



## User's Guide

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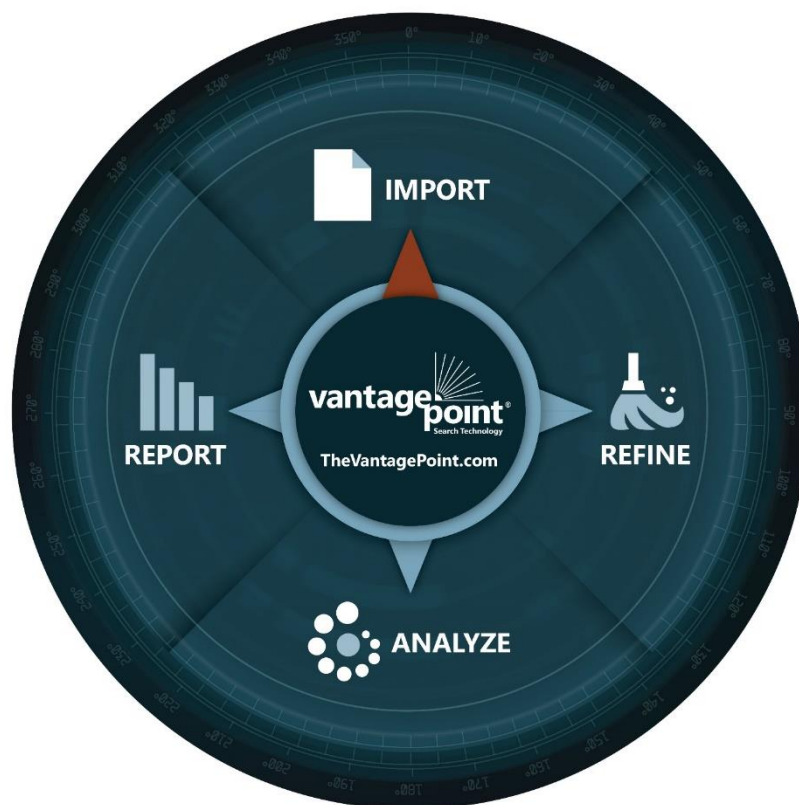
Version 14

## Welcome to Your New VantagePoint!

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VantagePoint is a powerful text-mining tool for discovering knowledge in search results from patent and literature databases. VantagePoint helps you rapidly understand and navigate through large search results, giving you a better perspective—a better vantage point—on your information. The perspective provided by VantagePoint enables you to quickly find WHO, WHAT, WHEN and WHERE, helping you clarify relationships and find critical patterns - turning your information into knowledge.

If this is your first time using VantagePoint, this manual will help introduce you to the many features and tools built into VantagePoint. Ribbons are used to organize VantagePoint's tools in workflow steps of Import/Open, Refine, Analyze, and Report. See the Quick Reference information on page 12 for an overview.



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## Getting Started with VantagePoint

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### Registration Code - Activating/Reactivating your License

Your Registration Code is your key to unlock VantagePoint. This procedure may be used for new installations or to Reactivate your VantagePoint License. (First see Registration Code - Moving VantagePoint from one computer to another for important instructions on Deactivating your License. You would also need to deactivate your License before your computer is reformatted, if possible. Otherwise, your Registration Code cannot be used again.)

For most customers, there are two methods of Activating (or Reactivating) your VantagePoint License: Using Internet (automatic, and the preferred method), or Using Email. Click on the tab offering the Activation method of your choice.

If your company has the "floating License" model, follow the instructions found in the Activating VantagePoint Using License from Server topic.

#### Using Internet:

- 1) Download VantagePoint from [www.theVantagePoint.com/downloads](http://www.theVantagePoint.com/downloads) and follow the installation procedure.
- 2) When you start VantagePoint, you will be prompted for your Registration Code. Copy and Paste the Registration Code into the New Registration Code field, enter your Email Address, and click **Activate New Registration Code**.

Manage VantagePoint License

Your Registration Code Is:

Your Email Address Is:

Your License Expires:

Using Internet | Using Email | License From Server

Activate Automatically through the Internet

If you have received a new Registration Code, enter that here

New Registration Code

Your Email Address

Deactivate Automatically through the Internet

If you want to install VantagePoint on a different computer, simply Deactivate the license here. After that you can use your Registration Code to activate the software on another computer.

You should receive a "License Successfully Activated!" message. Click **OK** and VantagePoint will open.

Begin by importing your data. See the topic [Import \(Starting a New Analysis\)](#).

### Using Email:

If you do not have Internet access, you can activate your Registration Code Using Email. (Note: This Process may take a few minutes or as many as two business days, depending on your location.)

Select the **Using Email** tab.

1. Copy and Paste your Registration Code into the "New Registration Code" field.

Click **Create Activation Request Email**.

Manage VantagePoint License

Your Registration Code Is:

Your Email Address Is:

Your License Expires:

Using Internet Using Email License From Server

Activate using Email

Step 1: Enter your new Registration Code here (copy/paste).

New Registration Code

Click 'Create Activation Request Email' and send the email to us. We will reply within 1 - 2 business days.

Create Activation Request Email

Activation Request Code

Step 2: After you receive the email from us, find the Activation Code in the email and copy/paste it here. Then click 'Activate Now!'

Activation Code

Activate now!

An email message addressed to "activate@searchtech.com" will be created containing the **Registration Code** and **Activation Request Code**. **Send the email message.**

In response, you will receive an email containing an **Activation Code**.

2. Copy and Paste the code into the **Activation Code** field.

Click **Activate now!**.

A "License Successfully Activated!" message box will appear. Click **OK** and VantagePoint will open.

Next, proceed with [Importing Data or Opening a VantagePoint file](#).

See Also:

[Registration Code - Moving VantagePoint from one computer to another](#)  
[Registration Code - Repair License](#)

Manage VantagePoint License

Your Registration Code Is:

Your Email Address Is:

Your License Expires:

Using Internet Using Email License From Server

Activate using Email

Step 1: Enter your new Registration Code here (copy/paste).

New Registration Code

Click 'Create Activation Request Email' and send the email to us. We will reply within 1 - 2 business days.

Create Activation Request Email

Activation Request Code

Step 2: After you receive the email from us, find the Activation Code in the email and copy/paste it here. Then click 'Activate Now!'

Activation Code

Activate now!

## Activating VantagePoint Using License from Server

**Important Note:** You cannot activate a VantagePoint Registration Code from this tab. If you have a VantagePoint Registration Code, go to the previous Topic to activate.

VantagePoint is offered with a floating license model. To use a floating license, the computer must (a) be connected to the internet and (b) have continuous access to the License Server on the internet.

The credentials for using the License Server are:

1. License Server address
2. Port number
3. Company ID
4. Username
5. Password
6. Your email address.

If you have purchased floating licenses, the steps to start using VantagePoint are:

1. Launch VantagePoint. You will be presented with a dialog box to enter your License Server credentials.

Manage VantagePoint License

Your Registration Code is:

Your License Expires:

Using Internet Using Email **License From Server**

License Status: Not Active

Server Address  Port

Company ID

User Name

☐ Always use License Server at startup

Activate Using License Server

Server Address  Port  Company ID

(put the server address here) (port#) (put Company ID here)

Username

(put the Username here)

Password

Email

(put your email address here)

Activate Using License Server

Test Network Connection

Close Help

2. You will be given credentials to enter as shown in the illustration. All items are required.
3. If you want to automatically retrieve your license from the License Server when you start VantagePoint, click the checkbox "Always use License Server at startup." If you leave this

unchecked, you will be prompted to activate each time you start VantagePoint. Your credentials are saved on your computer, so all you have to do is click the **Activate Using License Server** button each time you startup.

4. Click **Activate Using License Server** to activate your license.

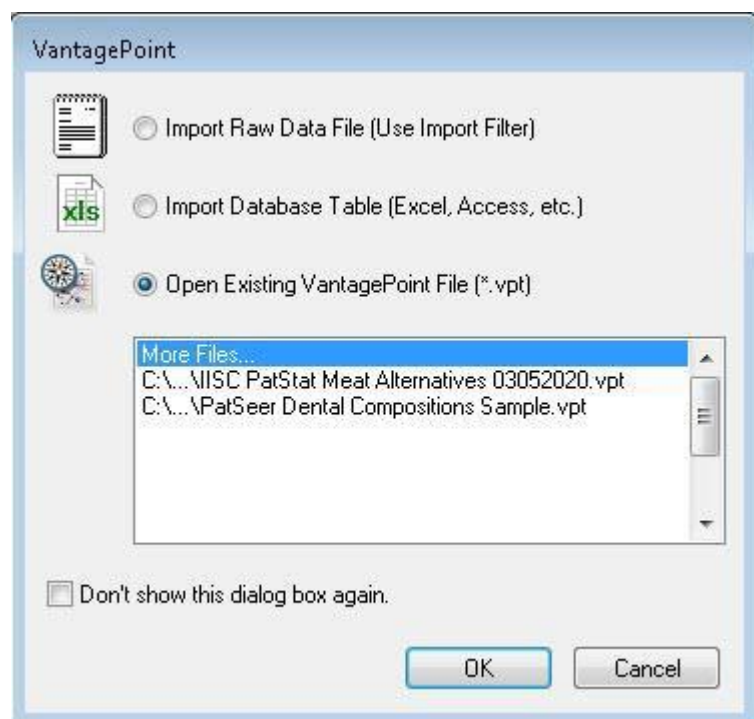
You can test your connection to the License Server ("Server Address" and "Port") using the **Test Network Connection** button. If the test is not successful, please check your firewalls and internet access.

If you look at this tab after successfully activating, all fields will be populated. (Registration Code field will reflect "License Server".) From here you can enter updated credentials, and you can modify the choice of whether or not to always use the License Server at startup. Make the desired changes, and click **Activate Using License Server** to save the changes.

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## Import Data or Open an Existing VantagePoint File

When you first open VantagePoint, you are presented with a Startup dialog box where you choose whether to **Import Raw Data File**, **Import Database Table** or **Open Existing VantagePoint File**.



(Context-Sensitive Help is available for most VantagePoint functions by pressing F1.)

1. If you choose to **Import Raw Data File**, you are taken to Step 1 of the Import Wizard (see the **Note** below, then continue to #2.)

**Note:** If you choose to **Import Raw Data File**, the Wizard method of import becomes your default. To change, see [Changing the import data method](#) to change to the Classic Interface, or to be asked each time which import method to use.

If you choose **Import Database Table**, a dialog box will appear where you choose the data source

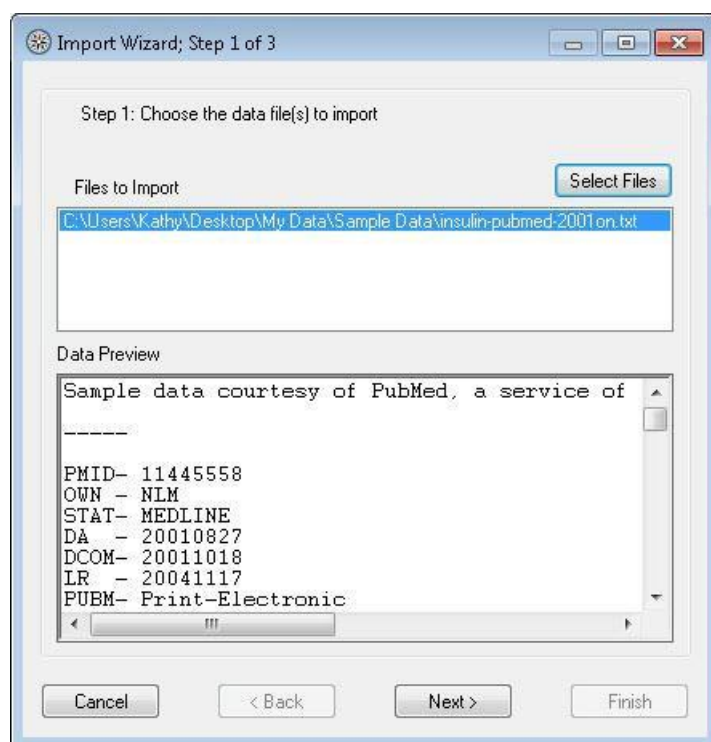


(either the file name or browse for the location. When the file is located and selected, click **Open** or double-click the file name). (See [Import from Excel](#) for full details.) If more than one sheet exists in the file, you will be presented with a "Select Information to Import" box. Make your selections and press **OK**. A [Summary View](#) will appear. Continue with [Step 5](#).

If you choose **Open Existing VantagePoint File**, select the file to be opened. For your convenience, a recent list of VantagePoint files is displayed for selection. If the file you want to use is not displayed, double-click **More Files...**, which opens a dialog box where you select the file location. When the file is located and selected, click **Open**, or double-click on the file. A Summary View is displayed. (Continue with [Step 5](#).)

Checking "Don't show this dialog box again" prevents this dialog box from appearing each time VantagePoint is started. See [Enabling or Disabling the startup dialog box](#) to change the setting while running VantagePoint.

2. **Import Wizard; Step 1 of 3:** Here you choose the file to import. Use the **Select Files** button to locate the file. Once the file is located and selected, the "Data Preview" window is filled. Click **Next**.

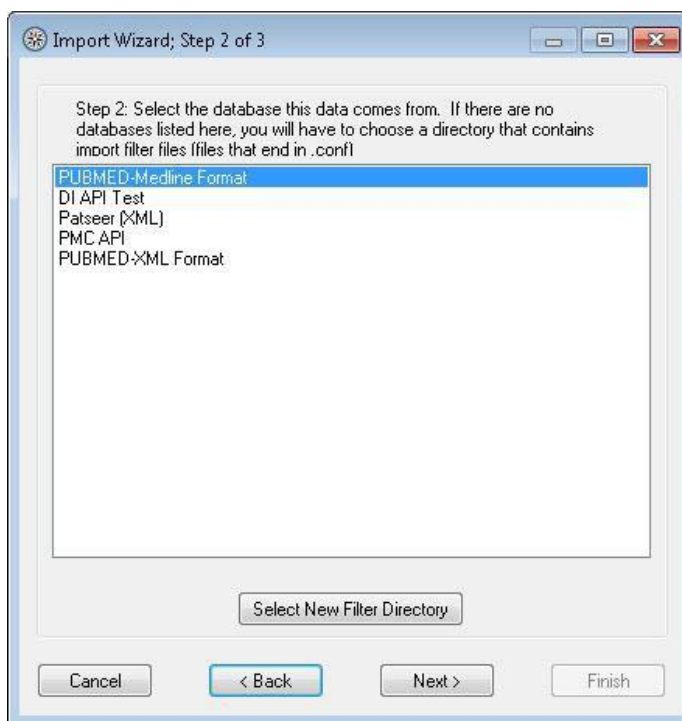


3. **Step 2** of the **Import Wizard** selects the database for the file. VantagePoint automatically detects which file to use.

**Note:** Files shown are for illustration purposes – your list of database files may differ.

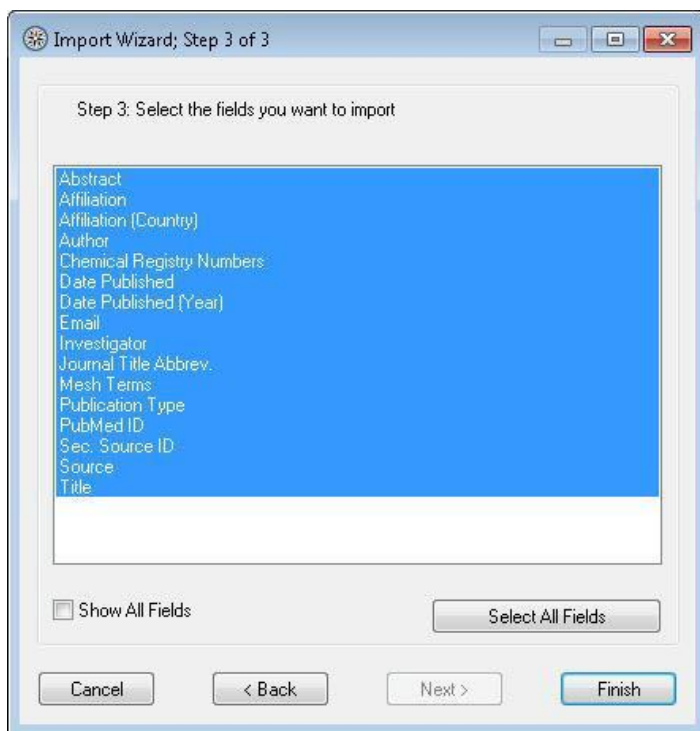
You may override this selection by clicking on another file (or files) displayed or by clicking **Select New Filter Directory**. Unless you are certain of which file to use, it is recommended that you accept the VantagePoint selection.

Click **Next**.



4. **Step 3** of the **Import Wizard** shows a list of fields to be imported. Initially, all primary fields are selected. To accept all, click **Finish**.

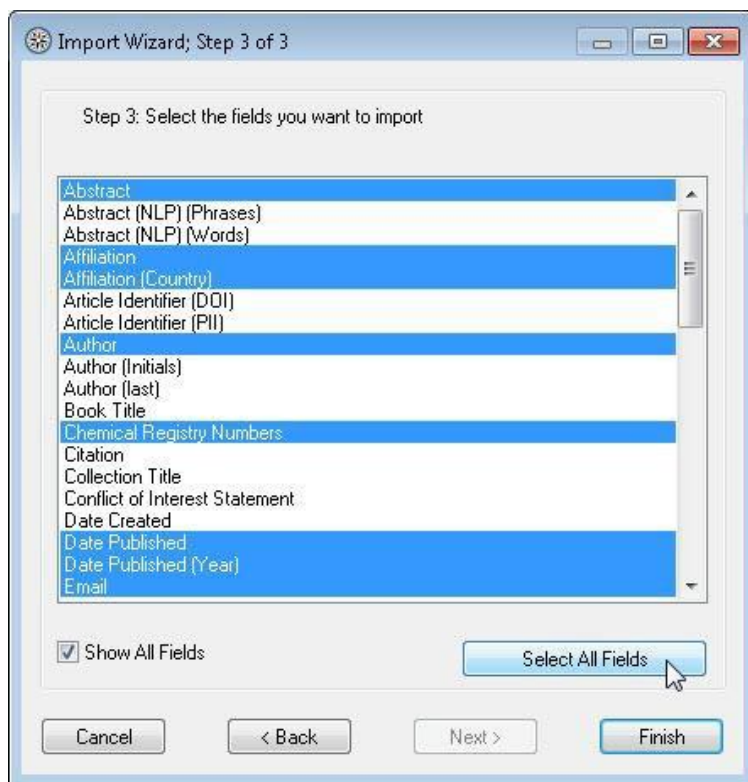
To select certain fields, use Ctrl-click keys to multi-select desired fields, then click **Finish**.



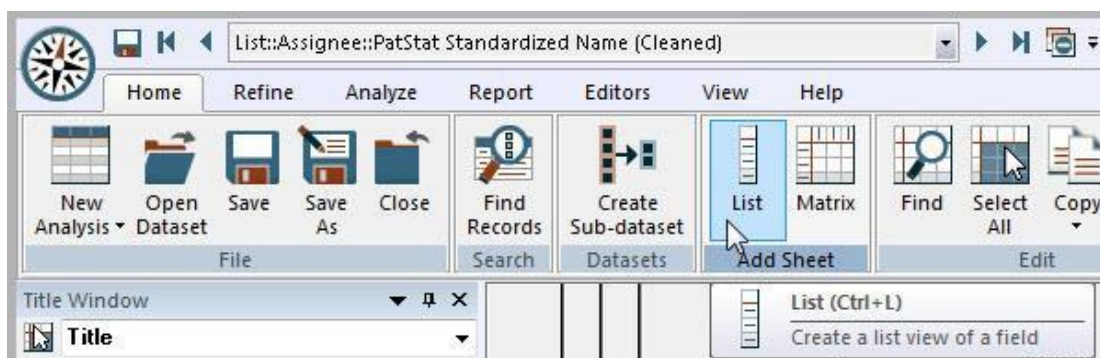
**Note:** Some database import filters have some fields defined as "Secondary Fields" - fields that are not normally imported at first.

Check the "Show All Fields" checkbox to view these fields (see below). You can then select fields from the entire list (or click the **Select All Fields** button) and click **Finish**.

If your dataset is very large, it may take a few minutes to import. When it is open, you will see a [Summary View](#) presenting an overview of the dataset, including total number of records, the date of the original search, and a list of fields with the total number of unique items in each field.



5. The first thing you will want to do is open a listing of one of the fields (see [Lists](#)). This can be accomplished using any of the three following methods:
  - (a) Double-click the field name on the [Summary View](#).
  - (b) From the **Home** Ribbon, click the **List** icon. A Create List dialog appears with all the Fields presented. Select the desired Field from the given list, and click **OK** (or simply double-click the field name).



- (c) Press Ctrl-L. Select the desired field name from the given list, and click **OK** (or simply double-click the field name).

A List view of the selected field will be shown. It is displayed as a separate sheet with the field name on a tab at the bottom of the window. You can create more Lists and then access them by clicking on


the tabs.

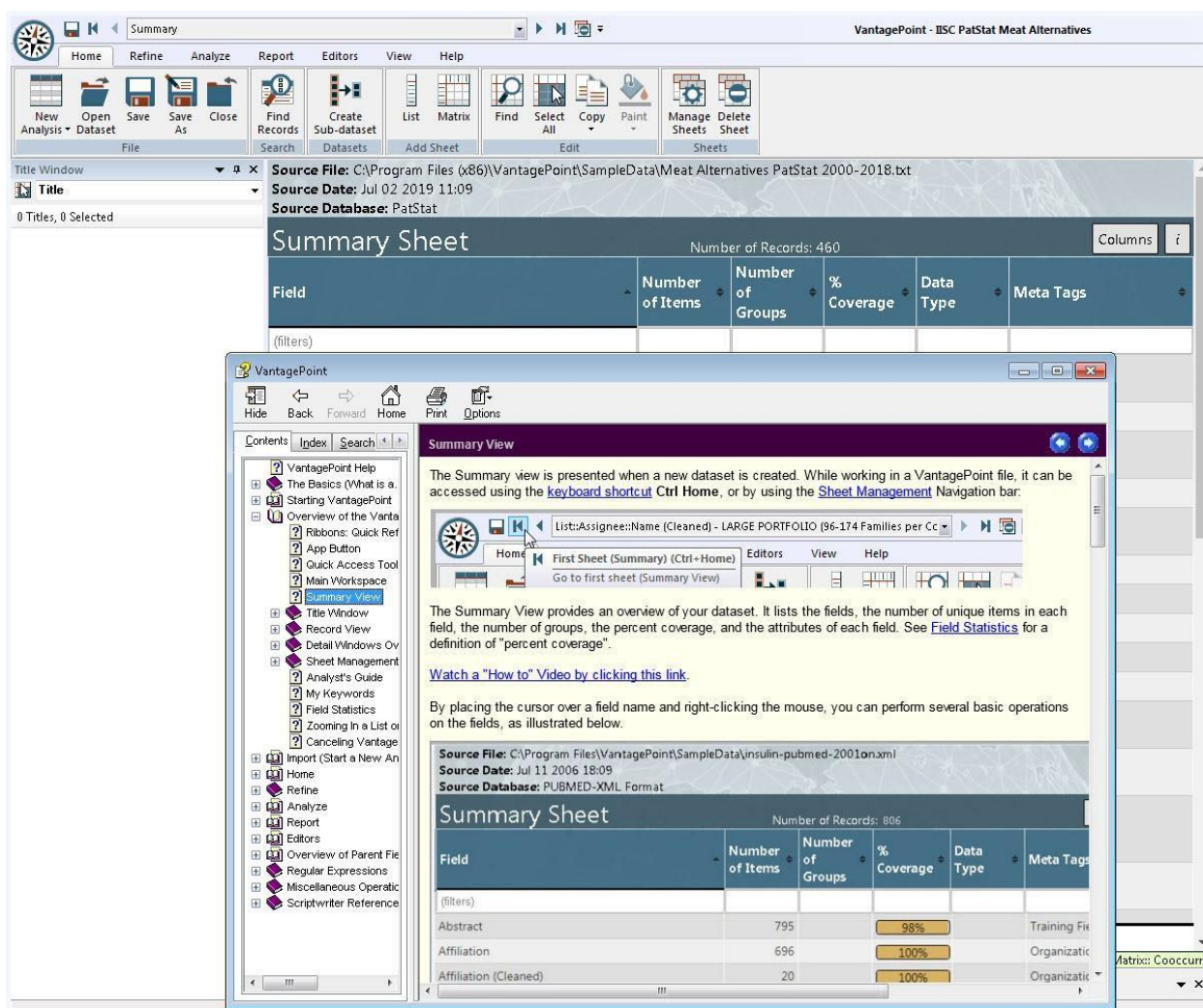
See Also:

- [Creating a List View](#)
- [Importing a Raw Data file using Classic Interface](#)
- [Import from Excel](#)
- [Overview of the VantagePoint window](#)

## Context-sensitive Help

Context-sensitive Help is available for most VantagePoint functions by pressing F1 or by clicking the Help

button  in a dialog box (when offered).



The screenshot displays the VantagePoint interface with the 'Summary Sheet' active. The main window shows a table with columns: Field, Number of Items, Number of Groups, % Coverage, Data Type, and Meta Tags. The 'Summary View' help window is open, providing instructions on how to access the Summary view and explaining the data presented in the Summary Sheet.

**Summary Sheet Data (from image):**

| Field                 | Number of Items | Number of Groups | % Coverage | Data Type | Meta Tags   |
|-----------------------|-----------------|------------------|------------|-----------|-------------|
| Abstract              | 795             |                  | 98%        |           | Training Fi |
| Affiliation           | 696             |                  | 100%       |           | Organizati  |
| Affiliation (Cleaned) | 20              |                  | 100%       |           | Organizati  |

**Summary View Help Text:**

The Summary view is presented when a new dataset is created. While working in a VantagePoint file, it can be accessed using the **keyboard shortcut Ctrl Home**, or by using the **Sheet Management** Navigation bar.

The Summary View provides an overview of your dataset. It lists the fields, the number of unique items in each field, the number of groups, the percent coverage, and the attributes of each field. See [Field Statistics](#) for a definition of "percent coverage".

Watch a "How to" Video by clicking this link.

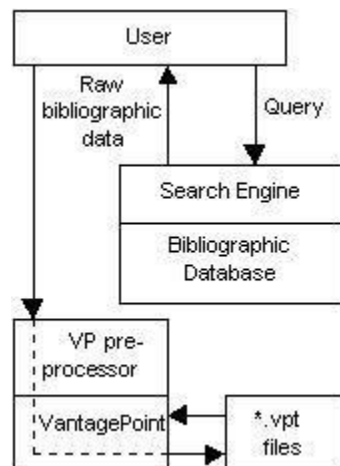
By placing the cursor over a field name and right-clicking the mouse, you can perform several basic operations on the fields, as illustrated below.

## Introduction

---

### Files and Datasets

A VantagePoint file (\*.vpt) contains all of the data for a given set of documents. The creation and use of a VantagePoint file is illustrated in the following diagram:



The user queries a bibliographic database and receives raw bibliographic data. When a raw bibliographic data file is imported into VantagePoint, the pre-processor parses the text in the following manner:

1. First, the text is divided into individual records. A record is the largest individual segment of information in the file. A raw data file consists of several (tens, hundreds, or maybe thousands) records, each of which has a similar structure.
2. Then the pre-processor divides each record into fields. For the most part, each record contains the same field structure (e.g., title, authors, keywords, abstract, etc.). On rare occasions, a field may be missing from a record.
3. Next, the pre-processor divides the text fields (e.g., the abstract and title) into words or phrases, and creates a new field for them (e.g., abstract words, title words, and abstract phrases).
4. Finally, the pre-processor creates a database relating all of the contents of the fields to all of the records. For example, if the word "chemistry" is found in at least one record, then the word "chemistry" is entered into the database and that word is linked to every record that contains the word "chemistry."

The VantagePoint file consists of this database relating the words to the records. As the user defines groups of list items, the group membership information is stored in the VantagePoint file. Additionally, as the user creates views of the data (also called sheets), these sheets are saved in the VantagePoint file.



## Records and Fields

The most basic form of raw data for VantagePoint is a bibliographic record. In bibliographic databases, a record consists of a single abstract of a scientific article or technical paper along with the associated information (e.g., the title, the authors' names, the affiliation of the primary author, the dates, etc.). Each type of information in the record is a field. The following is an illustration of a single bibliographic record. In this record, the fields are Authors, Affiliation, Title, Journal, Date, etc. In many cases, the fields delivered by the bibliographic search engine contain more than one "chunk" of data. The highlighted areas of text illustrate how VantagePoint parses some of the fields of the record to a greater level of detail.

Author(s) AU: Murata, M.; Namekawa, T.; Hamabe, R.  
Affiliation AF: Osaka Univ., Osaka, Japan  
Title TI: A proposal for standardization of home bus system for home automation  
Journal JN: IEEE Transactions on Consumer Electronics  
Vol/Page VO: vol.CE-29, no.4  
p.524-30  
Date DA: Nov. 1983  
ISSN/ISBN IS: 00983063;;gttec  
Record Type RT: Journal paper  
Subject(s) SU: data communication systems. domestic appliances  
Abstract AB: To combine home electronic and electrical equipment effectively and realize home automation, it is essential to establish a standard for information distribution networks and interfaces which can be used for the equipment. In this paper a plan is proposed for standardization of the Home Bus System (HBS). The system includes the following three bands; the baseband, the subband primarily for high-speed data signals, and the FM/TV band primarily for visual information  
Class. Codes CC: C3395. C5600. B62102. C7890  
Date Indexed DI: 8400

## Overview of the VantagePoint Window

The VantagePoint window consists of:

- 1) the [Ribbons](#), 2) the [Title Window](#), 3) the [Main Workspace](#), 4) [Detail Windows](#), 5) the [Analyst Guide](#), 6) the [My Keywords](#) windows, and 7) the [Notices](#) area.

The screenshot displays the VantagePoint software interface for 'Corporate Insulin Research PubMed.vpt'. The interface includes a ribbon menu at the top with tabs: Home, Refine, Analyze, Report, Editors, View, and Help. The ribbon contains various tool icons grouped under File, Search, Datasets, Add Sheet, Edit, and Sheets. A yellow notification bar at the top indicates 'Updates are available for VantagePoint' and 'Select files to update'.

Numbered callouts identify the following components:

- 1**: Ribbon menu (specifically the 'Sheets' group).
- 2**: Title Window, showing a list of 372 titles with 0 selected.
- 3**: Main Workspace, displaying a table of Mesh Terms with columns for # Records, # Instances, and Mesh Terms.
- 4**: Detail Window, showing a list of authors and a bar chart titled 'Date Published (Year)'.
- 5**: Analyst Guide, providing links to 'How-to Videos', 'Getting Started: Text-mining and VantagePoint', and 'How-to Instructions: Common Analyses'.
- 6**: My Keywords window, showing a list of 9 keywords with 0 selected.
- 7**: Notices area, located at the bottom of the interface.

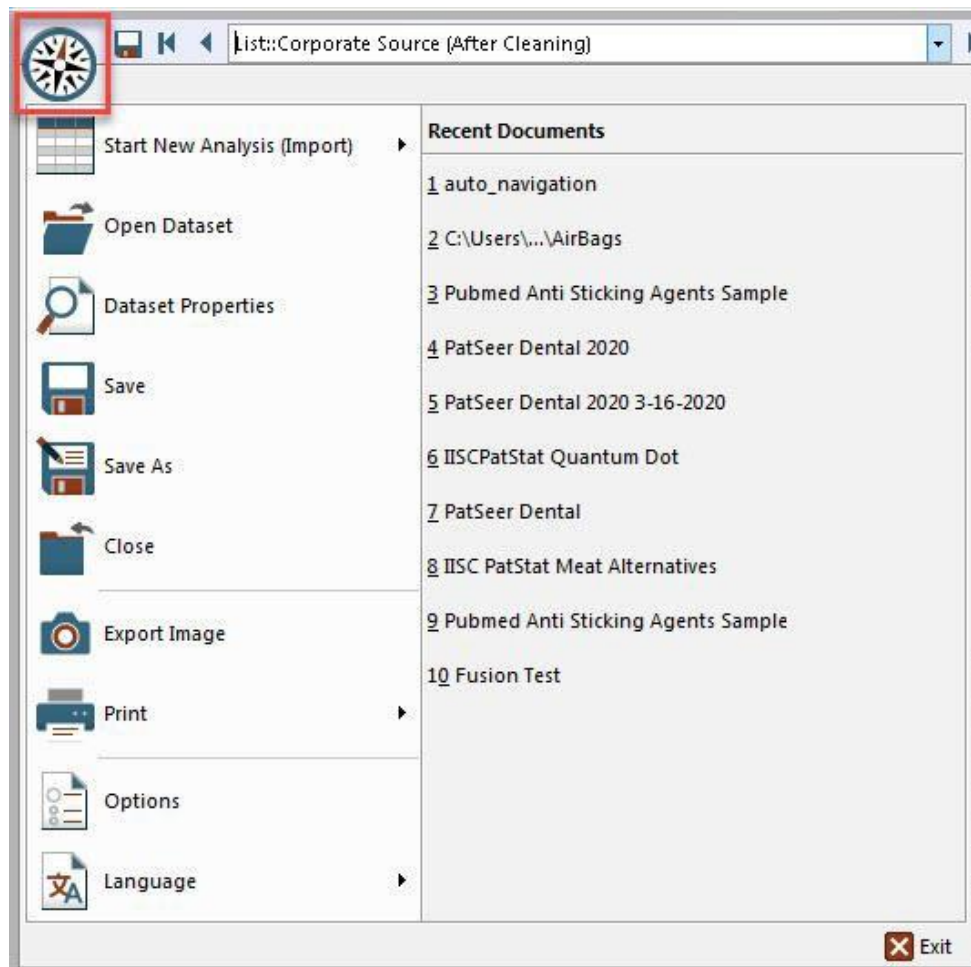
|    | # Records | # Instances | Mesh Terms                             |
|----|-----------|-------------|--|
| 1  | 519       | 519         | Humans                                 |
| 2  | 372       | 372         | Animals                                |
| 3  | 362       | 362         | Male                                   |
| 4  | 265       | 265         | Female                                 |
| 5  | 187       | 187         | Mice                                   |
| 6  | 173       | 173         | Middle Aged                            |
| 7  | 141       | 141         | Rats                                   |
| 8  | 135       | 135         | Adult                                  |
| 9  | 94        | 94          | Aged                                   |
| 10 | 74        | 74          | Blood Glucose/metabolism               |
| 11 | 72        | 72          | Diabetes Mellitus, Type 2/drug therapy |
| 12 | 62        | 62          | Insulin/blood                          |
| 13 | 61        | 61          | Dose-Response Relationship, Drug       |
| 14 | 59        | 59          | Glucose Tolerance Test                 |
| 15 | 56        | 56          | Treatment Outcome                      |
| 16 | 54        | 54          | Mice, Inbred C57BL                     |
| 17 | 53        | 53          | Adolescent                             |
| 18 | 52        | 52          | Insulin Resistance                     |
| 19 | 52        | 52          | Time Factors                           |
| 20 | 52        | 52          | Young Adult                            |
| 21 | 50        | 50          | Rats, Sprague-Dawley                   |
| 22 | 42        | 42          | Blood Glucose/analysis                 |
| 23 | 41        | 41          | Hemoglobin A, Glycosylated/metabolism  |
| 24 | 41        | 41          | Insulin/metabolism                     |
| 25 | 39        | 39          | Double-Blind Method                    |
| 26 | 39        | 39          | Hypoglycemic Agents/therapeutic use    |
| 27 | 38        | 38          | Cell Line                              |

## Ribbons: Quick Reference

Following is a Quick-Reference view of the VantagePoint App Button and Ribbons, and the functions found within each. For additional details on each, follow the links to the Topic.

### App Button

This menu features easy access to recent VPT documents, as well as [Options](#), where you set personal preferences in VantagePoint. See the [App Button](#) topic for more details.



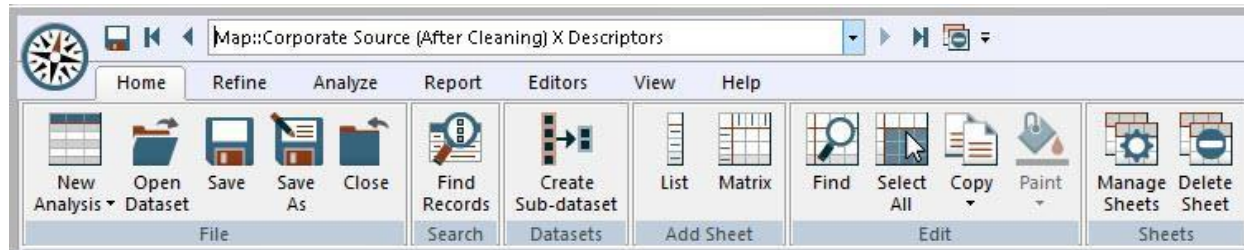
Following are illustrations of functions found on each Ribbon.



## Home

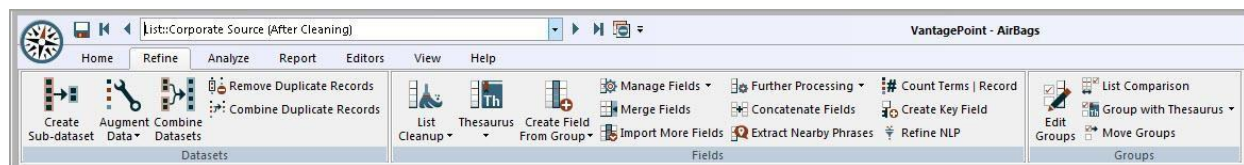
From the Home ribbon you can Import data/Start a New Analysis, Open a dataset (VantagePoint file), Save, and Close VantagePoint files.

With a VantagePoint file open, you can Search/Find Records within that dataset; Create Sub-datasets; Create a new List and Matrix; perform Find, Select, Copy, and Paint functions within a Sheet; and Manage and Delete Sheets.



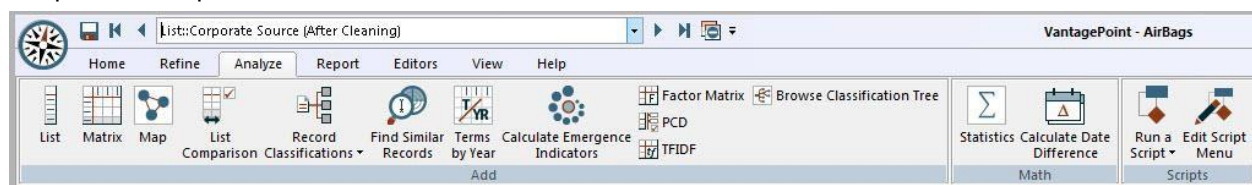
## Refine

Further refine an open VantagePoint file by performing Datasets functions such as: Augment Data by fusing records from two datasets; Add Fields from an Online Database; Combine Datasets; and Remove or Combine duplicate records; functions related to Fields, such as List Cleanup, apply a Thesaurus, Import more fields; and Create and manage Groups.



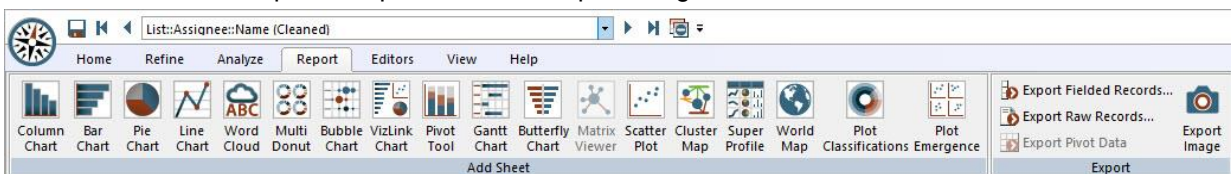
## Analyze

Add Lists, Matrices, Maps; perform List Comparison, assign Record Classifications, Find Records Similar to Text input; run Terms by Year report, Calculate Emergence Indicators, create Factor Matrix, PCD, TFIDF, Browse Classification Tree, run Statistics on a field, Calculate Date Difference, and Run Scripts/Edit Script Menu.



## Report

Create Visualization Reports, Export Records, Export Image.



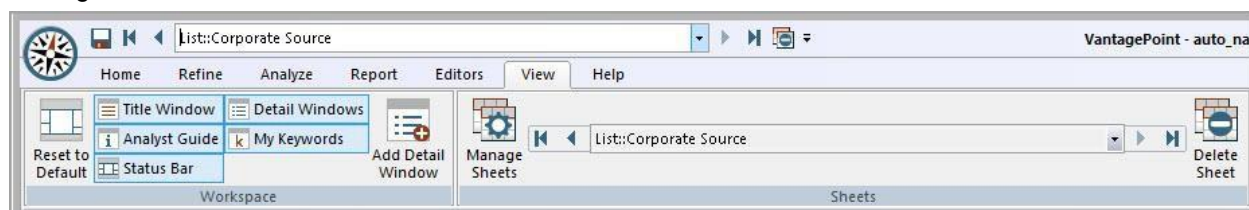
## Editors

Edit a Thesaurus, Fuzzy file, Import Filter, Meta Tags.



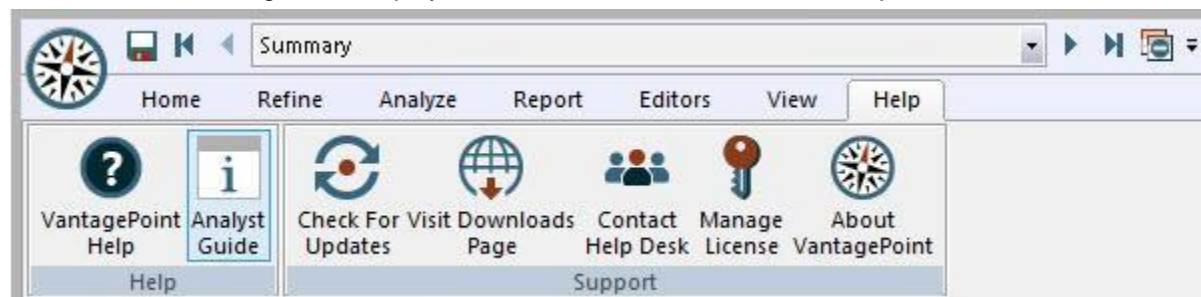
## View

Contains the Reset to Default button; Select Workspace windows to show/hide, Add Detail Window, Manage and Delete Sheets.



## Help

On this ribbon, you can Display the VantagePoint Help (press F1), Display (or hide) the Analyst Guide, Check for Updates, Go to the VantagePoint Downloads page, Contact the Help Desk, and Manage your License. About VantagePoint displays the Build code and links to other important information.



## Quick Access Toolbar

The Quick Access Toolbar includes the Save Command and Sheet Navigation. Add your own frequently-used commands for quick and easy access.

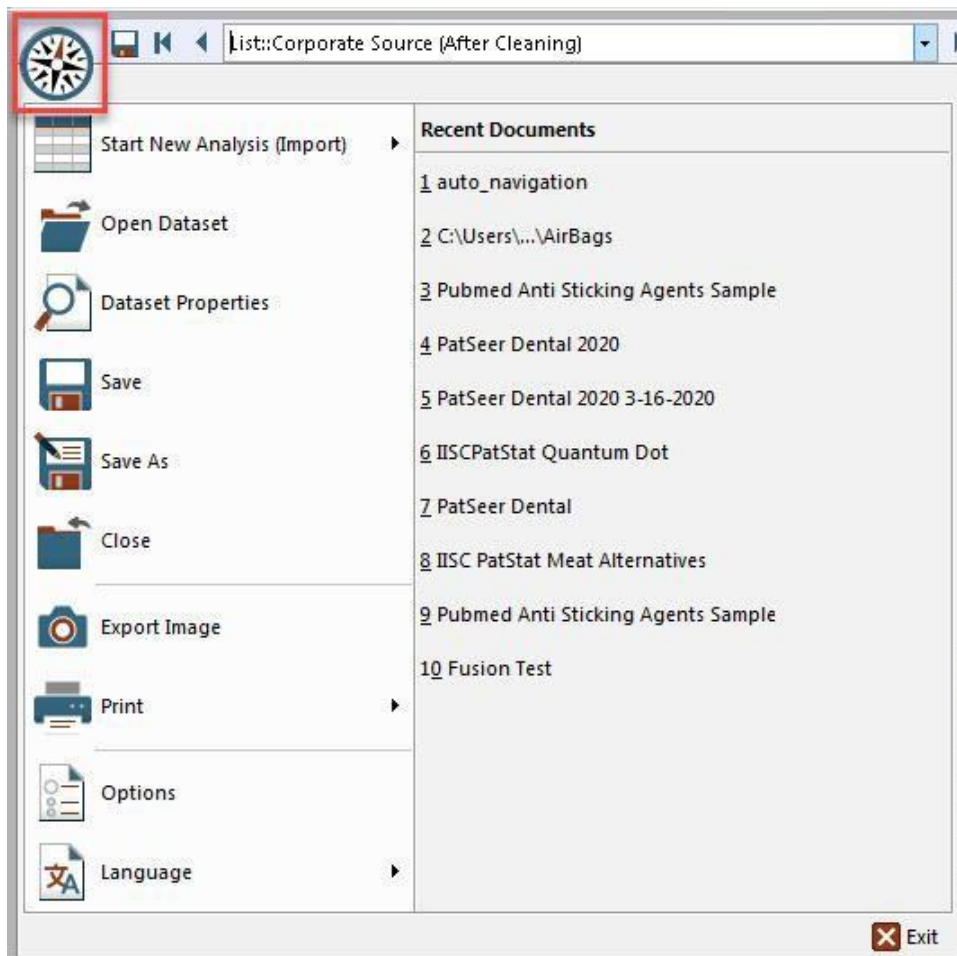


## App Button

From the **App Button**, you can Start a New Analysis, and open a VPT file using the list of Recent Documents.

In addition to the Open/Save/Save As/ and Close functions, the App Button connects to [Options](#) where you set preferences for certain VantagePoint activities, such as Checking for Updates, method used for importing data, Confirmation when deleting sheets, and Color customization.

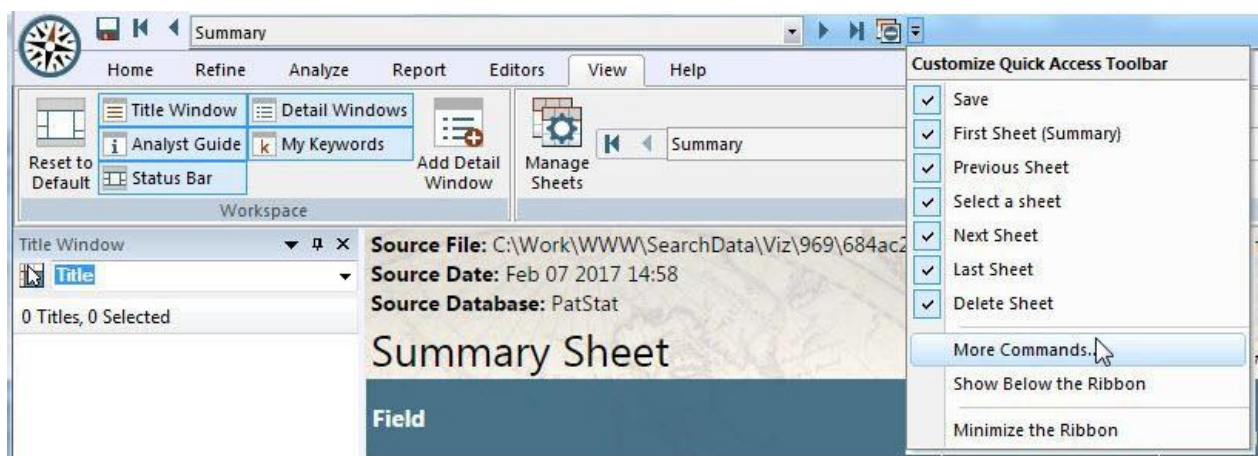
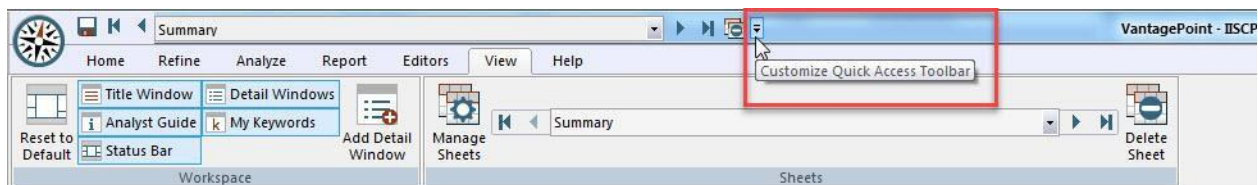
The App Button also provides a link to [Dataset Properties](#), where you can view characteristics of the current dataset.



## Quick Access Toolbar

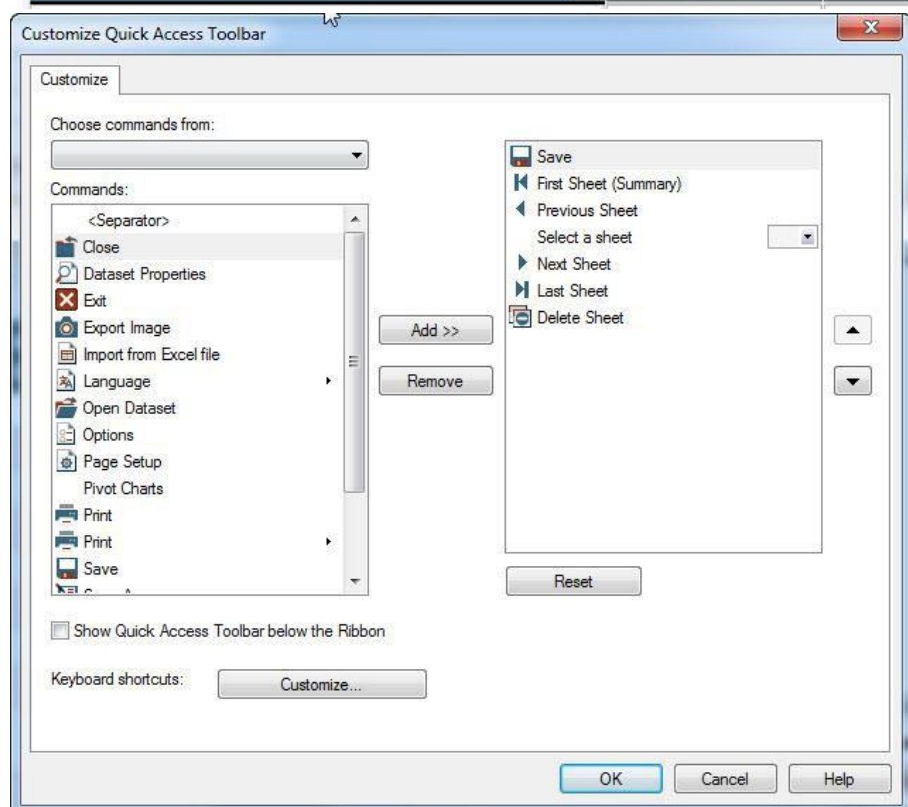
You can add frequently-used commands to the Quick Access Toolbar, which will always appear for handy access. Commands can also be removed from the Quick Access Toolbar, or the Toolbar can be repositioned below the ribbon.

To add a command, click the dropdown box, as shown below:



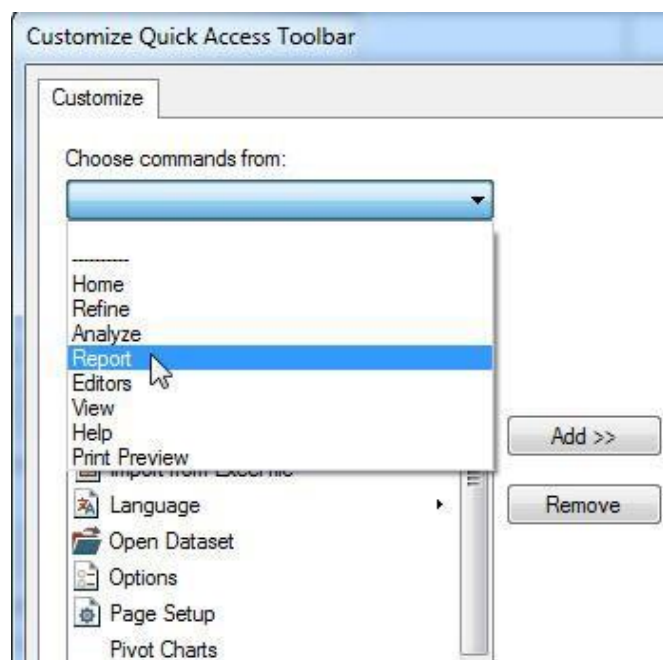
Commands are presented in the left panel, and those on the Quick Access Toolbar appear on the right.

There is a dropdown box under "Choose commands from:"

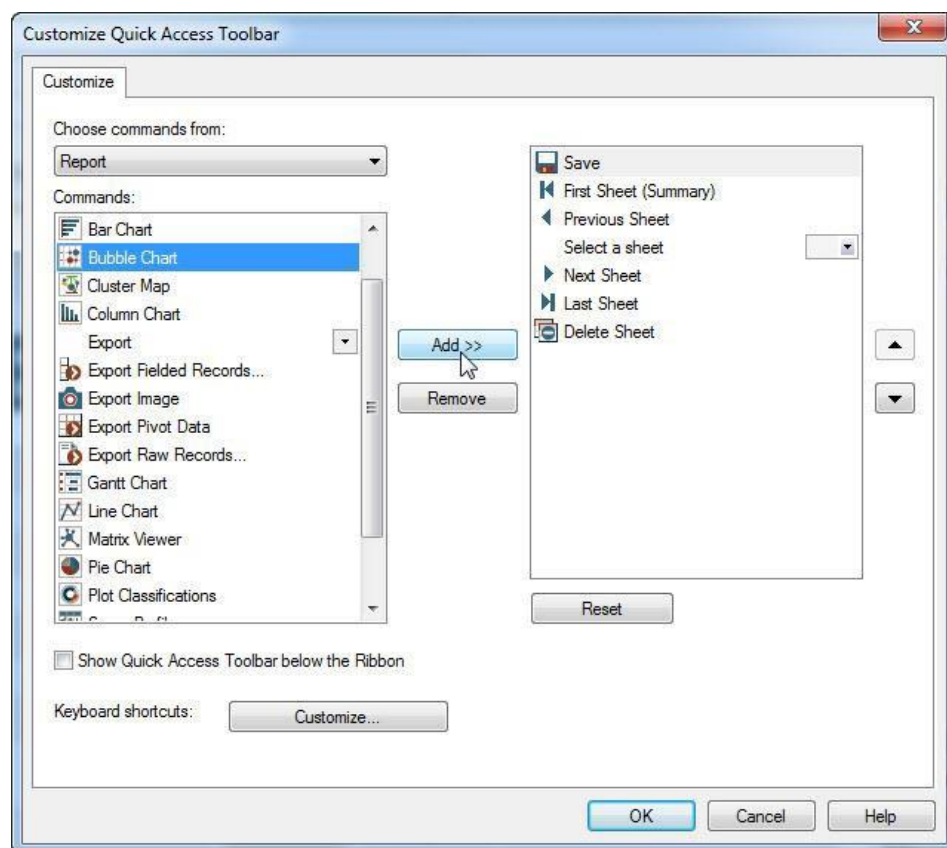




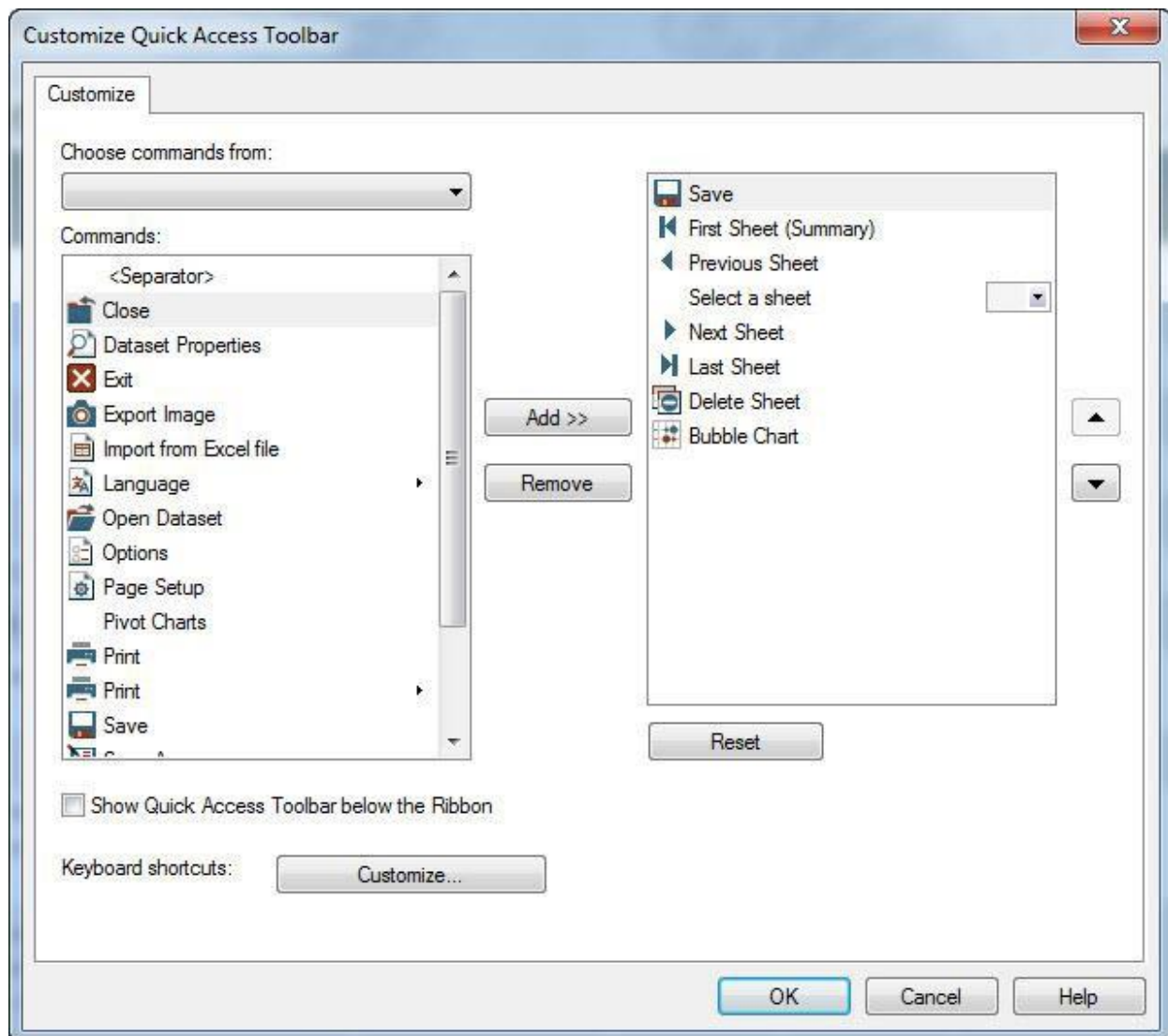
In this case, the user selects "Report" from the dropdown box.



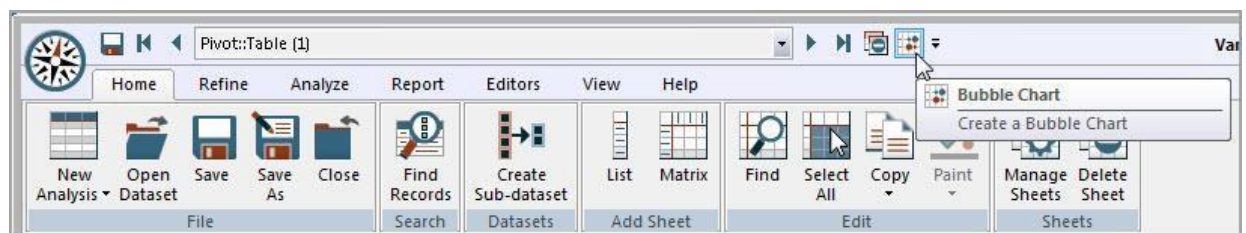
The commands for the Report Ribbon appear. The user wants to move "Bubble Chart" to the Quick Access Toolbar. The user selects that command, and then clicks the **Add** button:



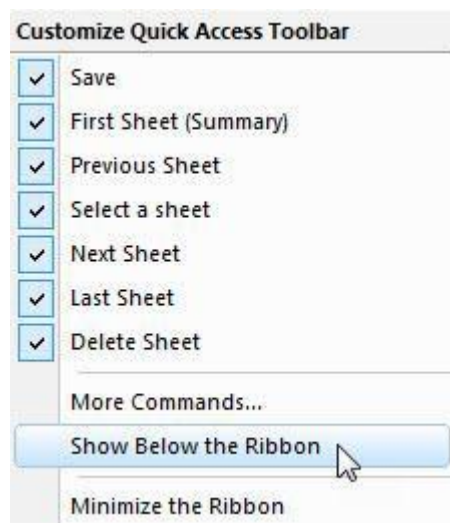
Bubble Chart is moved to the window on the right. Notice the up/down arrows to the right of that window. Use them to reposition the commands on the Toolbar:



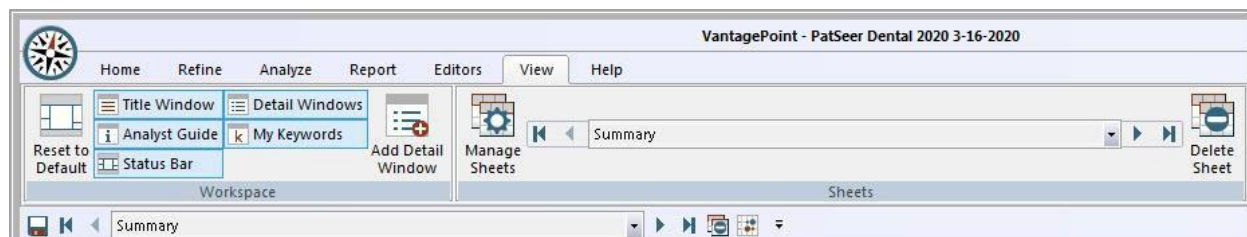
Now the Quick Access Toolbar contains the Bubble Chart icon:



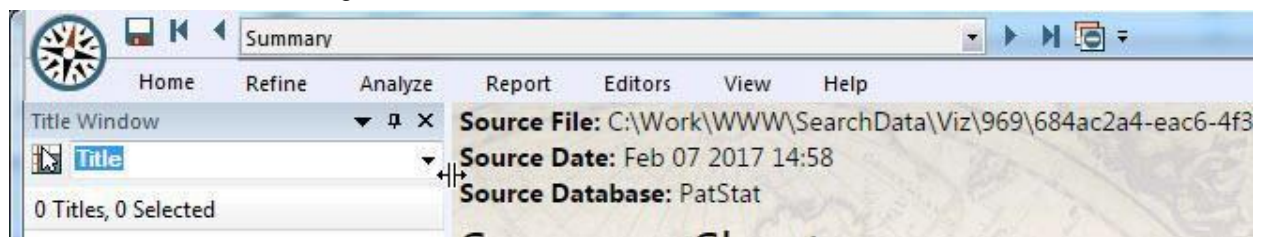
Show the Quick Access Toolbar Below the Ribbon:



Result:



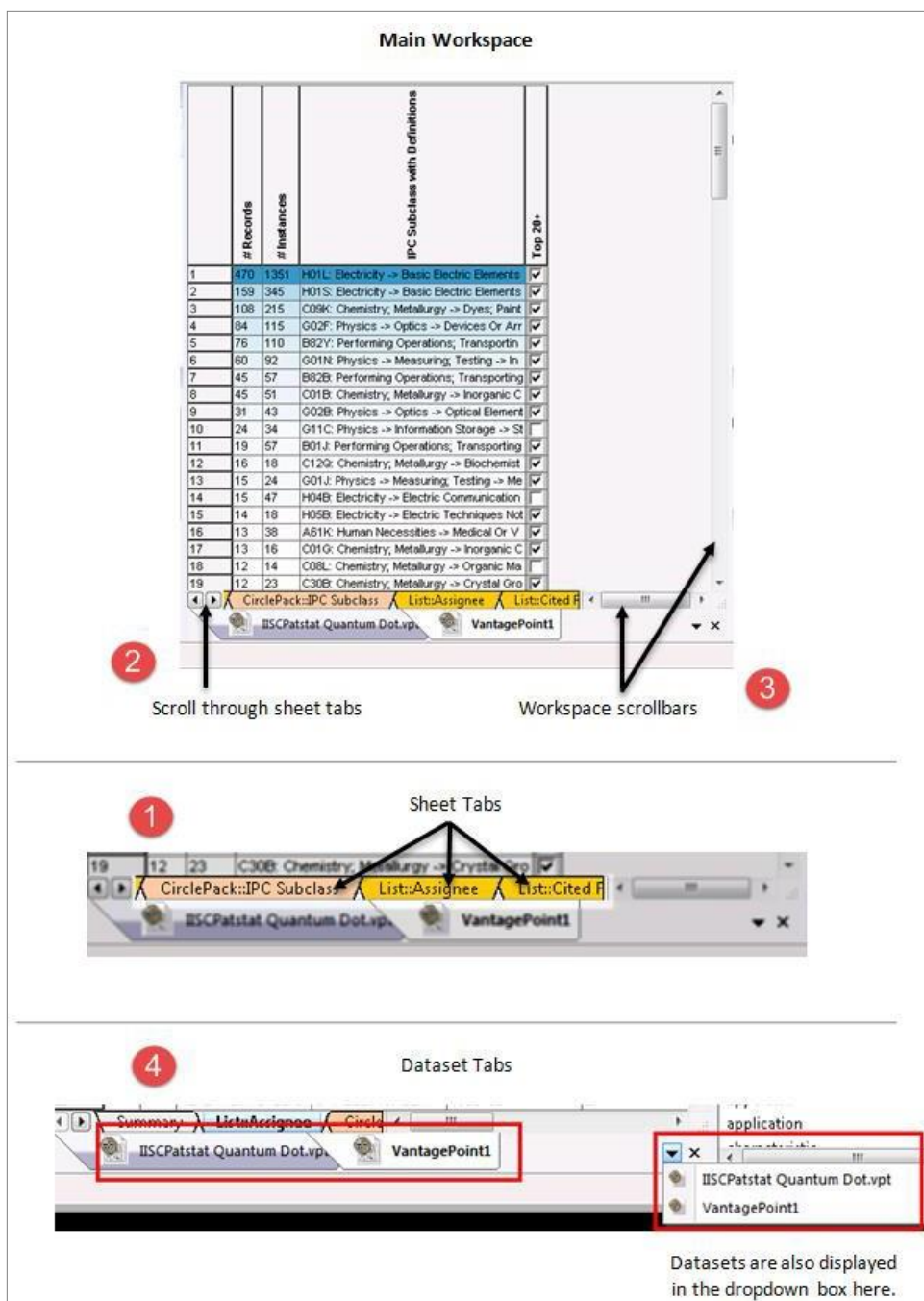
Here is the result of choosing **Minimize the Ribbon**:



## Main Workspace

The Main Workspace displays all of the List, Matrix, Map Views, etc. you create.

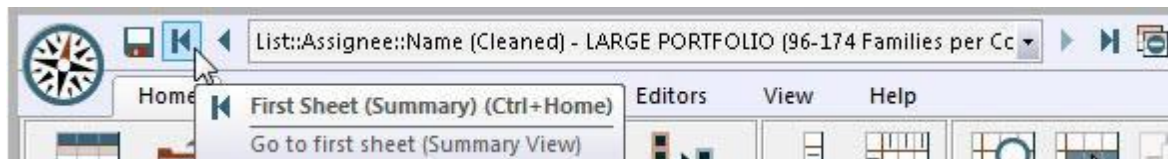
1. Each view created is displayed as a separate Sheet as shown below. You can access each view by clicking on the Sheet tabs.
2. You can scroll through the Sheet tabs using these buttons. (The Navigation tool bar is also helpful for moving between sheets. See [Sheet Management](#) for detailed information.)
3. You can scroll within the active sheet using the Workspace scrollbars.
4. You can select among multiple open datasets using the Dataset tabs, or using the dropdown arrow shown in the illustration below.





## Summary View

The Summary view is presented when a new dataset is created. While working in a VantagePoint file, it can be accessed using the keyboard shortcut **Ctrl Home**, or by using the Sheet Management Navigation bar:



The Summary View provides an overview of your dataset. It lists the fields, the number of unique items in each field, the number of groups, the percent coverage, and the attributes of each field. See [Field Statistics](#) for a definition of "percent coverage".

Source File: C:\Program Files\VantagePoint\SampleData\insulin-pubmed-2001on.xml  
 Source Date: Jul 11 2006 18:09  
 Source Database: PUBMED-XML Format

### Summary Sheet

Number of Records: 806

| Field  | Number of Items | Number of Groups | % Coverage | Data Type | Meta Tags      |
|--|-----------------|------------------|------------|-----------|----------------|
| (filters)  |                 |                  |            |           |                |
| Abstract   | 795             |                  | 98%        |           | Training Field |
| Affiliation  | 696             |                  | 100%       |           | Organization   |
| Affiliation (Cleaned)  | 20              |                  | 100%       |           | Organization   |
| Affiliation (Country)  | 52              |                  | 100%       |           | Country        |
| Affiliation (Country) (ISO3 codes)   | 20              |                  | 97%        |           |                |
| Affiliation (Country): Extract Country   | 19              |                  | 98%        |           | Country        |
| Affiliation (Country): Extract Country (ISO3 codes)  | 19              |                  | 98%        |           |                |
| Author   | 4,225           |                  | 100%       |           | Person         |
| Author (Cleaned)   | 3,865           |                  | 100%       |           | Person         |
| Authors and Affiliations and Country ▶ PubMed ID   Author (Cleaned)   Affiliation (Cleaned)   Affiliation (Country): Extract Country | 806             |                  | 100%       |           | Parent         |
| Chemical Registry Numbers  | 1,030           |                  | 86%        |           |                |
| Date Published   | 246             |                  | 100%       |           | Date           |
| Date Publish   | 6               |                  | 100%       | Year      |                |
| Email  | 377             |                  | 58%        |           |                |
| Grant Ackno  |                 |                  | 6%         |           |                |
| Journal ID   |                 |                  | 100%       |           |                |
| Journal Title  |                 | 1                | 100%       |           |                |
| Key  |                 |                  | 100%       | Key       |                |
| Language   |                 |                  | 100%       |           | Language       |

Context menu options for 'Date Published':

- Create List
- List Cleanup...
- Thesaurus...
- Find and Replace...
- Further Processing ▶
- Extract My Keywords ▶
- Rename Field...
- Copy Field...
- Set Data Type ▶
  - Category
  - General
  - Image
  - Link
  - Meta Field
  - Number
  - Year (selected)
- Set Meta Tags...
- Delete Field...
- View Statistics...

Bottom bar: Date Published (Year) Bubble Chart (1) | Chart: Journal Title Abbrev. (1) | World Map | List: Mesh T | Corporate Insulin Research PubMed

By placing the cursor over a field name and right-clicking the mouse, you can perform several basic operations on the fields, as illustrated below.

Clicking on the column headers sorts the Summary View in ascending/descending order for values in that column, depending on the number of times the column header is clicked.

Source File: C:\Program Files\VantagePoint\SampleData\insulin-pubmed-2001on.xml  
Source Date: Jul 11 2006 18:09  
Source Database: PUBMED-XML Format

Summary Sheet Number of Records: 806 Columns i

| Field                              | Number of Items | Number of Groups | % Coverage | Data Type | Meta Tags      |
|------------------------------------|-----------------|------------------|------------|-----------|----------------|
| (filters)                          |                 |                  |            |           |                |
| Mesh Terms (copy)                  | 3,657           | 88               | 88%        |           |                |
| Journal Title Abbrev.              | 285             | 1                | 100%       |           |                |
| Mesh Terms (copy) (Group Names)    | 88              | 1                | 88%        |           |                |
| Title (NLP) (Phrases)              | 2,591           | 1                | 100%       |           |                |
| Abstract                           | 795             |                  | 98%        |           | Training Field |
| Affiliation                        | 696             |                  | 100%       |           | Organization   |
| Affiliation (Cleaned)              | 20              |                  | 100%       |           | Organization   |
| Affiliation (Country)              | 52              |                  | 100%       |           | Country        |
| Affiliation (Country) (ISO3 codes) | 20              |                  | 97%        |           |                |

You can filter the Summary View by using the boxes under the column header to enter the desired criteria (minimum % Coverage, particular Data Type, minimum # of Items, Groups, etc.).

Source File: C:\Program Files (x86)\VantagePoint\SampleData\insulin-pubmed-2001on.txt  
Source Date: May 08 2013 14:32  
Source Database: PUBMED-Medline Format

Summary Sheet Number of Records: 806 Columns i

| Field                 | Number of Items | Number of Groups | % Coverage          | Data Type | Meta Tags    |
|-----------------------|-----------------|------------------|---------------------|-----------|--------------|
| (filters)             |                 |                  | >90% <span>x</span> |           |              |
| Abstract              | 795             |                  | 98%                 |           |              |
| Affiliation           | 696             |                  | 100%                |           | Organization |
| Affiliation (Cleaned) | 20              |                  | 100%                |           | Organization |
| Affiliation (Country) | 52              |                  | 100%                |           | Country      |

The items that fall outside the criteria are removed from the View. Note that this is simply a change in the way the Summary View is displayed for that session, and is not saved with any other changes to the dataset.

Source File: C:\Program Files (x86)\VantagePoint\SampleData\insulin-pubmed-2001on.txt  
Source Date: May 08 2013 14:32  
Source Database: PUBMED-Medline Format

Summary Sheet Number of Records: 806 Columns ⓘ

| Field                           | Number of Items | Number of Groups | % Coverage | Data Type | Meta Tags |
|---------------------------------|-----------------|------------------|------------|-----------|-----------|
| (filters)                       |                 | >                |            |           |           |
| Journal Title Abbrev.           | 285             | 1                | 100%       |           |           |
| Mesh Terms (copy)               | 3,657           | 88               | 88%        |           |           |
| Mesh Terms (copy) (Group Names) | 88              | 1                | 88%        |           |           |
| Title (NLP) (Phrases)           | 2,591           | 1                | 100%       |           |           |

Additionally, you can choose which columns to display in your Summary View by clicking the "Columns" button":

Source File: C:\Program Files (x86)\VantagePoint\SampleData\insulin-pubmed-2001on.txt  
Source Date: May 08 2013 14:32  
Source Database: PUBMED-Medline Format

Summary Sheet Number of Records: 806 Columns ⓘ

| Field       | Number of Items | Number of Groups | % Coverage | Data Type | Meta Tags    |
|-------------|-----------------|------------------|------------|-----------|--------------|
| (filters)   |                 |                  |            |           |              |
| Abstract    | 795             |                  | 98%        |           |              |
| Affiliation | 696             |                  | 100%       |           | Organization |

☐ Show All:  
☒ Number of Items  
☒ Number of Groups  
☒ % Coverage  
☒ Data Type  
☒ Meta Tags

Initially, "Show All" is checked. By unchecking that box, the others are available to check/uncheck.

The "i" button next to the Columns button toggles on/off the display of the file information above the SUMMARY SHEET header. (You can also view the file information by hovering the mouse over the "i" button.

#### Description of Right-Click Menu items:

**Create List** - Create a List view of the selected field. You can also create a List view of a field by double-clicking on a field name.

**List Cleanup...** To reduce or clean up a list. Presents the **List Cleanup** dialog box. (See [Cleaning a List.](#))

**Thesaurus...** To apply a thesaurus to a list. Presents the **Thesaurus** dialog box. (See [Applying a thesaurus to a list.](#))

**Find and Replace...** To apply a "Find and Replace" thesaurus to a list. (See [Find and Replace.](#))

**Further Processing** - Lets the user apply Import Engine text processing commands to an existing field without modifying the Import Filter. When Further Processing is used, a new field is created in the dataset and the original field is left unchanged. (See [Further Processing](#).)

**Extract My Keywords** - Lets the user apply Sample Keywords, StopWords or user's own list of Keywords to a selected field, resulting in a new field. (See [My Keywords](#)).

**Rename Field...** Rename the selected field.

**Copy Field...** Make a copy of the selected field.

**Set Data Type** - Set the data type for the selected field. The data type tells VantagePoint how to handle data in the field.

**Category** - The data in the field are a small set of discrete items. This data type is useful for creating detail windows that can be compared across selections and sub-dataset operations.

**General** - The data in the field are text. All fields are of this type unless specifically assigned another type.

**Image** - The data in the field is an image.

**Link** - The data in the field are links to web pages (URL) or file names with file path. When the user clicks on the data item in the Fielded Record View, VantagePoint should launch the application associated with that file name in the link. Examples of files are: Internet links (e.g., \*.htm, \*.html), images (e.g., \*.jpg, \*.bmp), documents (e.g., \*.pdf, \*.doc), spreadsheets (e.g., \*.xls), and intranet links (e.g., \*.ndl).

**Meta Field** - The data in the field contain generic information about a record.

**Number** - The data in the field are numeric. This affects how the data are sorted in List and Co-occurrence views. Also, the data in this type of field are summarized using statistical box-plots in the **Field Statistics** window and pop-ups on maps.

**Year** - The data in the field are four-digit years. The data in this type of field are summarized using column charts in the **Field Statistics** window and pop-ups on maps.

**Set Meta Tags...** Open the **Add/Remove Meta tags** dialog for the selected field. (See [Adding Meta tags for fields](#).)

**Delete Field...** Delete the selected field.

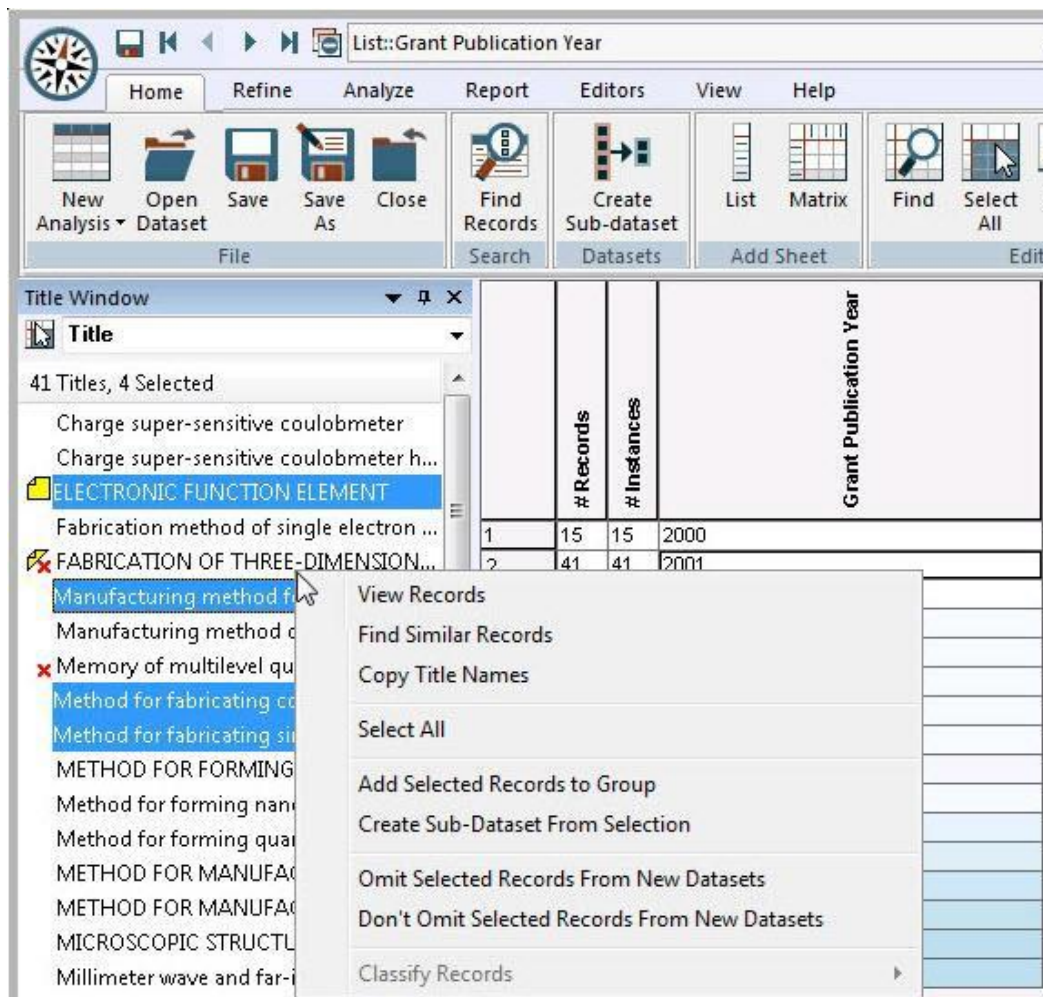
**View Statistics...** Open the [Field Statistics](#) window for browsing the summary statistics of the fields in your dataset.



## Title Window

The Title Window displays the titles of records in the dataset for a selected list item. When an item in a list view is selected (by clicking on a cell), the titles of records in the dataset containing that list item are displayed. When a cell is selected in a co-occurrence matrix, the Title Window displays the titles of records that contain both the row and column item of two list items.

The following example shows the Titles of 41 records in the selection (2001) from Grant Publication Year list. Of the 41 Titles, the user has selected four (4).




Icons next to a Title indicate that the record has been annotated in the Record View and/or that a record is marked to be omitted from new datasets.

Double-click on a record in the Title Window to view it in the Record View. You can also multi-select records in the Title Window using Ctrl-click and Shift-click. Right-click in the Title Window and a menu is displayed with the following options:

**View Records** - displays selection in [Record View](#).

**Find Similar Records** - displays similar records based on the content of the title(s) and abstract(s) in the record(s).

**Copy Title Names** - copies selection to a clipboard for pasting into another application.

**Select All** - selects all the titles in the Title View. Then use "Copy Title Names" to copy all titles into another application. (The  button next to the Title bar will also Select All Titles in the Title Window.)

**Add Selected Records to Group** - displays [Add Records to Group](#) dialog.

**Create Sub-Dataset From Selection** - takes whatever records are selected in the Title Window and creates a sub-dataset.

**Omit Selected Records From New Datasets** - tags record(s) for omission when creating a new dataset or exporting raw records.

**Don't Omit Selected Records From New Datasets** - if a record was previously tagged for omission, this removes the tag.

**Classify Records** - allows the user to assign an existing classification to a record or records. (See [Record Classifications](#).)

See Also:

[Create Sub-dataset](#)  
[Record View](#)

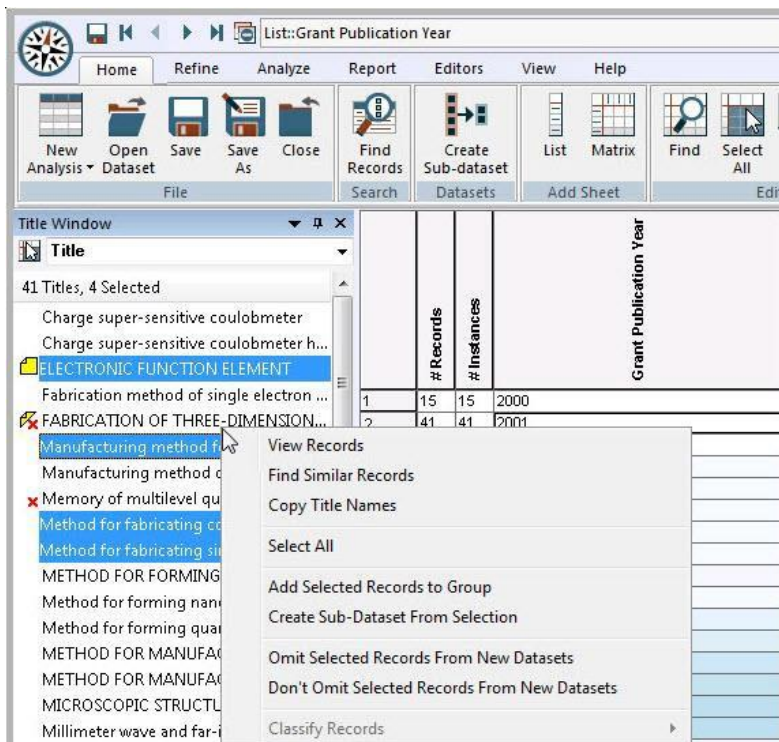
## How to update the Title Window

The Title Window is updated when you click on another cell in the Main Workspace.

## How to display a Record

To display a record, double-click on the title of the record displayed in the Title Window. Or, using the right-click menu in the Title Window, select **View Records**.

You can display a new record in the Record View by double-clicking on another title in the Title Window. Or, use the **Previous / Next** arrows in the [Record View](#) to browse each record in the Title Window.

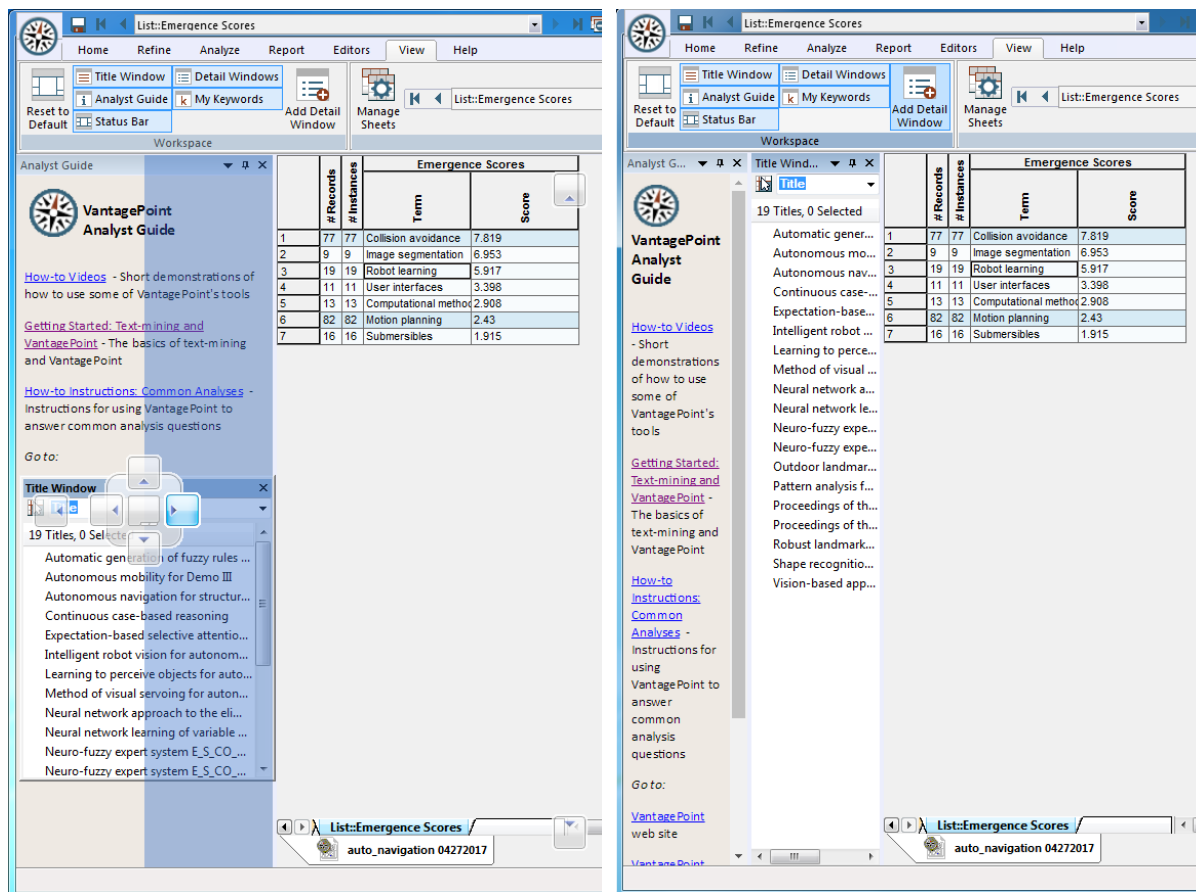


## Docking the Title Window

The Title Window can be repositioned anywhere in the VantagePoint workspace by clicking and dragging the Title Window banner.

In this case, the user has clicked and is dragging the Title Window banner down until the navigation arrows appear. The user drags the banner over the right navigation arrow and releases the mouse.

This results in its placement to the right of the Analyst Guide:



The Title Window can "float" anywhere in the workspace, as shown here. The user simply clicked and dragged the Title Window banner to the desired location:

The screenshot displays the VantagePoint software interface. The main window is titled "VantagePoint - auto\_navigation 04272017". The interface includes a menu bar (Home, Refine, Analyze, Report, Editors, View, Help) and a toolbar with icons for "Reset to Default", "Analyst Guide", "Detail Windows", "Add Detail Window", "Manage Sheets", and "Delete Sheet".

The "Analyst Guide" panel on the left contains the VantagePoint logo and links to "How-to Videos", "Getting Started: Text-mining and VantagePoint", "How-to Instructions: Common Analysis", and "VantagePoint web site". It also includes a "Go to:" section with links to "VantagePoint Users Guide (PDF)" and "VP-AG v160815".

The "List:Emergence Scores" table is visible in the center, showing a list of terms and their scores. The table has columns for "# Records", "# Instances", "Term", and "Score".

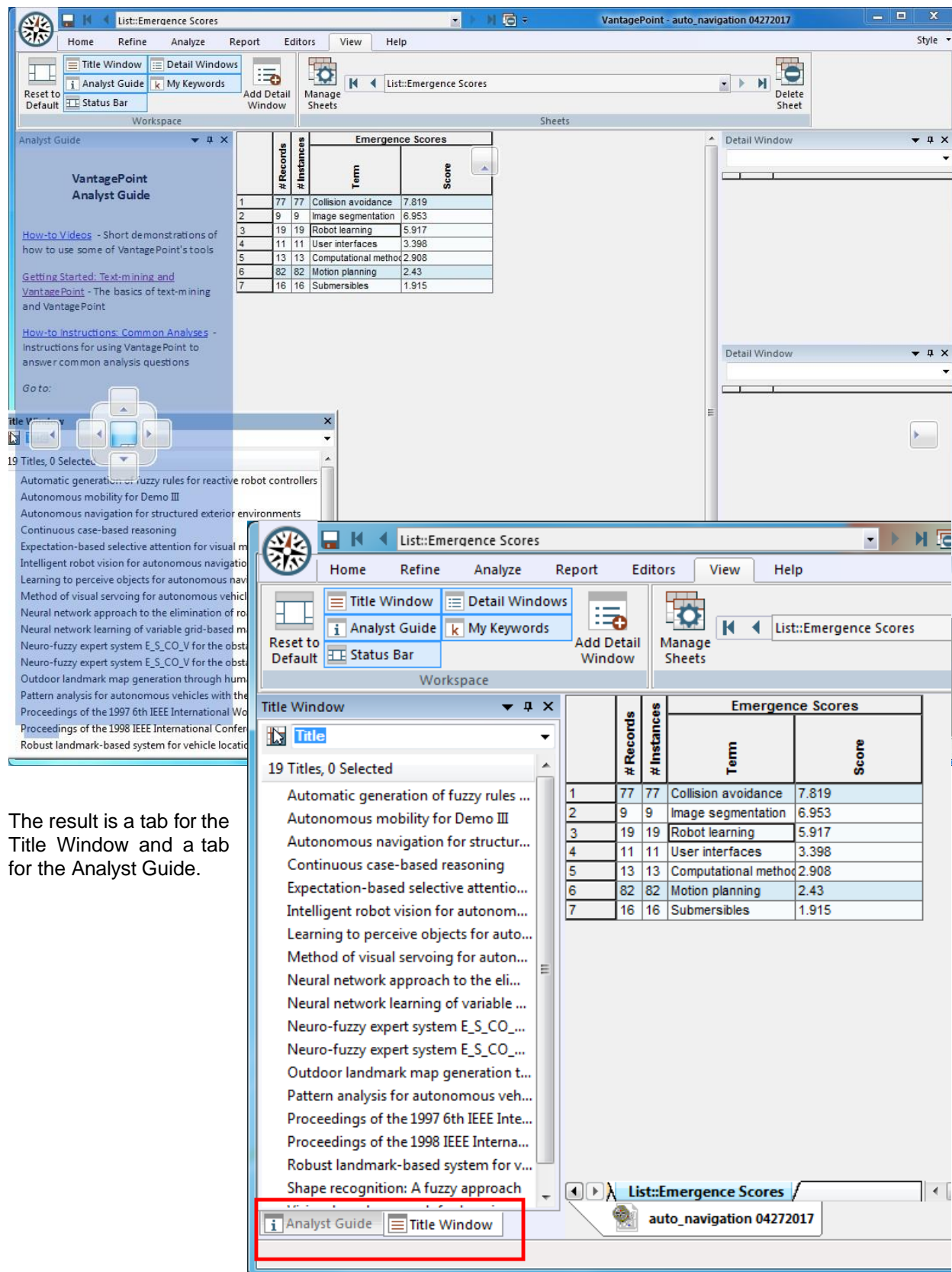
|   | # Records | # Instances | Term                 | Score |
|---|-----------|-------------|----------------------|-------|
| 1 | 77        | 77          | Collision avoidance  | 7.819 |
| 2 | 9         | 9           | Image segmentation   | 6.953 |
| 3 | 19        | 19          | Robot learning       | 5.917 |
| 4 | 11        | 11          | User interfaces      | 3.398 |
| 5 | 13        | 13          | Computational method | 2.908 |
| 6 | 82        | 82          | Motion planning      | 2.43  |
| 7 | 16        | 16          | Submersibles         | 1.915 |

The "Title Window" is floating over the Analyst Guide, displaying a list of 19 titles. The "Detail Window" is also visible on the right side of the interface.

The "My Keywords" panel on the right shows a list of 9 keywords, including "apparatus", "application", "characteristic", "component", and "composition".



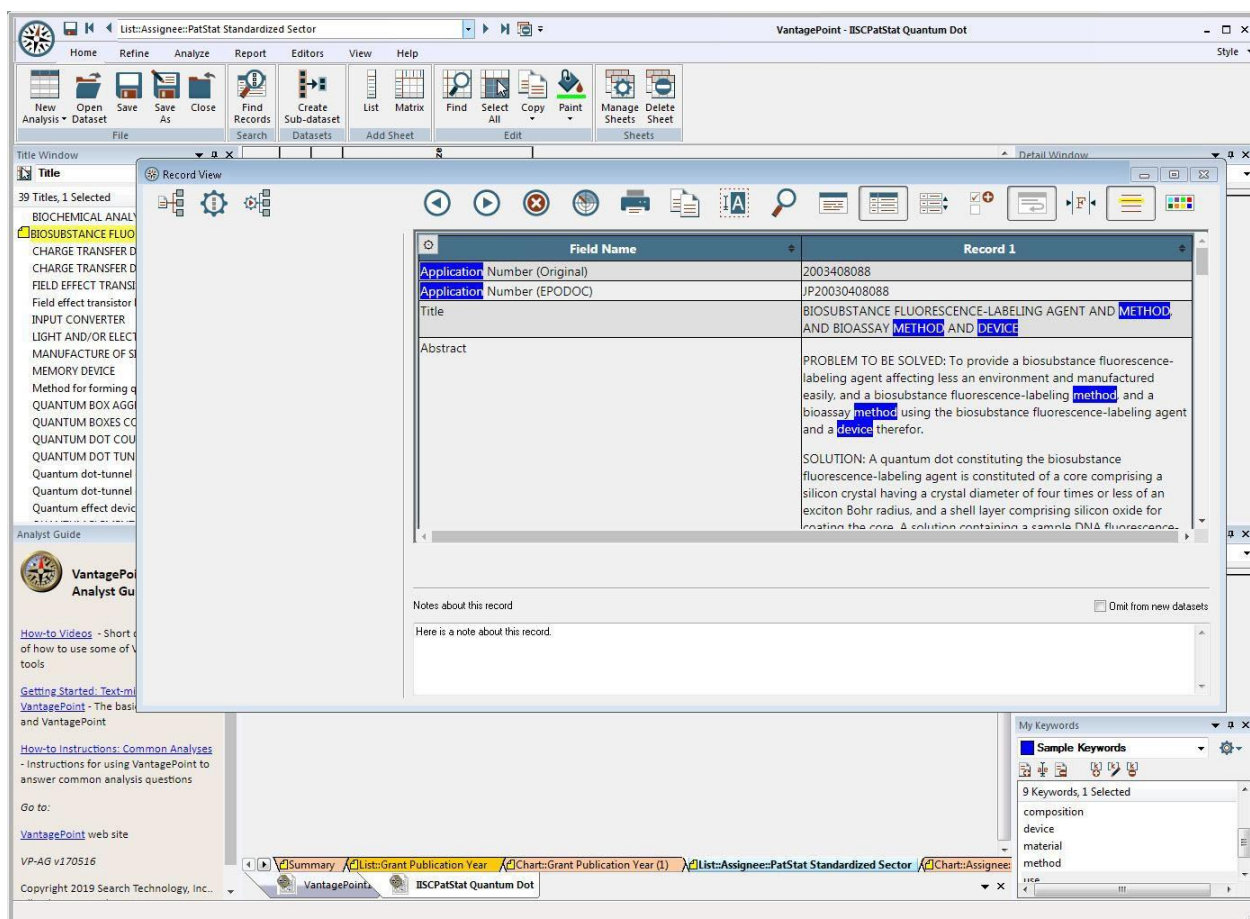
In this case, the user is choosing to create a tabbed view by clicking and dragging the Title Window banner until the center navigation box is highlighted:



The result is a tab for the Title Window and a tab for the Analyst Guide.

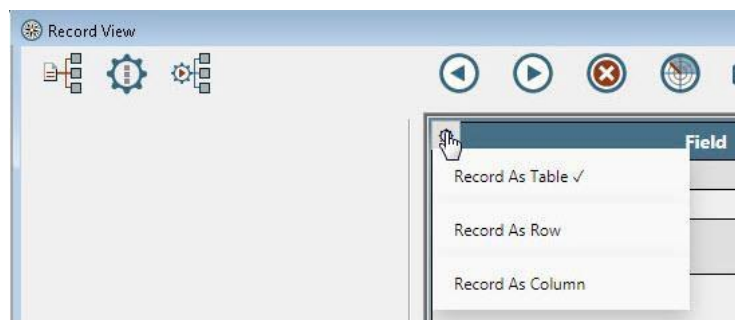
## Record View

The **Record View** is accessed by double-clicking on a title in the Title Window. The **Record View** shows one or more records at a time. This record shows [Record Classifications](#) for the dataset in the left panel (if there are any), and Classifications assigned to this record are indicated by checkmarks. The user's keywords from the Sample [Keywords](#) list (shown in the lower right corner) are highlighted in this illustration.



Records can be viewed as Fields, as shown above, or as a Raw Record.

In the Fielded view, the presentation can be in Table, Row, or Column layout. The selection is made here:



Here is a record displayed in Table format. In this layout, you can sort the content in ascending/descending order by clicking on the column headers. The width for the Field column can be resized by dragging the vertical border between columns. (A minimum column width is set, to maintain readability.)

| Field                         | Value   |
|-------------------------------|---|
| Application Number (EPODOC)   | US201414216296  |
| Application Number (Original) | 14216296  |
| Title                         | Integrated optical upconversion devices and related methods   |
| Abstract                      | Integrated upconversion devices capable of upconverting incident visible to short wavelength infrared photons to visible photons are disclosed. The device may include a quantum dot-based photodiode and a light-emitting diode. The device may further include a gain element such as a thin-film transistor. |
| Assignee                      | Research Triangle Institute / RESEARCH TRIANGLE INSTITUTE / 23247724 / 1 / GOV NON-PROFIT / Durham,NC / US / RES TRIANGLE INST / 94901  |
| Inventor                      | Klem, Ethan / 112188012 / Klem, Ethan / 0 / Durham,NC / US / KLEM ETHAN / 2023907 / KLEM, ETHAN / 14916236 / 1 / INDIVIDUAL   |
| IPC Codes::IPC Class Symbol   | H01L 27/28  |
| CPC                           | H01L25/167  |
| Patent Publication ID         | 425054891   |
| Parent Application ID         | 907487650   |
| Family ID (INPADOC)           | 8172877   |
| Family ID (docdb)             | 52132157  |
| Cited Publication ID          | 276246842   |
| Cited Application ID          |   |
| Cited Family (docdb)          | 22113192  |

Notes about this record ☐ Omit from new datasets

|   | Application Number (EPODOC) | Application Number (Original) |
|---|-----------------------------|-------------------------------|
| 1 | US201214112354              | 14112354                      |
| 5 | US201314106268              | 14106268                      |
| 3 | US201314140078              | 14140078                      |

Notes about this record ☐ Omit from new datasets

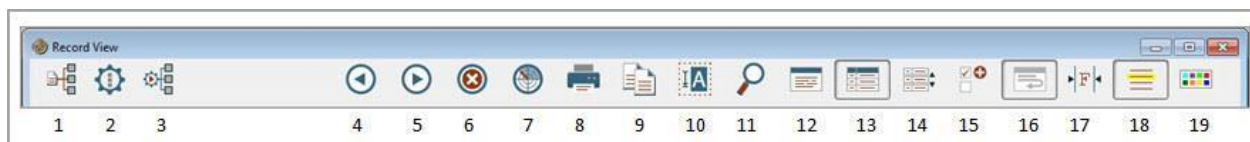
This shows the record displayed in Row format. The columns can be sorted in ascending/descending order. The columns can be resized.

Here is one of several records shown in Column format. The other records appear as you scroll to the right. The columns can be sorted in ascending/descending order and resized.

| Field Name                    | Record 1   |
|-------------------------------|--|
| Application Number (EPODOC)   | US201214112354   |
| Application Number (Original) | 14112354   |
| Title                         | Method and system for spectral unmixing of tissue images   |
| Abstract                      | A method and system for spectral demultiplexing of fluorescence species, such as quantum dots, conjugated with a biological species. The process of demultiplexing involves a non-linear regression on curve-fitting of estimated spectra of the quantum dots and confidence intervals describing the parameters of such fit for typical quantum dots. |
| Assignee                      | Ventana Medical Systems, Inc. / VENTANA MEDICAL SYSTEMS, INC. / 29280095 / 1 / COMPANY / Tucson, AZ / US / VENTANA MEDICAL SYSTEMS, INC. / 29866   |

Notes about this record ☐ Omit from new datasets

Following is a description of the buttons at the top of the display (numbered in the picture for reference):



1. **Manage Record Classifications:** Displays the Manage Record Classifications dialog, where user can set or change assignments. See the [Record Classification](#) topic for details.
2. **Auto-Classifer Settings:** Displays the [Auto Classifier](#) dialog.
3. **Classify Records:** Displays the dialog to automatically classify the records. See the [Classify Records](#) topic for details.
4. **Previous:** Displays previous record in [Title Window](#) (disabled if more than one record was selected in the Title Window).



5. **Next:** Displays next record in Title Window (disabled if more than one record was selected in the Title Window).
6. **Exit:** Closes the Record View.
7. **Find Similar Records:** Displays similar records based on a selected record. Resulting records will have a similarity score. See the [Find Similar Records](#) topic for more details.
8. **Print:** Prints the record in the format of the current view ("raw" or "fields")
9. **Copy:** Copies the highlighted (selected) portion of the record to the clipboard (for pasting to another application).
10. **Select All:** Selects the entire record (for copying to the clipboard).
11. **Find Text:** Brings up the [Find](#) dialog to find text.
12. **Show Raw Record:** Switches from the **Fields** view to the **Raw Record** view.
13. **Show Fields:** Switches from the **Raw Record** view to the **Fields** view, showing the parsed fields.
14. **Field Order:** User can change the order of Fields displayed in Fielded View. See [Field Order in the Record View](#) for details.
15. **Add Records to Group:** See the [Add Records to Group](#) topic for details.
16. **Wrap Text:** Word wrap. Applies to the Raw Record view only.
17. **Fixed Font:** Displays record in a fixed-width font. This improves readability for some record formats.
18. **Highlight Keywords:** If the user has created a [Keywords](#) List, this button will turn on or off the highlighting of those terms in the Record View.
19. **Set Keyword Colors:** Allows you to assign the color of your choice to terms in a Keywords List.

At the bottom of the **Record View** window, the following appear:

**Notes about this record:** (Also known as "Editable Note" for certain Import/Export functions.) Add annotations for the viewed record. Adding an annotation also adds an icon beside the record in the Title Window.

**Omit from new datasets:** Marks the viewed record for omission when a new dataset is created. Marking a record for omission adds an icon beside the record in the Title Window.

**Note:** "Omit" only comes into play when you subsequently perform an operation that creates a new dataset (for example, Create Sub-Dataset, Export Raw Records, Export Fielded Records, Remove Duplicate Records, and Data Fusion). For Create Sub- Dataset, Export Raw Records and Export Fielded Records, there is a checkbox in the operation to Omit records marked for omission. For Remove Duplicate Records and Data Fusion functions, if any of the records involved in your operation are tagged "Omit from new datasets", you will see a confirmation question, "This action involves records that have been marked for omission. Do you want to omit these records?" If you answer **Yes**, then the tagged records will be omitted from the new dataset. If you answer **No**, the "omit" tag will be ignored.

You can view another record by double-clicking on another title in the Title View without closing the **Record View**. Or, use the **Previous** / **Next** arrows to browse each record in the Title Window.

See Also:

[How to Display a Record](#)

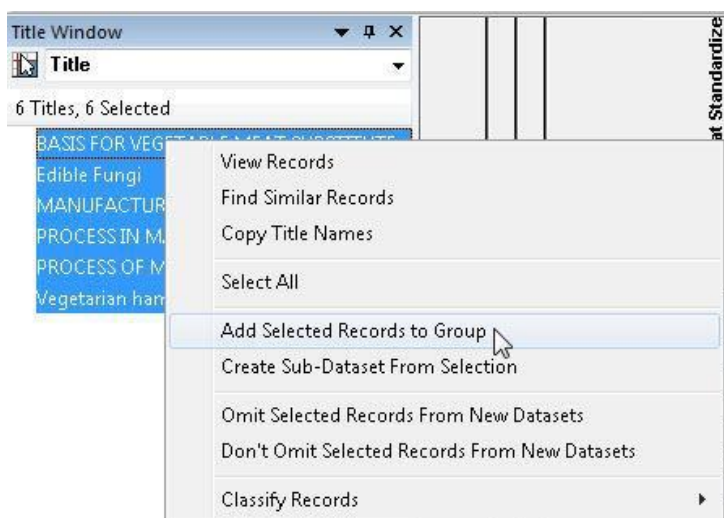
## Add Records to Group

The **Add Records to Group** feature enables the user to collect selected records into a group that can then be used for comparative analysis, visualization, creating sub-datasets, etc.

Adding Records to Group can be performed from the Record View:



Or from the Right-click menu in the Title View (for example, after a [Find Records](#) search):



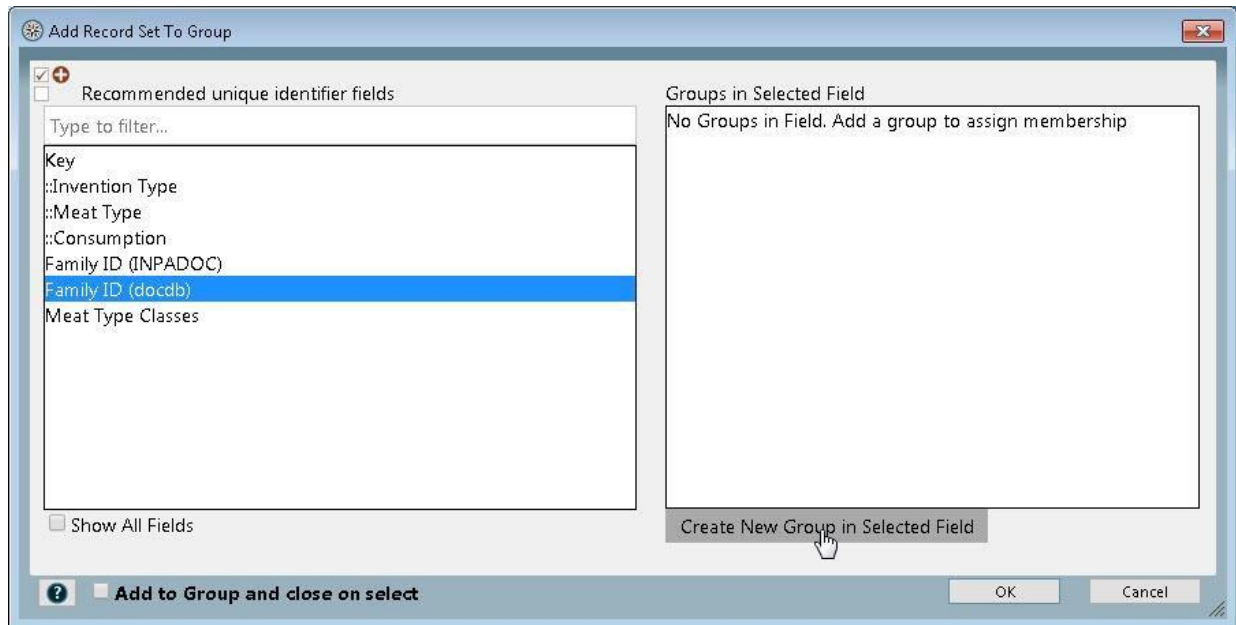
You are presented with the following dialog, from which you choose the Recommended unique identifier field and Group.

**Unique Identifier Fields** are single valued fields (i.e., 1 item per record) with 100% coverage. Unique Identifiers are recommended for this operation so you group only the records you've selected, and nothing more. These are typically patent or publication number fields.

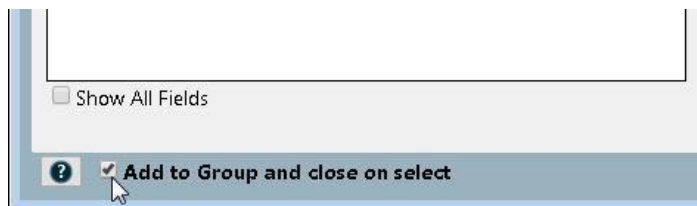
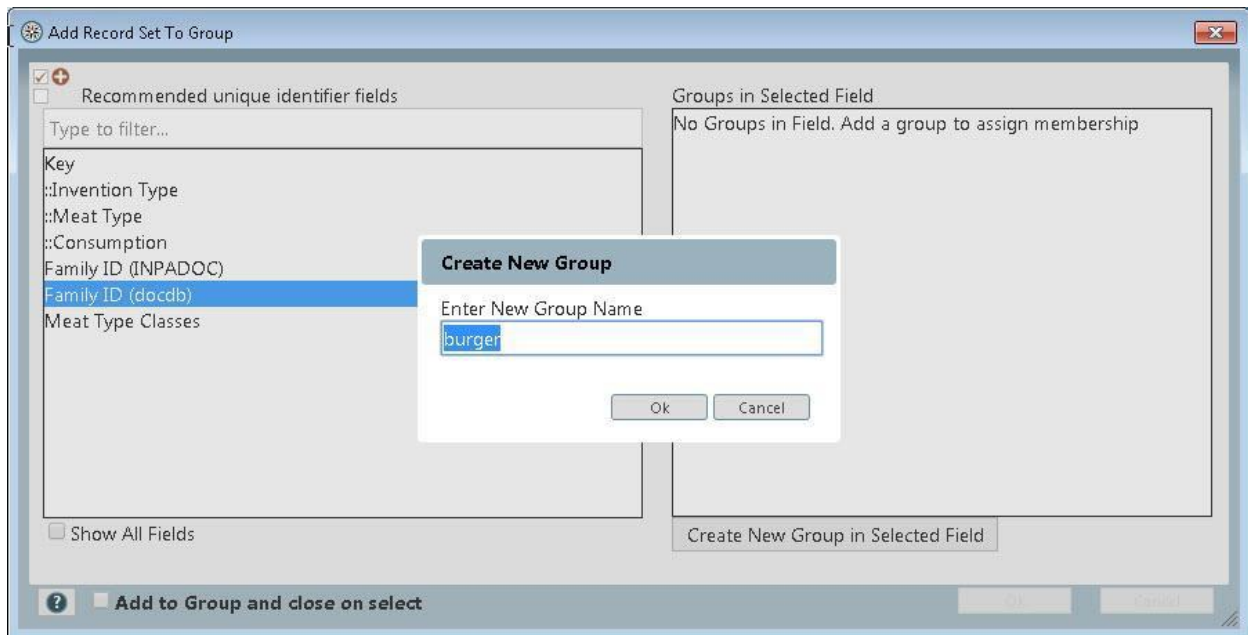
If you were to use something like a year field (which has 1 item per record but is not unique), and had a record selected from 2017, then every other record from 2017 would also appear in this group. This could be beneficial in its own way, but is not the targeted use case for this.



If no [Group](#) exists in the Selected Field, click the **Create New Group in Selected Field** button.



You are presented with the **Create New Group** dialog, where you enter the name:



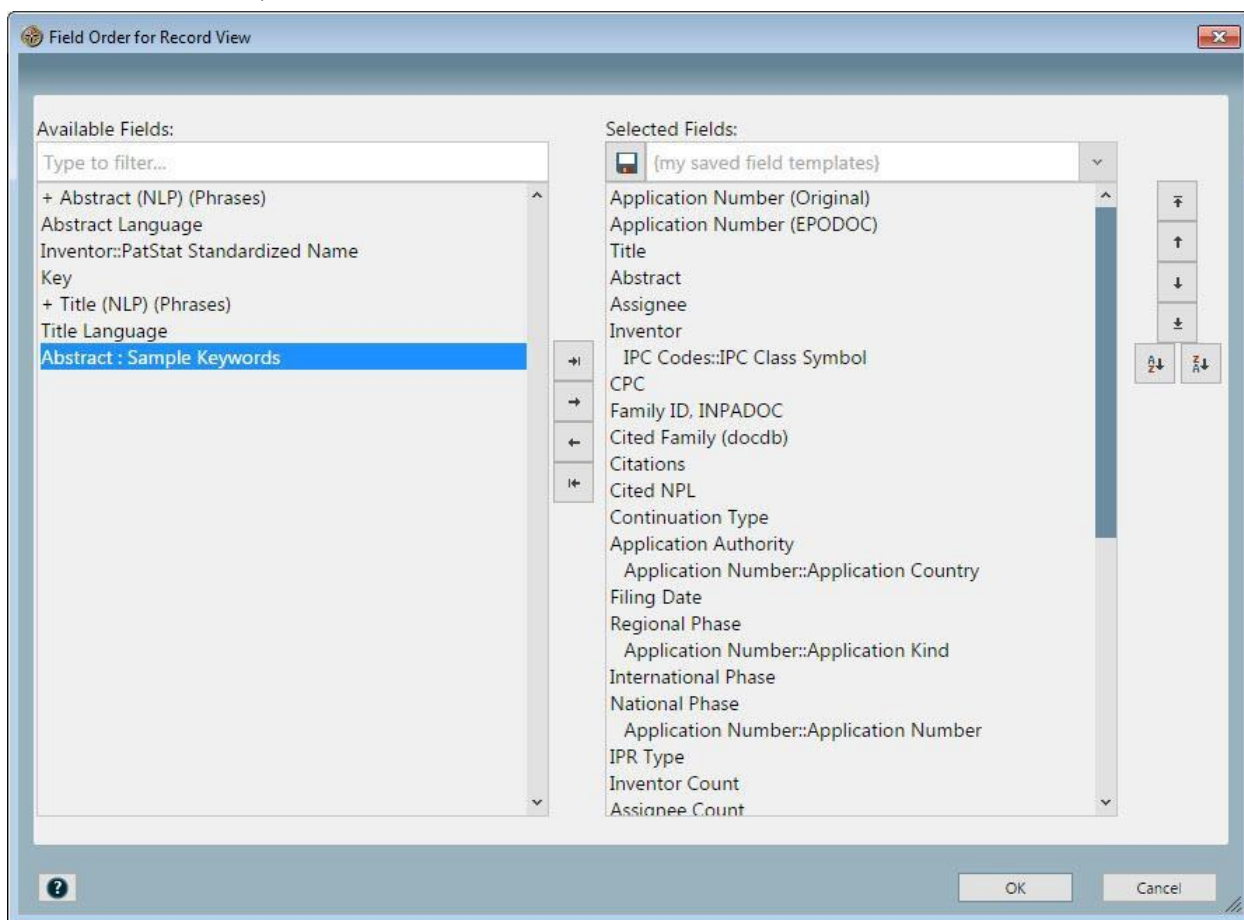
Click **OK**, then select that group in the “Groups in Selected Field” panel and click **OK**. Checking the box in the lower left corner closes the dialog automatically, once the Group name is selected.

## Field Order in the Record View

**Field Order:** Click this button to change the way records are displayed in the Fielded Record View.



This leads to the following dialog box (data are for illustration purposes -- whatever field names are in your dataset will be shown):



Fields available for selection appear on the left; Fields selected for display in the Fielded Record View appear on the right. The arrows between the windows are used to move fields from the Available Fields into the Selected Fields, or vice versa. To change the order that the fields are presented in the Fielded Record View, click on the field name (in the Selected Fields window) and use the Up and Down arrows to move the field names. You can also sort them alphabetically, in ascending or descending order.

The “Available Fields” window offers the “Type to filter” feature to help easily locate Field names.

Click **OK** to save changes and return to the Record View.

| Field Name                    | Value   |
|-------------------------------|---|
| Application Number (Original) | 14216296  |
| Application Number (EPODOC)   | US201414216296  |
| Title                         | Integrated optical upconversion devices and related methods   |
| Abstract                      | Integrated upconversion devices capable of upconverting incident visible to short wavelength infrared photons to visible photons are disclosed. The device may include a quantum dot-based photodiode and a light-emitting diode. The device may further include a gain element such as a thin-film transistor. |
| Assignee                      | Research Triangle Institute / RESEARCH TRIANGLE INSTITUTE / 22342347 / 1 / GOV NON-PROFIT / Durham, NC / US<br>Research Triangle Institute / RESEARCH TRIANGLE INSTITUTE / 22342347 / 1 / GOV NON-PROFIT / Research Triangle Park, NC / US  |
| Inventor                      | Klem, Ethan / Durham, NC / US / KLEM, ETHAN / 14344791 / 1 / INDIVIDUAL<br>Lewis, John / Durham, NC / US / LEWIS JOHN / 15996245 / 1 / INDIVIDUAL   |
| IPC Codes::IPC Class Symbol   | H01L 27/28    H01L 27/32    H01L 31/00    H01L 31/0296    H01L 31/032    H01L 31/0352    H01L 31/12    H01L 31/167    H01L 31/18    H01L 51/00    H01L 51/05    H01L 51/56  |
| CPC                           | H01L25/167<br>H01L27/288<br>H01L27/3227<br>H01L2924/0002<br>H01L31/12   |

Notes about this record ☐ Omit from new datasets

Your selection of Field order can be saved as a Template to be recalled for future use:

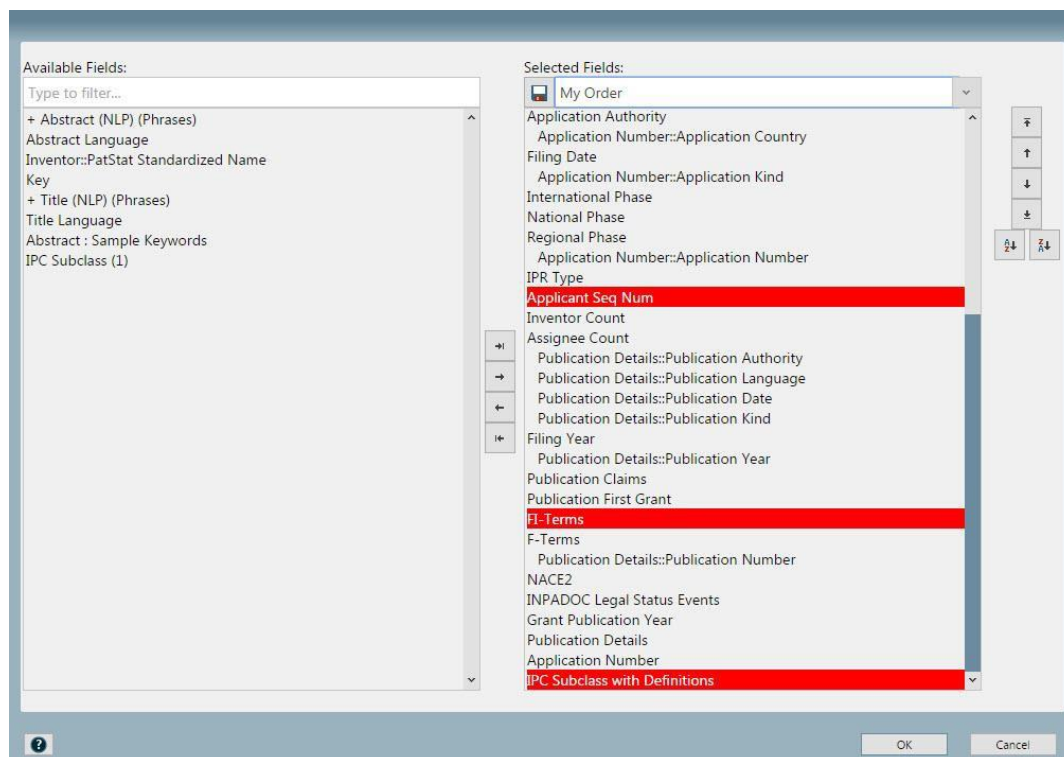
Use the field in the upper right of the dialog to type a name for the template and click the save icon.

Then click **OK** at the bottom of the dialog.

Now, your saved Field Order can be retrieved and applied in the future by selecting from the dropdown box.



If there are fields defined in that profile that are not found in the current dataset to which it is being applied, they will be highlighted in red, as shown below.



## Record Classification

You can use Record Classifications to create, manage, and apply your own classification system to your data. When you add a new classification, a new field is created in your dataset. This field is a type of "key" field where each item in the field is a unique record key. Typically, there will be exactly one item per record unless you have records that are identical copies of each other (an unusual situation). Each Category within a Classification becomes a "group" in that field.

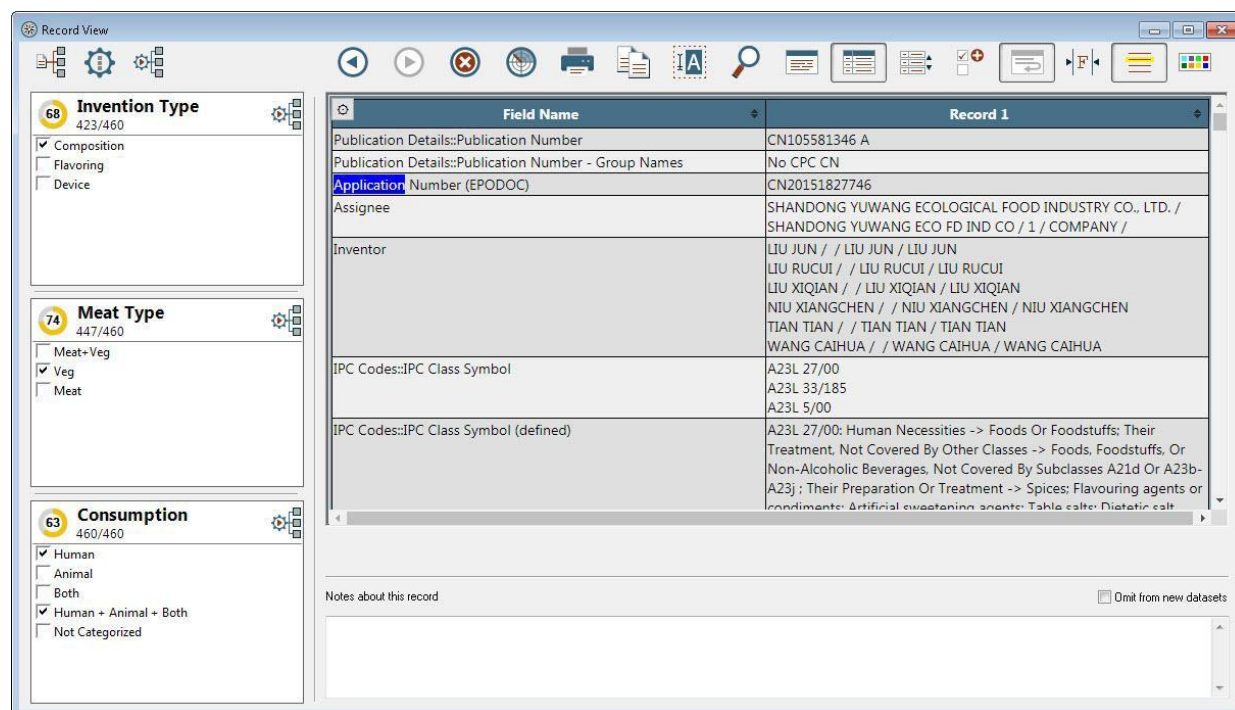
Classifications must first be created. See the main [Record Classification](#) topic for detailed instructions.

Then, in the Record View, Record Classifications and their Categories appear in the left panel. In the illustration below, three Classifications are shown: "Invention Type", "Meat Type", and "Consumption".

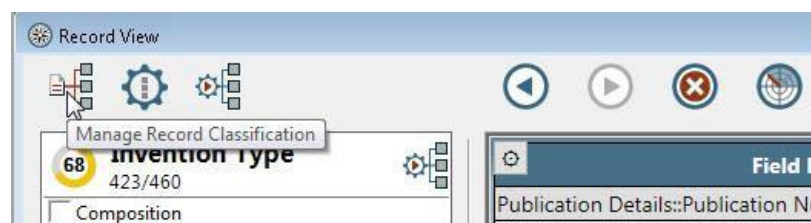
Assign records to the desired Classification/Category by checking the appropriate box, as shown below.

Click the "Next" icon  to advance to the next record, and continue assigning classification as you go.

Each Classification shows the number of records classified out of the total number of records. For "Invention Type", 423 of 460 total records are classified. The number within the colored circle ("68" for Invention Type) shows the "confidence score" the [Auto-Classifier](#) has in classifying the remaining records for the Classification.



The Record Classifications dialog can be accessed from the Record View by selecting the **Manage Record Classifications** icon.

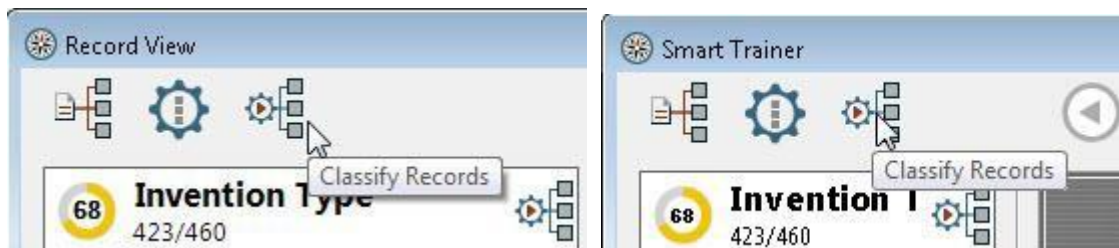


The other icons in this grouping relate to Record Classification: [Auto-Classifer Settings](#) and Classify Records.

For a more detailed explanation, see the main [Record Classification](#) Topic.

## Classify Records

After an acceptable level of confidence has been achieved for Classification of records, begin automatic Classification of the remaining records by selecting the **Classify Records** icon in either the [Record View](#) or the [Smart-Trainer](#) record view:



Notice the same icon also appears to the right of each Classification. The Auto-Classifer can be run on individual Classifications, too. See the expanded [Auto-Classifer](#) topic for details.

## Find Similar Records

As Records are being classified, a helpful tool is **Find Similar Records**. The user can define the number of Records to find and the matching percentage of similarity.

Resulting records will have a similarity score. The default fields for the search are Title and Abstract, but the user can change the training fields (in the [Auto-Classifer Settings](#) dialog, or by assigning the "Training Field" Meta Tag to the desired field. See the [Adding Meta Tags for Fields](#) topic for details).

In the [Record View](#) for the selected Record, the user clicks the **Find Similar Records** icon:

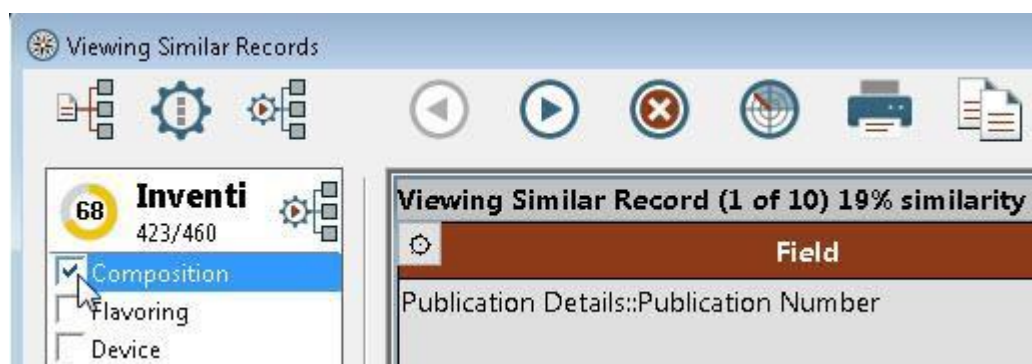


Here, you can change the default settings for number of records to find, and the percentage of matching. These settings will be retained until they are changed. If you do not want to change these settings and to avoid having this dialog presented, check the "Don't Show When Finding Similar Records" box, then click **Continue**. (To enable this dialog again, go to the [Options/Confirmations](#) dialog and check the "Show Find Similar Records" checkbox.)




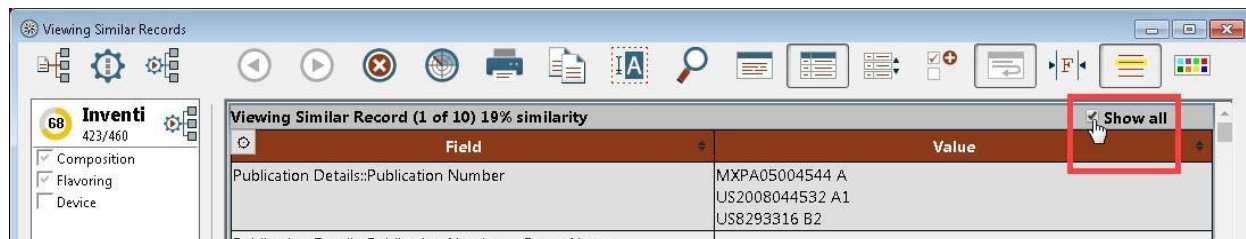


In this case, ten records are returned, allowing the user to view and assign Classification to those records, if desired:



During this display, the user can classify each record individually, or en masse (when Viewing All Similar Records using the "Show all" display).

When several records are returned, they are presented in order of similarity, with the highest similarity being shown first. View the remaining Similar Records by clicking the "Next" button , or check the "Show all" box and use the scrollbars to view All the Similar Records returned.



See Also:

[Record Classification](#)  
[Auto-Classifier](#)  
[Record View](#)



## Detail Windows Overview

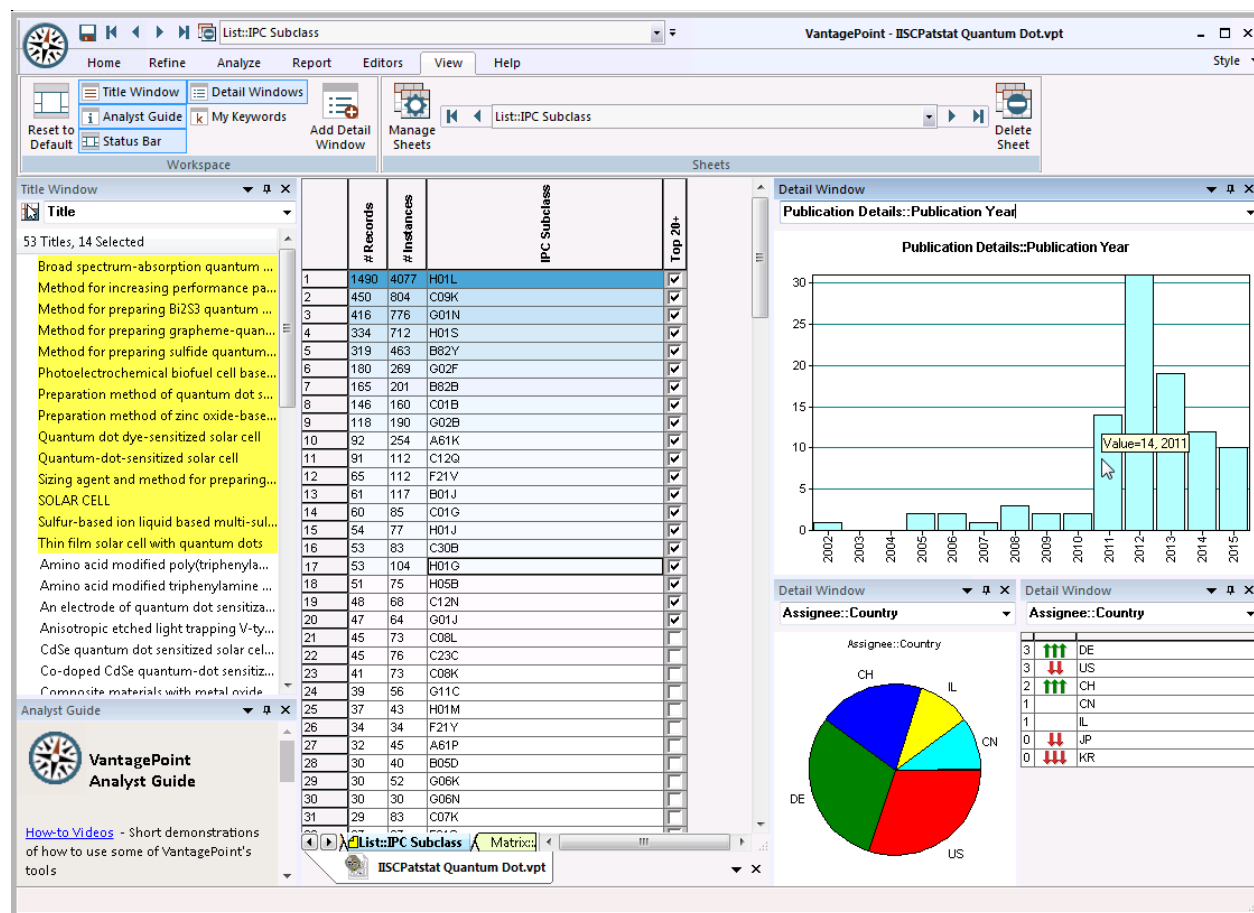
**New in this release!** Selections are saved per sheet as long as a detail window is available to populate. For example, if two detail window selections had previously been set for a sheet, but only one detail window is open, then only the first detail window will populate when switching to that sheet. No Detail Windows will be created nor destroyed.

Detail Windows provide details of the records selected in the Main View. They show the co-occurrence of items in one field with items or nodes selected in a view. There are two types of views in the Detail Windows: Lists and Charts.

The List-type Detail Windows display the co-occurrence values, the "expectancy arrows", and the text of the co-occurring items. The Chart-type Detail Windows show the same data as the List-type Detail Windows, except that the co-occurrence values are graphically displayed and the expectancy arrows are not shown.

You can switch between view types, change the chart type, zoom in on the column charts, copy and/or print the data, and perform other operations using menus accessed by right-clicking on the Detail Windows. Each menu is described in the sub-topics listed at the bottom of this page.

The following illustration shows three Detail Windows on the right-hand side of the screen, each showing details about the records selected in the List view. The Detail Windows are updated as you make selections in the Main View, in the same way the Title List is updated when you make a new selection.



When you click on an item in a Detail Window, the records are highlighted in the Title Window. In the illustration shown above, the user has clicked on the year "2011" in the "Publication Details: Publication

Year" Detail Window, and the 14 record titles (out of the 53 records selected in the List view) from 2011 are highlighted in the Title View. They are also moved to appear at the top of the list of Titles in the Title Window.

Any field can be viewed in the Detail Windows – the selection is made from a drop-down menu at the top of each Detail Window, or by typing the name of a field (Type to filter). The field name window will populate with fields matching the entry for easy selection.

See the following Topics for additional details.

### Detail Window-Expectancy Arrows

An expectancy arrow appears if a co-occurrence value in the Detail Window is much higher or much lower than the co-occurrence's expected value. When an arrow appears, it can be reasonably inferred that the co-occurrence value in the detail view diverges from expectation. The number of arrows (one, two or three) indicates the degree to which the co-occurrence value departs from expectation, with three arrows showing the greatest departure. The absence of an arrow shows that the value does not depart much from expectation or that the expectancy cannot be determined. Green upward-pointing arrows mean that the co-occurrence value is much greater than expected. Conversely, red downward-pointing arrows mean that the value is much lower than expected. Note that an item which has zero co-occurrence with the selection in a view is shown in a Detail Window only if it is much lower than expectation.

| Priority Countries |     |    |
|--------------------|-----|----|
| 42                 | ↑↑↑ | US |
| 1                  |     | DE |
| 0                  | ↓   | GB |
| 0                  | ↓↓↓ | JP |

| Patent Assignees |     |                   |
|------------------|-----|-------------------|
| 20               | ↑↑↑ | COLGATE PALMOLIV  |
| 16               | ↑↑↑ | ENAMELON INC      |
| 6                | ↑↑↑ | CHURCH & DWIGHT C |
| 1                | ↑↑  | AFFLITTO J        |
| 1                | ↑↑  | ENAMELON          |
| 1                | ↑↑  | ENAMELON RES      |
| 1                | ↑   | GAFFAR A          |
| 1                | ↑↑  | NABI N            |
| 1                | ↑↑  | USEN N            |
| 1                | ↑↑  | WINSTON A E       |
| 0                | ↓   | KAO CORP          |
| 0                | ↓↓↓ | LION CORP         |
| 0                | ↓↓↓ | PROCTER & GAMBLE  |

### Detail Window-List Pop-up Menu

Right-clicking on a list in a Detail Window brings up a menu as the following illustration shows:

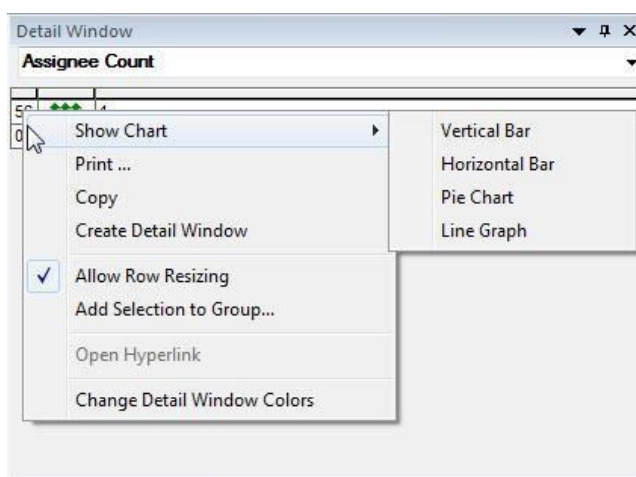
**Show chart...** – switches from displaying a list to displaying one of the following charts:

Vertical Bar - switches the Detail Window to show the data as a vertical bar chart.

Horizontal Bar - switches the Detail Window to show the data as a horizontal bar chart.

Pie Chart - switches the Detail Window to show the data as a pie chart.

Line Graph - switches the Detail Window to show the data as a line graph.



**Print ...** – prints the list. (**CAUTION:** This can print a lot of pages if the list is long.)

**Copy** – copies the selected (highlighted) portion of the list to the clipboard.

**Create Detail Window** - opens a new Detail Window.

**Allow Row Resizing** - when checked, row height can be adjusted.

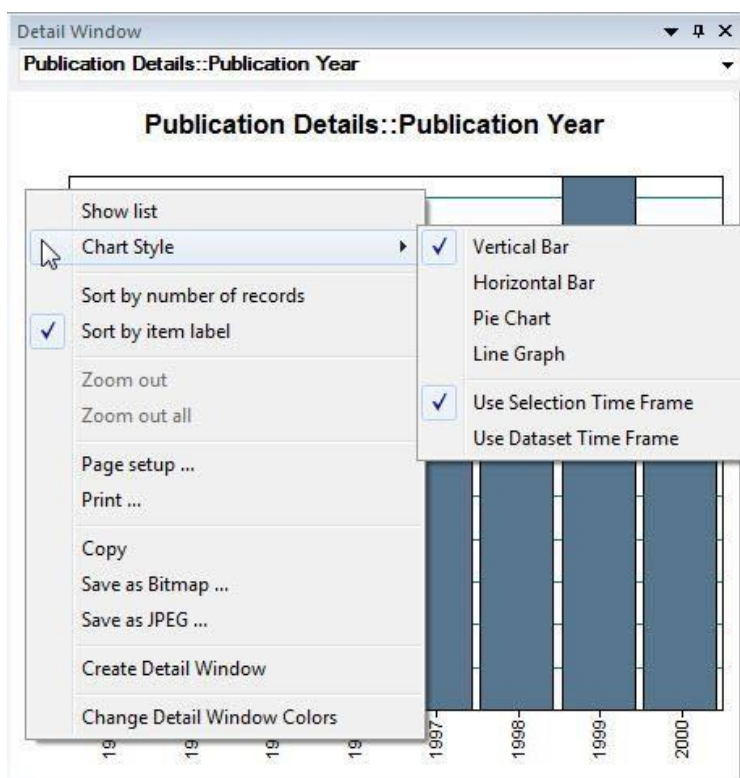
**Add Selection to Group...** - Brings up the dialog to select from an existing Group (if any exist), or allows you to create a new Group.

**Open Hyperlink** - opens the hyperlink, if applicable.

**Change Detail Window Colors** - Brings up the Options dialog where colors for Detail Windows are set.

### **Detail Window-Chart Pop-up Menu**

When you right-click on a chart in a Detail Window, the following menu pops up:



**Show list** – Switches the Detail Window to show a list view instead of a chart.

**Chart Style** – Switches the chart style shown in the Detail Window to one of the following charts:

Vertical Bar - Switches the Detail Window to show the data as a vertical bar chart.

Horizontal Bar - Switches the Detail Window to show the data as a horizontal bar chart.

Pie Chart - Switches the Detail Window to show the data as a pie chart.

Line Graph - Switches the Detail Window to show the data as a line graph.

Use Selection Time Frame - Limits the chart's timeframe displayed to the range within the selection.

**Use Dataset Time Frame** - Displays the chart's timeframe as a range covering the entire dataset.

**Sort by number of records** – Sorts the items in the chart by number of records (descending order).

**Sort by item label** – Sorts the items in the chart alphabetically by label.

**Zoom out** – If you have zoomed in on a chart, this zooms out. If you have performed several zoom-in operations, the view is zoomed out one level at a time.

**Zoom out all** – This zooms the chart all the way out to show all the data.

**Page setup ...** – Brings up a dialog box for setting several options for printing charts.

**Print ...** – Prints the chart.

**Copy** – Copies the chart to the clipboard (for pasting into other applications).

**Save as Bitmap/Save as JPEG ...** – Brings up a dialog box for saving the chart to a Bitmap (\*.bmp) or JPEG file.

**Create Detail Window** - Opens a new Detail Window.

**Change Detail Window Colors** - Brings up the Options dialog where colors for Detail Windows are set.

## **Detail Windows-Record/Parent Item Scope**

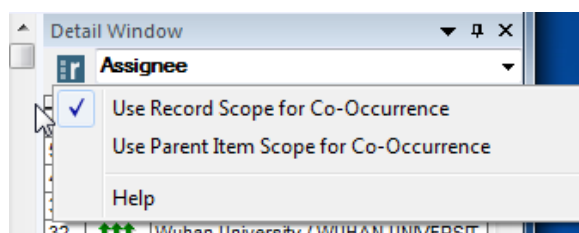
Detail Windows provide details of the records selected in the Main View. They show the co-occurrence of items in one field with items selected in a view.

Parent Fields and Table Views enable an additional layer of analysis. Parent Fields are made up of Child Fields, which introduces the notion of co-occurrence among a Child Field within the Parent Field.

Detail Windows that contain related fields (Parent, Child, or Sibling) have a button to the left of the field name, as seen in the illustration below. Clicking this button pops up a menu that allows you to select the scope of data displayed in the Details Window.

### **Use Record Scope for Co-Occurrence**

When Record Scope is selected, the Detail Window behaves the same way it does with any field. The records selected in the Main View define the scope, and the Detail Window shows all co-occurring items for the field.



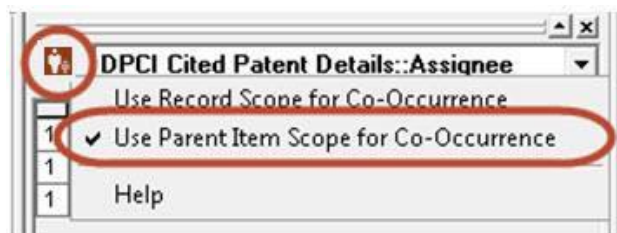
In the following illustration, the Detail Window uses Record Scope to show all Assignees for the selected record. The record has one Family Member (US5827505A) (highlighted) that cites 10 patents. The collection of Assignees for all 10 Cited Patents is shown in the Detail Window. Note that if the record had other Family Members, the Assignees from those Family Members would also be displayed in the Detail Window.

| DPCI Cited Patent Details |                          |               |              |                    |              |              |               |   |                  |
|---------------------------|--------------------------|---------------|--------------|--------------------|--------------|--------------|---------------|---|------------------|
|                           | # Records<br># Instances | Family Member | Cited Patent | Relevance Category | Source       | Cited Family | Priority Date | Assignee  | US5827505A (AND) |
| 1                         | 1                        | 1             | US5827505A   |                    | 0 (Examiner) | 197027924R   | 1970-04-21    | PREV-COAT CORP (PRE_-N)   |                  |
| 2                         | 1                        | 1             | US5827505A   |                    | 0 (Examiner) | 1986094946   | 1987-10-06    | GOLDSCHMIDT AG TH (GOLD)  |                  |
| 3                         | 1                        | 1             | US5827505A   |                    | 0 (Examiner) | 1992398080   | 1992-11-10    | REVLON CONSUMER PROD CORP (REVL)  |                  |
| 4                         | 1                        | 1             | US5827505A   |                    | 0 (Examiner) | 1996288503   | 1996-12-31    | CURTIS INC HELENE (CURT-N)<br>UNILEVER NV (UNIL)<br>UNILEVER PLC (UNIL)   |                  |
| 5                         | 1                        | 1             | US5827505A   |                    | 0 (Examiner) | 197201160T   | 1971-11-30    | PROCTER & GAMBLE CO (PROC)  |                  |
| 6                         | 1                        | 1             | US5827505A   |                    | 0 (Examiner) | 1990180429   | 1991-02-19    | CHESEBROUGH PONDS INC (CHEO)<br>UNILEVER NV (UNIL)<br>UNILEVER PLC (UNIL) |                  |
| 7                         | 1                        | 1             | US5827505A   | Y                  | 0 (Examiner) | 1994265729   | 1994-08-31    | L'OREAL SA (OREA)   |                  |
| 8                         | 1                        | 1             | US5827505A   |                    | 0 (Examiner) | 1996116280   | 1996-02-13    | ARDEN CO DIV CONOPCO INC ELIZABETH  |                  |
| 9                         | 1                        | 1             | US5827505A   | Y                  | 0 (Examiner) | 1990172938   | 1992-01-07    | CHESEBROUGH PONDS INC (CHEO)<br>UNILEVER NV (UNIL)<br>UNILEVER PLC (UNIL) |                  |
| 10                        | 1                        | 1             | US5827505A   |                    | 0 (Examiner) | 1996269752   | 1997-08-12    | CURTIS INC HELENE (CURT-N)<br>UNILEVER NV (UNIL)<br>UNILEVER PLC (UNIL)   |                  |
| 11                        | 1                        | 1             | AT409587B    |                    | 0 (Examiner) | 199657041    | 1996-10-08    | KIEN H (KIEN-I)   |                  |
| 12                        | 1                        | 1             | AT409587B    |                    | 0 (Examiner) | 2001062363   | 2000-12-14    | STOCK VITAL GMBH (STOC-N)   |                  |
| 13                        | 1                        | 1             | AT409587B    |                    | 0 (Examiner) | 1999122837   | 1999-03-18    | STRATMANN R (STRA-I)  |                  |
| 14                        | 1                        | 1             | AT412448B    |                    | 0 (Examiner) | 1997271728   | 1997-07-15    | MEDICIS PHARM CORP (MEDI-N)<br>MEDICIS PHARM INC (MEDI-N)                 |                  |

| DPCI Cited Patent Details::Assignee |                                    |
|-------------------------------------|------------------------------------|
| 1                                   | ARDEN CO DIV CONOPCO INC ELIZABETH |
| 1                                   | BANNER A AND F (BAN_-I)            |
| 1                                   | CHESEBROUGH PONDS INC (CHEO)       |
| 1                                   | COLGATE PALMOLIVE CO (COLG)        |
| 1                                   | CURTIS INC HELENE (CURT-N)         |
| 1                                   | GOLDSCHMIDT AG TH (GOLD)           |
| 1                                   | HENKEL & CIE GMBH (HENK)           |
| 1                                   | HILL I D (HILL-I)                  |
| 1                                   | HUBER CORP J M (HUBE)              |
| 1                                   | L'OREAL SA (OREA)                  |
| 1                                   | LEVER BROS CO (UNIL)               |
| 1                                   | PREV-COAT CORP (PRE_-N)            |
| 1                                   | PRINCETON CHEM RES INC (PRIN)      |
| 1                                   | PRINCETON PHARM INC (PRIN)         |
| 1                                   | PROCTER & GAMBLE CO (PROC)         |
| 1                                   | REVLON CONSUMER PROD CORP (REVL)   |
| 1                                   | SONY CORP (SONY)                   |
| 1                                   | UNILEVER NV (UNIL)                 |
| 1                                   | UNILEVER PLC (UNIL)                |
| 1                                   | UNION CARBIDE CORP (UNIC)          |
| 1                                   | WHITE R D (WHIT-I)                 |
| 1                                   | WILKINSON SWORD LTD (WILK)         |

### Use Parent Item Scope for Co-Occurrence

Selecting the other option in the menu changes the scope to the Parent Item(s).



In this illustration, the Detail Window now shows only the 3 Assignees for the selected Parent Item (Cited Patent US5589177A).

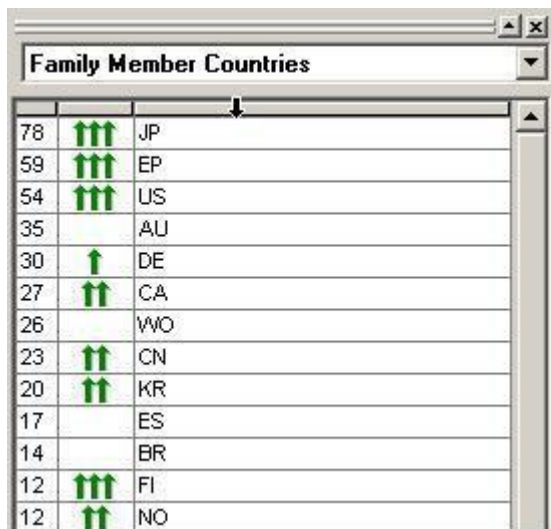
| DPCI Cited Patent Details |                          |               |              |                    |              |              |               |   |                  |
|---------------------------|--------------------------|---------------|--------------|--------------------|--------------|--------------|---------------|---|------------------|
|                           | # Records<br># Instances | Family Member | Cited Patent | Relevance Category | Source       | Cited Family | Priority Date | Assignee  | US5827505A (AND) |
| 1                         | 1                        | 1             | US5827505A   |                    | 0 (Examiner) | 197027924R   | 1970-04-21    | PREV-COAT CORP (PRE_-N)   |                  |
| 2                         | 1                        | 1             | US5827505A   |                    | 0 (Examiner) | 1986094946   | 1987-10-06    | GOLDSCHMIDT AG TH (GOLD)  |                  |
| 3                         | 1                        | 1             | US5827505A   |                    | 0 (Examiner) | 1992398080   | 1992-11-10    | REVLON CONSUMER PROD CORP (REVL)  |                  |
| 4                         | 1                        | 1             | US5827505A   |                    | 0 (Examiner) | 1996288503   | 1996-12-31    | CURTIS INC HELENE (CURT-N)<br>UNILEVER NV (UNIL)<br>UNILEVER PLC (UNIL)   |                  |
| 5                         | 1                        | 1             | US5827505A   |                    | 0 (Examiner) | 197201160T   | 1971-11-30    | PROCTER & GAMBLE CO (PROC)  |                  |
| 6                         | 1                        | 1             | US5827505A   |                    | 0 (Examiner) | 1990180429   | 1991-02-19    | CHESEBROUGH PONDS INC (CHEO)<br>UNILEVER NV (UNIL)<br>UNILEVER PLC (UNIL) |                  |
| 7                         | 1                        | 1             | US5827505A   | Y                  | 0 (Examiner) | 1994265729   | 1994-08-31    | L'OREAL SA (OREA)   |                  |
| 8                         | 1                        | 1             | US5827505A   |                    | 0 (Examiner) | 1996116280   | 1996-02-13    | ARDEN CO DIV CONOPCO INC ELIZABETH  |                  |
| 9                         | 1                        | 1             | US5827505A   | Y                  | 0 (Examiner) | 1990172938   | 1992-01-07    | CHESEBROUGH PONDS INC (CHEO)<br>UNILEVER NV (UNIL)<br>UNILEVER PLC (UNIL) |                  |
| 10                        | 1                        | 1             | US5827505A   |                    | 0 (Examiner) | 1996269752   | 1997-08-12    | CURTIS INC HELENE (CURT-N)<br>UNILEVER NV (UNIL)<br>UNILEVER PLC (UNIL)   |                  |
| 11                        | 1                        | 1             | AT409587B    |                    | 0 (Examiner) | 199657041    | 1996-10-08    | KIEN H (KIEN-I)   |                  |
| 12                        | 1                        | 1             | AT409587B    |                    | 0 (Examiner) | 2001062363   | 2000-12-14    | STOCK VITAL GMBH (STOC-N)   |                  |
| 13                        | 1                        | 1             | AT409587B    |                    | 0 (Examiner) | 1999122837   | 1999-03-18    | STRATMANN R (STRA-I)  |                  |

| DPCI Cited Patent Details::Assignee |                            |
|-------------------------------------|----------------------------|
| 1                                   | CURTIS INC HELENE (CURT-N) |
| 1                                   | UNILEVER NV (UNIL)         |
| 1                                   | UNILEVER PLC (UNIL)        |



## Detail Window-Sorting Lists

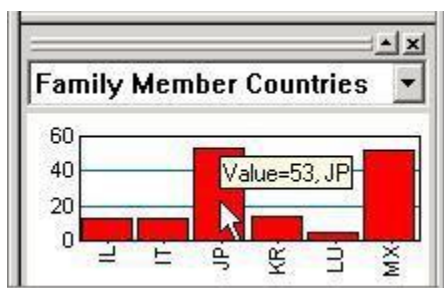
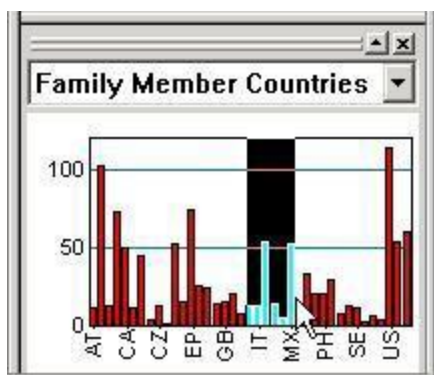
When lists are viewed in a Detail Window, they can be sorted by double-clicking on the bar above the data (similar to sorting lists in the Main window). When you can sort, the cursor changes to the "sort" cursor (down arrow) as shown in the following illustration:



| 78 | ↑↑↑ | JP  |
|----|-----|-----|
| 59 | ↑↑↑ | EP  |
| 54 | ↑↑↑ | US  |
| 35 |     | AU  |
| 30 | ↑   | DE  |
| 27 | ↑↑  | CA  |
| 26 |     | WVO |
| 23 | ↑↑  | CN  |
| 20 | ↑↑  | KR  |
| 17 |     | ES  |
| 14 |     | BR  |
| 12 | ↑↑↑ | FI  |
| 12 | ↑↑  | NO  |

## Detail Window - Zooming in a Chart

When you click and drag across a range of data, the view zooms to display only those data selected, as shown in the two illustrations following:

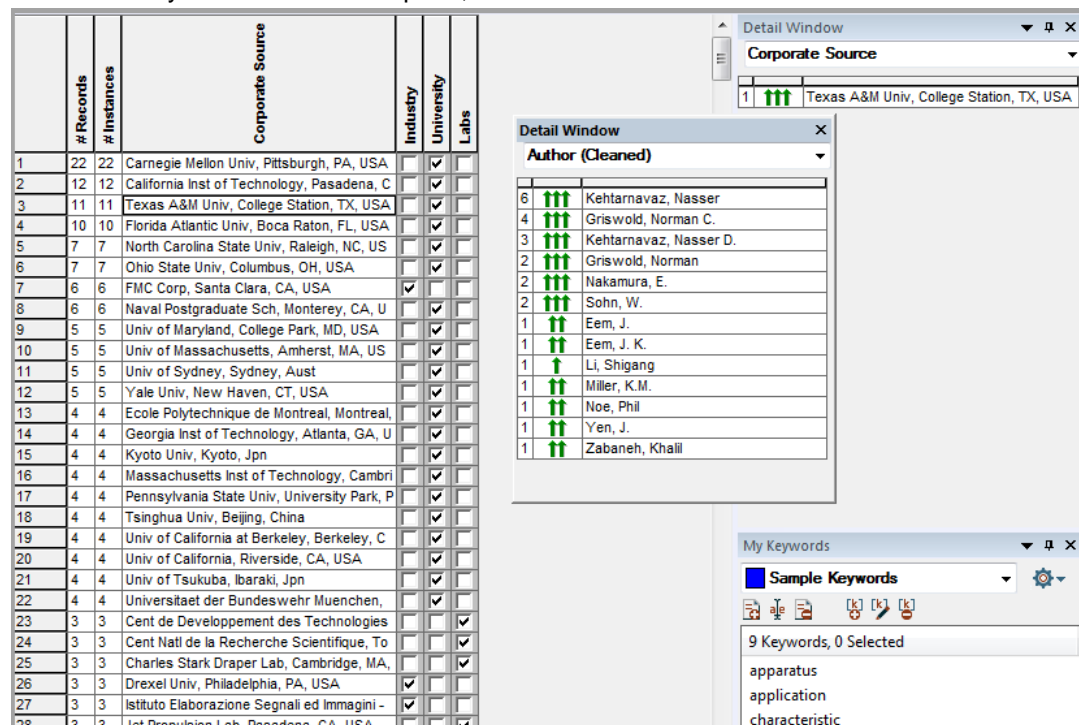


You can zoom out again using the right-click menu, as explained under Detail Window - Chart Pop-up Menu.

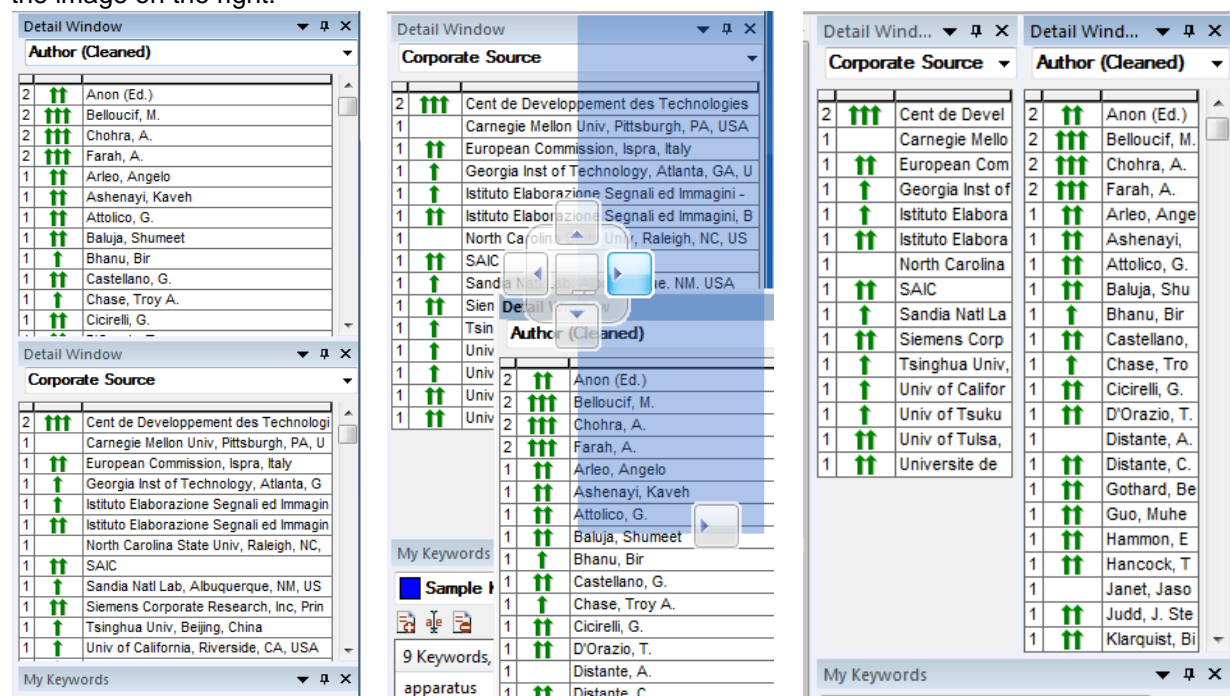


## Detail Window-Docking

Detail Windows can be moved/rearranged by clicking and dragging the Detail Window bar. Detail Windows can "float" anywhere in the workspace, as seen here:



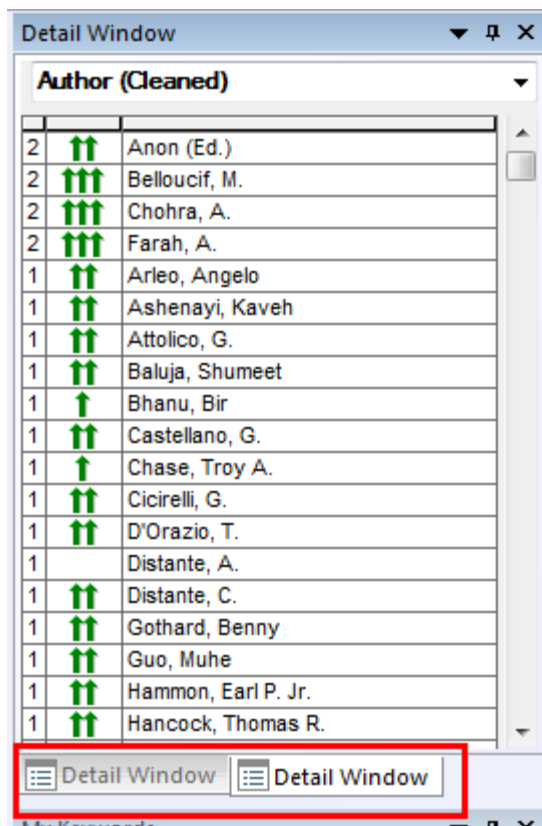
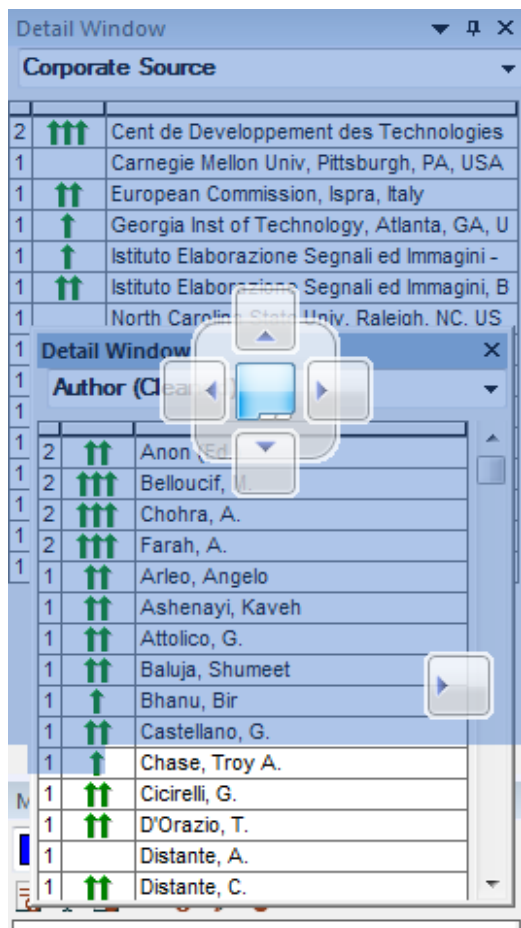
By default, multiple Detail Windows appear "stacked" along the right side of the VantagePoint window. Starting with the positions shown on the left below, the middle illustration shows the user has clicked the top Detail Window bar and is dragging it down. The navigation arrows appear and the user drags the Detail Window bar over the right navigation arrow and releases the mouse. The side-by-side result is shown in the image on the right:



Another option is to create tabbed views:

Here, the user has clicked and drags the Detail Window bar until the center navigation box is highlighted, then releases the mouse.

The Result is a tabbed view for each Detail Window displayed there:



You can always choose **Reset to Default** from the View ribbon to restore the default layout.

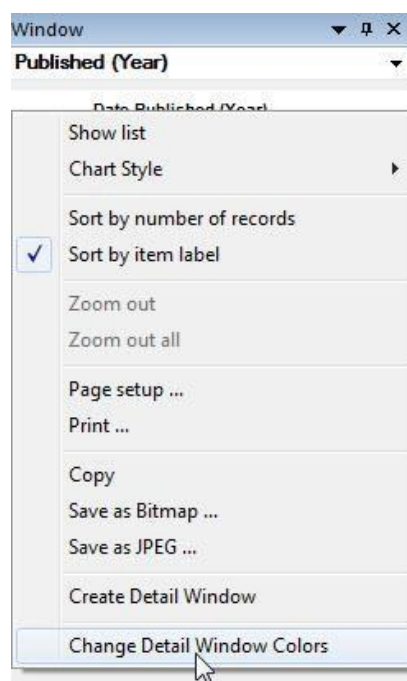


## Detail Window - Colors for Charts

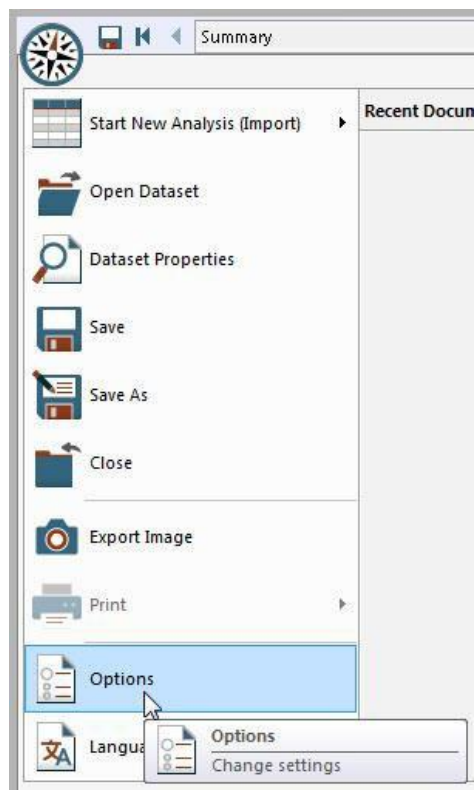
When a chart is viewed in Detail Windows, you can select the color used in the chart.



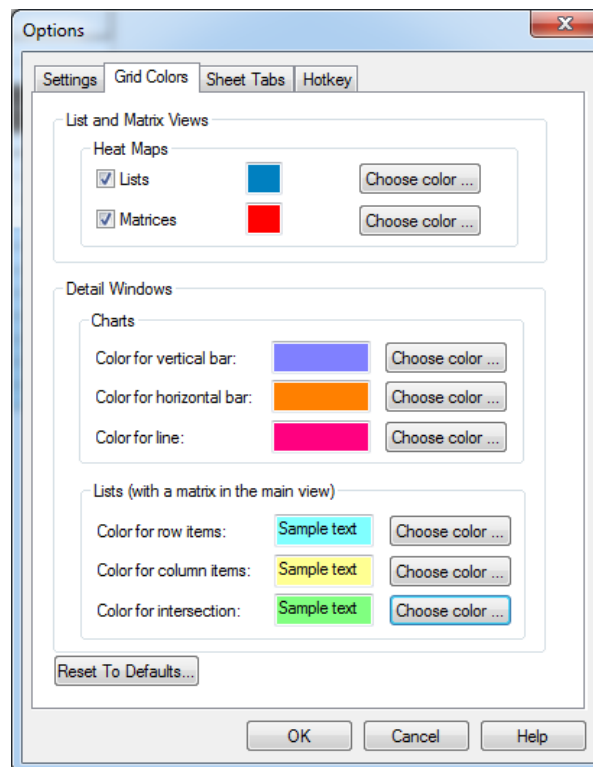
Right-click in the chart area of the Detail window and select **Change Detail Window Colors**. This brings up the [Options](#) dialog, where colors for Detail Windows are set.



Or, from the App Button, select **Options**.



Select the **Grid Colors** tab to select colors for Detail Windows:



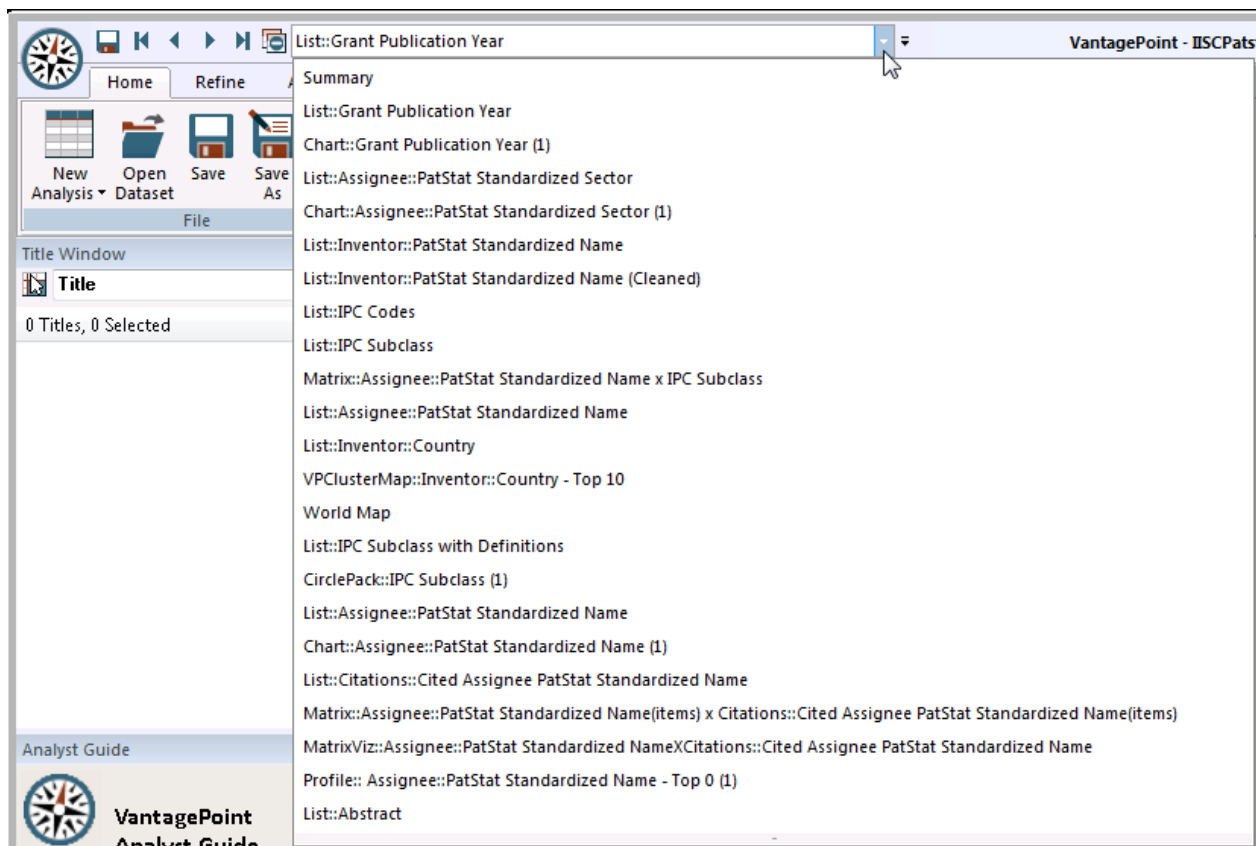
**Note:** If you already have chart data displayed in the detail window and then make changes to Detail Window Colors, the change will not apply to existing charts until you re-select the chart style (or field name shown in the detail window).

See Also:

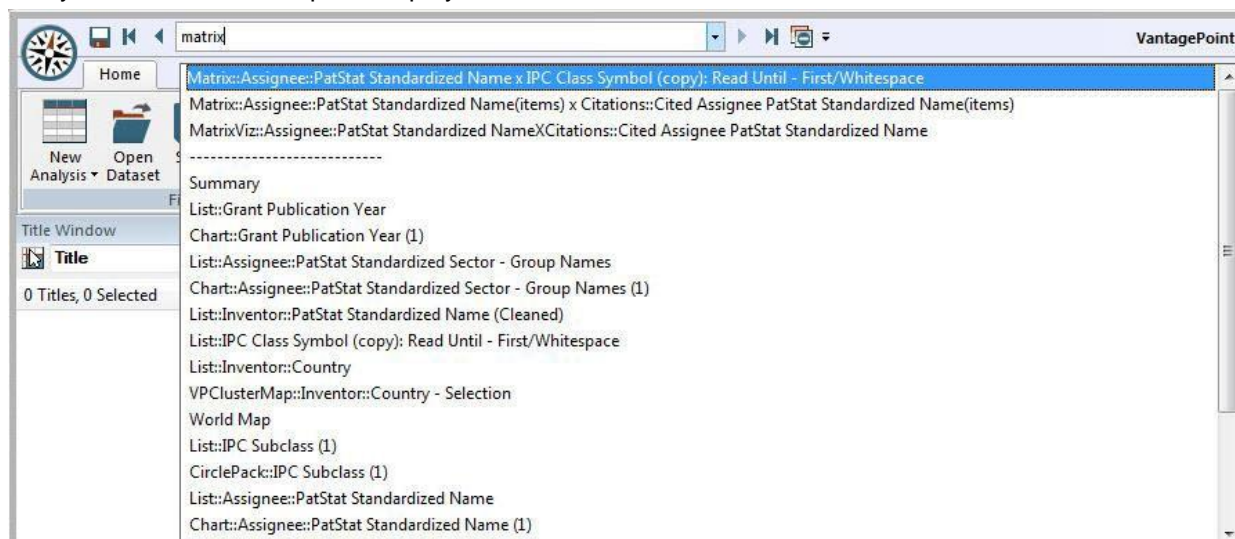
[Detail Window Colors](#)

## Sheet Management

The Sheet Navigation Toolbar helps you quickly navigate the sheets within a VantagePoint file. The dropdown box lists all the sheet names in the current VantagePoint file. When you select a sheet from the dropdown box, that sheet is presented.

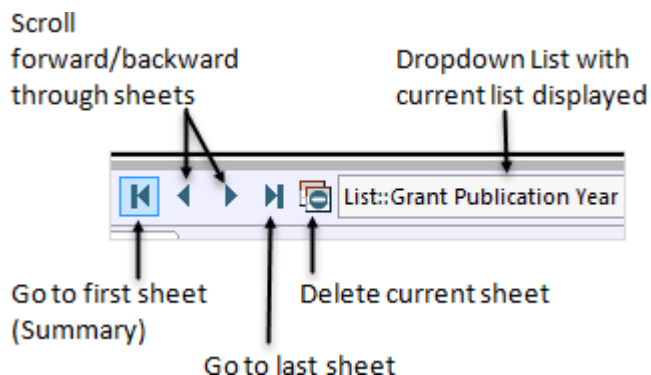


You can also engage a "Type to Filter" function by pressing **Ctrl Y**. This moves the cursor to the Navigation toolbar where you can type a sheet name (or type) to narrow selection. Sheet names matching the typed entry are moved to the top, as displayed here:

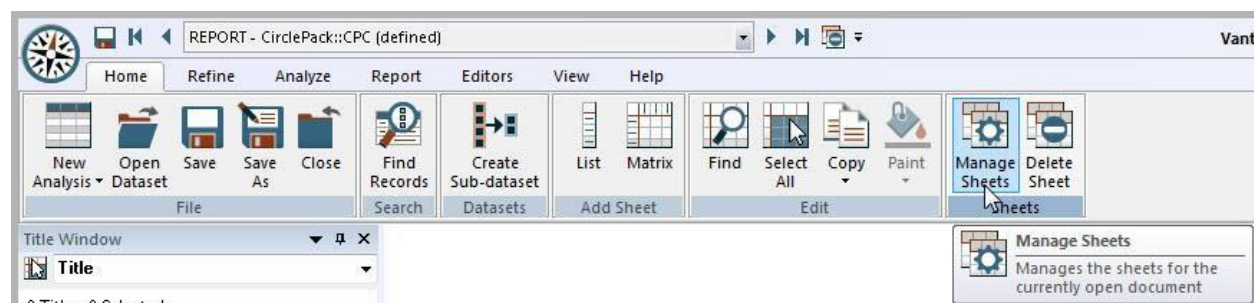




Or, use the blue arrows or dropdown list to quickly and easily move between sheets in the current VantagePoint file.

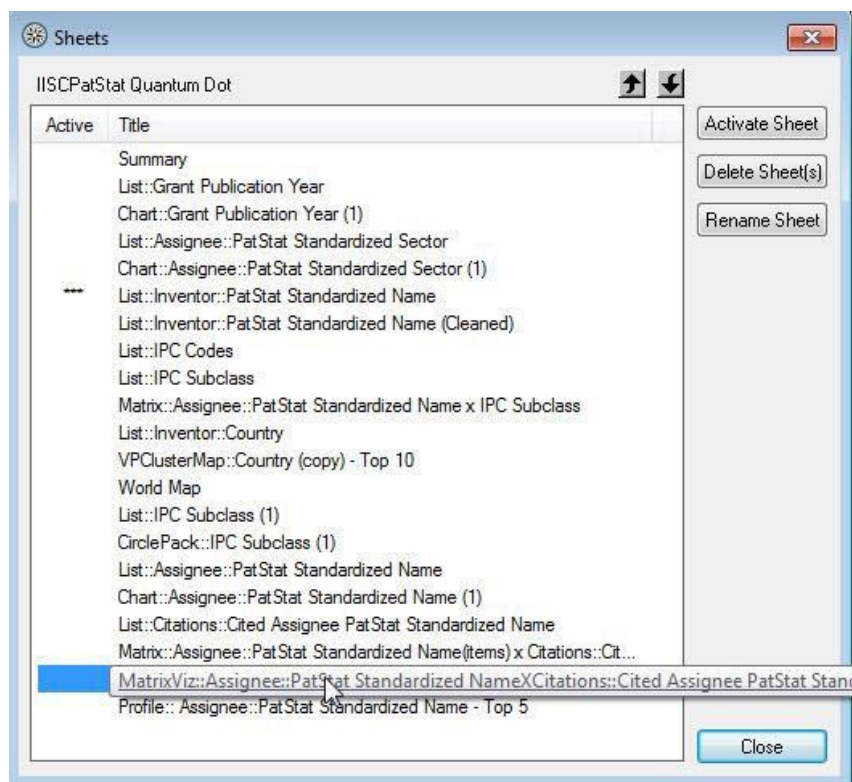


The **Sheets** Dialog is used to rename sheets and to rearrange the order of the sheets. The **Sheets** Dialog is accessed by selecting the **Manage Sheets** icon on the Home ribbon:



Click on a sheet name in the list to enable the up/down arrows above the window of sheet names. Use the arrows to rearrange the order of the sheets. The ellipses under the "Active" column indicates the currently active sheet.

**Note:** The Summary sheet cannot be moved or deleted.



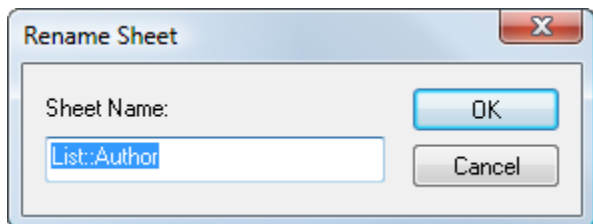


**Activate Sheet:** Activate a sheet by either double-clicking on the sheet name or by clicking on the sheet name and then clicking **Activate Sheet**.

**Delete Sheet(s):** Select one or more sheets (Click and Shift-Click or Ctrl-Click) and click **Delete Sheet(s)** to delete these sheets.

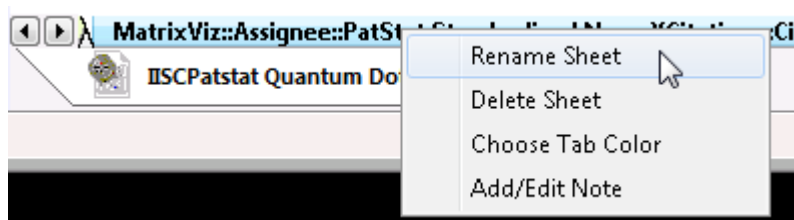
\*\*\* **Caution: The Delete Sheet(s) action cannot be undone.** \*\*\*

**Rename Sheet:** Select the sheet to be renamed and click **Rename Sheet**. The **Rename Sheet** dialog appears where you can enter a new name. Click **OK** to complete. See Renaming a Sheet for rules pertaining to Sheet names.

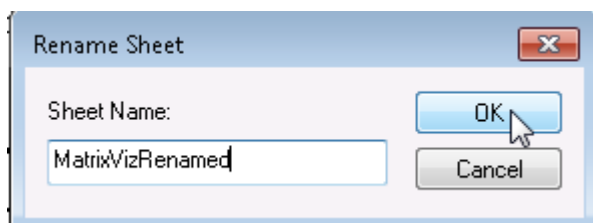


## Renaming a Sheet

In addition to the Rename Sheet function in the Sheets dialog, you can right-click on a Sheet name to rename it.



A text edit box appears where you can enter a new name for the sheet:



**Note:** You may not rename a sheet with the "empty" string (blank). You may not rename a sheet with a name that is already in use.

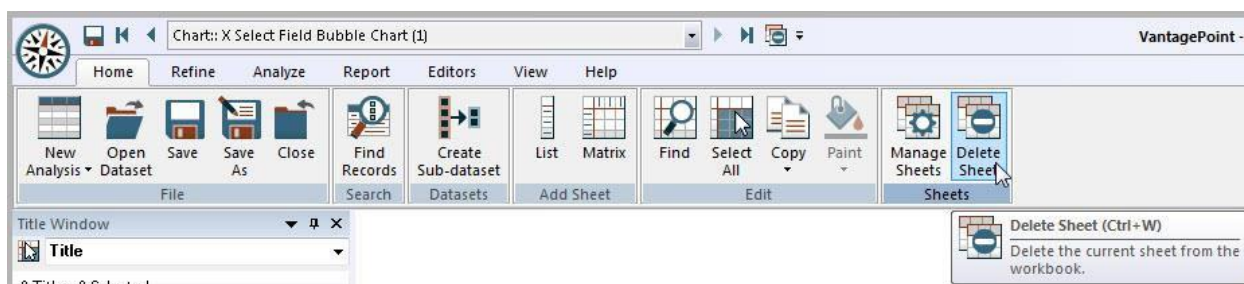
## Deleting the Current Sheet

To delete the current sheet, simply click the **Delete Sheet** button on the Sheet Navigation Toolbar



\*\*\* **Caution: The Delete Sheet action cannot be undone.** \*\*\*

Or, click the **Delete Sheet** icon from the Home Ribbon.



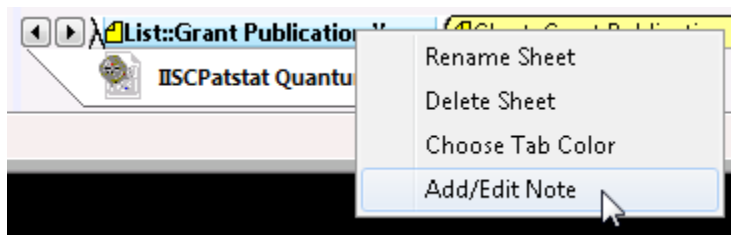
To Delete a Sheet using a keyboard shortcut, press **Ctrl W**.

**Note:** Unless you have changed the "Confirm When Deleting" setting in the [Options](#) dialog, VantagePoint will prompt you for confirmation before the sheet is deleted.

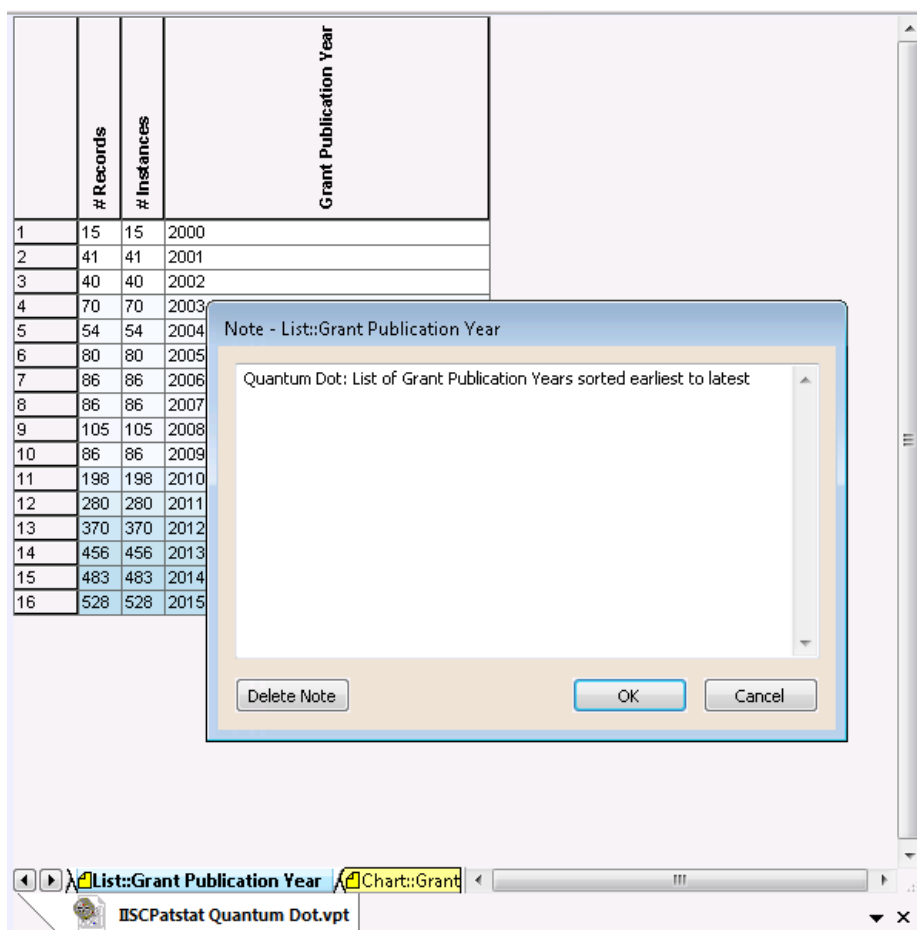
See [Changing the Confirmation Settings](#) for more information.

## Add Note

Add Notes to your Sheets for explanation. Right-click on the Sheet tab and select Add/Edit Note:



Here the existing Note is displayed with the List:

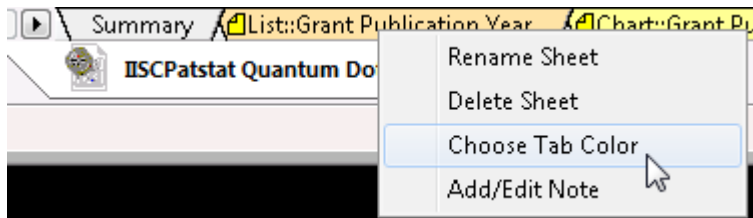


See Also:

[Sticky Notes](#)

## Choose Tab Color

You can assign unique colors to Sheet tabs. Right-click on a Sheet tab and choose a color from the Color dialog.



See Also:

[Options – Sheet Tabs](#)

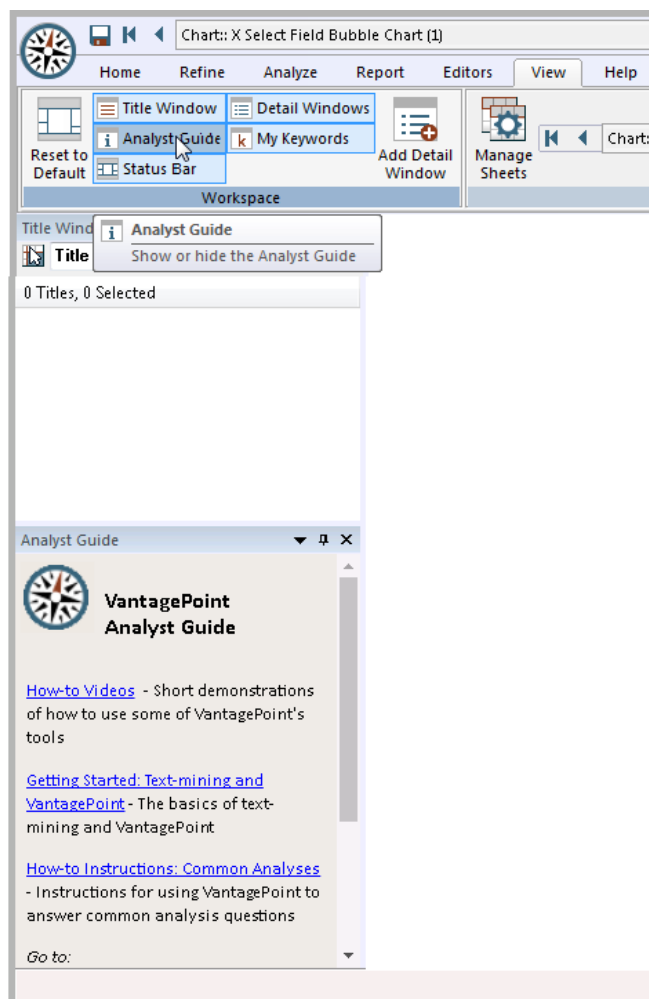
## Analyst's Guide

The Analyst's Guide provides an Internet Browser-type "window" to materials that help you learn how to apply VantagePoint to analytical tasks. These are updated from time to time, but the general topics include things like...

- How-to Videos
- Analyst's handbook (overview of the basic analytical process)
- Walkthroughs of common analyses
- Frequently Asked Questions

The Analyst's Guide Window can be "docked" anywhere on the screen by clicking and dragging the banner line. You can hide (or display) the Analyst's Guide by clicking **Analyst Guide** in either:

The **View** Ribbon



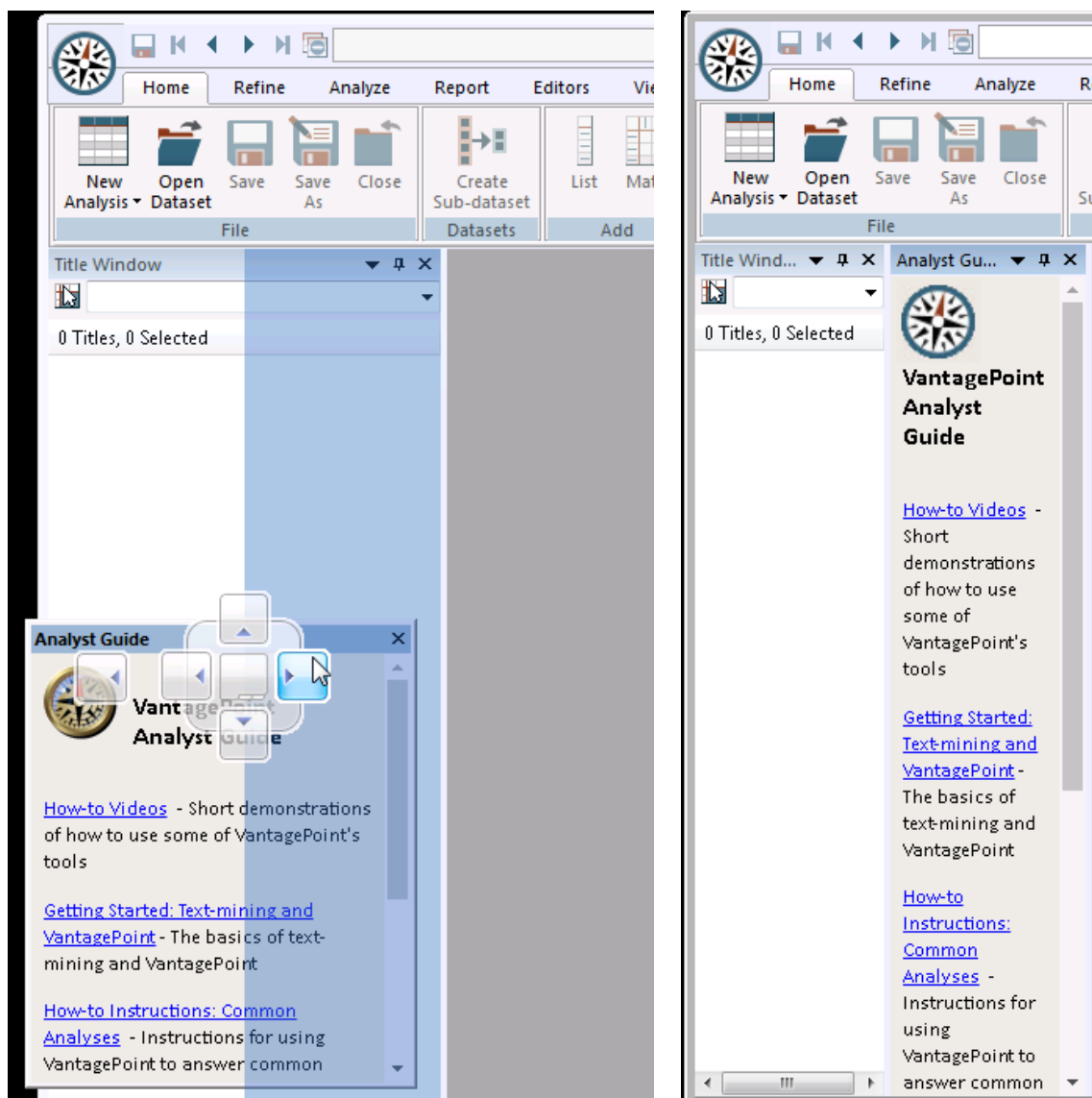
Or the **Help** Ribbon



The Analyst Guide can be repositioned to anywhere in the VantagePoint window by clicking and dragging the Analyst Guide Banner, as shown in the illustration on the left below.

Navigation guides are displayed to help you place the new Window position. In this case, the user is choosing to display the Analyst Guide to the right of the Title Window.

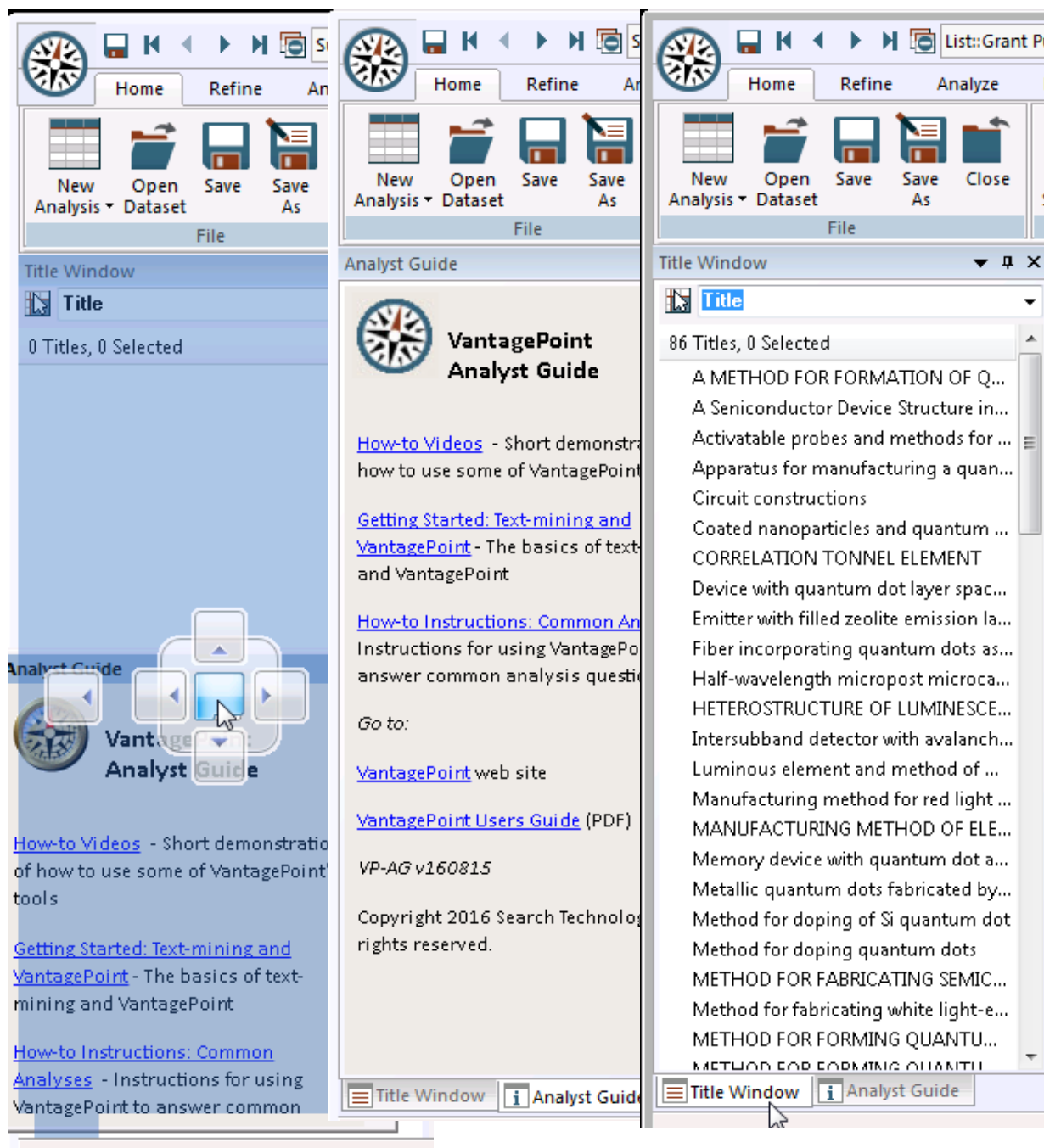
The result is the illustration on the right:



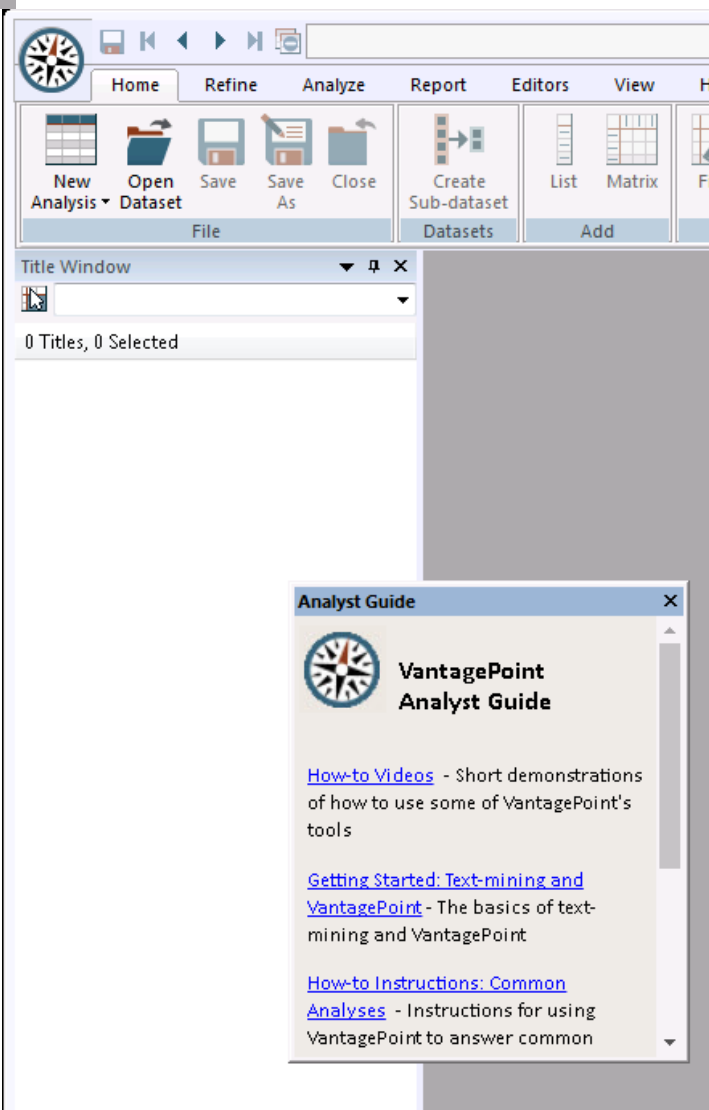
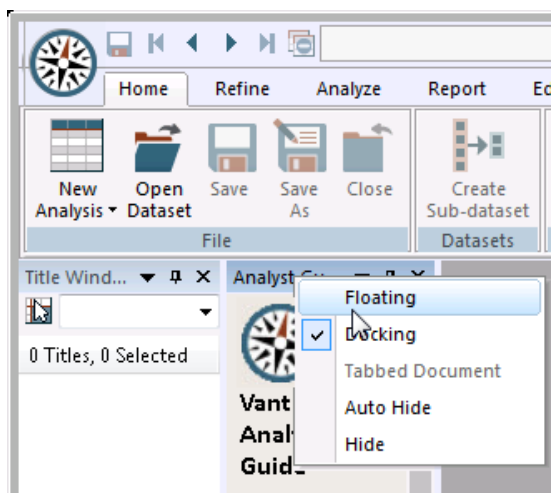


In this case, the user has chosen to display both the Analyst Guide and the Title Window in the left window pane.

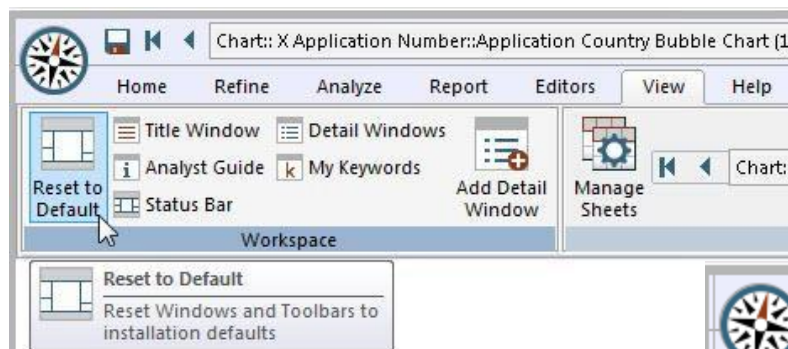
This results in a tabbed view where you select which window to view from the tabs at the bottom:



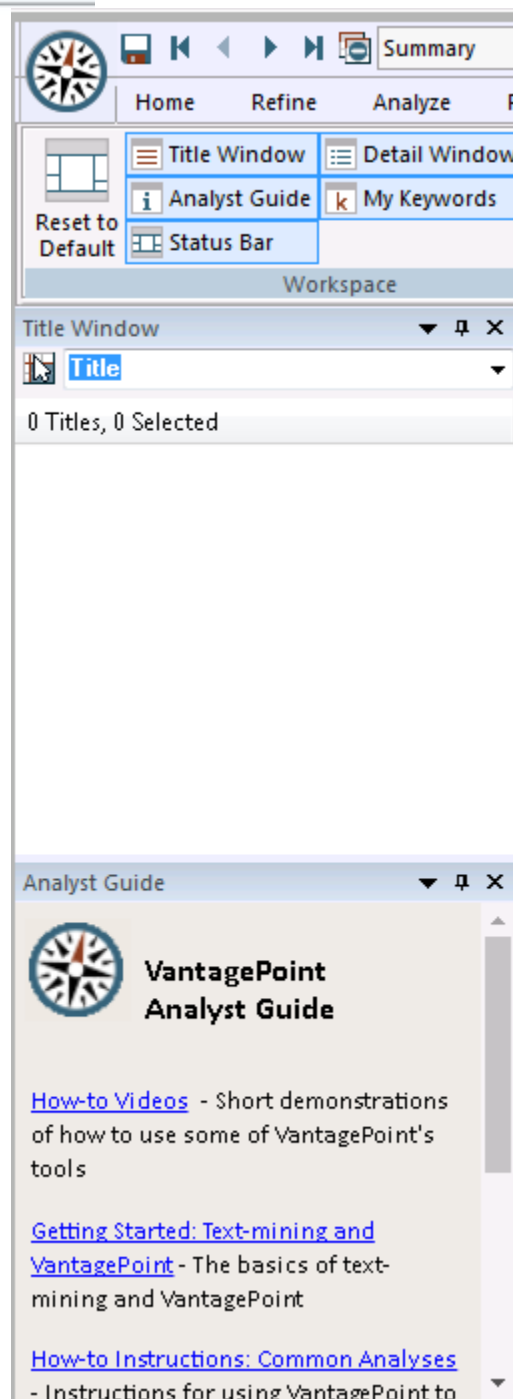
You can also right-click in the Analyst Guide Banner and choose "Floating" so the window is displayed in the foreground wherever you move it.



You can reset your preferences to the Default by selecting the View Ribbon and **Reset to Default**:



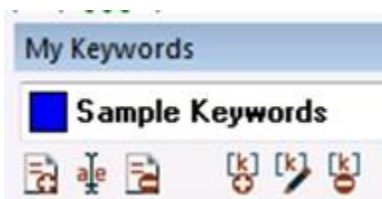
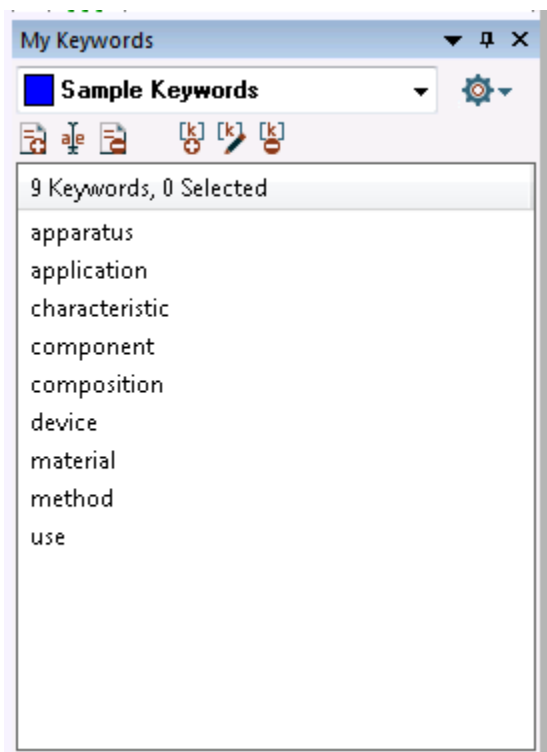
The result is:



## My Keywords

A user can use the “My Keywords” feature to extract terms of interest from a field and highlight the terms in the [Record View](#). This extraction results in a new List and creates a new field, reflected in the [Summary View](#).

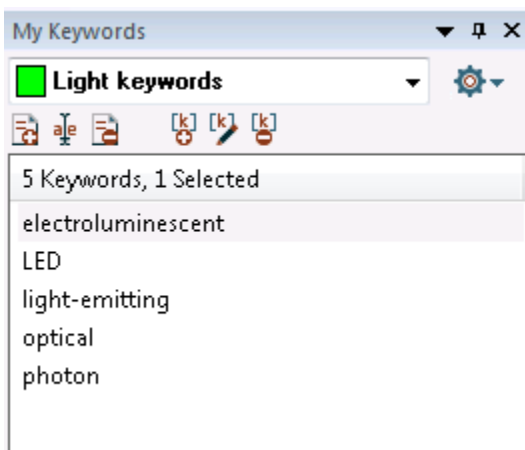
First, if it isn't already visible, enable the “My Keywords” display: From the View ribbon, click **My Keywords**. The My Keywords window will appear. In this case, the Sample Keywords is presented:



The first group of 3 icons below the "Sample Keywords" list name affect the Keyword List file. They are (from left to right): Create New Keyword List, Rename (displayed) Keyword List, and Delete (displayed) Keyword List.

The second group of 3 icons affect the individual Keywords within the Keyword List displayed: Add New Keyword, Edit Keyword, and Delete Keyword.

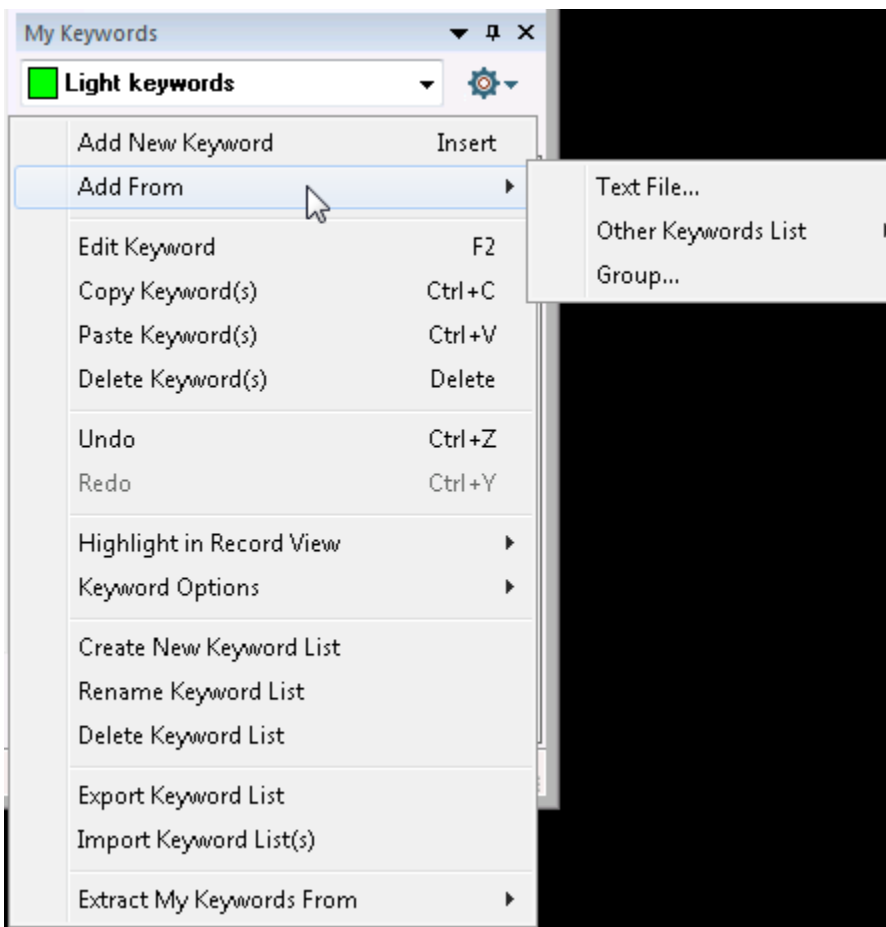
In this illustration, a User has created a Keyword List named "Light Keywords", containing 5 Keywords:



Clicking the **Manage Keywords** icon



reveals a Menu:



Keywords can be added from a text file, another Keywords List, or a Group of items from a field in an active \*.vpt file.

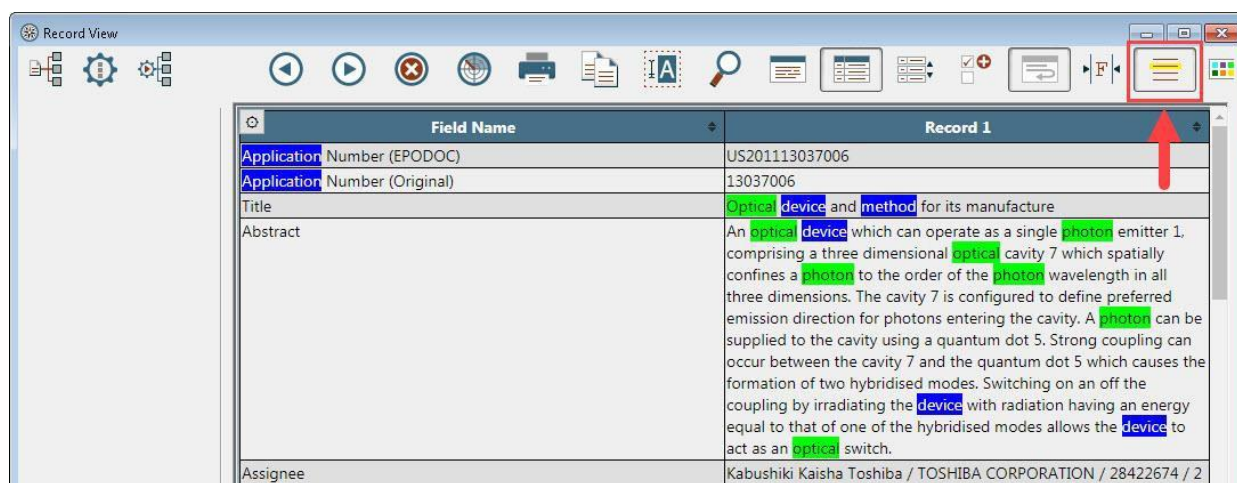
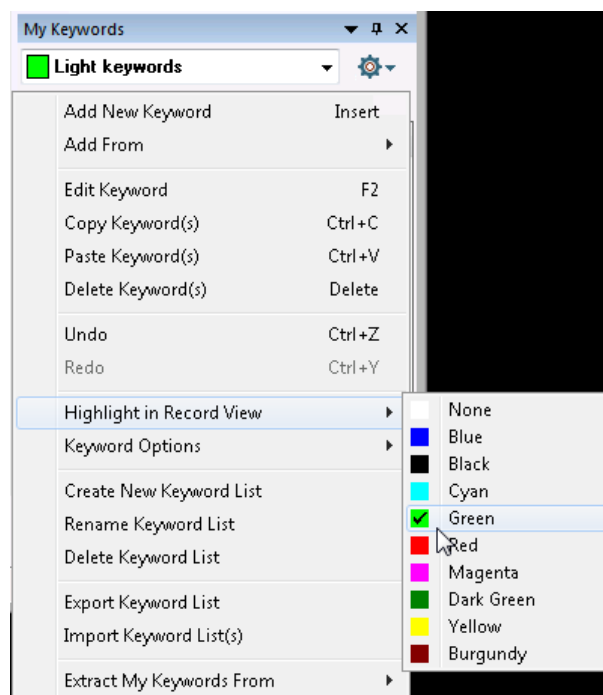


Other ways to add terms to a Keywords List include:

1. Click and drag an item(s) from a List View to the Keywords List: Click on the item(s) in the List View (Shift-click or Ctrl-click for multiple selections), then hover the cursor over the selection until you see a drag cursor (a hand) appear. Then you can click and drag the item to your Keywords List.
2. Right-click on the item(s) to be added (Shift-click or Ctrl-click for multiple selections, then Right-click) in the List View and select "Add Selection to Keywords List", then choose the target Keywords List.
3. In a List View, Right-click on a group name in the column heading and choose 'Add Group Items to Keywords List', then choose the target Keywords List.
4. Perform a Find function (**Ctrl F**; or, from the Main Menu, select Edit and Find...): Type in the term, click Find or Select All, and then click the "Add to Keyword List" button. Choose the target Keywords List

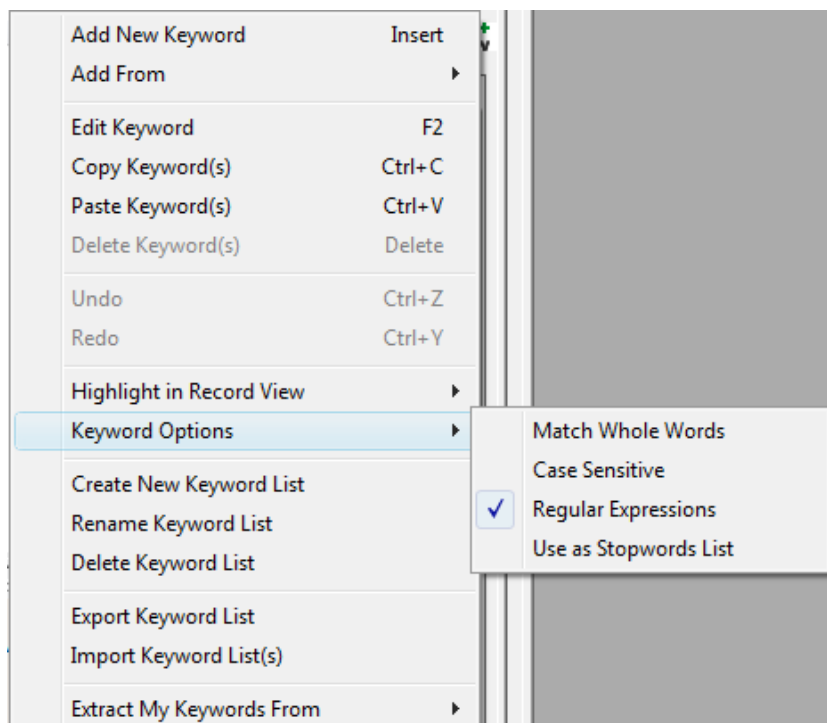
Keywords can be highlighted in the [Record View](#) for easy identification.

In the illustration below, the user has extracted terms from more than one Keywords List. Notice the "highlight Keywords" button at the top of the Record View dialog (identified by the red arrow) must be enabled to see the colors. Terms from the different lists can be assigned different colors. You can change the color for a particular Keywords List within the Record View using the "Colors" button.



Options for a Keywords List include:

- Match Whole Words
- Case Sensitive
- Regular Expressions
- Use as Stopwords List (when extracting keywords)



Note: The “Use as Stopwords List” option is for matching and discarding items in NLP or other fields with uncontrolled vocabulary terms. When this option is selected, highlighting in Record View is disabled for performance reasons.

Here, the user is choosing the field from which to Extract the Keywords List:

The screenshot displays the VantagePoint software interface. The main window shows a list of titles, with one selected: "Optical device and method for its manufa...". The "My Keywords" menu is open, showing options like "Add New Keyword", "Add From", "Edit Keyword", "Copy Keyword(s)", "Paste Keyword(s)", "Delete Keyword(s)", "Undo", "Redo", "Highlight in Record View", "Keyword Options", "Create New Keyword List", "Rename Keyword List", "Delete Keyword List", "Export Keyword List", and "Import Keyword List(s)". The "Extract My Keywords From" option is highlighted, leading to a list of fields from which keywords can be extracted. The selected field is "Abstract (NLP) (Phrases) : Light keywords".

**Abstract (NLP) (Phrases) : Light keywords**

- Abstract
- Abstract (NLP) (Phrases)
- Abstract (NLP) (Phrases) : Light keywords
- Abstract Language
- Applicant Seq Num
- Application Authority
- Application Number
- Application Number (EPODOC)
- Application Number (Original)
- Application Number::Application Country
- Application Number::Application Kind
- Application Number::Application Number
- Assignee
- Assignee Count
- Assignee::Address
- Assignee::Assignee (Original)
- Assignee::Country
- Assignee::PatStat Standardized ID
- Assignee::PatStat Standardized Level
- Assignee::PatStat Standardized Name
- Assignee::PatStat Standardized Sector
- Citations
- Citations::Citation Category
- Citations::Citation ID
- Citations::Citation Sequence Number
- Citations::Cited Application ID
- Citations::Cited Assignee Country
- Citations::Cited Assignee PatStat Standardized Name
- Citations::Cited Patent Publication ID
- Citations::Cited Publication Number
- Citations::Generating Authority
- Citations::Origin
- Cited Family (docdb)
- Cited NPL
- Cited NPL::Biblio
- Cited NPL::Citation Category
- Cited NPL::Generating Authority
- Cited NPL::ID
- Cited NPL::NPL Citation Sequence Number
- Cited NPL::NPL Type
- Cited NPL::Origin
- Continuation Type
- CPC
- F-Terms
- Family ID, INPADOC

A new List view of the results is presented:

The screenshot shows the VantagePoint software interface. The main window displays a list of results for 'Light keywords'. The list has columns for '# Records', '# Instances', 'Abstract (NLP) (Phrases) : Light', and 'Multi Word Phrases'. The results are as follows:

|   | # Records | # Instances | Abstract (NLP) (Phrases) : Light | Multi Word Phrases |
|---|-----------|-------------|----------------------------------|--------------------|
| 1 | 393       | 990         | optical                          |                    |
| 2 | 145       | 396         | light-emitting                   |                    |
| 3 | 141       | 428         | LED                              |                    |
| 4 | 98        | 219         | photon                           |                    |
| 5 | 33        | 69          | electroluminescent               |                    |

The interface also includes a 'Title Window' on the left, an 'Analyst Guide' on the bottom left, and a 'My Keywords' panel on the right showing 5 keywords: electroluminescent, LED, light-emitting, optical, and photon.

The Summary View now reflects the new field:

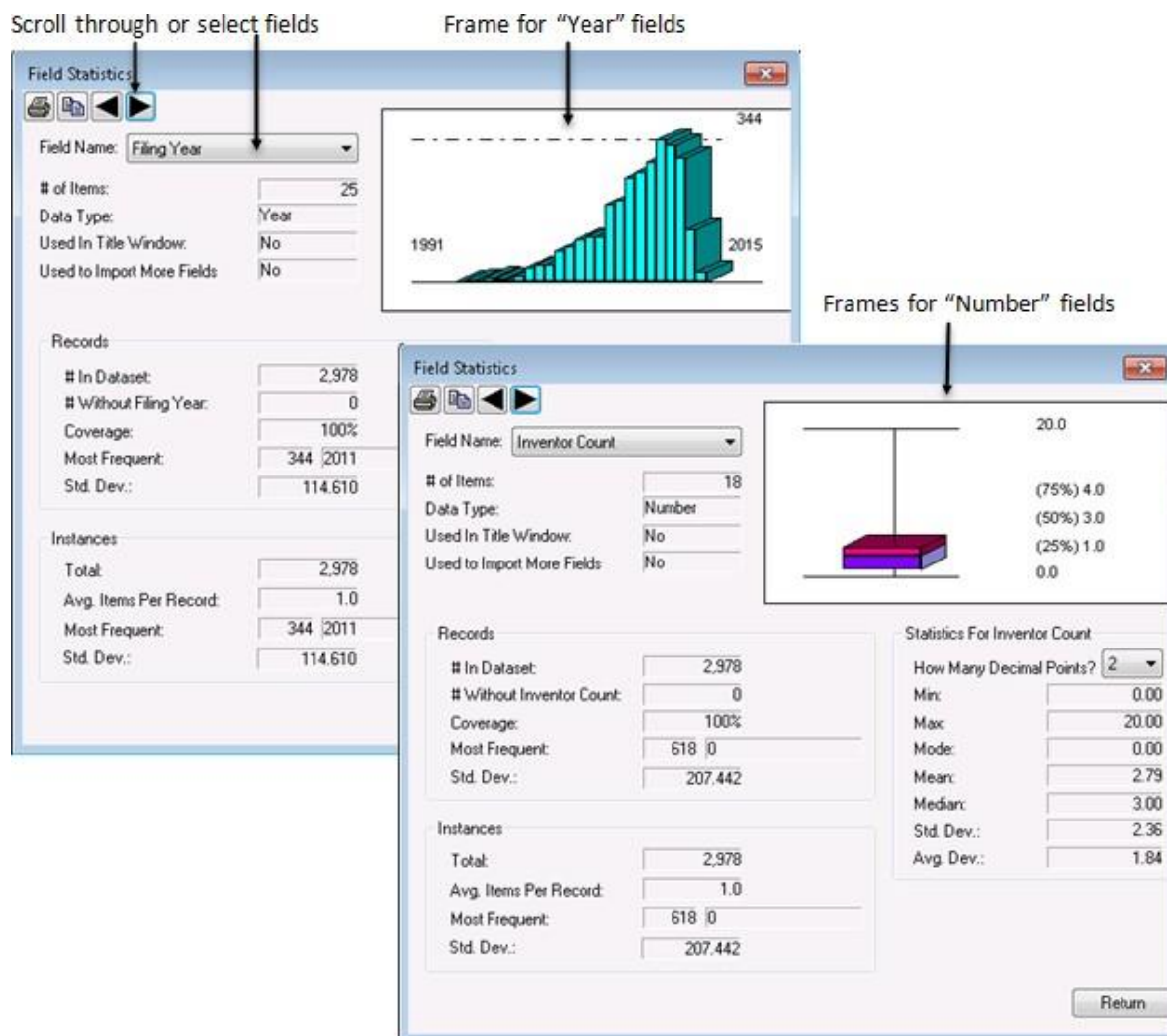
Source File: C:\Work\WWW\SearchData\Vis\1144\46e676b7-cc0a-4fdf-b60d-fdbafc849f67.xml  
Source Date: May 11 2017 22:59  
Source Database: PatStat

Summary Sheet Number of Records: 3,618 Columns i

| Field   | Number of Items | Number of Groups | % Coverage | Data Type | Meta Tags |
|---|-----------------|------------------|------------|-----------|-----------|
| (filters)   |                 |                  |            |           |           |
| Abstract  | 3,405           |                  | 100%       |           |           |
| Abstract (NLP) (Phrases)  | 40,468          | 1                | 99%        |           |           |
| Abstract (NLP) (Phrases) : Light keywords   | 5               | 1                | 24%        |           |           |
| Abstract Language   | 6               |                  | 100%       |           | Language  |
| Application Authority   | 18              |                  | 100%       |           | Country   |
| Application Number (EPODOC)   | 3,618           |                  | 100%       |           |           |
| Application Number (Original)   | 3,618           |                  | 100%       |           |           |
| Application Number ▶ Application Country   Application Number   Application Kind                                  | 3,618           |                  | 100%       |           | Parent    |
| Assignee Count  | 6               |                  | 100%       | Number    |           |
| Assignee ▶ Assignee (Original)   PatStat Standardized Name   PatStat Standardized ID   PatStat Standardized Level | 1,429           |                  | 96%        |           | Parent    |

## Field Statistics

The **Field Statistics** window is accessed from the Summary View by right-clicking on a field name and selecting **View Statistics**.



**Field Name:** the name of the field. Another field can be selected using the drop-down menu or the scroll buttons.

**# of Items:** This is the total number of unique items in the field (i.e., also the number of rows in the List View).

**Data Type:** Either **Category**, **Link**, **General**, **Number**, **Year** or **Meta Field**. This is set by right-clicking on a field name in the Summary View and selecting **Set Data Type** in the pop-up menu.

**Used in Title Window:** "Yes" if this attribute was set for this field in the import filter when the raw dataset was imported.

**Used to Import More Fields:** "Yes" if this attribute was set for this field in the import filter when the raw dataset was imported.

Under **Records**:



**# In Dataset:** Total number of records in the dataset

**# Without <field name>:** Number of records that do not have this field.

**Coverage:** The percentage of the records that do have this field.

**Most Frequent:** The most frequent item based on record count. Multiple instances of an item in a single record do not count toward this total.

**Std. Dev.:** Standard Deviation of the # Records column for the field.

Under **Instances:**

**Total:** The total number of items for this field found in the dataset. Duplicate occurrences within a single record do count toward this total.

**Avg. Items Per Record:** This is the average number of items in this field per record. Again, duplicate occurrences within a single record count toward this total.

**Most Frequent:** The most frequent item based on instance count. Multiple instances of an item in a single record count toward this total.

**Std. Dev.:** Standard Deviation of the # Instances column for the field.

**Plot for "Year" Fields:** For fields set as **Data Type** "Year", the Field Statistics window shows a histogram of the chronological distribution of the records in the dataset.

**Plot and Statistics Summary for "Number" Fields:** For fields set as **Data Type** "Number", the Field Statistics window shows several summary statistics of the numeric data in the field, and a "Box-Plot" shows a graphical depiction of the data.

**How Many Decimal Points:** Set the number of decimal places to show in the statistical summary.

## Zooming In a List or Matrix

You can make List and Matrix views bigger by using the Zoom function. Row height and column width are proportionately re-sized to your selection. The resizing applies only to the sheet in which Zoom is selected.

Within a List or Matrix view, right-click and select **Zoom**, then choose the desired size.

| Reset |              | Assignee::PatStat Standardized Name                              | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 10   | 11   | 12   | 13   | 14   | 15 |
|-------|--------------|--|------|------|------|------|------|------|------|------|------|------|------|------|------|------|----|
|       |              | # Records  | 1780 | 556  | 494  | 421  | 409  | 256  | 202  | 194  | 155  | 102  | 102  | 93   | 82   | 77   | 6  |
|       |              | ▼ ▲  |      |      |      |      |      |      |      |      |      |      |      |      |      |      |    |
|       |              | Show Values >= 1 and <= 135                                      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |    |
|       |              | Cooccurrence<br># of Records                                     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |    |
|       |              | ▼ ▲  |      |      |      |      |      |      |      |      |      |      |      |      |      |      |    |
|       | IPC Subclass | # Records  | H01L | C09K | G01N | B82Y | H01S | G02F | C01B | B82B | G02B | A61K | C12Q | F21V | C01G | B01J |    |
| 1     | 185          | FUJITSU  | 135  |      |      | 23   | 94   | 19   |      | 1    | 6    |      |      |      |      |      |    |
| 2     | 164          | CHINESE ACADEMY OF SCIENCES                                      | 66   | 33   | 24   | 14   | 17   | 3    | 23   | 4    | 2    | 3    | 6    | 2    | 6    | 10   |    |
| 3     | 114          | SAMSUNG ELECTRONICS COMPANY                                      | 78   | 22   | 6    | 15   | 11   | 17   | 6    | 15   | 4    |      |      | 4    | 1    |      |    |
| 4     | 57           | BOE TECHNOLOGICAL CORP   |      |      |      |      |      |      |      |      | 9    |      |      | 5    |      | 1    |    |
| 5     | 56           | TOSHIBA CORP   |      |      |      |      |      |      | 1    | 1    | 7    |      |      |      |      |      |    |
| 6     | 52           | SHANGHAI JIAO TONG UNIVERSITY                                    |      |      |      |      |      |      | 1    |      |      |      | 2    |      | 3    | 2    |    |
| 7     | 48           | JAPAN SCIENCE AND TECHNOLOGY                                     |      |      |      |      |      |      |      |      |      |      |      |      |      | 2    |    |
| 8     | 44           | ITRI (INDUSTRIAL TECHNOLOGY RESEARCH INSTITUTE)                  |      |      |      |      |      |      |      |      |      |      |      |      | 2    |      |    |
| 9     | 43           | SEOUL NATIONAL UNIVERSITY  |      |      |      |      |      |      |      |      |      |      | 1    |      | 1    | 1    |    |
| 10    | 39           | ETRI (ELECTRONICS AND TELECOMMUNICATIONS RESEARCH INSTITUTE)     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |    |
| 11    | 39           | NEC CORPORATION  |      |      |      |      |      |      |      |      |      |      |      |      |      |      |    |
| 12    | 39           | SONY CORPORATION   |      |      |      |      |      |      |      |      |      |      |      |      |      |      |    |
| 13    | 37           | WUHAN UNIVERSITY   |      |      |      |      |      |      |      |      |      |      | 2    |      |      |      |    |
| 14    | 32           | TOSHIBA RESEARCH DEVELOPMENT                                     |      |      |      |      |      |      |      |      |      |      | 4    |      | 1    | 1    |    |
| 15    | 31           | KIMM (KOREA INSTITUTE OF MATERIALS)                              |      |      |      |      |      |      |      |      |      |      |      |      |      |      |    |
| 16    | 30           | UNIVERSITY OF ULSAN  |      |      |      |      |      |      |      |      |      |      |      |      | 2    | 4    |    |
| 17    | 28           | JILIN UNIVERSITY   |      |      |      |      |      |      |      |      |      |      |      |      | 4    | 3    |    |
| 18    | 26           | KIST (KOREA INSTITUTE OF SCIENCE AND TECHNOLOGY)                 |      |      |      |      |      |      |      |      |      |      | 1    |      |      |      |    |
| 19    | 26           | LG INNOTEK CORP  |      |      |      |      |      |      |      |      |      |      |      | 2    |      |      |    |
| 20    | 25           | SOUTHEAST UNIVERSITY   |      |      |      |      |      |      |      |      |      |      |      |      |      |      |    |
| 21    | 23           | MIT (MASSACHUSETTS INSTITUTE OF TECHNOLOGY)                      | 20   | 1    | 6    | 5    | 3    |      |      |      |      |      |      |      |      |      |    |
| 22    | 22           | NATIONAL INSTITUTE OF ADVANCED INDUSTRIAL SCIENCE AND TECHNOLOGY | 8    | 2    | 7    | 1    | 3    |      |      |      |      |      |      |      |      |      |    |
| 23    | 21           | HANYANG UNIVERSITY   | 19   | 1    |      |      |      |      |      |      |      |      |      |      |      |      |    |
| 24    | 21           | HONEYWELL INTERNATIONAL  | 16   | 1    | 5    | 1    |      |      |      |      |      |      |      |      |      |      |    |
| 25    | 20           | ATOMIC ENERGY COUNCIL-INSTITUTE OF PHYSICS AND CHEMISTRY         | 15   |      |      |      |      |      |      |      | 1    |      |      |      |      |      |    |
| 26    | 20           | PANASONIC CORPORATION  | 20   |      | 1    |      | 1    |      |      |      |      |      |      |      |      |      |    |
| 27    | 20           | UNIVERSITY OF JINAN  | 2    | 7    | 11   | 3    |      |      |      | 2    | 1    |      | 1    |      | 2    | 1    |    |
| 28    | 19           | THE UNITED STATES OF AMERICA AS REPRESENTED BY                   | 5    | 1    | 8    | 7    |      |      |      |      | 1    | 6    | 5    |      |      |      |    |

| Reset        |           | Assignee::PatStat Standardized Name                                       | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    |
|--------------|-----------|---|------|------|------|------|------|------|------|------|------|
|              |           | # Records   | 1780 | 556  | 494  | 421  | 409  | 256  | 202  | 194  | 155  |
| IPC Subclass | # Records | ▼ ▲<br>Show Values >= 1 and <= 135<br>Cooccurrence<br># of Records<br>▼ ▲ |      |      |      |      |      |      |      |      |      |
|              |           |   | H01L | C09K | G01N | B82Y | H01S | G02F | C01B | B82B | G02B |
| 1            | 185       | FUJITSU   | 135  |      |      | 23   | 94   | 19   |      | 1    | 6    |
| 2            | 164       | CHINESE ACADEMY OF SCIENCES   | 66   | 33   | 24   | 14   | 17   | 3    | 23   | 4    | 2    |
| 3            | 114       | SAMSUNG ELECTRONICS COMPANY   | 78   | 22   | 6    | 15   | 11   | 17   | 6    | 15   | 4    |
| 4            | 57        | BOE TECHNOLOGY GROUP COMPANY  | 23   | 8    |      | 5    |      | 25   |      |      | 9    |
| 5            | 56        | TOSHIBA CORPORATION   | 39   |      | 1    | 7    | 15   | 19   | 1    | 1    | 7    |
| 6            | 52        | SHANGHAI JIAO TONG UNIVERSITY   | 2    | 25   | 8    | 11   |      |      | 16   |      |      |
| 7            | 48        | JAPAN SCIENCE AND TECHNOLOGY AG   | 27   | 1    |      | 2    | 13   | 11   |      | 10   | 6    |
| 8            | 44        | ITRI (INDUSTRIAL TECHNOLOGY RESEA   | 36   | 2    | 1    |      | 6    |      | 2    | 1    |      |
| 9            | 43        | SEOUL NATIONAL UNIVERSITY   | 26   | 8    | 1    | 7    |      | 1    | 5    | 4    |      |
| 10           | 39        | ETRI (ELECTRONICS AND TELECOMMU   | 31   |      |      | 3    | 11   | 1    |      |      | 1    |
| 11           | 39        | NEC CORPORATION   | 28   |      |      |      | 23   | 4    |      | 2    | 5    |
| 12           | 39        | SONY CORPORATION  | 37   |      | 2    | 2    | 4    | 6    |      |      | 3    |
| 13           | 37        | WUHAN UNIVERSITY  |      | 16   | 17   | 3    |      |      | 2    |      |      |
| 14           | 32        | TOSHIBA RESEARCH EUROPE   | 25   |      |      | 2    | 15   | 4    |      |      | 2    |
| 15           | 31        | KIMM (KOREA INSTITUTE OF MACHINER   | 10   | 12   |      | 4    |      |      | 3    | 13   |      |
| 16           | 30        | UNIVERSITY OF TOKYO   | 19   |      |      | 8    | 22   | 1    |      |      | 1    |
| 17           | 28        | JILIN UNIVERSITY  | 7    | 15   | 2    | 5    |      |      | 1    |      |      |
| 18           | 26        | KIST (KOREA INSTITUTE OF SCIENCE A  | 18   | 1    | 4    | 5    | 3    |      |      | 3    |      |
| 19           | 26        | LG INNOTEK COMPANY  | 17   | 1    |      | 1    |      | 11   |      |      | 2    |
| 20           | 25        | SOUTHEAST UNIVERSITY  | 4    | 13   | 9    | 4    | 2    |      | 4    |      |      |
| 21           | 23        | MIT (MASSACHUSETTS INSTITUTE OF T   | 20   | 1    | 6    | 5    | 3    |      |      |      | 2    |
| 22           | 22        | NATIONAL INSTITUTE OF ADVANCED IN   | 8    | 2    | 7    | 1    | 3    | 2    | 4    | 1    |      |

Matrix::Assignee::PatStat Standardized Name (Cleaned)

II SCPatStat Quantum Dot

Within Lists and Matrices, you can also zoom in and out using a wheel mouse. While holding down the Ctrl key, scroll the wheel forward or backward to enlarge or to shrink the view.

To restore the default setting, right-click and select **Restore**.

| Reset        |           | Assignee::PatStat Standardized Name                                | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    |
|--------------|-----------|--|------|------|------|------|------|------|------|------|------|
|              |           | # Records  | 1780 | 556  | 494  | 421  | 409  | 256  | 202  | 194  | 155  |
| IPC Subclass | # Records | ▼ ▲<br>Show Values >= 1 and <= 135<br>Cooccurrence<br># of Records |      |      |      |      |      |      |      |      |      |
|              |           | ▼ ▲  | H01L | C09K | G01N | B82Y | H01S | G02F | C01B | B82B | G02B |
| 1            | 185       | FUJITSU  | 135  |      |      | 23   | 94   | 19   |      | 1    | 6    |
| 2            | 164       | CHINESE ACADEMY OF SCIENCES  | 66   | 33   | 24   | 14   | 17   | 3    | 23   | 4    | 2    |
| 3            | 114       | SAMSUNG ELECTRONICS COMPANY  | 78   | 88   | 9    | 15   | 11   | 17   | 6    | 15   | 4    |
| 4            | 57        | BOE TECHNOLOGICAL CO.  |      |      |      | 5    |      | 25   |      |      | 9    |
| 5            | 56        | TOSHIBA CORP.  |      |      |      | 7    | 15   | 19   | 1    | 1    | 7    |
| 6            | 52        | SHANGHAI JIAO TONG UNIVERSITY                                      |      |      |      |      |      |      | 16   |      |      |
| 7            | 48        | JAPAN SCIENCE AND TECHNOLOGY                                       |      |      |      |      |      |      |      | 10   | 6    |
| 8            | 44        | ITRI (INDUSTRIAL TECHNOLOGY RESEARCH INSTITUTE)                    |      |      |      |      |      |      | 2    | 1    |      |
| 9            | 43        | SEOUL NATIONAL UNIVERSITY  |      |      |      |      |      |      | 5    | 4    |      |
| 10           | 39        | ETRI (ELECTRONICS AND TELECOMMUNICATIONS RESEARCH INSTITUTE)       |      |      |      |      |      |      |      |      | 1    |
| 11           | 39        | NEC CORPORATION  |      |      |      |      |      |      |      | 2    | 5    |
| 12           | 39        | SONY CORPORATION   |      |      |      |      |      |      |      |      | 3    |
| 13           | 37        | WUHAN UNIVERSITY   |      |      |      |      |      |      | 2    |      |      |
| 14           | 32        | TOSHIBA RESEARCH DEVELOPMENT CO.                                   |      |      |      |      |      |      |      |      | 2    |
| 15           | 31        | KIMM (KOREAN INSTITUTE OF MATERIALS)                               |      |      |      |      |      |      | 3    | 13   |      |
| 16           | 30        | UNIVERSITY OF ULSAN  |      |      |      |      |      |      |      |      | 1    |
| 17           | 28        | JILIN UNIVERSITY   |      |      |      |      |      |      | 1    |      |      |
| 18           | 26        | KIST (KOREA INSTITUTE OF SCIENCE AND TECHNOLOGY)                   | 18   | 1    |      |      |      |      |      | 3    |      |
| 19           | 26        | LG INNOTEK COMPANY   | 17   | 1    |      |      |      |      |      |      | 2    |
| 20           | 25        | SOUTHEAST UNIVERSITY   | 4    | 13   |      |      |      |      | 4    |      |      |
| 21           | 23        | MIT (MASSACHUSETTS INSTITUTE OF TECHNOLOGY)                        | 20   | 1    | 6    | 5    | 3    |      |      |      | 2    |
| 22           | 22        | NATIONAL INSTITUTE OF ADVANCED INDUSTRIAL SCIENCE AND TECHNOLOGY   | 8    | 2    | 7    | 1    | 3    | 2    | 4    | 1    |      |

See Also:

[Resize Rows & Columns](#)



## Canceling VantagePoint Processes

During the most compute-intensive processes, VantagePoint displays this dialog box. You can cancel the current process by clicking the **Cancel** button. A confirmation dialog box will then appear asking you to confirm that you want to cancel the process.



If you check the **Notify Upon Completion** checkbox, VantagePoint will provide an audible alert when the process is complete (if your computer has speakers).

The final steps of some VantagePoint processes cannot be interrupted. The most notable are the steps that create fields in Import and New Dataset, and the step that creates the [List Cleanup Confirmation](#) dialog. On these operations VantagePoint will notify you of the interim completion of the task and remove the **Cancel** dialog box while the uninterruptible portions of the task are completed.



## Home Ribbon

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### Import (Start a New Analysis)

To Import data, click the **New Analysis** icon on the Home Ribbon:



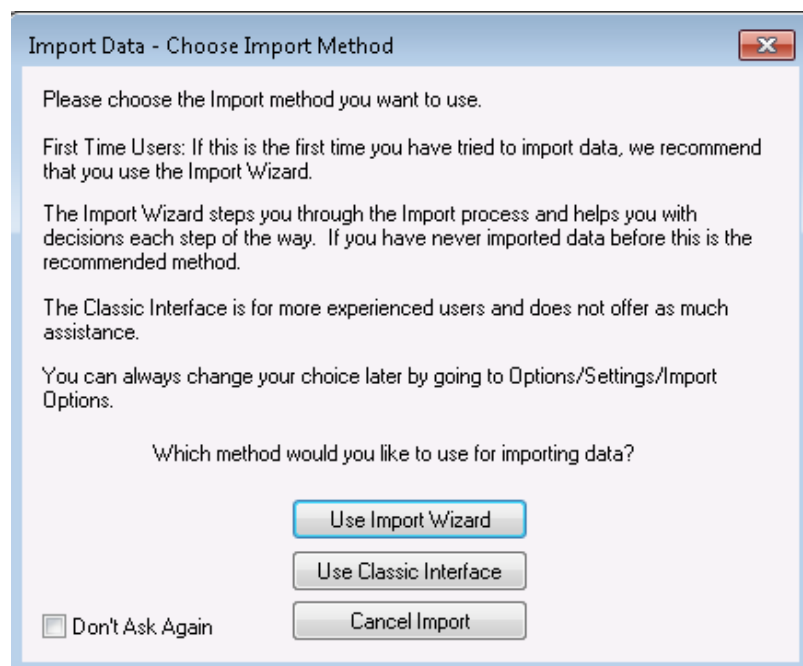
You are then taken to the steps for Importing a Raw Data file or [Importing from Excel](#).

Or, click the App button and select **Start New Analysis**. Depending on your default, you are presented with the [Import Wizard](#) or Import data dialog.



### Importing a Raw Data file

The first time you Import Data, you are presented with the following dialog box, where you choose which import method to use: the Import Wizard or the Classic Interface.



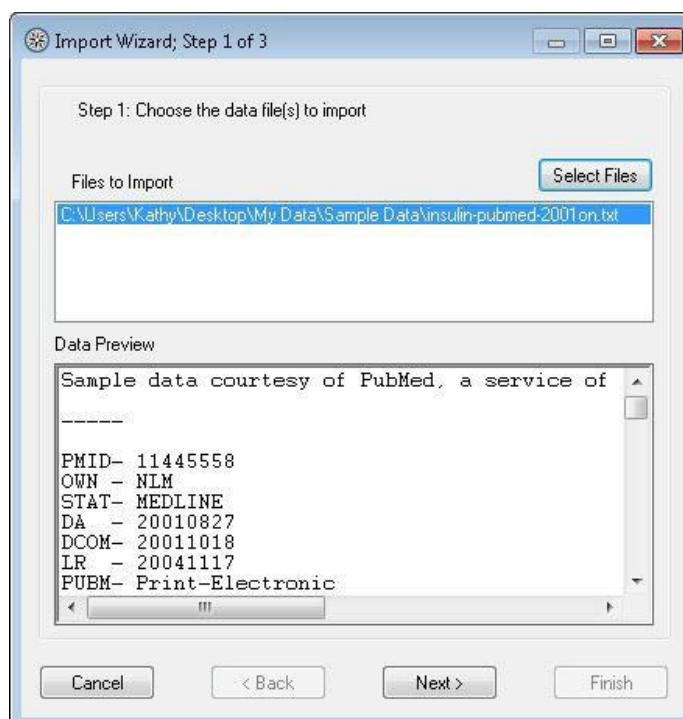
**Note:** If the "Don't Ask Again" box is checked, whichever method you choose becomes the default for future Data Imports. See [Changing the import data method](#) for information on how to change it.

Select from one of the following for detailed instructions on either import method: [Classic Interface](#) or Using Import Wizard.

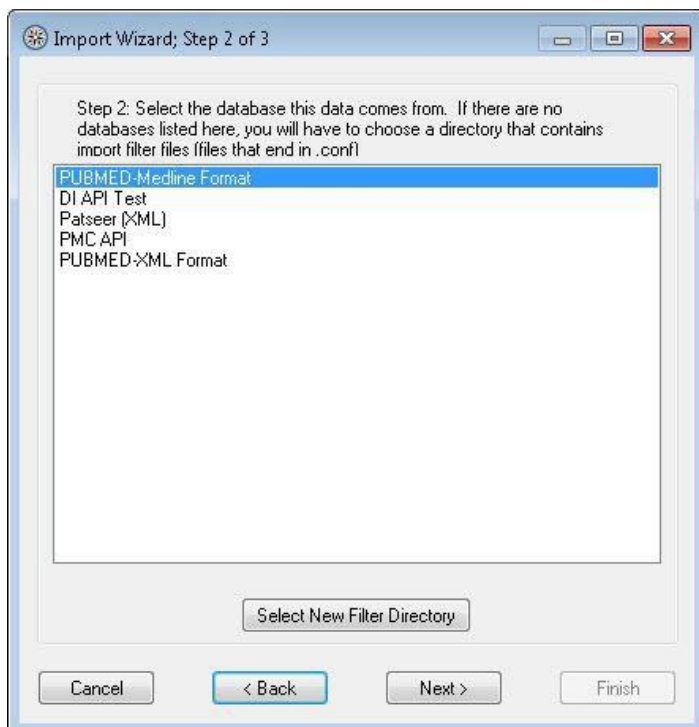
### Importing a Raw Data file using Import Wizard

From the **Choose Import Method** dialog:

1. Click **Use Import Wizard**. You are presented with **Step 1** of the **Import Wizard**. Here you choose the raw data file (or files) to import. Use the **Select Files** button to locate the file(s). (Use Ctrl-Click or Shift-Click to select multiple files.)
2. Once the file is located and selected, the "Data Preview" window is filled. Click **Next**.



3. In **Step 2** of the **Import Wizard**, VantagePoint automatically selects the appropriate database for the file(s). **Note:** Your list of databases may be different from those shown here.



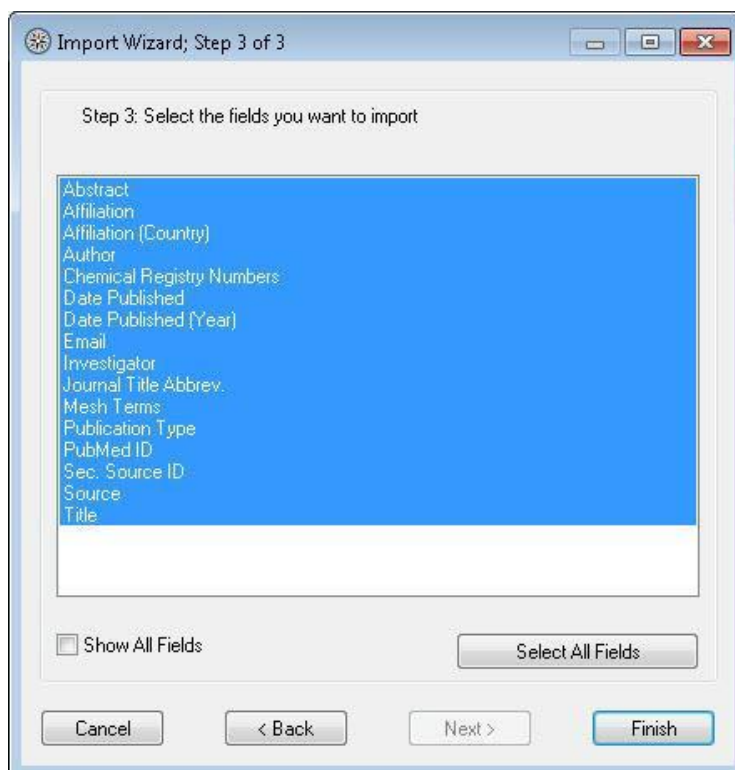
**Note:** You may override this selection by clicking on another file (or files) displayed or by clicking **Select New Filter Directory**. Unless you are certain of which file to use, it is recommended that you accept the VantagePoint selection.

Click **Next**.

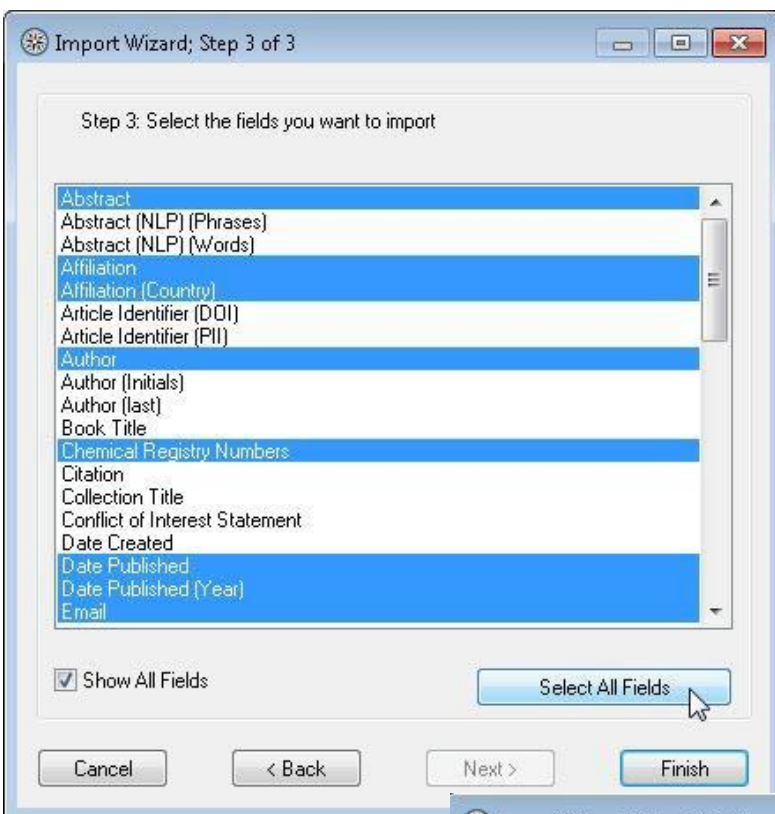
4. **Step 3** of the **Import Wizard** shows a list of fields to be imported. Initially, all primary fields are selected. To accept, click **Finish**.

To select certain fields to be imported, use Ctrl-Click keys to multi-select fields, then click **Finish**.

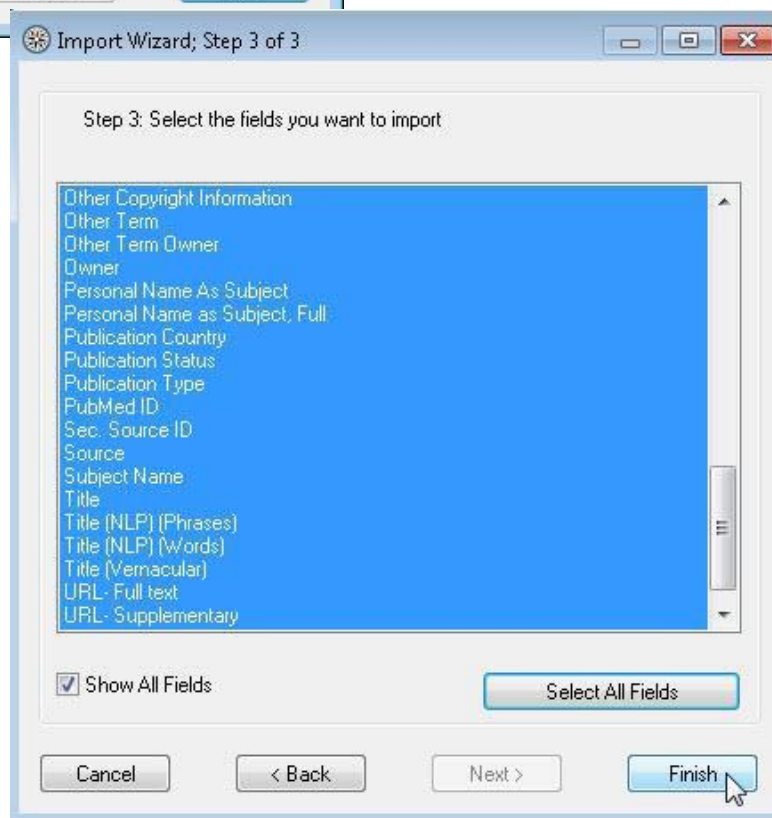
(See Note below...)



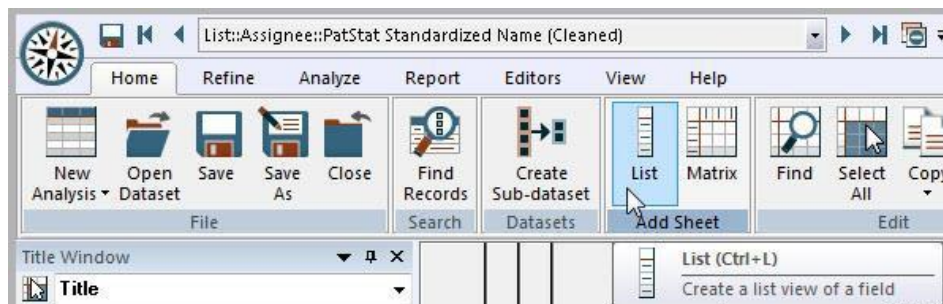
**Note:** Some database import filters have fields defined as "Secondary Fields" -- fields that are not normally imported at first. Check the "Show All Fields" checkbox to view these fields. You can then select fields from the entire list (see below) or click **Select All Fields**. Click **Finish**.



If your dataset is very large, it may take a few minutes to import. When it is finished, you will see a [Summary View](#) presenting an overview of the dataset, including total number of records, the date of the original search, and a list of fields with the total number of unique items in each field.



5. The first thing you will want to do is open a listing of one of the fields (see [Lists](#)). This can be accomplished using any of the three following methods:
- a) Double-click the field name on the Summary View.
  - b) From the **Home** Ribbon, click **List....** A Create List dialog appears with all the Fields presented. Select the desired Field from the given list, and click **OK** (or simply double-click the field name).



- c) Press Ctrl-L. Select the desired field name from the given list, and click **OK** (or simply double-click the field name).

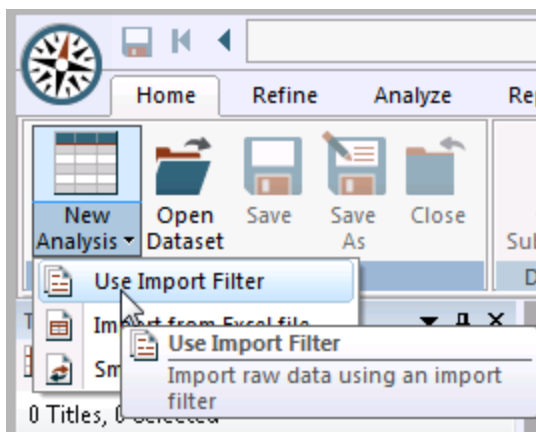
A List view of the selected field will be shown. It is displayed as a separate sheet with the field name on a tab at the bottom of the window. You can create more Lists and then access them by clicking on the tabs.

See Also:

[List Views](#)

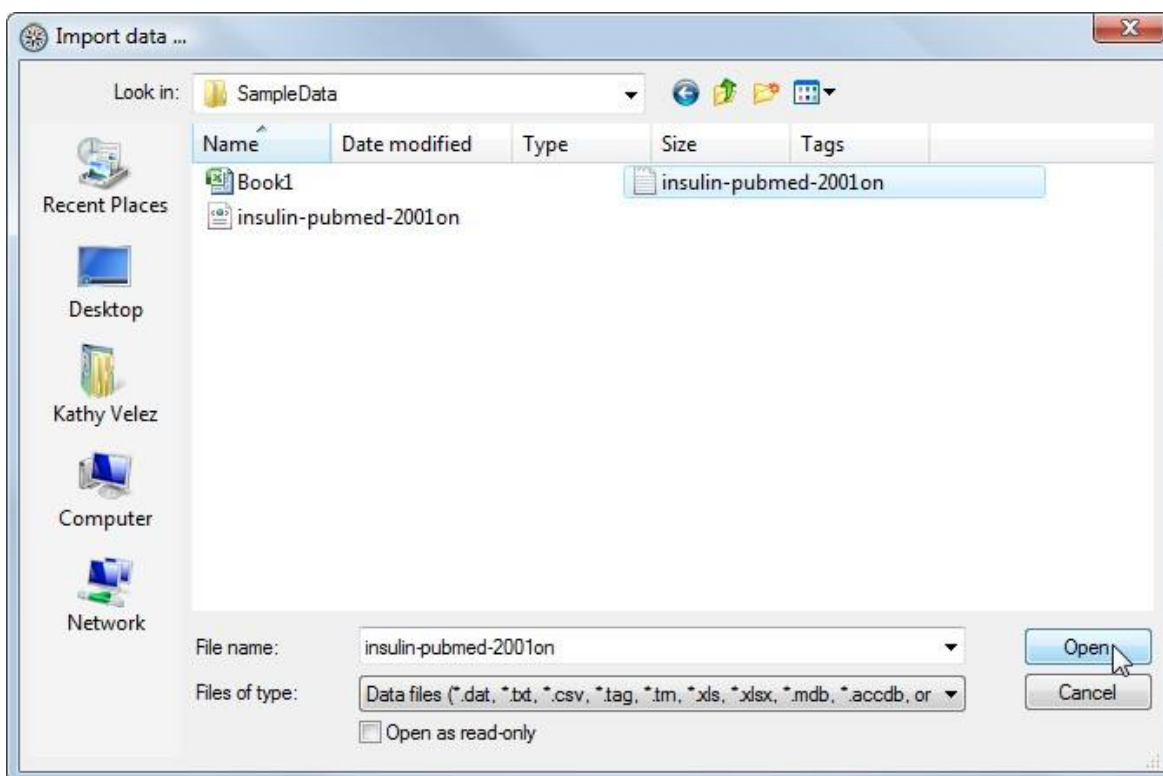
## Importing a Raw Data file using Classic Interface

1. From the **Choose Import Method** dialog box, click **Use Classic Interface**.  
or From the **Home** Ribbon, select **New Analysis**, then **Use Import Filter**.



or press **Ctrl i** on the keyboard.

2. In the **Import Data...** dialog box, select the drive, folder, or network location that contains the raw data file(s) you want, click on the file (or select multiple files using Ctrl-Click or Shift-Click), and click **Open**.

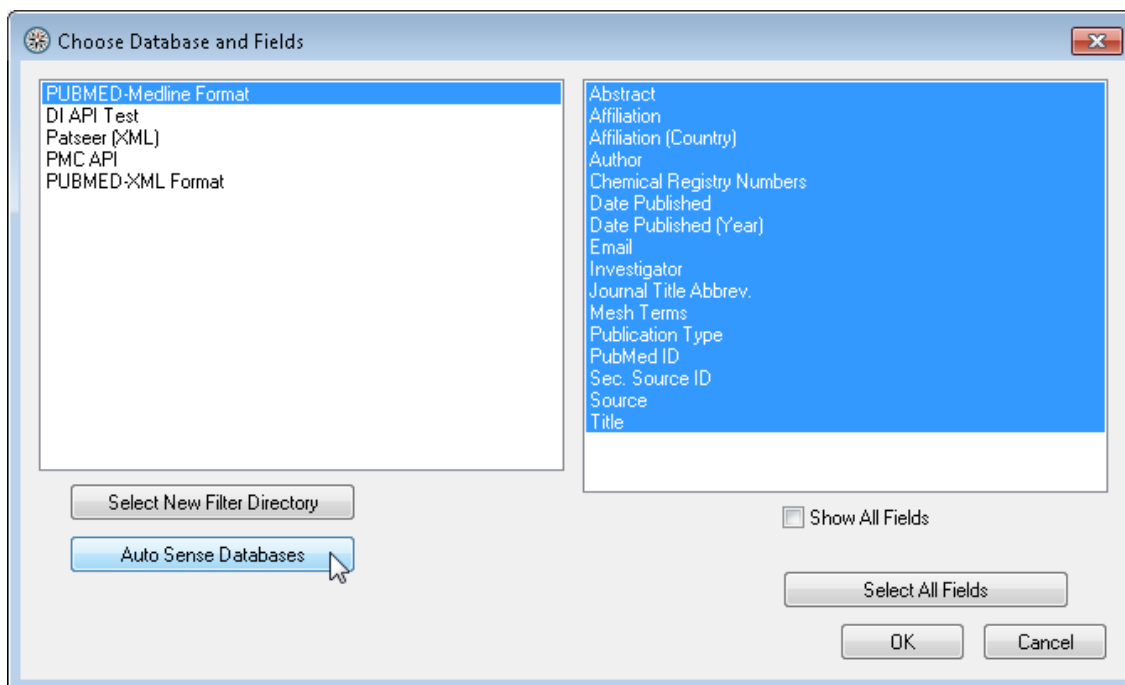


3. You should then see a **Choose Database and Fields** dialog box with a listing of your database import filters. The list of database import filters comes from \*.conf files located in your Import Filters folder. The database import filter contains information about the structure of the raw datasets (record



start/end indicators, field labels/delimiters). (Note: If VantagePoint cannot find the 'Program Files\VantagePoint\Import Filters' folder, you will see a **Browse For Folder** dialog box, where you can specify the location of your database import filter.)

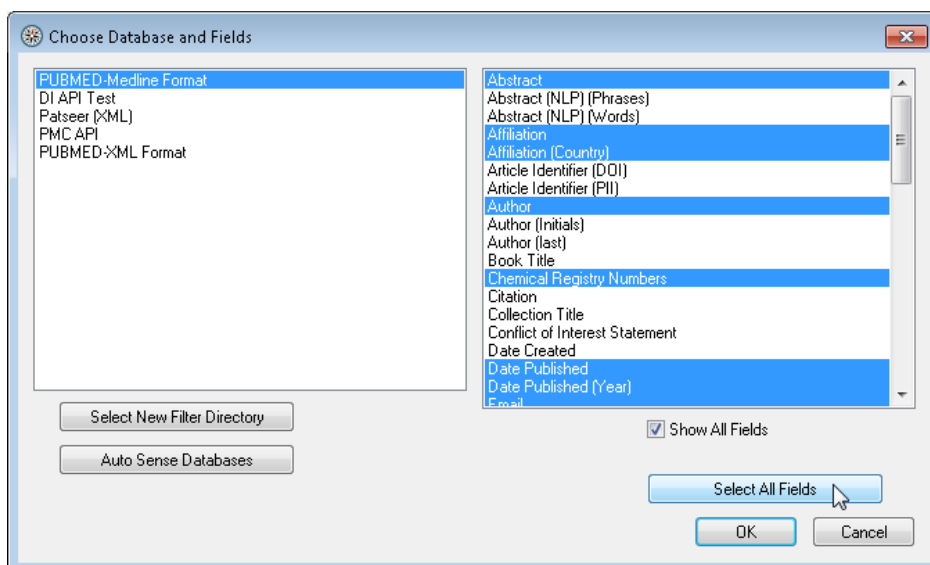
**Note:** Your list of databases may be different from those shown here.

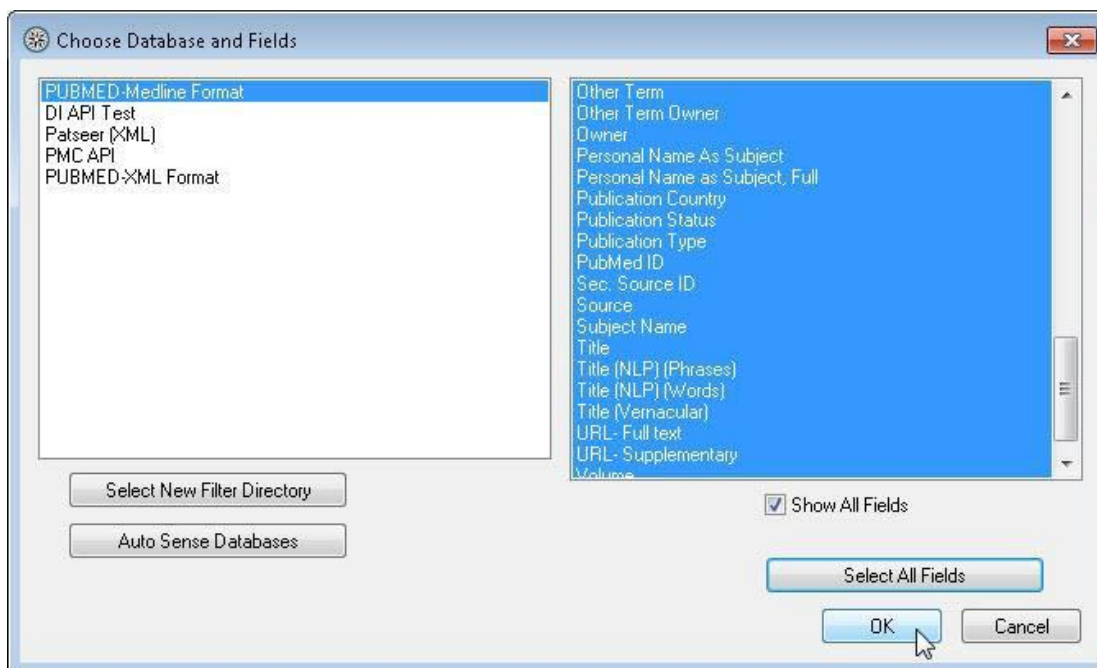


If your raw dataset comes from more than one database, you can manually select multiple databases in the left-hand window by clicking on one and then holding down the Ctrl key while clicking on other database names. Alternatively, you can click the **Auto Sense Databases** button to have VantagePoint automatically compare the database formats with the raw dataset and select the appropriate database format(s).

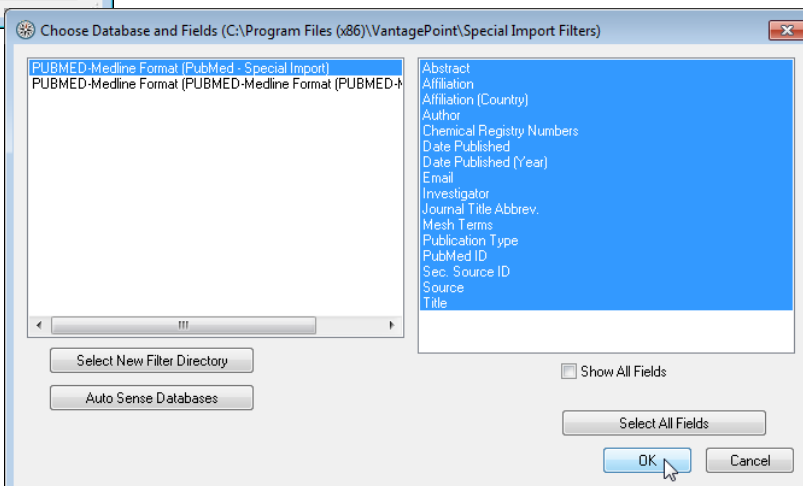
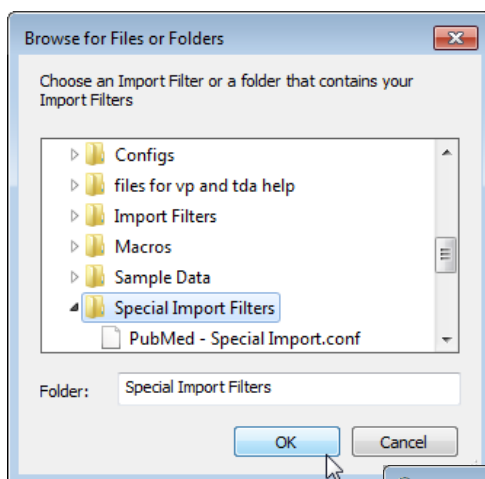
- When databases are selected on the left, the Primary fields from the selected databases are listed and automatically selected in the right-hand window. You can select only the fields you want to import using Click, Ctrl-Click, and Shift-Click.

Some database import filters have some fields defined as "Secondary Fields" -- fields that are not normally imported at first. Check the "Show All Fields" checkbox to view these fields in the right-hand window, as shown below. You can then select fields from the entire list, or click **Select All Fields** to add all.





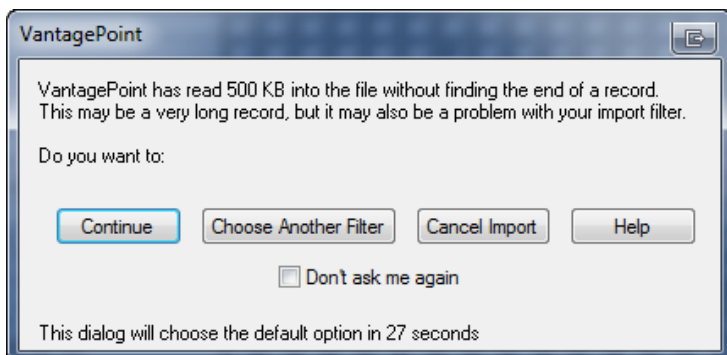
If you want to use a different database import filter, click **Select New Filter Directory**, choose the folder containing the new import filter in the **Browse For Files or Folders** dialog box and click **OK**.



- Click **OK** in the **Choose Database and Fields** dialog box to begin importing the data.

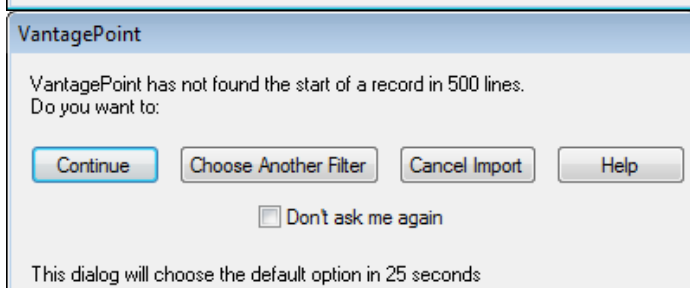
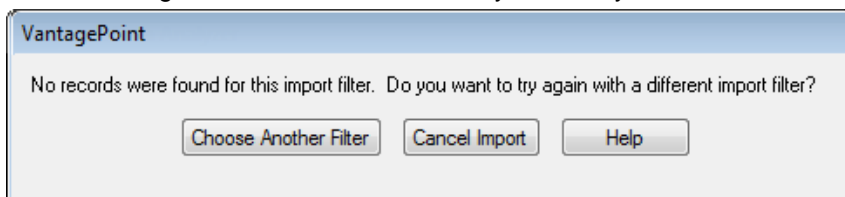
If your dataset is very large, it may take a few minutes to import. When it is finished, you will see a [Summary View](#) presenting an overview of the dataset, including total number of records, the date of the original search, and a list of fields with the total number of unique items in each field.

VantagePoint monitors the import process and notifies you of unusual situations. For example, if VantagePoint encounters a problem during import, you may see a warning:



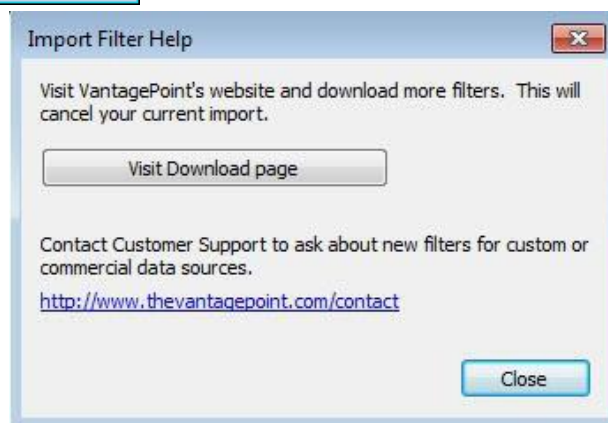
This may indicate that you chose the wrong database and the record Start | End indicators do not match anything in the raw data file. However, if your raw data file contains very large records, there may be nothing wrong. In that case, you should click **Continue** and ignore this message.

Other warnings, such as those below, may indicate you have chosen the wrong import filter.

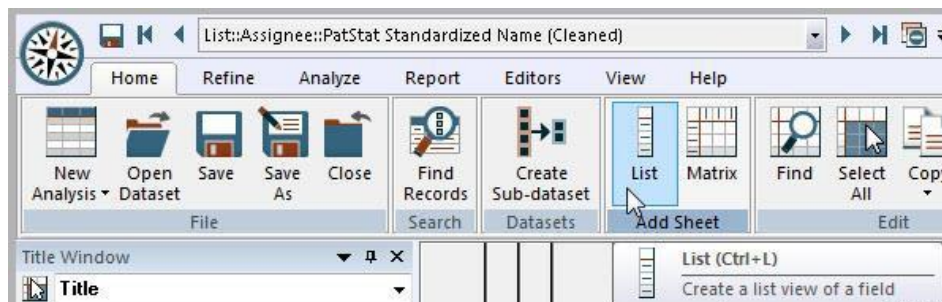


You can Continue, Choose Another Import Filter (cancels the import and opens a dialog box where you select the folder containing your import filter), or Cancel Import. You are given 30 seconds to respond. If no response is received, VantagePoint will Continue (the default).

The **Help** option cancels the import and offers a link to contact Customer Support or to the VantagePoint download site, where you can choose another import filter.



6. The first thing you will want to do is open a listing of one of the fields (see [Lists](#)). This can be accomplished using any of the three following methods:
  - a) Double-click the field name on the Summary View.
  - b) From the **Home** Ribbon, click **List....** A Create List dialog appears with all the Fields presented. Select the desired Field from the given list, and click **OK** (or simply double-click the field name).



- c) Press Ctrl-L. Select the desired field name from the given list, and click **OK** (or simply double-click the field name).

A List view of the selected field will be shown. It is displayed as a separate sheet with the field name on a tab at the bottom of the window. You can create more Lists and then access them by clicking on the tabs.

See Also:

[List Views](#)

## Import from Excel

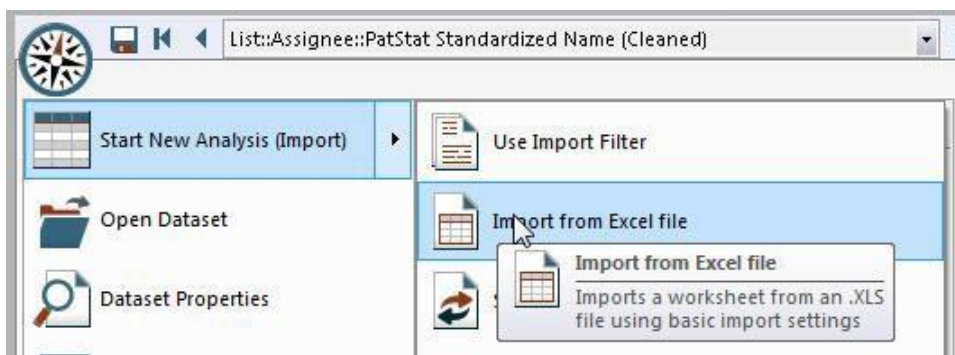
VantagePoint can import MS Excel files (csv, xls) and MS Access files. VantagePoint uses the first row of data by default as the field names, but allows the user to change that (see Step 4, below). When importing a csv file, VantagePoint immediately presents the "Quick Import" dialog (Step 4, below). VantagePoint recognizes number and date fields more readily, and automatically assigns the appropriate [Data Type](#) or [Meta Tags](#) to these fields.

(It should be noted that .csv files can still be imported via import filter if an import filter for that database exists. If it does, the import filter route is recommended since it does more to parse, and tag the data better than the Excel import does.)

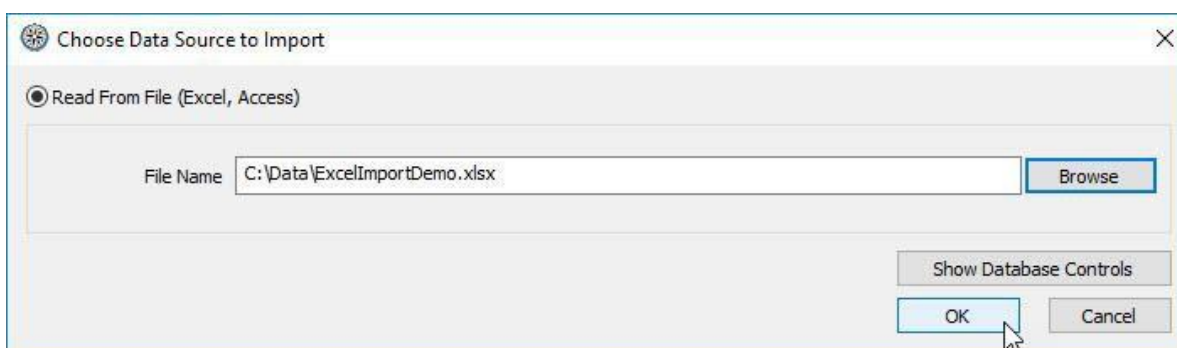
VantagePoint can import images and hyperlinks from Excel. Follow the hyperlinks in the List view by pressing **Alt Click**. In the Record view, simply click on the hyperlink.

To import a file from Excel:

1. Click the App Button, select **Start New Analysis (Import)** and **Import from Excel File....**

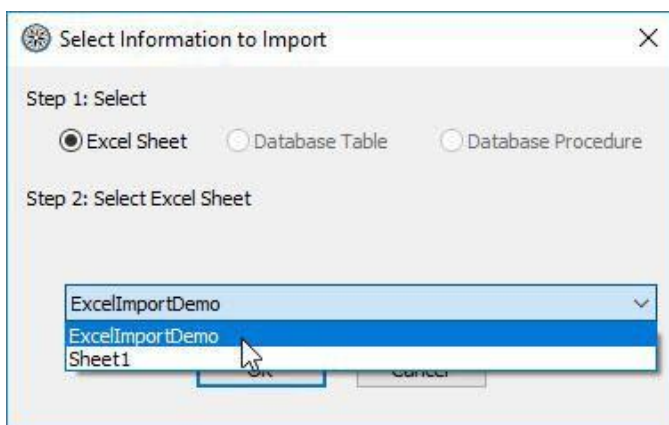


2. In the **Choose Data Source to Import** dialog box, click **Browse** to locate the database file you want to use. When the file is selected, it appears in the "File Name" field. Click **OK**. ("Show Database Controls" button is for other databases such as SQL Server and Oracle - at this time this is an unsupported beta feature.)



3. VantagePoint identifies the type of data being imported.

In this illustration, VantagePoint has identified an MS Excel file is being imported. If the file contains more than one worksheet, you will be prompted to select which sheet to use:



4. Next, you are presented with a list of fields that are found in your file. VantagePoint gives you tools for working with those fields. The "Field Type" for each field is at first assumed to be "Single Value". You can change it to either "Divide Text" (for multi-valued, delimited fields) or "NLP" (for English text such as Abstracts and Titles). If you select "Divide Text", you must enter a single character delimiter (the default is semi-colon). If you select "NLP", the original field is imported also. In this example, the user will have a field with the full text of the Abstract and another field with the NLP Phrases. The data preview window shows you examples of the results you will get using the selected approach. You can browse through the dataset record-by-record using the **<Prev Record** and **Next Record>** buttons.

Quick Import From Database

Row containing field names: 1 Refresh ☒ Always Use This Row

| Field Name         | Field Type   | Delimiter |
|--------------------|--------------|-----------|
| Abstract           | NLP          |           |
| Application Year   | Single Value |           |
| Assignee           | Single Value |           |
| CPC                | Single Value |           |
| Inventor           | Single Value |           |
| IPC                | Single Value |           |
| Publication Number | Single Value |           |
| Publication Year   | Single Value |           |
| Title              | Single Value |           |

Field Name: Abstract

Field Type: **NLP** (selected)  Delimiter:  Save as Default

Field Preview

adaptor  
-----  
duplex radio transceiver circuit module  
-----  
bottom interface  
-----

< Prev Record 1 Next Record >

☐ Save Import Filter to File  Browse

Import Cancel

You can multi-select fields to assign "Field Type" to more than one field at a time. In the following illustration, the user has selected four fields and set their "Field Type" to "Divide Text" with a semi- colon delimiter.



Quick Import From Database

Row containing field names: 1 Refresh ☒ Always Use This Row

| Field Name         | Field Type   | Delimiter |
|--------------------|--------------|-----------|
| Abstract           | NLP          |           |
| Application Year   | Single Value |           |
| Assignee           | Divide Text  | ;         |
| CPC                | Divide Text  | ;         |
| Inventor           | Divide Text  | ;         |
| IPC                | Divide Text  | ;         |
| Publication Number | Single Value |           |
| Publication Year   | Single Value |           |
| Title              | NLP          |           |

Field Name:

Field Type: Divide Text Delimiter: ; Save as Default

Set

Field Preview

< Prev Record 1 Next Record >

☐ Save Import Filter to File

Browse

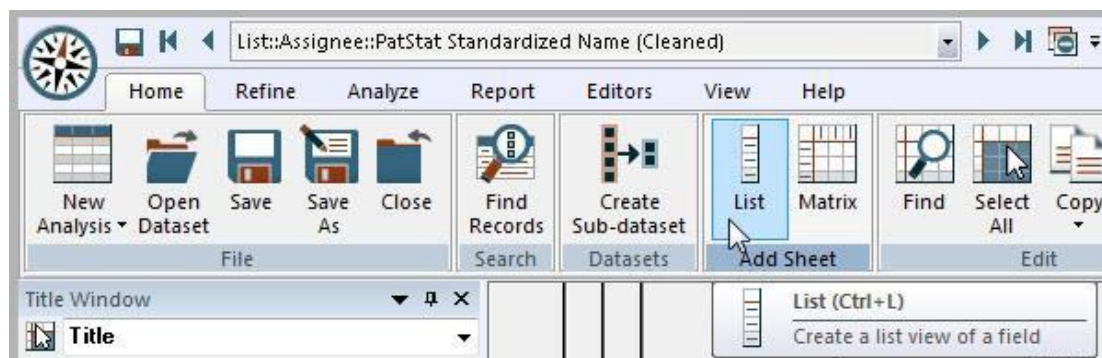
Import Cancel

You can also save a default delimiter that will be used with “Divide Text” in the future for quick imports

When you have set each of the fields, you can save the settings as an Import Filter so you can use it again later.

Finally, click **Import** to begin importing the data.

5. When import is complete, a [Summary View](#) is presented.
6. The first thing you will want to do is open a listing of one of the fields (see [Lists](#)). This can be accomplished using any of the three following methods:
  - (a) Double-click the field name on the [Summary View](#).
  - (b) From the **Home** Ribbon, click the **List** icon. A Create List dialog appears with all the Fields presented. Select the desired Field from the given list, and click **OK** (or simply double-click the field name).



- (c) Press Ctrl-L. Select the desired field name from the given list, and click **OK** (or simply double-click the field name).

A List view of the selected field will be shown. It is displayed as a separate sheet with the field name on a tab at the bottom of the window. You can create more Lists and then access them by clicking on the tabs.

See Also:

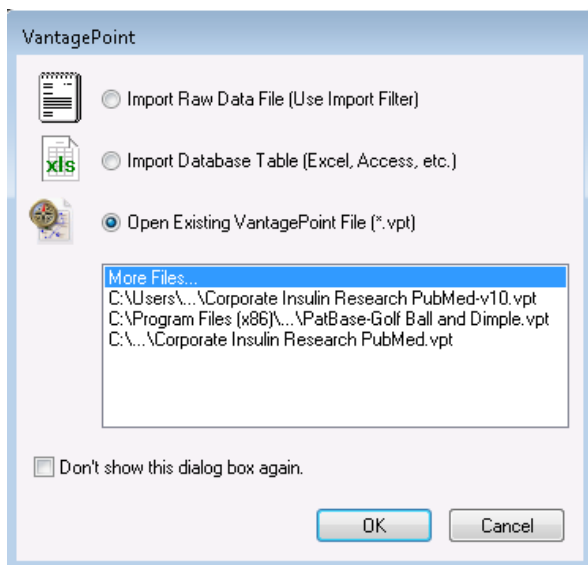
[Creating a List View](#)

[Overview of the VantagePoint window](#)

## Opening a VantagePoint (\*.vpt) file

There are four methods for opening a VPT file:

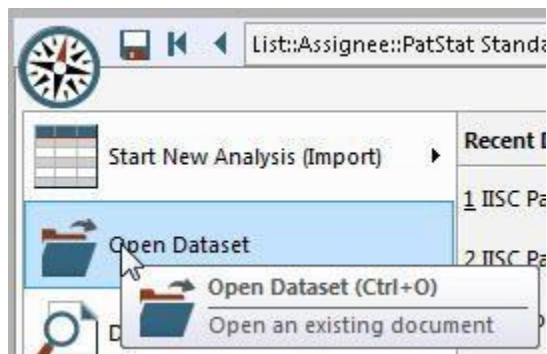
### 1.) Using the Startup dialog box (lists Recent Documents)



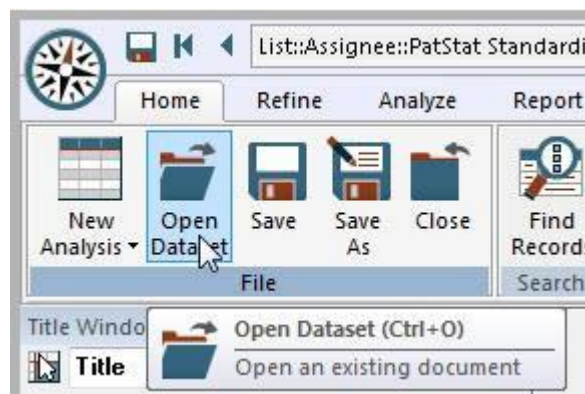
The default is **Open Existing VantagePoint File**. You then select the file to be opened. For your convenience, the window displays recently used files which can be opened by double-clicking on the file name or by selecting the file and clicking **OK**. If the file you want to use is not displayed, double-click **More Files...** (above the list of recently used files) which opens a dialog box allowing you to select the file location.

or, if the startup dialog box is disabled,

### 2.) Using the **App Button**



### 3.) Using the **Home Ribbon**

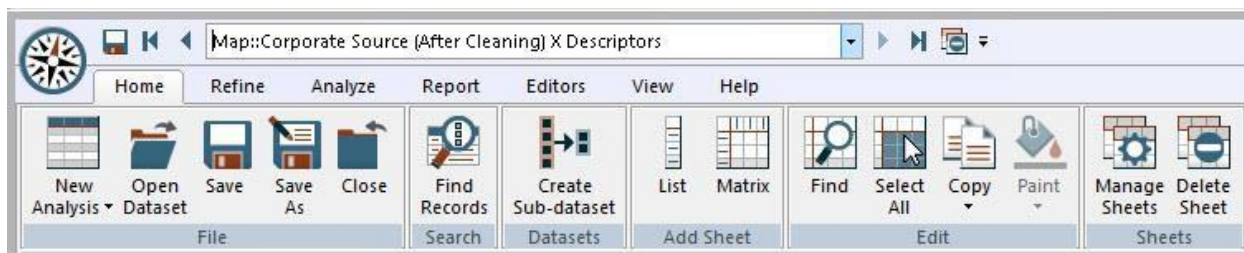


### 4.) or press **Ctrl O** on the keyboard.

In the **Open** dialog box select the drive, folder, or network location that contains the \*.vpt file you want. Double-click on the file you want to open.

## Additional Home Ribbon functions

With a VantagePoint file open, you can [Find Records](#) in a dataset, [Create Sub-datasets](#); Create a new [List](#) and [Matrix](#); Find, Select, Copy, and Paint sheet selections; and [Manage](#) and [Delete Sheets](#).



See the following sub-topics for the functions available on the Home ribbon.

### File



**New Analysis** - [Import data](#), [Import from Excel](#) file, [Smart Data Exchange](#). Follow the links to the individual Topics.

**Open Dataset** - Open a VantagePoint file

**Save** - To Save a VantagePoint file, click the **Save** icon on the Home ribbon; or press **Ctrl S** on the keyboard.

**Save As** - to save with a new file name. *If you have not saved the current file since importing the raw data or creating a new dataset:* In the **Save As** dialog box, select the drive, folder, or network location in which you want to save the VantagePoint file, and type the new file name in the **File Name** box.

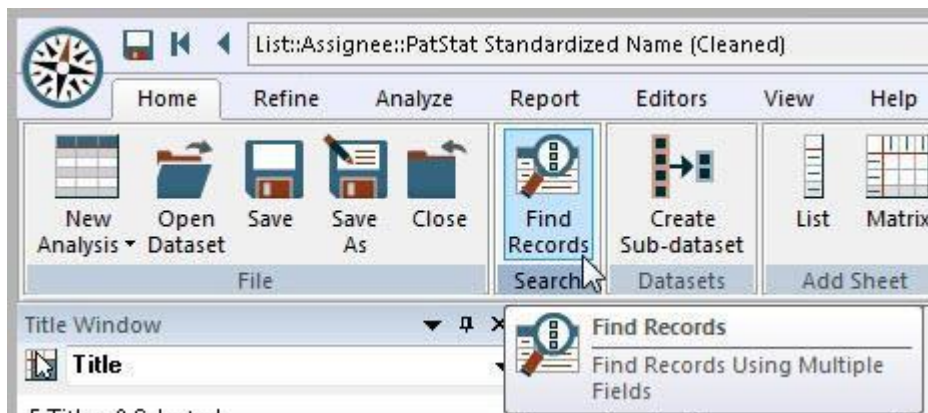
**Close** - close the current dataset. The current dataset can also be closed by clicking the "x" in the lower right corner of the workspace:



## Search: Find Records

Find records in a dataset using multiple Fields. Matching records are displayed in the Title view, allowing you to [classify](#) the records, or [add the record set to a group](#).

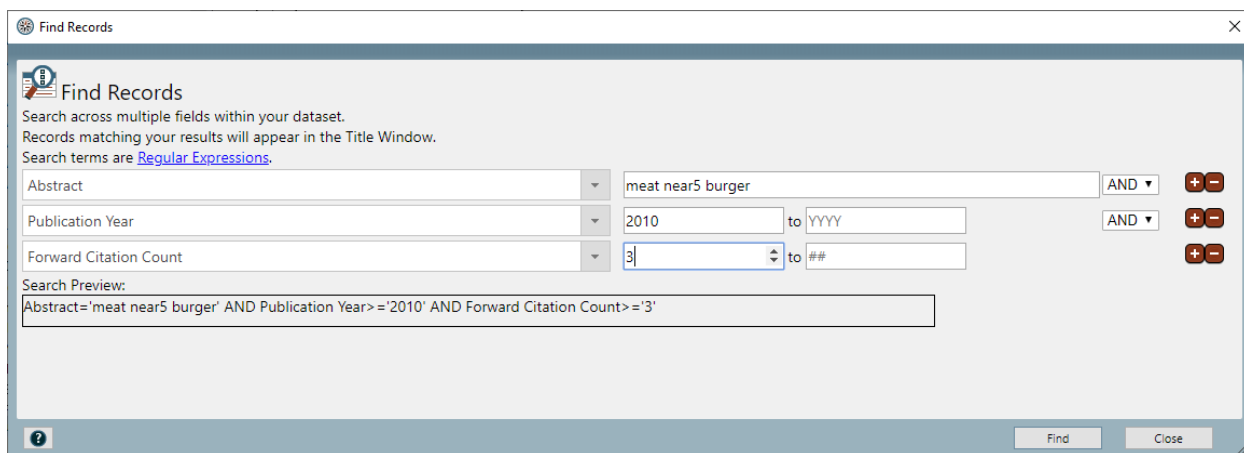
From the Home Ribbon, select **Find Records**:



A dialog is presented for selection of Fields and entries for search criteria. In the dropdown boxes, Fields are grouped for selection by type: "Text", "Year", and "Number". (Field name must first have been assigned "Year" or "Number" Data Type.) Type-to-Filter feature is also available for selecting the Fields.

In the example below, the user wants to find records matching certain terms in the Abstract, based on a Publication Year of 2010 or greater, and Cited Family count greater than or equal to 3. The query is shown in the "Search Preview" box as it is being created.

After clicking the **Find** button, the matching records are displayed in the Title Window. If no records are found, a "No Records Found" message will be displayed. At that point you can try a new search.



Search in as many fields as you'd like within the dataset. Click the + icon to add (or insert) more criteria.



Click the - icon to remove search criteria.

Only one boolean operator per line is allowed. For example,

Searching in the Abstract field: "Plastic and Mesh and Red" fails.

Split the searches onto multiple lines (i.e. line 1 "Plastic and Mesh", line 2 "Red")

Clicking **Find** will populate the underlying Title window with all the records that match within the search

parameters, or return a "No Records Found" message.

### **Criteria for searches:**

#### **Text Fields**

For "Text" fields, we support our usual set of regular expressions as well as the following boolean searches:

- and
- or
- not
- adj
- adjn
- near
- nearn

One boolean operator per line.

For "adj", order matters. "Near" order does not matter. For both "adjn" and "nearn", 'n' can be any number.

None of the commands are case-sensitive, but they must have a space between the terms:

CORRECT: meat near burger

NOT CORRECT: meatNEARburger

#### **Year Fields**

Search criteria for Year fields are presented as parameters of "minimum year" to "maximum year". Enter the 4-digit year for either or both parameters.

#### **Number Fields**

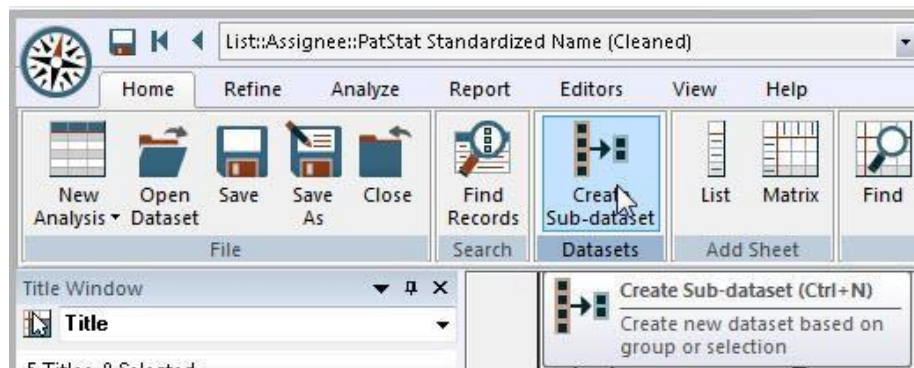
Search criteria for Number fields are presented as parameters of "minimum" to "maximum". Enter the number for either or both parameters.

#### **See Also:**

- [Regular Expressions](#)
- [Add Records to Group](#)
- [Record Classification](#)

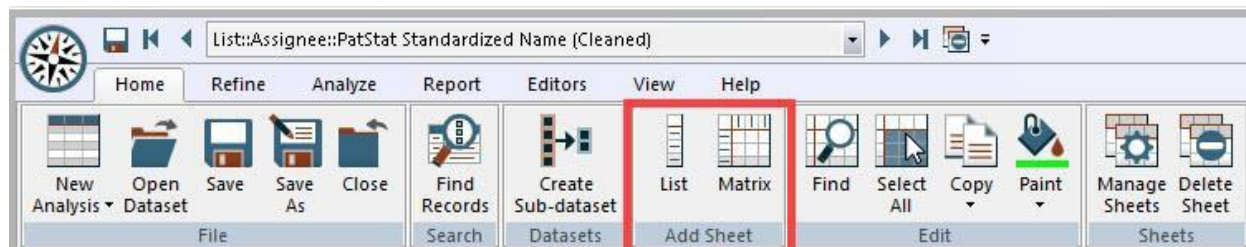


## Datasets



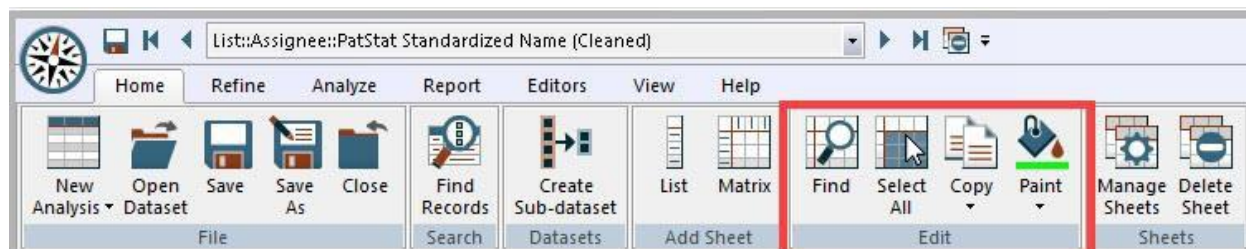
See the [Create Sub-dataset](#) topic for details.

## Add Sheet



Add a [List](#) or [Matrix](#) view.

## Edit

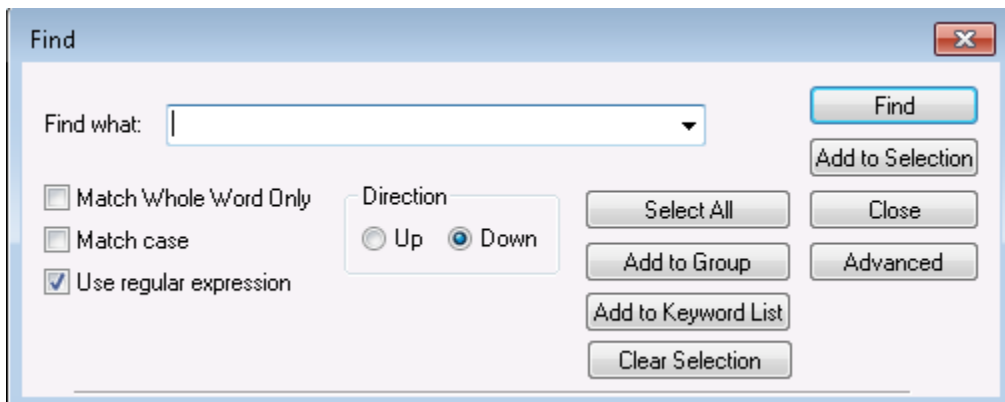


Edit - perform Find, Select All, Copy, and Paint functions on the current sheet. See the following sub- topics for details.

## Find

This function is for Finding text in the current sheet.

1. From the Home ribbon, select **Find**.  
or press **Ctrl F** on the keyboard.



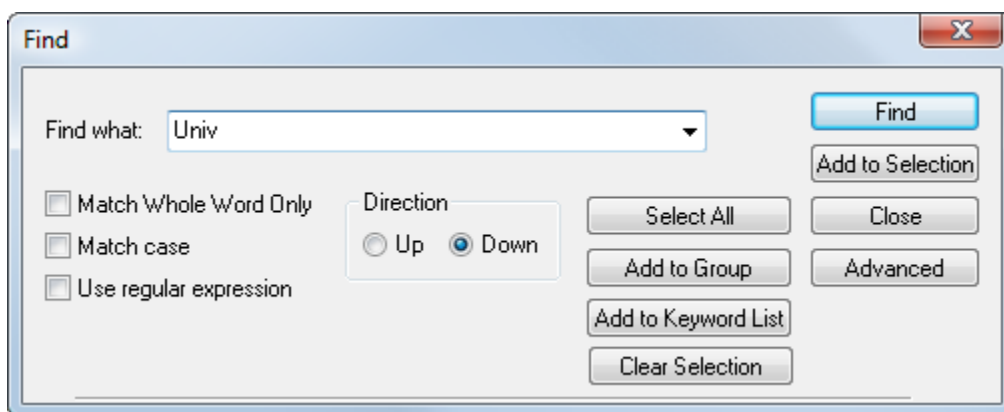
2. In the **Find** dialog box, type in the string of characters you want to find.
3. Click **Find** to search for the string. Once the string is found, click **Find** again to find the next occurrence. Click **Select All** to have VantagePoint highlight and select all records containing the string.

See the next topic "The Find String dialog box" for an expanded explanation of the choices in the dialog box.

To Find Records in a dataset, see the topic [Find Records](#) on the Home Ribbon.

## The Find String dialog box

**Find What:** Type in the character string you want to find.



**Match Whole Word Only:** Click this checkbox if you want the search to match the entry as a whole word only.

**Match Case:** Click this checkbox if you want the search to match the upper and lower case exactly as you typed it.

**Use Regular Expression:** You can use a matching syntax called [Regular Expressions](#).

(A full discussion of regular expressions is beyond the scope of this Help Guide. You can find many useful resources on the Internet by searching for "Regular Expressions.")

If you want to find a simple string of text, just type the text in the box. If you want to find all items that begin with "example text", you can enter "^example text". To find all items that end with "example text", you can enter "example text\$".

However, regular expressions have reserved characters that require special treatment - most notably, to match the "." ("period") character, you must use "\." ("back slash" followed by "period"). For example, to match "Inst." you must enter "Inst\."

If you click **Use Regular Expression** "off" (remove checkmark), then a simple string match is performed.

**Direction:** Choose the direction you want to search.

**Select All:** Click on this button to search for the character string and add all items containing the string to the selection list.

**Add to Group:** When items are found, the matching items can be added to a group by pressing this button. Brings up a dialog box to select from an existing group or you can create a new one.

**Add to Keyword List:** Add selection to Keyword List (then choose the Keyword List.)

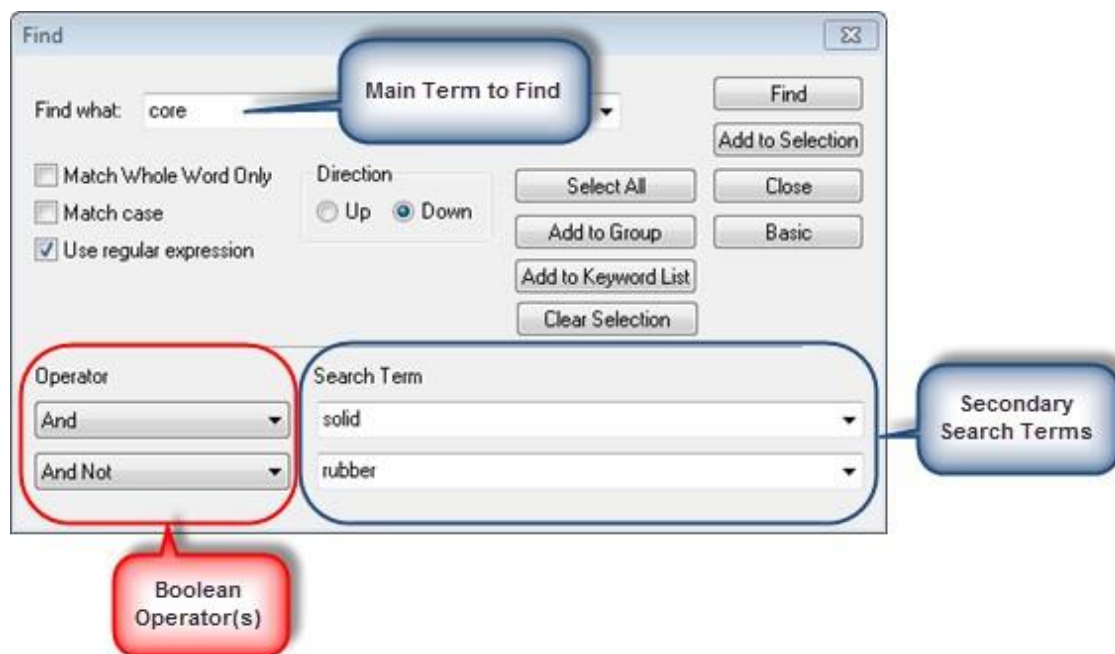
**Clear Selection:** After "Select All" is performed, this de-selects those found.

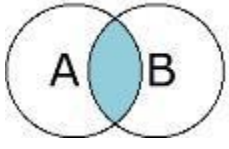
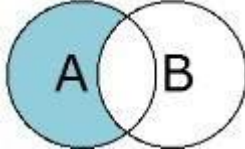
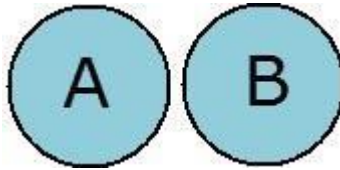
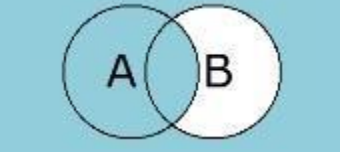
**Find:** Click this button to simply find the character string

**Select Item:** Click this button to add the item just found to the selection list.

**Find** and **Select Item** can be used in combination to interactively search for and select items in a list.

**Advanced:** Clicking this button expands the dialog box for advanced search operations.



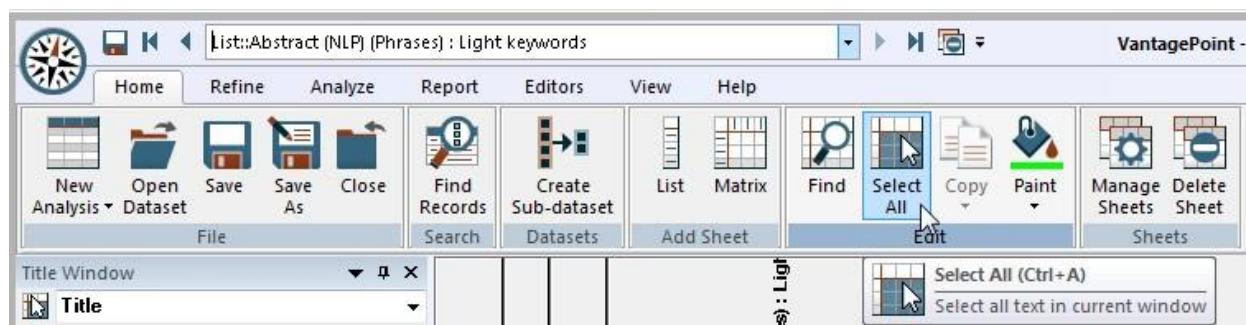
| Operator                       | Description  | Diagram   |
|--------------------------------|--|---|
| Adjacent                       | The Secondary term must appear next to the Main term, but the order of the terms is unimportant.                     |   |
| And                            | The Boolean "And" – matches when the Main (A) and Secondary terms (B) appear together.                               |    |
| And Not                        | Matches the Main term (A) when it appears in the absence of the Secondary term (B).                                  |    |
| Followed by Adjacent           | The Main term must be directly followed by the Secondary term.   |   |
| Followed by And                | Similar to "And" above, but the Main term must appear before the Secondary term.                                     |   |
| Followed by Near2/Near3/Near4* | Asserts that the Main and Secondary terms are within 2, 3, or 4 words of each other, and that Main term comes first. |   |
| Near2<br>Near3<br>Near4*       | Asserts that the Main and Secondary terms are within 2, 3, or 4 words of each other. The terms can be in any order.  |   |
| Or                             | The basic Boolean "Or" operator – Matches if either of the Main or Secondary terms is found                          |  |
| Or Not                         | Matches if Main term is found OR if the Secondary term is NOT found. (inclusive).                                    |  |

\* Note: In practice, Near2 will match when the terms are adjacent to one another, OR when the Main and Secondary search terms have one (1) word between them. It follows that Near3 will accept up to two (2) words in between, and Near4 permits up to three (3) words separating the Main and Secondary terms.

### Finding and selecting multiple items in a list

1. From the Home ribbon, select **Find**.  
or press **Ctrl F** on the keyboard.
2. In the **Find** dialog box, type in the string of characters you want to find and select.
3. Click **Select All** to search for and select all items containing the string.

## Select All

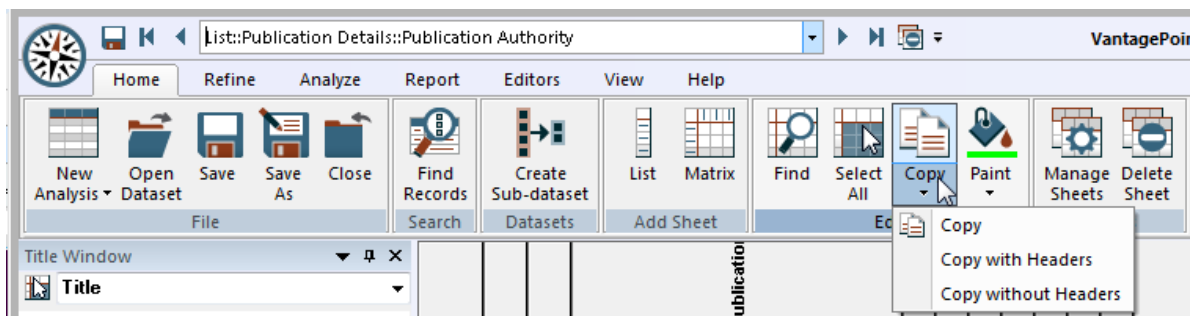


**Select All** is enabled when viewing a List or Matrix. Selects all text in the current window for copying/pasting into another application.

## Copy / Copy with Headers

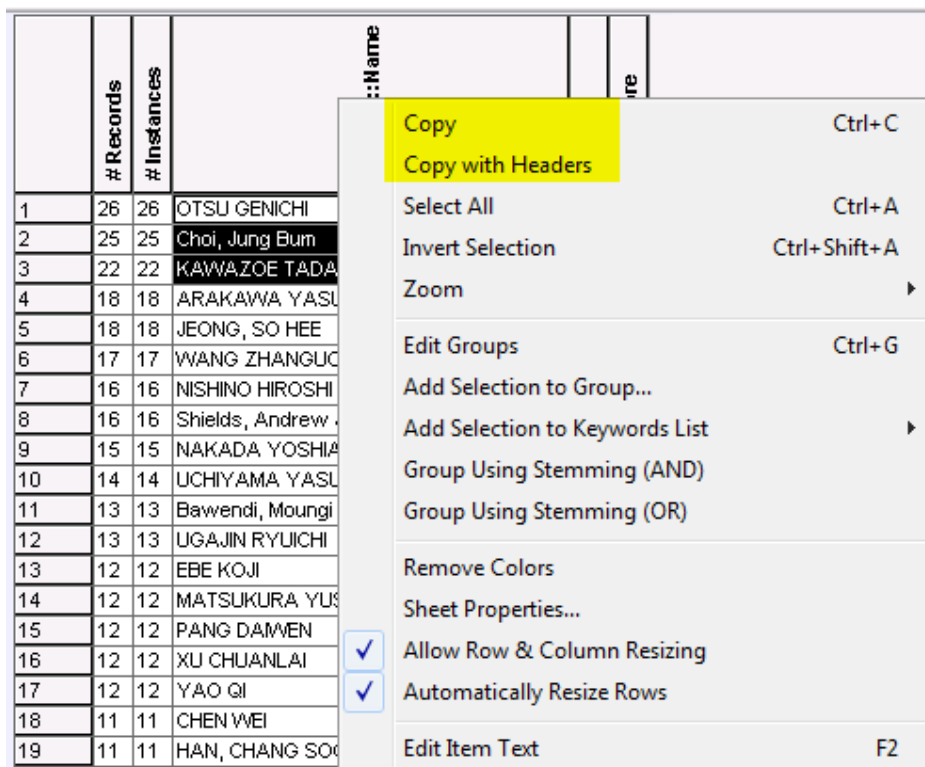
You can Copy items from a List view.

1. Select the item(s) you want to copy.
2. Select the Home ribbon and click **Copy** or select from the Copy dropdown menu.



(or right-click on your selection, as shown below).

3. Select either **Copy** or **Copy with Headers**. The default is Copy with Headers.



Here is an illustration of the results of each function, after pasting into an Excel file. Under the Group names, "1" designates membership in the group; "0" indicates it is not in the group.

| Book1 |   |           |            |                 |        |            |   |   |
|-------|---|-----------|------------|-----------------|--------|------------|---|---|
|       | A | B         | C          | D               | E      | F          | G | H |
| 1     |   | # Records | # Instance | Inventor::Name  | top 10 | 10 or more |   |   |
| 2     | 1 | 26        | 26         | OTSU GENICHI    | 1      | 1          |   |   |
| 3     | 2 | 25        | 25         | Choi, Jung Bum  | 1      | 1          |   |   |
| 4     | 3 | 22        | 22         | KAWAZOE TADASHI | 1      | 1          |   |   |
| 5     |   |           |            |                 |        |            |   |   |
| 6     |   |           |            |                 |        |            |   |   |
| 7     |   |           |            |                 |        |            |   |   |
| 8     |   |           |            |                 |        |            |   |   |
| 9     |   |           |            |                 |        |            |   |   |
| 10    |   |           |            | OTSU GENICHI    |        |            |   |   |
| 11    |   |           |            | Choi, Jung Bum  |        |            |   |   |
| 12    |   |           |            | KAWAZOE TADASHI |        |            |   |   |
| 13    |   |           |            |                 |        |            |   |   |
| 14    |   |           |            |                 |        |            |   |   |
| 15    |   |           |            |                 |        |            |   |   |
| 16    |   |           |            |                 |        |            |   |   |
| 17    |   |           |            |                 |        |            |   |   |



The preference for copying Records and Instance columns is set in the [Options Settings](#) dialog (accessed via the App button):



**Options**

Settings | Grid Colors | Sheet Tabs | Hotkey | Colors

**Startup**

- ☒ Show Startup Dialog
- ☒ Check for Updates at Startup Check Now
- ☒ Show Expiration Reminders

**Import Options** Ask me each time

**Confirmations**

**Confirm When Deleting**

- ☒ Lists ☒ Matrices
- ☒ Maps ☒ Browsers

- ☒ Confirm When Renaming in Compound List
- ☒ Show Further Processing Field Renaming
- ☒ Show Find Similar Records

☒ Include Record/Instance Columns when Copying Lists

☒ Check if VPT file can be compacted when opening

Threshold:  MB

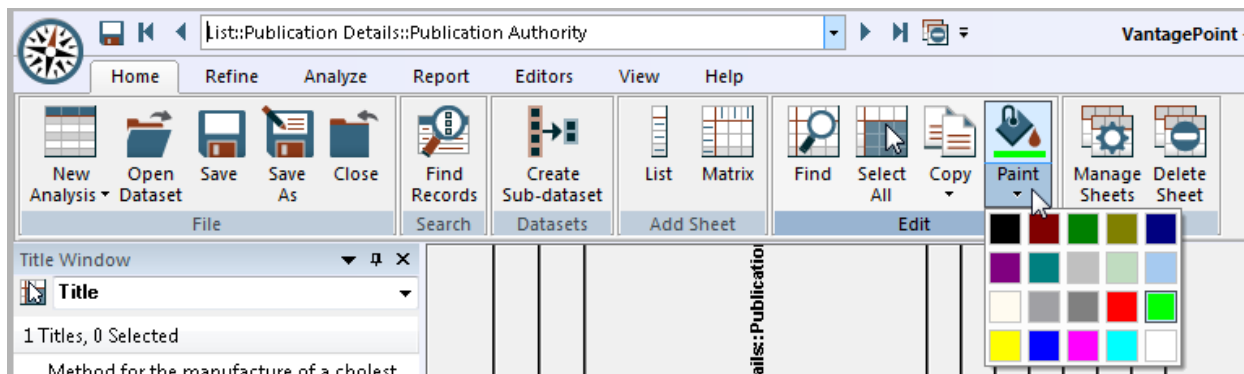
Reset To Defaults...

| Book2 |      |           |            |                   |      |   |   |
|-------|------|-----------|------------|-------------------|------|---|---|
|       | A    | B         | C          | D                 | E    | F | G |
| 1     |      | # Records | # Instance | Grant Publication | Year |   |   |
| 2     | 3    | 40        | 40         | 2002              |      |   |   |
| 3     | 4    | 70        | 70         | 2003              |      |   |   |
| 4     | 5    | 54        | 54         | 2004              |      |   |   |
| 5     |      |           |            |                   |      |   |   |
| 6     |      |           |            |                   |      |   |   |
| 7     |      |           |            |                   |      |   |   |
| 8     |      |           |            |                   |      |   |   |
| 9     |      |           |            |                   |      |   |   |
| 10    | 2002 |           |            |                   |      |   |   |
| 11    | 2003 |           |            |                   |      |   |   |
| 12    | 2004 |           |            |                   |      |   |   |
| 13    |      |           |            |                   |      |   |   |
| 14    |      |           |            |                   |      |   |   |
| 15    |      |           |            |                   |      |   |   |

Result - Box checked

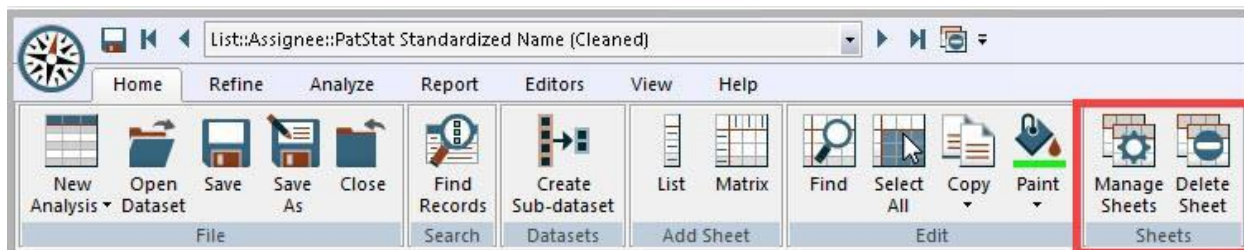
Result - Box not checked

## Paint



Use the Paint feature to highlight items in a List view or in a Matrix. (See "Painting cells in a co-occurrence matrix")

## Sheets



[Manage Sheets](#) (activate, move, rename) and [Delete Sheets](#). See the individual Topics for additional details.

## Refine

---

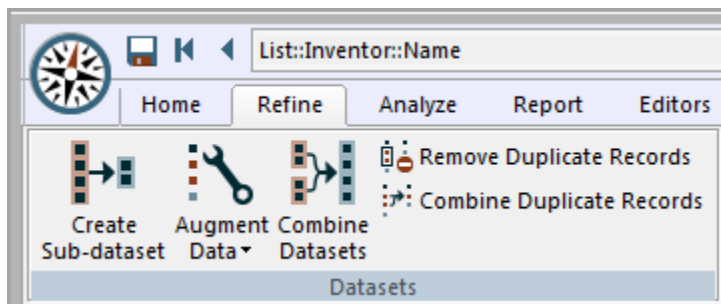
Refine an open VantagePoint file by:

- performing **Dataset** functions such as Creating a Sub-dataset, merging datasets or records, combining or removing duplicate records;
- performing functions related to [Fields](#), such as List Cleanup, apply a Thesaurus, Import more fields; and
- performing functions related to [Groups](#).



## Datasets

---



The sub-topics in this section describe these functions for working with datasets:

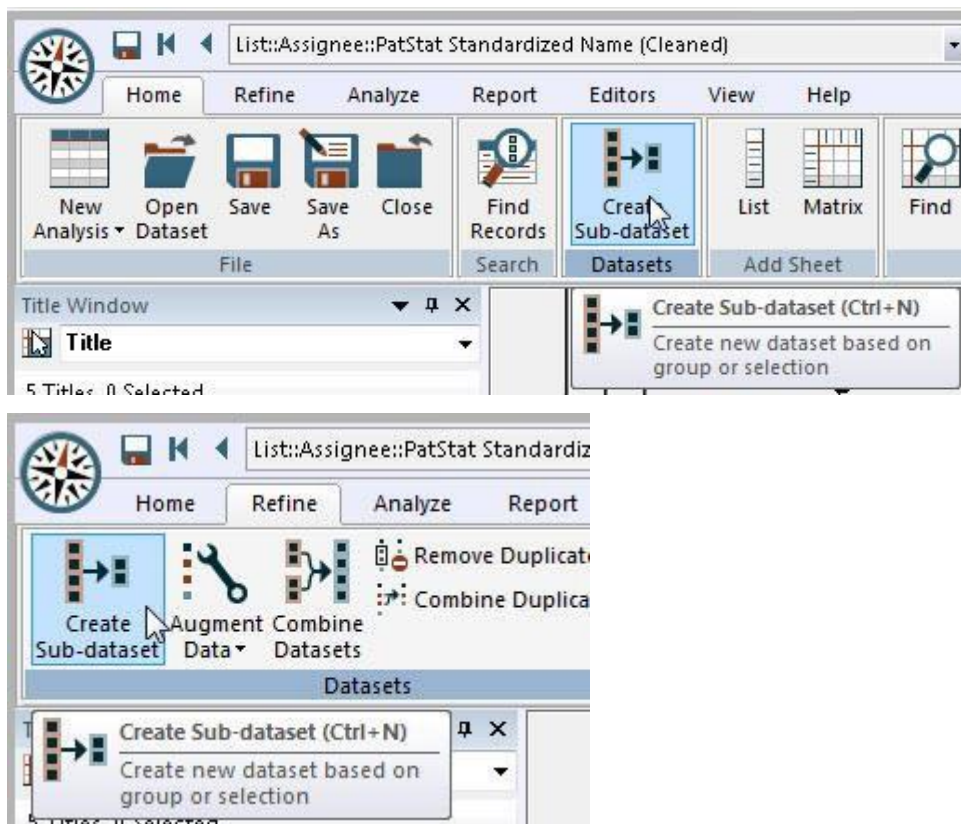
- 1) Create Sub-dataset
- 2) [Augment Data](#) (add fields to one dataset from another open dataset, creating a third dataset, or add fields directly to a dataset from an Online Database\*)
- 3) [Combine Datasets](#) (combine two datasets into a new, third, dataset.)
- 4) [Remove Duplicate Records](#)
- 5) [Combine Duplicate Records](#)

\* Database from a Third-party provider. You must have user credentials for access.

### Create Sub-dataset

You can extract all or a portion of the current dataset into a new, smaller dataset. The new dataset can be extracted using groups or selected list items. The new dataset will contain all of the records that contain any of the selected list items (or any of the list items in the selected group).

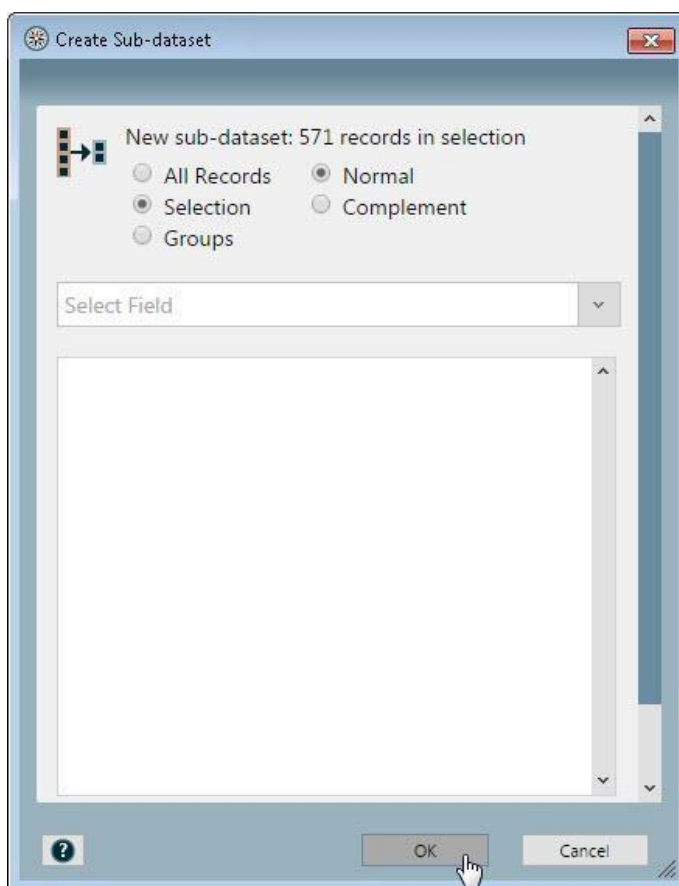
1. Select the Sheet to be used to create the new dataset. If a group is defined for extraction, continue to step 2. If no group is defined, create a selection by highlighting the selection (rows, columns, or cells) to be used to create the new dataset. If the list items are consecutive, you can "click and drag" to highlight all the items to be used. Otherwise, use the Ctrl key and click multiple items.
2. From either the Home or Refine ribbon, select **Create Sub-dataset**



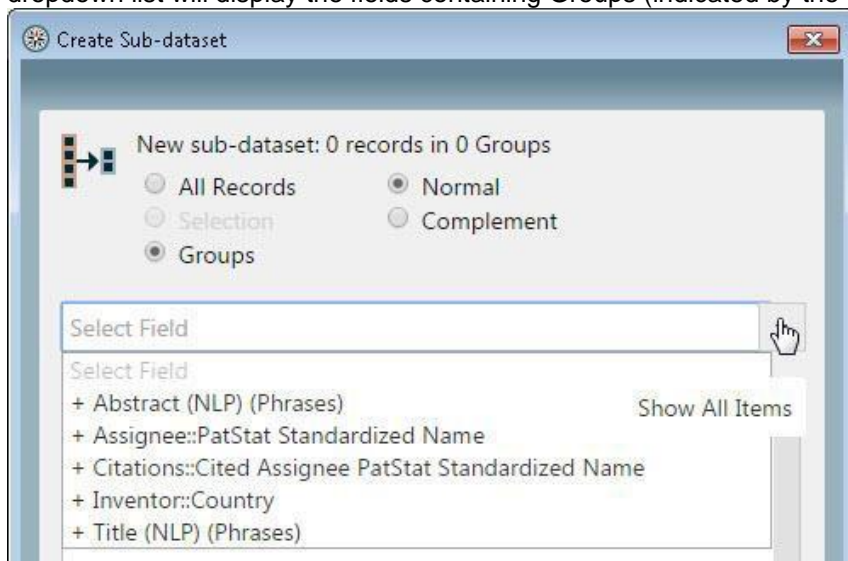
or press **Ctrl N** on the keyboard.

3. The **Create Sub-dataset** dialog box is displayed.

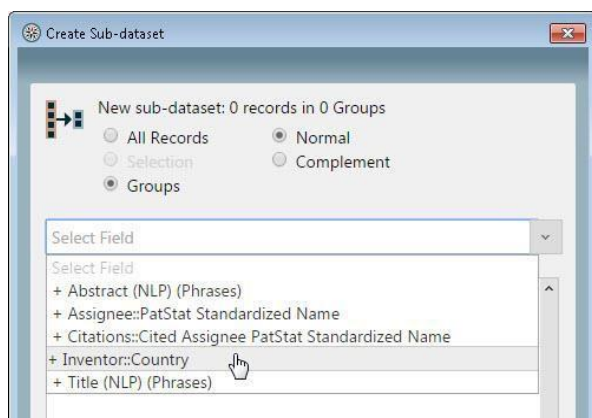
4. Choose to Create the New Dataset from **All Records**, a **Selection**, or **Groups** (if your dataset contains groups).



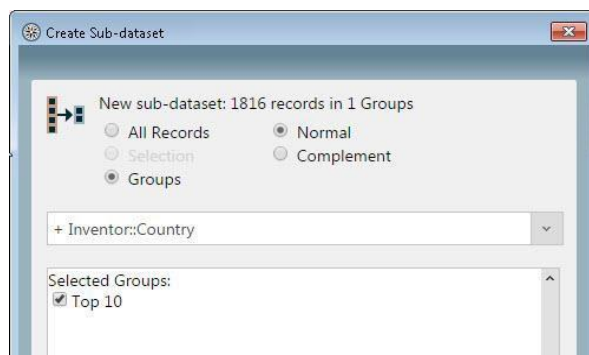
5. If you select **Group**, select the group you want to use as the basis for extracting the Sub-dataset. The dropdown list will display the fields containing Groups (indicated by the "+" sign).



Here, the user selects the Field containing the desired Group.



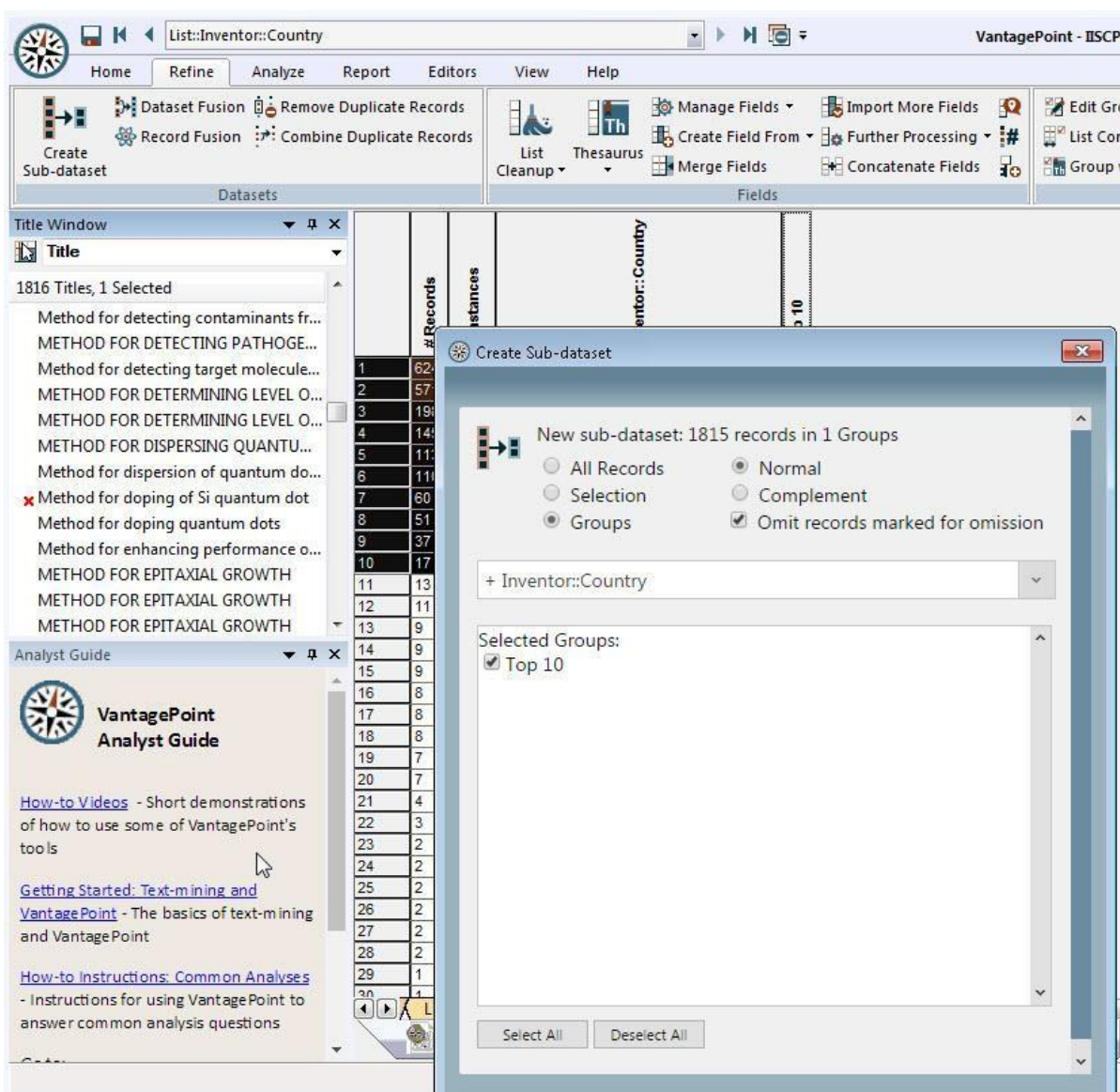
Next, the user selects the Group(s) of records to be included in the new dataset. (If a Field had more than one Group defined, all groups would be displayed.)



- 6) Select **Normal** or **Complement**. "Normal" results in the creation of a sub-dataset consisting of the selected records or group. "Complement" *excludes* the group or records selected and creates a sub-dataset using all the other records.
- 7) If your dataset contains records marked for omission (see Record View), they will be omitted from the sub-dataset if this box remains checked. (This checkbox is displayed only if there are records marked for omission.)
- 8) The number of records that will be created in the sub-dataset is displayed above the window where the group names appear.



The illustration below shows the user has selected the "Top 10" Group in the Inventor::Country field. In this case, the user has also chosen to Omit records marked for omission. At the top of the Create Sub-dataset dialog, you see the New sub-dataset will contain 1815 records. Notice the Title Window shows 1816 Titles, with one record visibly marked for omission.

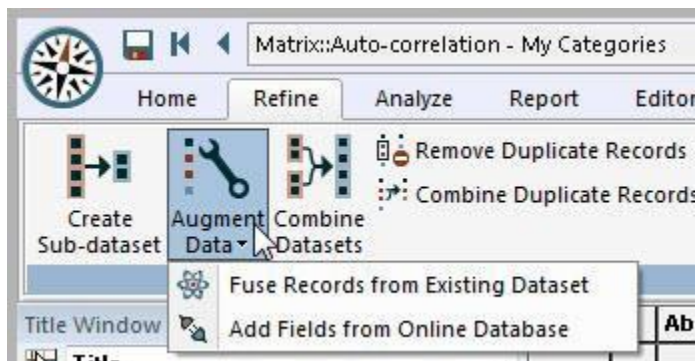


9) Click **OK** to begin the extraction process.

Depending on the size of the dataset, the extraction may take a few moments. You will know the process is complete when a [Summary View](#) of the new dataset is displayed.

## Augment Data

Add more fields to an existing dataset using Augment Data:



The Augment Data functions are:

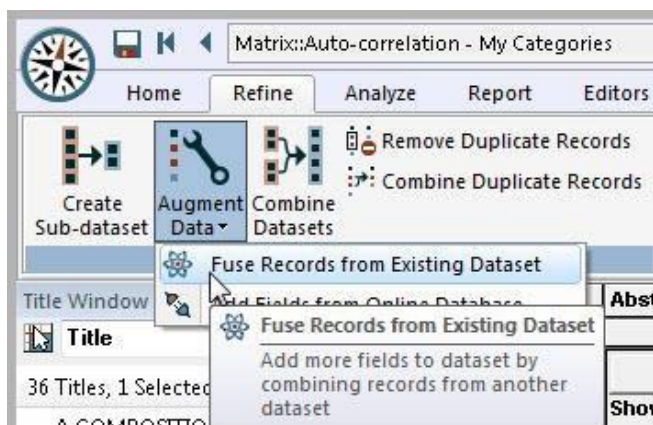
1. Fuse Records from Existing Dataset
2. Add Fields from Online Database

## Record Fusion

As the name implies, the Record Fusion operation takes records from two different datasets and combines them into a third dataset based on a user-defined association. One of the original datasets is designated as the "Master Dataset" and the other is the "Accessory Dataset". The resulting dataset will have the same number of records as the Master dataset. Each record in the Accessory dataset is examined based on the user-defined association and is attached to a Master record if the association is satisfied. An Accessory record can be attached to one or more Master records, and a Master record can have any number of Accessory records (including zero). If an Accessory record does not satisfy the user-defined association with at least one Master record, the Accessory record is discarded.

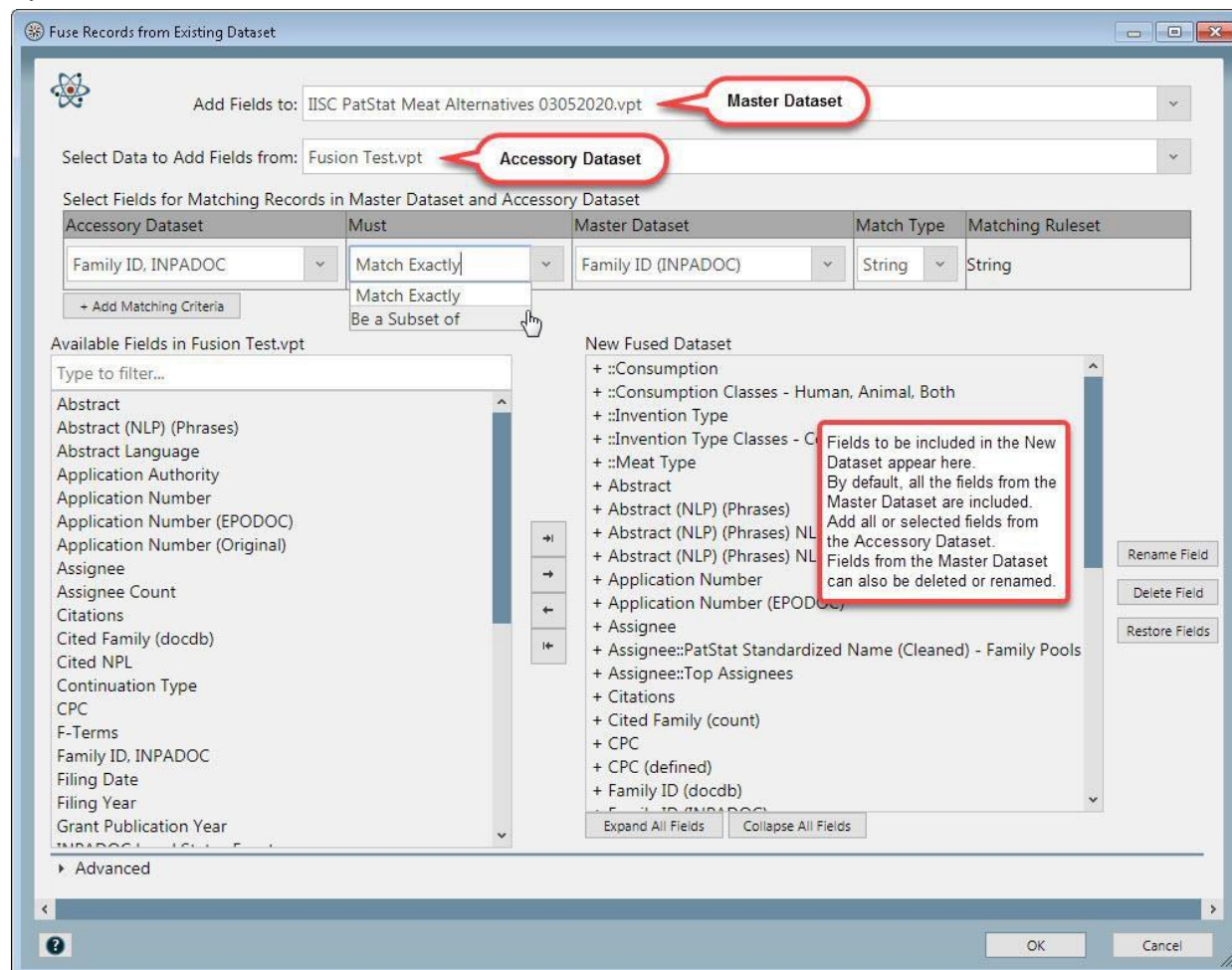
The datasets you want to fuse must already be open.

From the Refine ribbon, click the **Augment Data** button, and select **Fuse Records from Existing Dataset**.



The following dialog box appears.

By default, the active dataset is considered the Master Dataset.



First, confirm the file selection of the Master dataset. If necessary, use the dropdown list to select another open .vpt file. Then, select the file containing the fields to be added - the Accessory dataset.

**Master Dataset:** The “organizing” dataset containing the core records upon which you want to “hang” records from the Accessory Dataset. Chooses the active dataset by default.

**Accessory Dataset:** The “resource” records that you want to merge into the records in the Master Dataset. Selects from other files that are open.

The next step is to select matching criteria: Select the Fields for matching records in the Accessory Dataset and the Master Dataset. Choose how to match the Fields from the dropdowns Must:

**Match Exactly:** The field in the Accessory record must match the field in the Master record item-for-item. However, the match between each pair of items may be “fuzzy”.

**Be a Subset of:** The field in the Accessory record must match a subset of the field in the Master record.

Then choose the **Match Type**:

**String:** Specifies that the two items must match (not fuzzy).

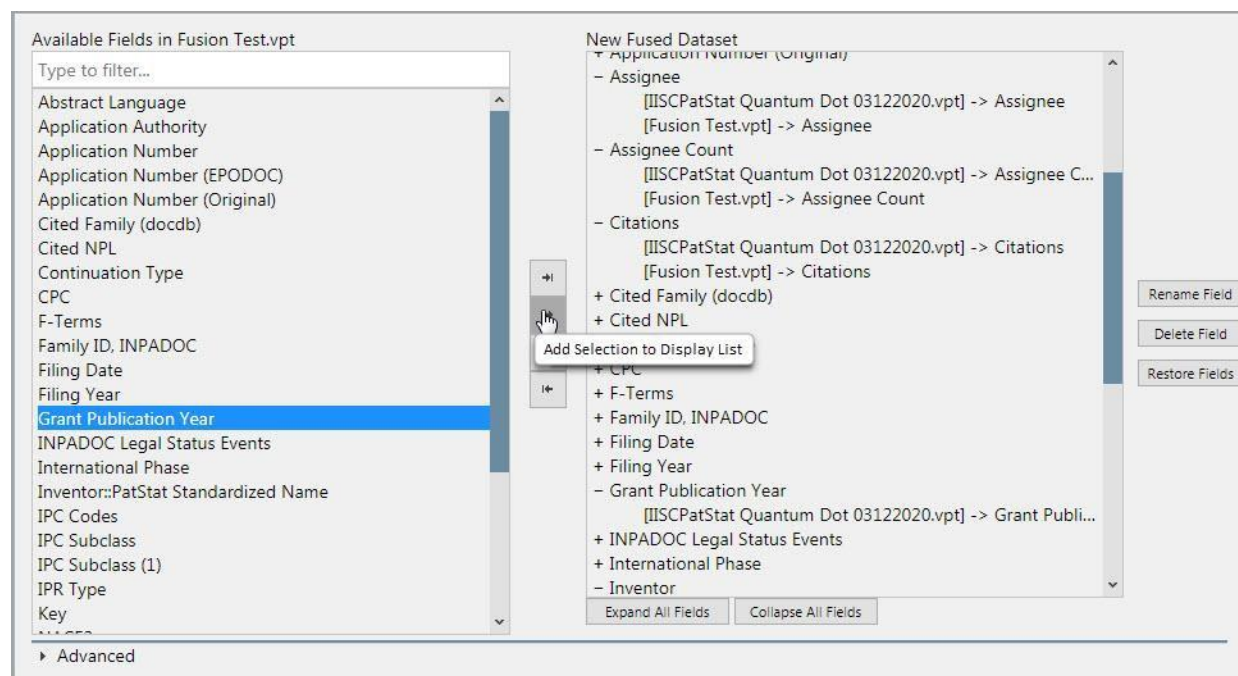
**Fuzzy:** Specifies a fuzzy match between items. (Select a .fuz file to apply.)

You can choose up to three (3) different Fields to match. Click the button (above the left window) to **Add Matching Criteria**.

The available Fields in the Accessory Dataset appear in the left window. The Fields to be included in the New Fused Dataset appear in the right window. By default, all the Fields from the Master Dataset are included.

#### Move Fields into the New Fused Dataset

- Quickly add All Fields from the "Accessory" Dataset to the New Fused Dataset by clicking the top arrow between the windows.
- Add Fields individually by clicking and dragging the field name to the right window. Or, select the Field name and click the Add Selection arrow.
- Multiple Fields can be selected by using Shift-click or Ctrl-click. Drag your selection to the right window, or click the Add Selection arrow.



By clicking the "+" sign in the New Fused Dataset window, you can see the [source dataset] of the fields that are being added.

Remove fields from the New Fused Dataset window using click-and-drag, and the Remove Selection/Remove All buttons. (This only removes fields that were added from the Accessory Dataset. Fields from the Master Dataset remain, unless you click the **Delete Field** button.)

You can make changes to fields in the New Fused Dataset window by selecting the field and clicking the button to the right of the window:

**Rename Field** (shortcut F2)

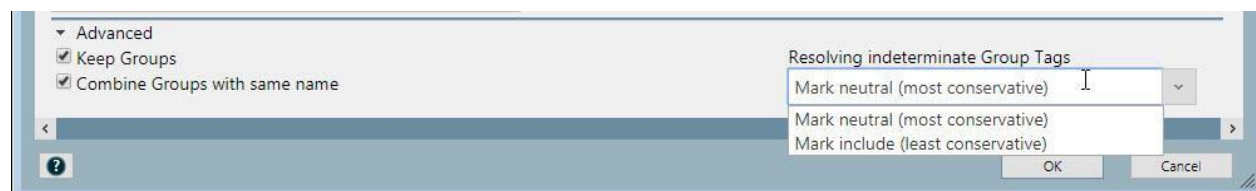
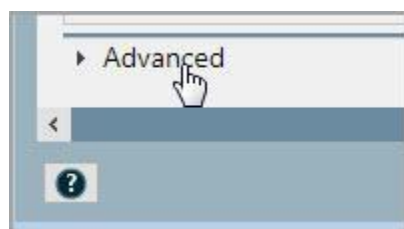
**Delete Field** (Delete key)

**Restore Fields** (Alt R) (you must then click on the field name when it is presented in the "Restore Field" box. Restored fields appear at the bottom of the list.)





Settings for handling Group membership within the fields are in the hidden section that is revealed by clicking "Advanced", in the lower left of the **Fuse Records** dialog.



**Keep Groups** – If this is checked and the fields in the Source Dataset(s) have groups, the groups will be retained in the new dataset. If this is left unchecked, groups will not be retained in the new dataset.

**Combine Groups with same name** – If this is checked and the source fields have groups that have the same name, then the group memberships will be merged.

**Resolving Indeterminate Group Tags** – If there are conflicts combining groups, this selection specifies how you want the conflict resolved. See the section Applying Thesaurus to a List for an explanation of these options.

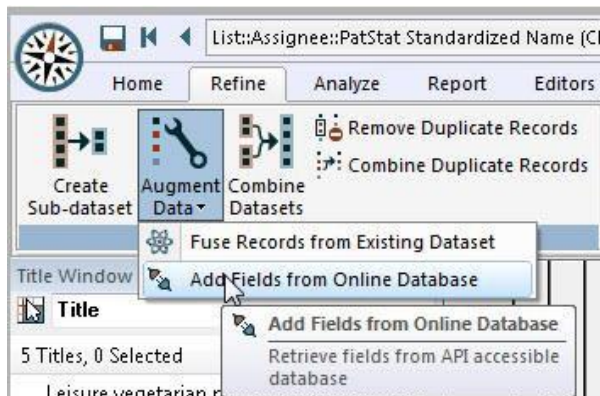
When you have finished making your selections, click **OK**.

**Note:** If any of the records in your files are tagged "Omit from new datasets" (see Record View), you will see a confirmation question, "This action involves records that have been marked for omission. Do you want to omit these records?" If you answer Yes, then the tagged records will be omitted. If you answer No, the "omit" tag will be ignored.

When the operation is finished, a Summary sheet is presented. Accessory records that do not "find a home" with a Master record are discarded.

## Add Fields from Online Database

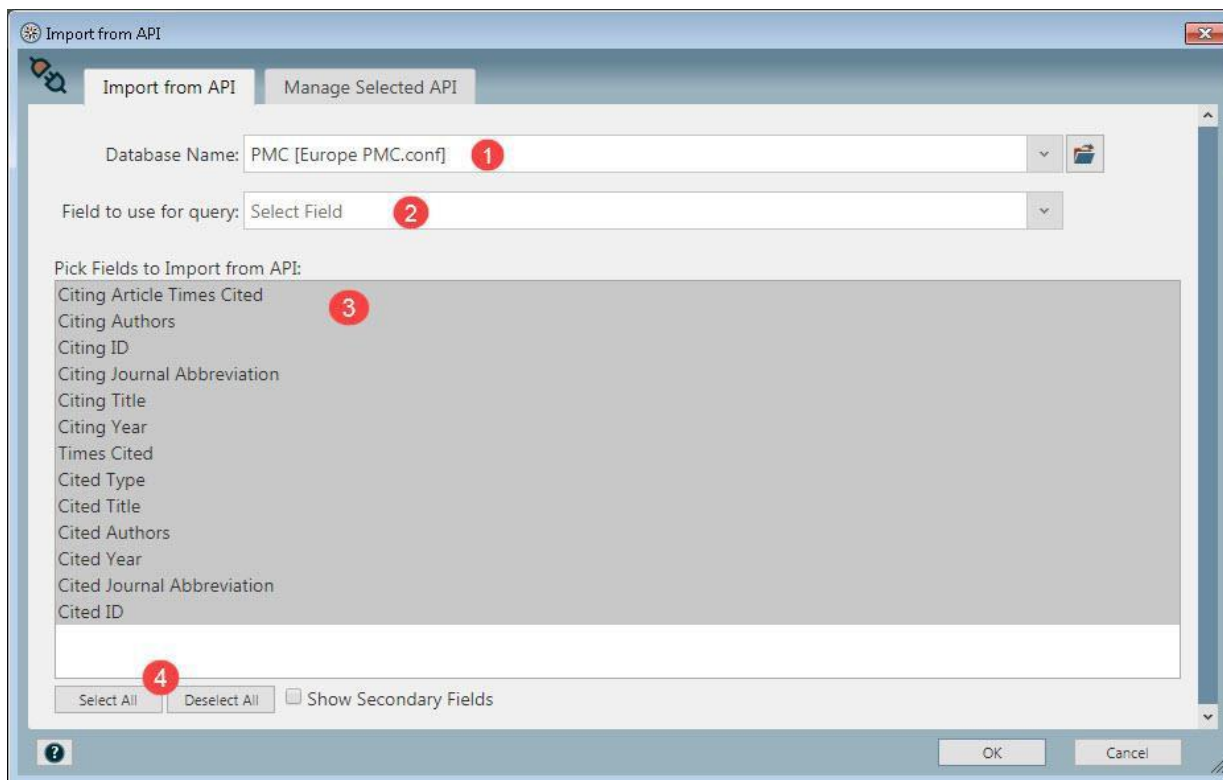
From the Refine ribbon, click the **Augment Data** button, and select **Add Fields from Online Database**.



The **Import from API** dialog appears, with two tabs.

### Import from API

1. Select a Database Name.
2. Field to use for query - the field on which to search.
3. The "Pick Fields to Import" window populates with fields available to import from the selected database. Primary fields are displayed and selected for import by default. Check the "Show Secondary Fields" box below the window to display more fields, if available.
4. Use the **Select All** / **Deselect All** buttons, if desired. Or, use Ctrl-Click or Shift-click to select multiple fields.





### Manage Selected API

Database-specific settings go here, such as any required login information. If any input is needed from the user, the Manage Selected API tab will change to reflect this alert:



If the selected API requires login, Username and Password fields would be entered here. In most cases, except for login information, the user should not need to enter any information on this tab.

Click **OK**.

After the search is completed, results are imported as a new field (or set of fields) and are displayed in the Summary View. They are named in the following format:

[Field name chosen in Step 2]: [Fields to import chosen in Step 3]

So for example, if *PubMed ID* is chosen as the Field to query (Step 2), and Fields to import (Step 3) include *Citing Title*, *Citing Authors*, and *Times Cited*, the new Field names are:

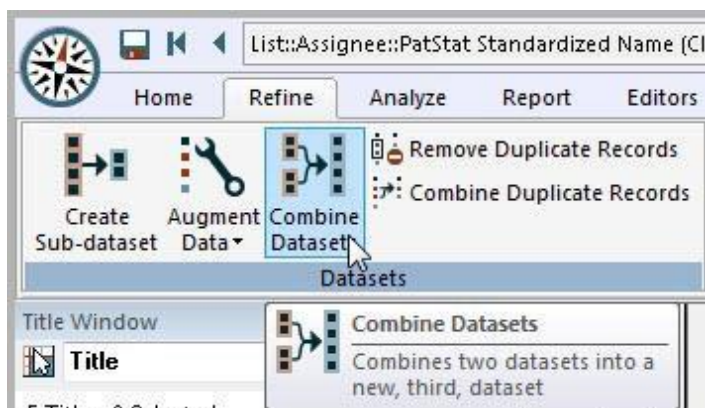
- PubMed ID: Citing Title
- PubMed ID: Citing Authors
- PubMed ID: Times Cited

These new fields are now available for any activity in VantagePoint.

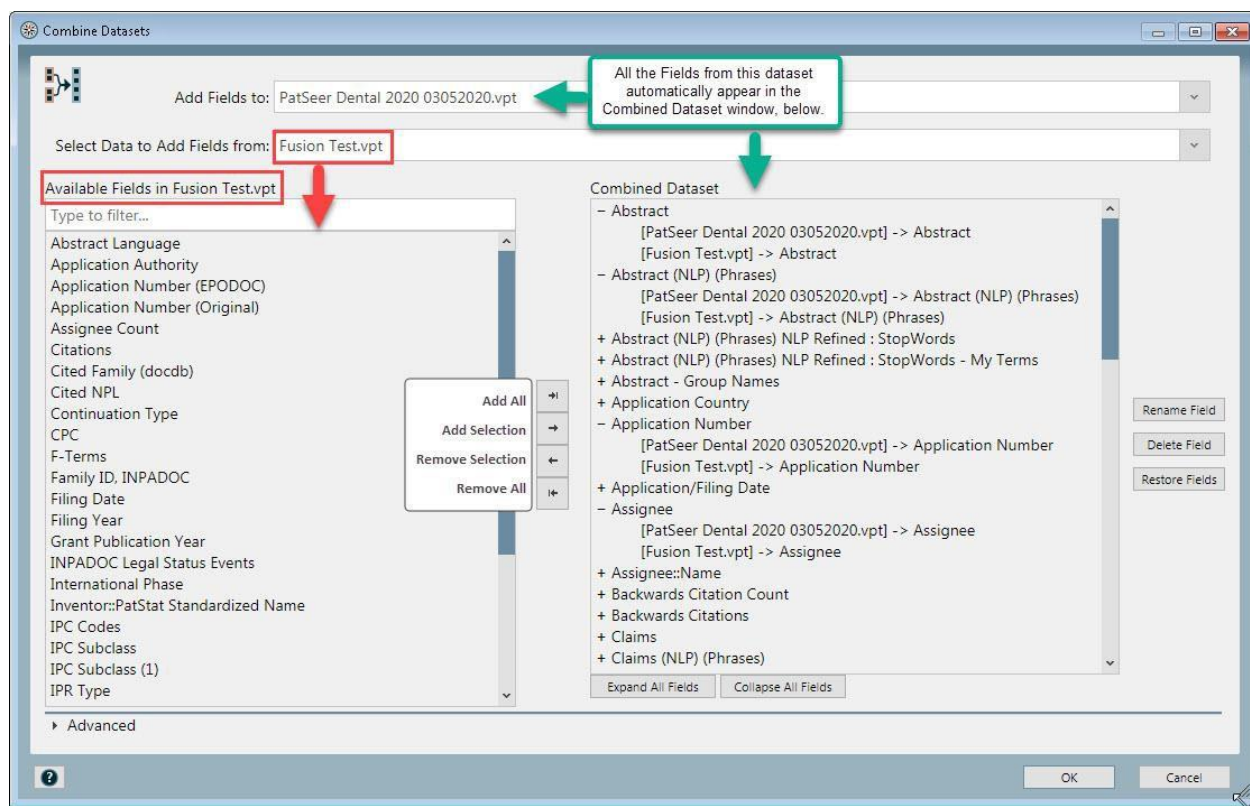
### Combine Datasets

Combine two open datasets.

From the Refine ribbon, click the **Combine Datasets** icon. (The datasets you want to combine must already be open).



The following dialog box appears:



By default, the active dataset is considered the Master Dataset, and the "Add Fields to:" box is populated with that dataset name. The available fields from that dataset are shown in the Combined Dataset window. Select the Source Datasets using the drop-down lists.

In the illustration above, the user selected "Fusion Test.vpt" as the "Accessory" Dataset and has begun adding fields from it to the Combined Dataset. Notice that Fieldnames from both datasets are shown in the Abstract, Abstract (NLP) (Phrases), Application Number and Assignee Fields.

By clicking the "+" sign in the Combined Dataset window, you can see the [source dataset] of the fields that are being added.

#### Move Fields into the Combined Dataset

- Quickly add All Fields from the "Accessory" Dataset to the Combined Dataset by clicking the top arrow between the windows.
- Add Fields individually by clicking and dragging the field name to the right window. Or, select the Field name and click the Add Selection arrow.
- Multiple Fields can be selected by using Shift-click or Ctrl-click. Drag your selection to the right window, or click the Add Selection arrow.

Remove fields from the Combined Dataset window using click-and-drag, and the Remove Selection/Remove All buttons. (This only removes fields that were added from the Accessory Dataset. Fields from the Master Dataset remain, unless you click the **Delete Field** button.)

You can make changes to Fields in the Combined Dataset window by selecting the field and clicking the button to the right of the window:

**Rename Field** (shortcut F2)

**Delete Field** (Delete key)

**Restore Fields** (Alt R) (you must then click on the field name when it is presented in the "Restore Field" box. Restored fields appear at the bottom of the list.)

Settings for handling Group membership within the fields are in the hidden section that is revealed by clicking "Advanced", in the lower left of the **Combine Datasets** dialog.

**Keep Groups** – If this is checked and the fields in the Source Dataset(s) have groups, the groups will be retained in the new dataset. If this is left unchecked, groups will not be retained in the new dataset.

**Combine groups with same name** – If this is checked and the source fields have groups that have the same name, then the group memberships will be merged.

**Resolving Indeterminate Group Tags** – If there are conflicts combining groups, this selection specifies how you want the conflict resolved. See the section [Applying Thesaurus to a List](#) for an explanation of these options.

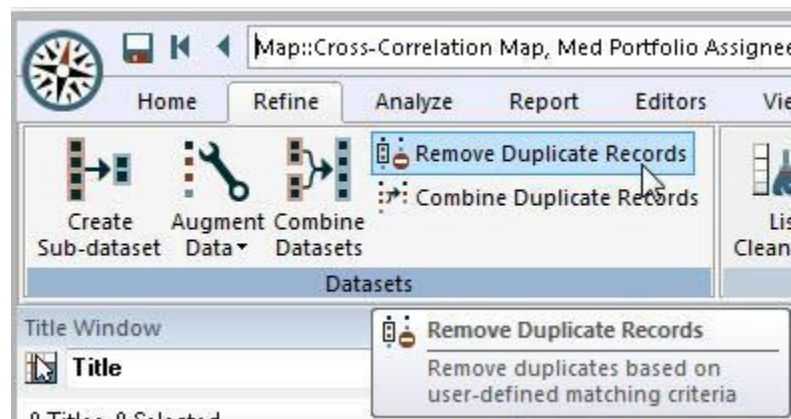
Click **OK** to proceed.

**Note:** If any of the records in your files are tagged "Omit from new datasets" (see [Record View](#)), you will see a confirmation question, "This action involves records that have been marked for omission. Do you want to omit these records?" If you answer Yes, then the tagged records will be omitted. If you answer No, the "omit" tag will be ignored.

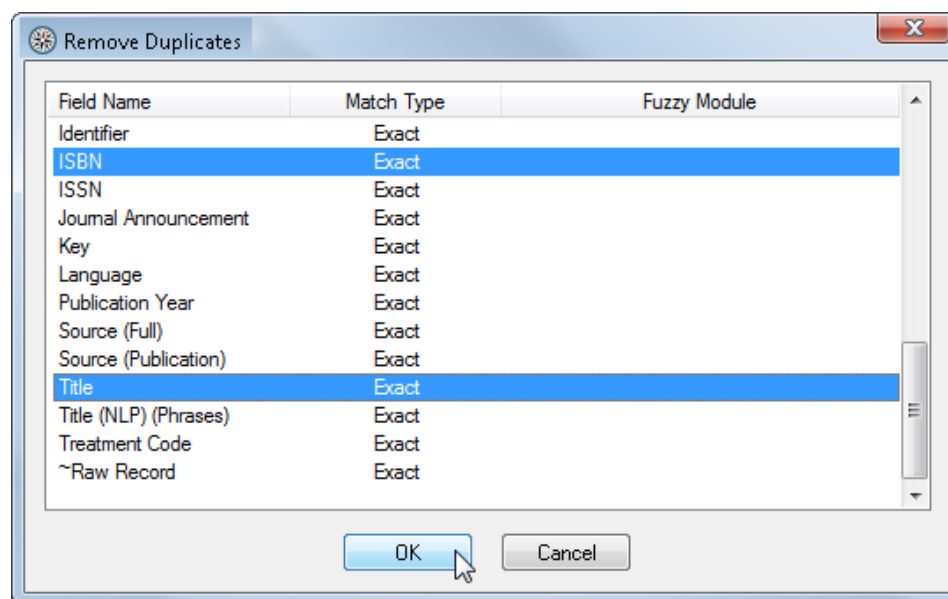
When the operation is finished, a [Summary sheet](#) is presented.

## Remove duplicate records

With a dataset open, select **Remove Duplicate Records** from the Refine ribbon.



The following dialog box will appear with your dataset's field names listed:



First you should specify the type of match you desire for each field ("Exact" or "Fuzzy"). You toggle this selection by double-clicking on the text under the column named "Match Type". When "Fuzzy" is selected, you can change which fuzzy module to use by double-clicking on the file name that will appear under "Fuzzy Module."

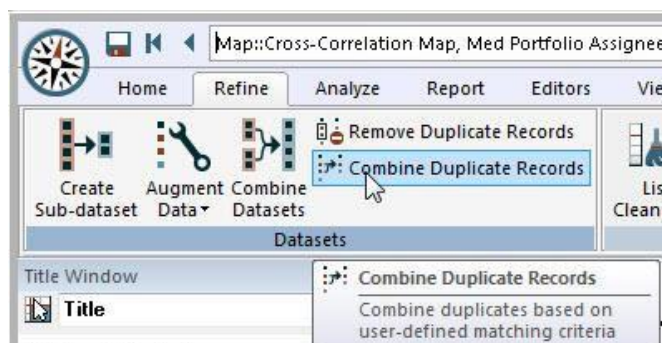
Finally, you may select multiple fields to use in the fuzzy comparison by multi-selecting field names (click, shift-click, and/or control-click). Click **OK** to begin the creation of a new dataset with the duplicate records removed.

**Note:** If any of the records in your file are tagged "Omit from new datasets" (see [Record View](#)), you will see a confirmation question, "This action involves records that have been marked for omission. Do you want to omit these records?" If you answer **Yes**, then the tagged records will be omitted. If you answer **No**, the "omit" tag will be ignored.

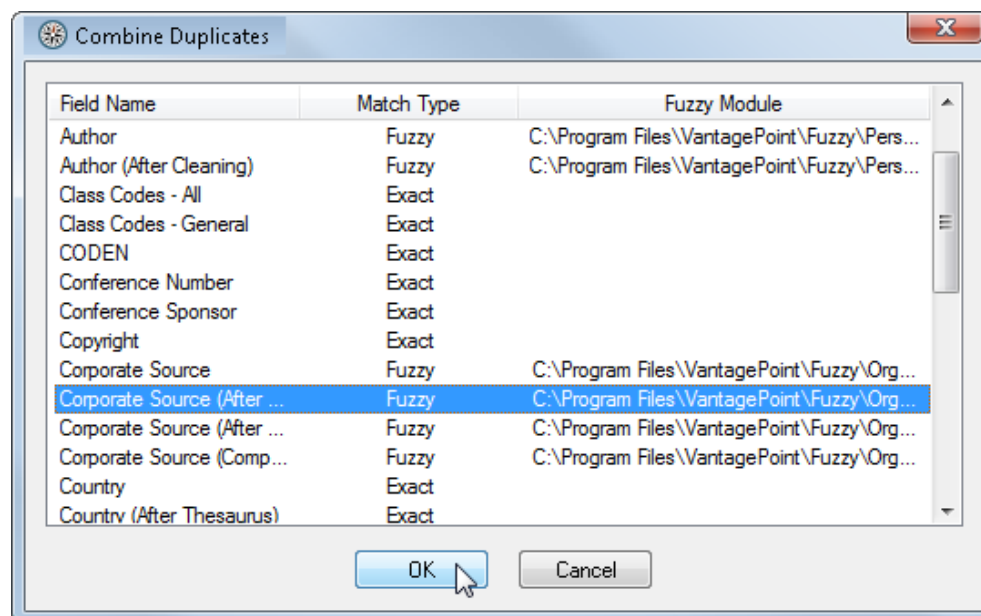
## Combine duplicate records

When your dataset contains two or more records that can be considered as the same record, you might want to combine them (i.e., keep all of them, but as one record) instead of keeping only one and discarding the rest as in Remove Duplicate Records. This might be useful if the records contain information about the same publication but from different data sources with, for example, different coding schemes or different content (abstracts, claims, etc.).

With a dataset open, select **Combine Duplicate Records** from the Refine ribbon.



The following dialog box will appear with your dataset's field names listed:



As explained in [Remove Duplicate Records](#), you should specify the type of match you desire for each field ("Exact" or "Fuzzy"). (Double-click on the Match Type to toggle selection.)

Finally, you may select multiple fields to use in the comparison by multi-selecting field names (click, shift-click, and/or ctrl-click). Click **OK** to begin the creation of a new dataset with the duplicate records combined.

**Note:** If any of the records in your file are tagged "Omit from new datasets" (see [Record View](#)), you will see a confirmation question, "This action involves records that have been marked for omission. Do you want to omit these records?" If you answer **Yes**, then the tagged records will be omitted. If you answer **No**, the "omit" tag will be ignored.

## Fields

The Refine ribbon contains tools for working with Fields:



**List Cleanup** - The [List Cleanup](#) function helps reduce or cleanup a list. Performing List Cleanup does not affect the original list; VantagePoint creates a new list each time.

**Thesaurus** - Use the [Thesaurus](#) function to reduce a list. Applying a thesaurus to a list does not affect the original list; VantagePoint creates a new list each time you apply a thesaurus.

**Create Field From Group** - [Create Field from Group Names](#) or [Create Field From Group Items](#).



**Manage Fields** - Copy, Delete or Rename fields.

**Merge Fields** - Combine/[Merge fields](#).

**Import More Fields** - If you did not initially import all the fields from your data, use this to [Import More Fields](#).

**Further Processing** - [Further Processing](#) lets the user apply Import Filter text processing commands to an existing field without modifying the Import Filter. When Further Processing is used, a new field is created in the dataset. The original field is left unchanged.

**Concatenate Fields** - Concatenate two fields in a record into a new field. The second field can have multiple values per record. See the [Concatenate Fields](#) topic.

**Extract Nearby Phrases** - Using this feature, you can extract NLP Phrases from a free text field that occur in proximity to any of the terms in a group. See the [Extract Nearby Phrases](#) topic.

**Count Terms | Record** - Count the number of unique items in a record and put this in a new field. See the [Count Terms | Record](#) topic.

**Create Key Field** - A [Key Field](#) contains a short, unique identifier for each unique record in your dataset. This is useful for creating groups of records during an analysis.

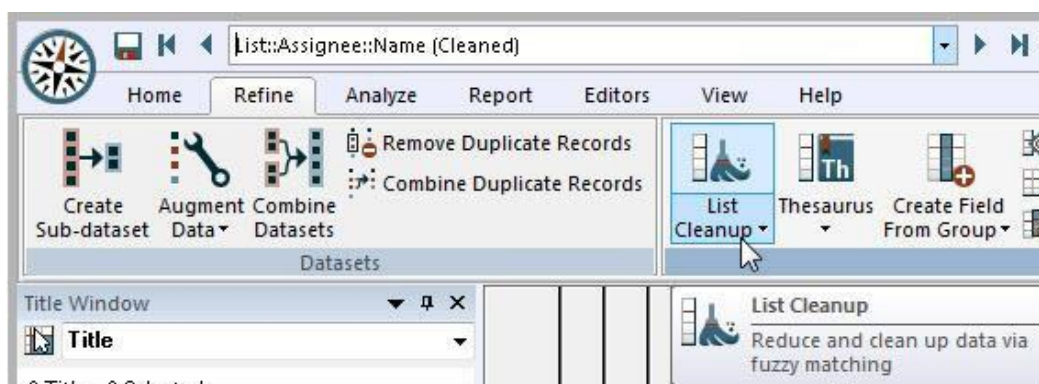
**Refine NLP** - Cleans an NLP field by applying various thesauri. See the [Refine NLP](#) topic. Additional details for each function are found in the individual topics.

## **List Cleanup (Cleaning a List)**

Use the VantagePoint List Cleanup function to reduce or cleanup a list. Performing List Cleanup does not affect the original list; VantagePoint creates a new list each time.

VantagePoint cleans a list by attempting to identify list items that may be equivalent. For example, the terms "human-computer interaction" and "human computer interaction" will appear as separate items in a list (because of the hyphen between "human" and "computer" in the first instance). The List Cleanup algorithms in VantagePoint will catch this as well as plurals and simple misspellings. In addition, VantagePoint can identify equivalents such as "J. Smith", "James Smith", and "Smith, J.". VantagePoint presents these possible equivalents to you for confirmation.

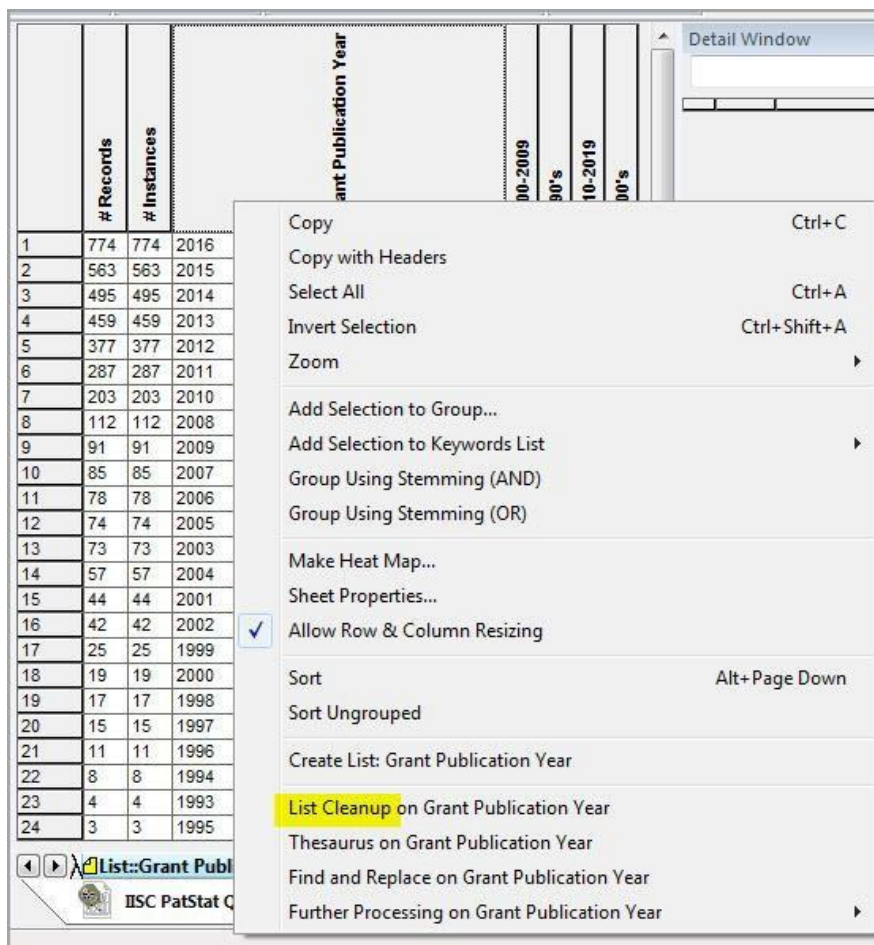
1. To clean a list, open the **List Cleanup** dialog by clicking **List Cleanup** on the Refine ribbon.





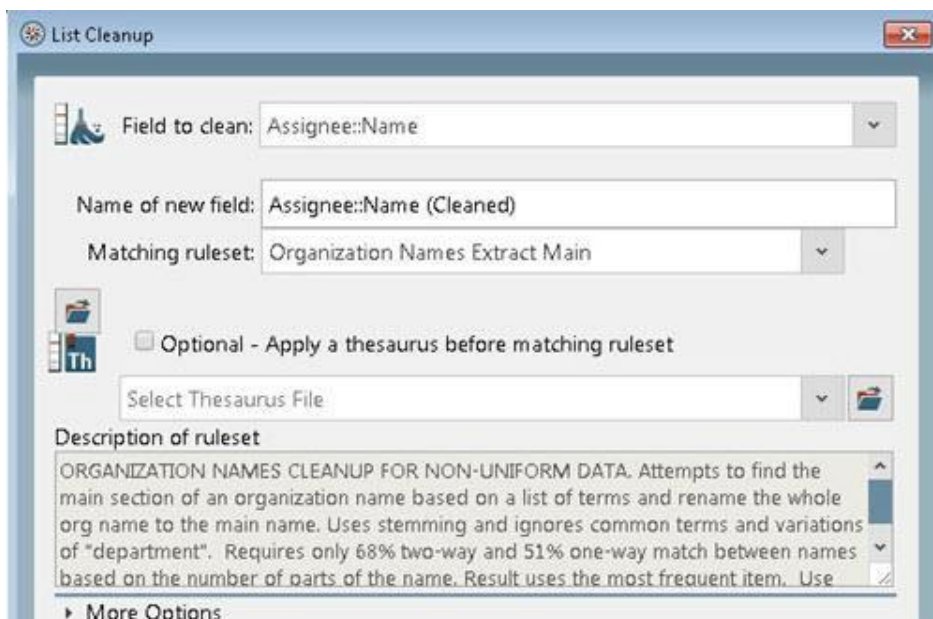
or

With the List view open, Right-click on the Column Header of the Field name and select **List Cleanup** on <Field name>.

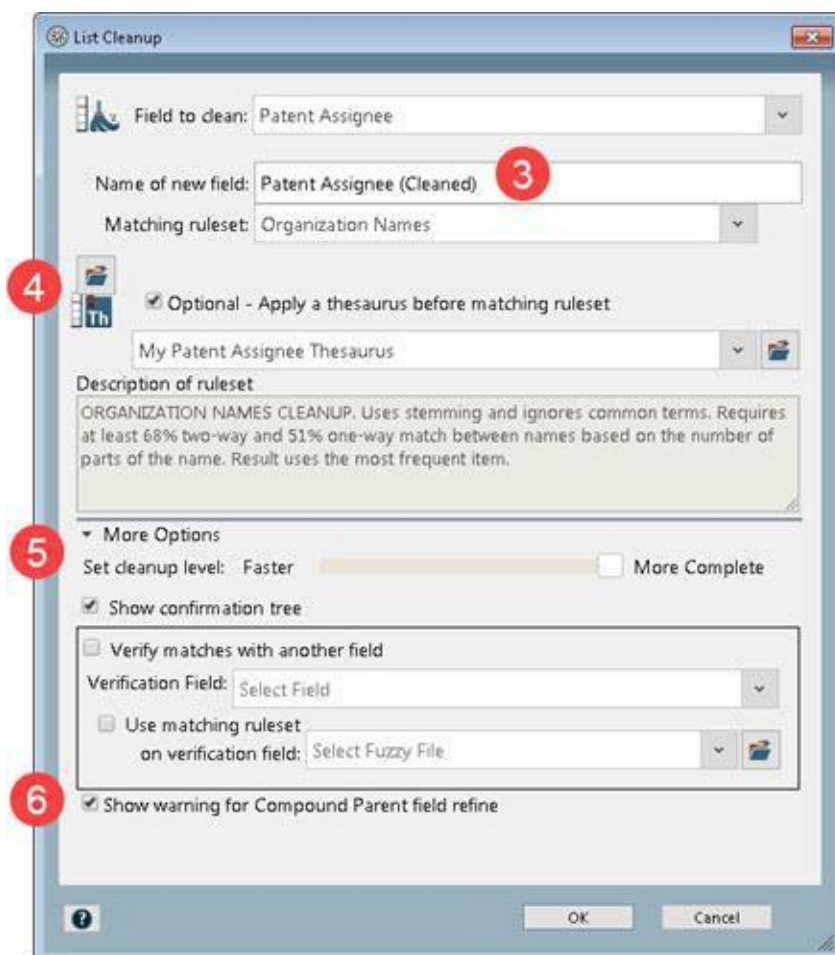


2. In the List Cleanup dialog (see the next page), choose the field to clean up and the tools to apply. There are several tools available, but only two choices are necessary:
  - a) Field to clean: Select the field that you want to clean up. Click the down-arrow on the right to pop up a list of fields, and/or type-to-filter to narrow down the list.
  - b) Matching ruleset: Select the fuzzy-matching ruleset to use. In many cases, based on the Field to clean, a recommended ruleset will automatically be pre-selected. (In this case, "Organization Names Extract Main" is selected. The "Extract Main" ruleset will run a special script to find the main organization name within a longer item containing extra organization information, including departments, addresses, and other data mixed together with the organization name.)

The fuzzy-matching rulesets are usually located in a folder named "Fuzzy" in your VantagePoint installation folder (e.g., C:\Program Files\VantagePoint\Fuzzy). They specify rules and parameters that guide the process of matching one term to another. As you select a \*.fuz file, a description of the fuzzy module appears in the window at the bottom of the dialog.



3. In the "Name of new field" box, VantagePoint enters a name for the new field that will be created. You can type in a name of your choice.

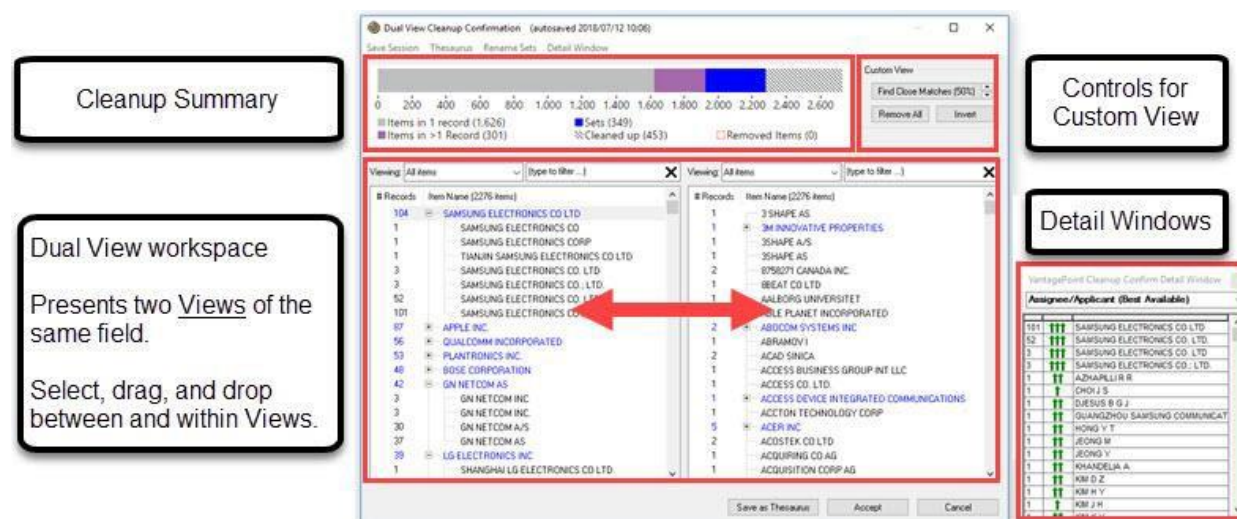


4. You have the option to apply a thesaurus before applying the Matching ruleset. This is useful if you have saved the result of a previous List Cleanup as a thesaurus.
5. Click "More Options" to use some more advanced tools.
  - Set the cleanup level slide to the desired setting (Faster, More Complete, or in-between).
  - Using the "Show confirmation tree" checkbox, you can choose to confirm the changes that List Cleanup suggests or to allow the changes to occur without confirmation. The default operation is with the checkbox checked (i.e., to confirm changes). For large lists the creation of the **Cleanup Confirmation** dialog can take a long time.
  - Select "Verify Matches with another Field" if you want to set a condition such that terms are considered a match and are combined only when the set of records which contain each term contains matching data in another (user-chosen) field.
  - In the **Select Field** dialog box, pick the field you want to use to verify matches made by List Cleanup. By clicking the "Use matching ruleset" box, you can verify matches based on close agreement of items in this verification field.
6. Show warning for Compound Parent field refine: When running list cleanup or thesaurus on a compound field, the resulting "Cleaned" field will be a single field combining all the child fields together into a single item. You will be presented with a warning when attempting to run the cleanup. Choosing the "Don't ask me again" option in the warning box will hide further warnings about cleanups on compound fields. Likewise, you can uncheck the "Show warning for Compound Parent field refine" to turn off these warnings.
7. Click **OK** to clean the list.

VantagePoint may take a few moments to search your list and suggest equivalents. When it is finished, if you checked the "Show confirmation tree" box, you will see the **Cleanup Confirmation** dialog. See [List Cleanup Confirmation](#) for the next steps. If you did not check the "Show confirmation tree" box, a view of the cleaned List will appear.

## List Cleanup Confirmation

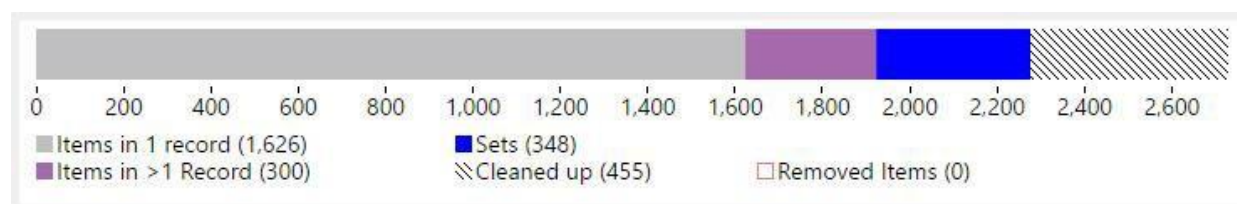
This is the dialog for confirming list cleanup operations. Here you can accept, change, or delete the list cleanup operations suggested by VantagePoint. Note the three buttons at the bottom of the dialog.



**Save as Thesaurus** - saves the cleanup operation as a thesaurus (\*.the). This allows you to save the automatic cleanup recommendations and your manual cleanup operations so you can use them again later (see Applying a thesaurus to a list).

**Accept** - When you are satisfied with your cleanup, click **Accept** to create the new field. No operations are actually performed on the list until you click the "Accept" button. At any time before Acceptance, you can save the session and resume at a later time. See Saving the Cleanup Session for details.

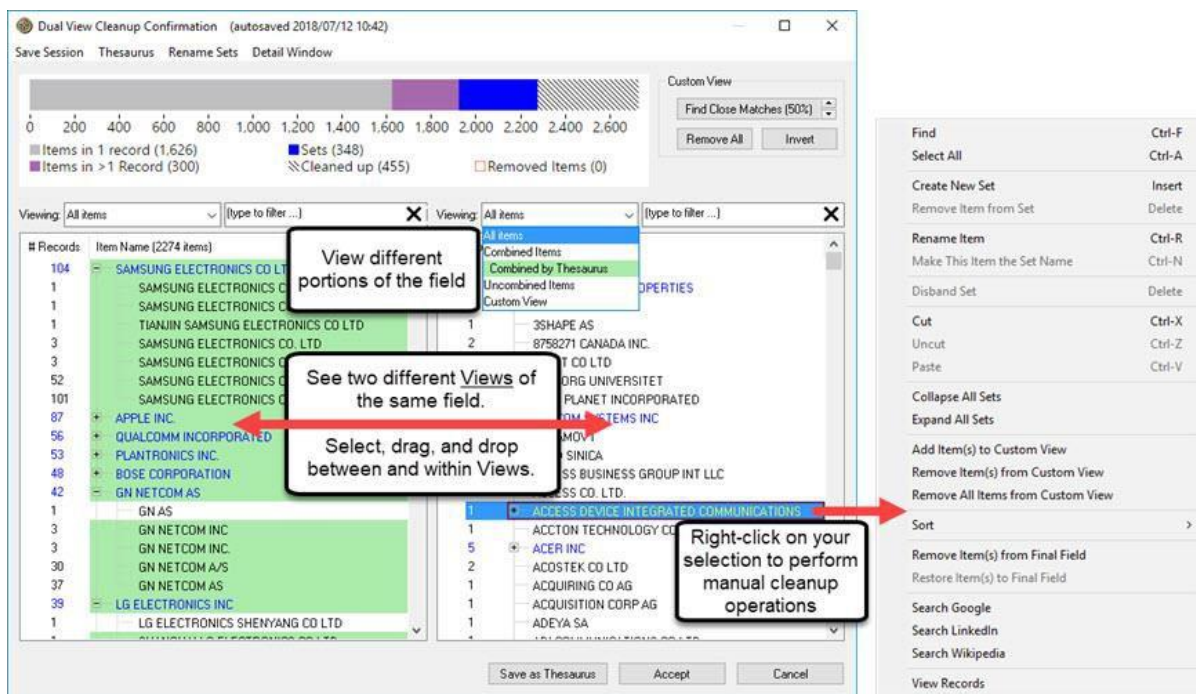
**Cancel** - Click this button to cancel the List Cleanup operation. Any changes that you made in the Cleanup Confirmation dialog will be lost (unless you saved the session).



1. **Cleanup Summary.** The bar graph at the top of the window shows a summary of the cleanup process. The full bar represents the total number of unique items in the source list (in this illustration, approximately 2,700 items). VantagePoint's algorithm has identified potential matches creating 348 sets, cleaning up 455 Items, and reducing the new list to approximately 2,250 Items.
  - a) The solid gray area represents "Items in 1 record": 1,626 items in the list occur in only one record. This does not mean these are "bad" items; it simply means these occur in only one record and did not match any other items in the list. It is not uncommon for this to be more than half of the total number of items.
  - b) The purple area represents "Items in > 1 record": In this graph, 300 items occur in more than one record AND did not match any other items in the list.
  - c) The blue area represents "Sets": 348 sets that VantagePoint's algorithm created.
  - d) The gray hashed area represents the progress of the cleanup. In the process of the automatic cleanup in the illustration, the list has been reduced by 455. Note these 455 are not lost – they have been combined with other items in the Sets (blue area).



- e) If the user has removed items from the list, they will be represented by a white area with a red border on the far right of the bar. (Not illustrated in the graph above.) See below under “Remove Item(s) from Final Field” for more information.
2. Dual View Workspace. The largest portion of the dialog box is for a list of potential matches found by the VantagePoint algorithms. (Items colored in green are those that were Combined by Thesaurus.)



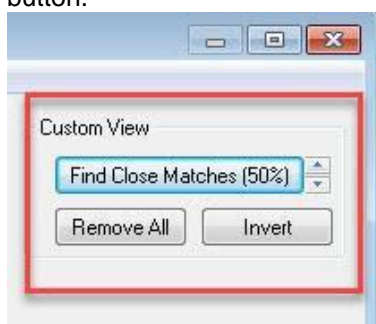
- a) Two levels of list items shown here – the Set names (next to the “+” or “-” signs) and the potentially equivalent source list Items, which appear under each set name when the grouping is expanded.
- b) Two Views of the cleanup results are shown. These can show different views of the same field. The data in each view is kept in sync as you perform additional manual cleanup operations. You can click and drag items and sets within a view and between the two views.
- c) Sorting. The set names can be sorted alphabetically by clicking on the “Item Name” header. Or the groups/sets can be sorted by number of records by clicking on the “# Records” header. Reverse sort order is achieved by clicking on the header again.
- d) “# Records” is the total for each grouping. You will note that the total number of records in the set may not equal the sum of the number of records for each of the items. When this happens, it means that some records contain more than one of the items in the set.
- e) Expanding/Collapsing groups – by clicking on the “+” sign in the box to the left of a list item, you can expand the group/set of suggested equivalencies. You can collapse the grouping by clicking on the “-” sign.
- f) Within each view you can select which items or sets to see using the “Viewing” menu.
  - i. “All Items” shows all the items in the field.
  - ii. “Combined Items” shows only the sets of items that have been combined by the algorithm or the user’s manual operations.
  - iii. “Combined by Thesaurus” shows only the sets of items that are created by applying a thesaurus before automatic cleanup. These items are identified with green highlights.
  - iv. “Uncombined Items” shows only the items that have not yet been combined into a set.

- v. "Custom View" shows a selection of items and sets defined by the user (see below).
  - vi. Use "type to filter" to reduce the number of items and sets in the View. **NOTE:** If you find a View is unexpectedly empty, make sure the "type to filter" box is empty.
- g) When you Right-Click on a list item, a pop-up menu appears. Some of the menu items will be disabled from time to time because they are not appropriate for certain operations. The pop-up menu has the following selections:
- i. Find - Displays the Find dialog box. Can also be performed using the shortcut **Ctrl F**.
  - ii. Select All - Selects all displayed items. Can also be performed using the shortcut **Ctrl A**.
  - iii. Create New Set - Creates a new set beginning with the highlighted (ungrouped) list item. This action is enabled if you Right-Click on an ungrouped item (one without a "+" or "-"). Can also be performed using the "Insert" key.
  - iv. Remove Item from Set - Removes the highlighted item from the set. The item is removed from the set and moved to the main level. Can also be removed using the "Delete" key.
  - v. Rename Item - Opens the name of the item/set for editing. Can also be performed using the shortcut **Ctrl R**.
  - vi. Make This Item the Set Name - Makes the highlighted item the name of the set. Can also be performed using the shortcut **Ctrl N**.
  - vii. Disband Set - Removes all items from the set and deletes the set. The items are moved to the main level. Can also be deleted using the "Delete" key.
  - viii. Cut - Cuts the highlighted set or item from the tree. When used in combination with Paste (see below), this is a convenient way to move items around. After you cut a set or item, it shows as gray text and remains in its place until you Paste it somewhere else. If you Accept the list cleanup before Pasting, the item remains in its current location (i.e., List Cleanup does an "Uncut" before completing the list cleanup). Can also be performed using the shortcut **Ctrl X**.
  - ix. Uncut - After a "Cut" operation, this restores the set or item to the position from which it was cut. Can also be performed using the shortcut **Ctrl Z**.
  - x. Paste - After a "Cut" operation, places the cut set or item into the highlighted set. Can also be performed using the shortcut **Ctrl V**.
  - xi. Collapse All Sets - Shows only the set names and hide the items underneath.
  - xii. Expand All Sets - Shows the source list items within each set.
  - xiii. Add Item(s) to Custom View - Creates a "Custom Set of Items" using the item(s) selected in the display.
  - xiv. Remove Item(s) from Custom View - Removes the selected item(s) from the Custom View.
  - xv. Remove All Items from Custom View - Removes all items from the Custom View.
  - xvi. Sort -
    - 1) All Items - Sort all sets and items by Name, or by Number of Records.
    - 2) Sets - Sort all Sets (only) by Name, or by Number of Records.
    - 1) Items in Selected Sets - Sort items of selected sets by Name, or by Number of Records.  
(Note: Changes to "Siblings" when right-clicking on an item within a group.)
  - xvii. Remove Item(s) from Final Field - Removes the selected items from the cleanup operation and marks them for deletion. When the cleanup is accepted, items that have been marked for deletion will be permanently removed from the final field. **NOTE:** This may reduce the dataset percent coverage of the final field and omit records from subsequent analysis that uses the final field.
  - xviii. Restore Item(s) to Final Field - Presents a list of items that have been marked for deletion. Select the items to restore. Items are restored to the main level.
  - xix. Search Google/LinkedIn/Wikipedia - Opens the default internet browser and searches for the

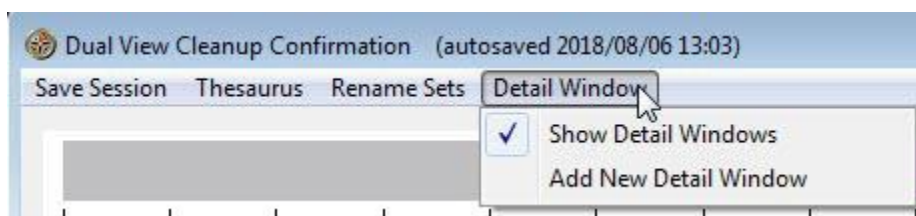


selected item. These search engines can be changed to those of your preference. Contact our Helpdesk for assistance.

- xx. **View Records** - Opens the VantagePoint Record View and displays the records for the selected item(s). **NOTE:** Check # Records first. This operation opens all these records in one Record View and may take a very long time to complete.
- h) **Custom View**. When Custom View is selected for one of the windows, a smaller, customized set of items is shown for manual cleanup/confirmation. When Custom View is first selected, the view is empty.
  - i. You can click and drag items from the other window into the Custom View.
  - ii. Then you can use "Find Close Matches" in the "Custom View" controls at the top to search and add more items to the Custom View. The percentage controls the degree of similarity required to match items. The lower the percentage is, the lower the threshold for matching, so more items may match. The percentage is changed using the up/down arrows to the right of the button.



- iii. Use "Remove All" to remove everything from the Custom View. **NOTE:** "Remove All" does not affect the list cleanup operations. Any changes you make remain and can be seen in the other Views. "Remove All" only clears out the Custom View.
  - iv. Use "Invert" to change the Custom View to toggle to show everything that is not in the current Custom View.
- 3. **Detail Windows for List Cleanup Confirmation**. You can display Detail Windows for the item(s) selected. One Detail Window is opened by default. In the Detail Windows menu, be sure Show Detail Windows is checked. Any number of Detail Windows can be added by choosing Add New Detail Window from the Detail Window menu.



Detail Windows are useful when manually checking cleanup results, because an analyst can employ co-occurring data from other record fields when deciding if a suitable match was made or if an unmatched term should be added to a grouping.

**Dual View Cleanup Confirmation menus** are described below:

Under **Save Session**:

**Save Session to Finish Later** - saves session so it can be resumed later. See Saving the Cleanup Session.

**Load Saved Session** - loads a previously saved session. See Saving the Cleanup Session.

**Auto-Save Cleanup Session** – toggles on/off the automatic saving of the cleanup session.

**How Often to Auto-Save** – sets the time period between auto-saves. The default is 5 minutes.

Under **Thesaurus**:

**Save as Thesaurus** - saves the cleanup operation as a thesaurus (\*.the). This allows you to save the automatic cleanup recommendations and your manual cleanup operations so you can use them again later (see Applying a thesaurus to a list). After you click **Save As Thesaurus**, the **Save As** dialog box will allow you to name the \*.the file and place it in an appropriate folder. You can create a new thesaurus file, or you can merge the thesaurus entries into an existing thesaurus file. See Managing Multiple Matches in a Thesaurus. Once you've finished working with the thesaurus, you will then be returned to the **Cleanup Confirmation** dialog box to complete (or cancel) the cleanup operation on the current list.

#### Thesaurus Options -

**Require Exact Match** - This allows you to specify the degree of match in your new thesaurus. If Require Exact Match is checked, then all thesaurus entries that are added will be encoded to require that an item exactly match the entry to be matched (including leading or trailing white space). Left unchecked, the thesaurus entries will be encoded to simply match any item that contains the thesaurus entry. For example, without requiring an exact match, a thesaurus entry of "Land, R." would also match "Auckland, R.".

**Prompt to Save before Accepting** - When this is checked, you will be prompted to save the cleanup as a thesaurus when you click Accept.

Under **Rename Sets**:

#### Select New Name Using...

**Most Frequent Name** - Assigns the set/grouping name according to the entry with the Most number of records.

**Longest Name** - Assigns the set/grouping name according to the entry with longest name.

**Shortest Name** - Assigns the set/grouping name according to the entry with shortest name.

**Rename sets as I work** - Based on the Set Name selection, renames sets as work is performed on each set.

**Rename Current Set** - Changes the current set name based on the Set Name selection.

**Re-name all Sets** - Renames all sets based on the Set Name selection.

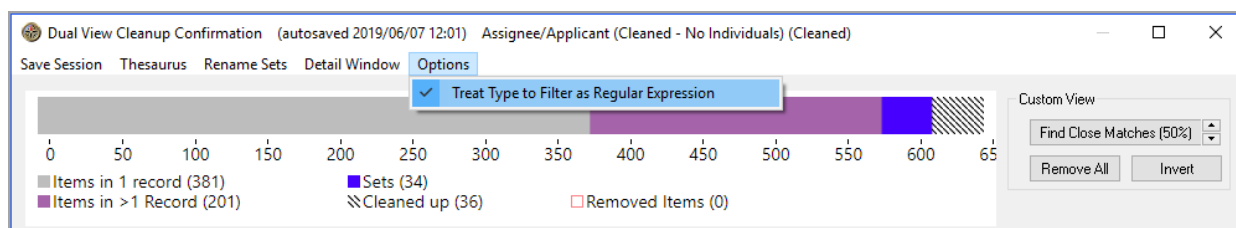
Under **Detail Window**:

**Show Detail Windows** – Toggle showing/hiding the [Detail Windows](#) for List Cleanup confirmation.

**Add New Detail Window** - Adds a new Detail Window for List Cleanup confirmation. You can have several open at a time.

Under **Options**:

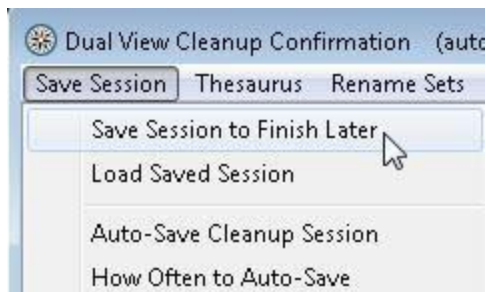
**Treat Type to filter as Regular Expression** - This toggles the type to filter boxes to accept regular expression syntax.



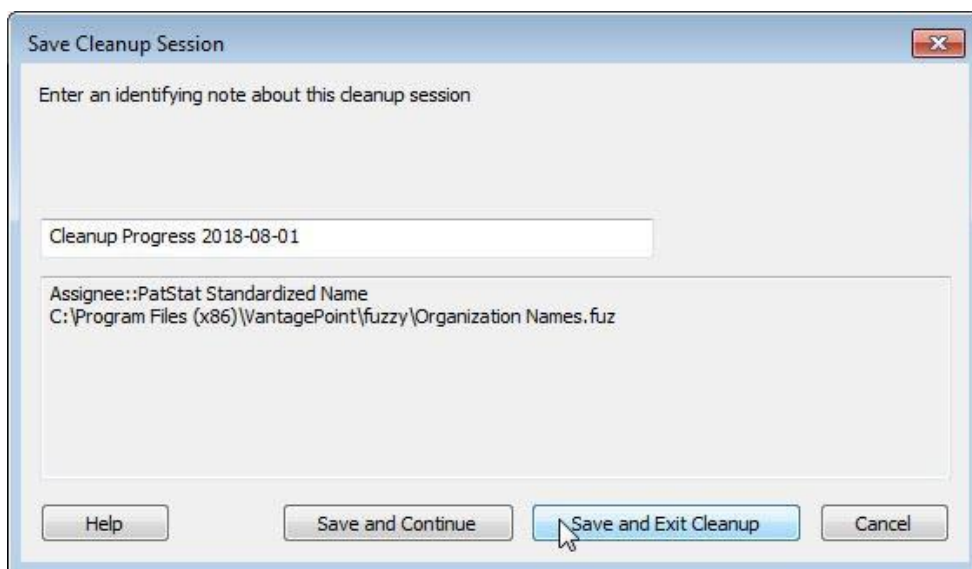
## *Saving the Cleanup Session*

If you are unable to finalize the list cleanup and want to resume the session at a later time, select **Save Session** from the Cleanup Confirmation menu and **Save Session to Finish Later**.

**Reminder: If a Custom Set of Items was created, it is not saved with the Cleanup Session.**



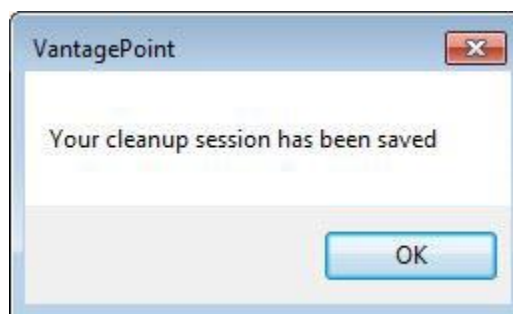
You will then be prompted to enter a session name which you can retrieve at a later time and resume where you left off.



Click either **Save and Continue** or **Save and Exit Cleanup**. A confirmation appears stating your cleanup session was saved.

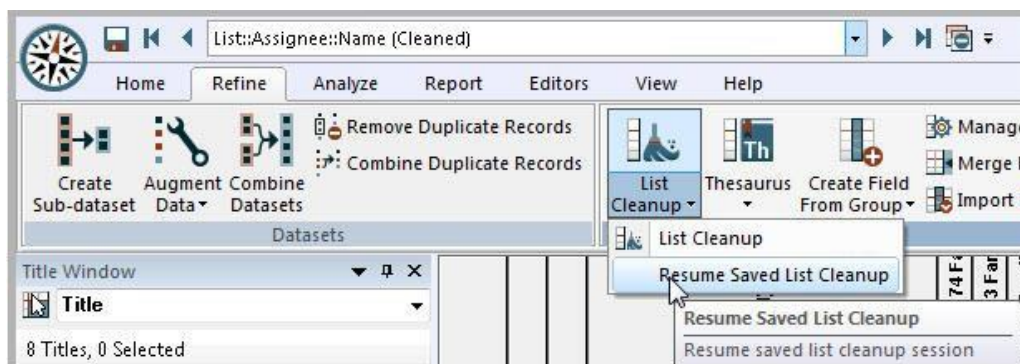
Click **OK**.

If you clicked **Save and Exit Cleanup**, the Cleanup Confirmation window closes. Otherwise, the Cleanup Confirmation window remains, allowing you to proceed with the cleanup.

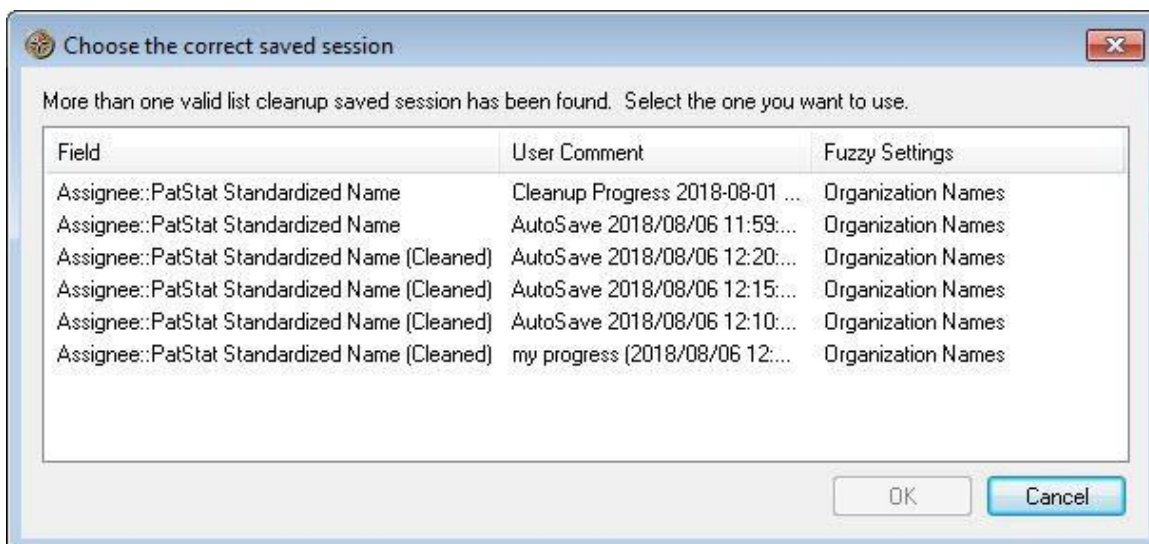


## Resuming the Cleanup Session

Once a session is saved, you can select **Resume Saved List Cleanup** from the Refine ribbon.



You are presented with a list from which to choose the session to be resumed. Cleanup sessions created with the current dataset are displayed.



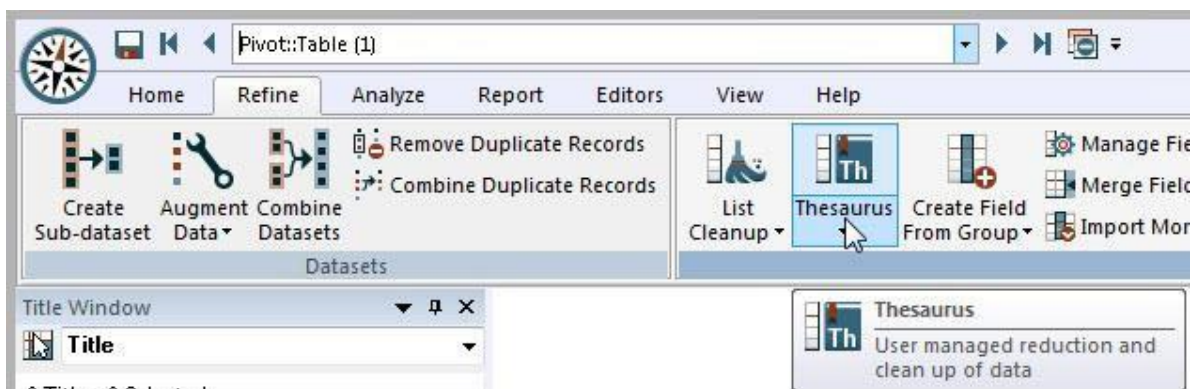
Select the session and click **OK**. You will then be presented with the Cleanup Confirmation dialog.

**Note:** When a cleanup session is resumed and Cleanup is performed, that session is no longer available for retrieval. If you want to use the session in the future, save it again *before* Accepting cleanup.

## Thesaurus - Applying a Thesaurus to a list

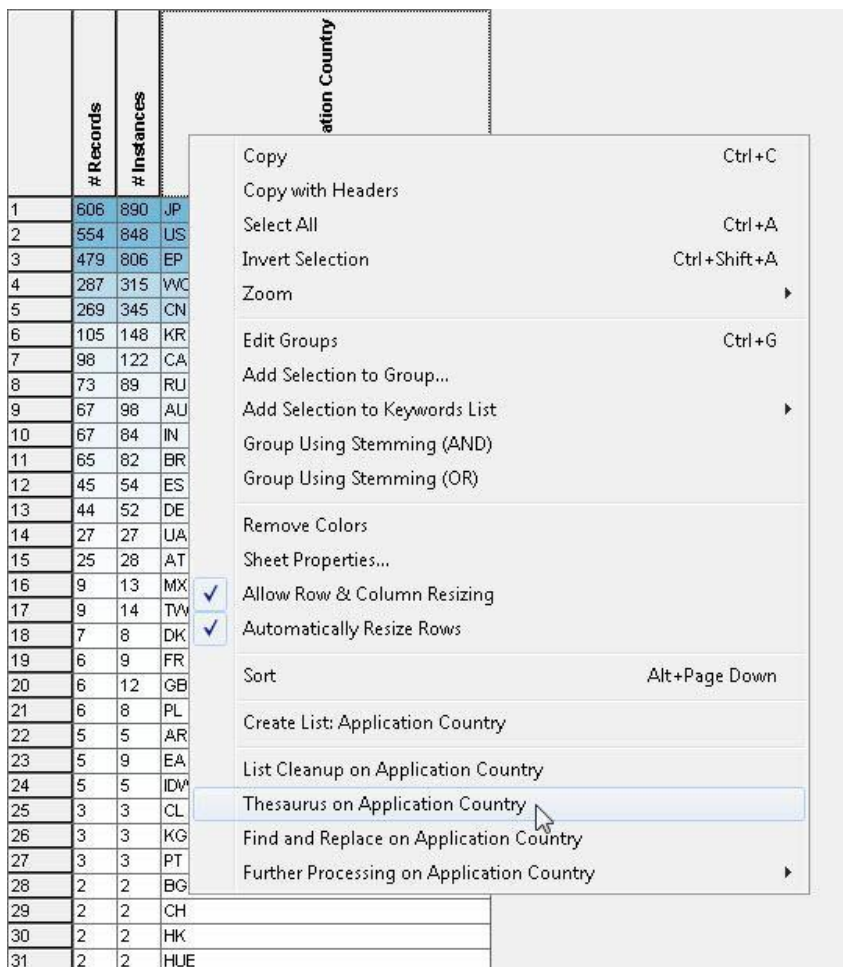
You can use the VantagePoint Thesaurus function to reduce a list. Applying a thesaurus to a list does not affect the original list; VantagePoint creates a new list each time you apply a thesaurus.

1. From the Refine ribbon, choose **Thesaurus**.



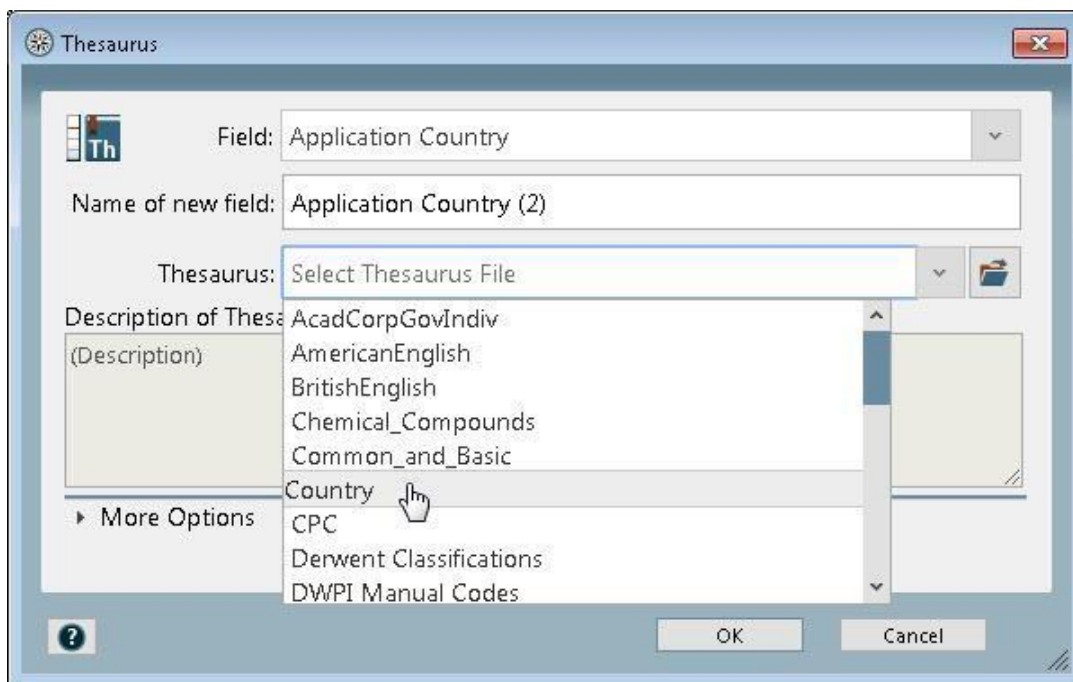
or

From the List view, Right-click on the Column header of the Field name and select **Thesaurus on <Field name>**.





2. If not already done, select the field to which you want to apply a thesaurus. (You may use the Type- to-filter feature in this box.)



In the "Name of new Field" box, VantagePoint enters a name for the new list that will be created. You can type in a name of your choice.

3. In the Thesaurus box, select the thesaurus you want to use. Use the drop-down button to see the standard thesauri. These are usually located in a folder named "Thesaurus" in your VantagePoint installation folder (e.g., C:\Program Files\VantagePoint\Thesaurus). You can use the browse button to locate other thesauri you may have saved elsewhere.
4. Click **OK** to apply the thesaurus and create the new field.

There are some additional (optional) selections you can make under **More Options**.

5. Check the box for "Allow Multiple Matches" if you want to allow a field item to match thesaurus sub-items of more than one main item. (Default state is unchecked.)
6. If you want items from your starting field that are unchanged by the thesaurus to be included in your new field, leave the check in the box for "Include unmatched items in new field". (Default state is checked.)
7. You can apply the thesaurus as a Find and Replace operation. See the [Find and Replace](#) topic. (Default state is unchecked.)

Once the operation is complete, a view of the new list is created and displayed.



## Find and Replace

Using "Find and Replace" thesaurus enables you to apply a thesaurus to a list and replace only a portion of a list item with another string. This has a variety of uses, one of which is to convert from one spelling convention to another. This is best explained using a simple illustration.

Suppose a list contains the following items:

"airplane"  
 "aeroplane"  
 "jet airplane"  
 "jet aeroplane"  
 "turboprop aeroplanes" and  
 "turboprop airplane,"

and your thesaurus contains an entry that converts anything that contains "airplanes," "aeroplane," or "aeroplanes" to the alias "airplane." (See Thesaurus Editor.)

Using the standard thesaurus function (explained earlier), applying this thesaurus to this list combines all of these items into one list item:

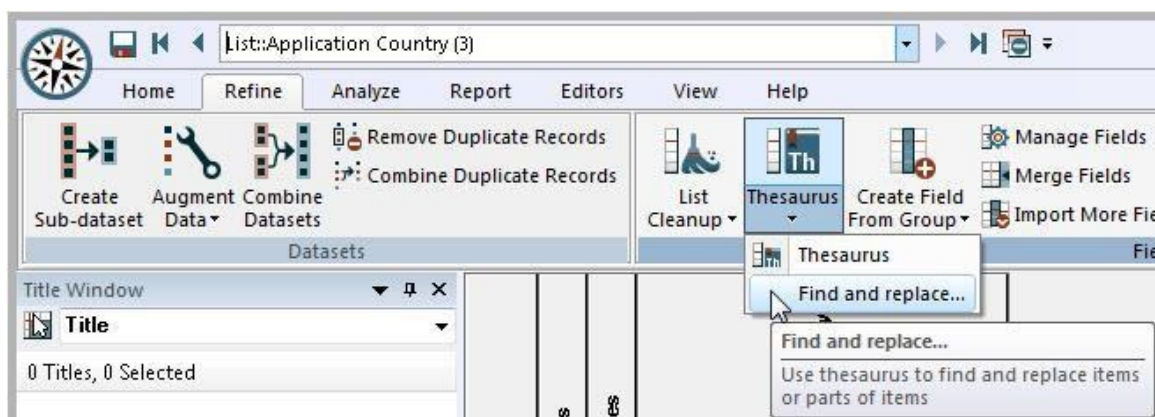
"airplane" – combining all six original list items.

When you apply this as a "Find and Replace" thesaurus, the resulting list contains:

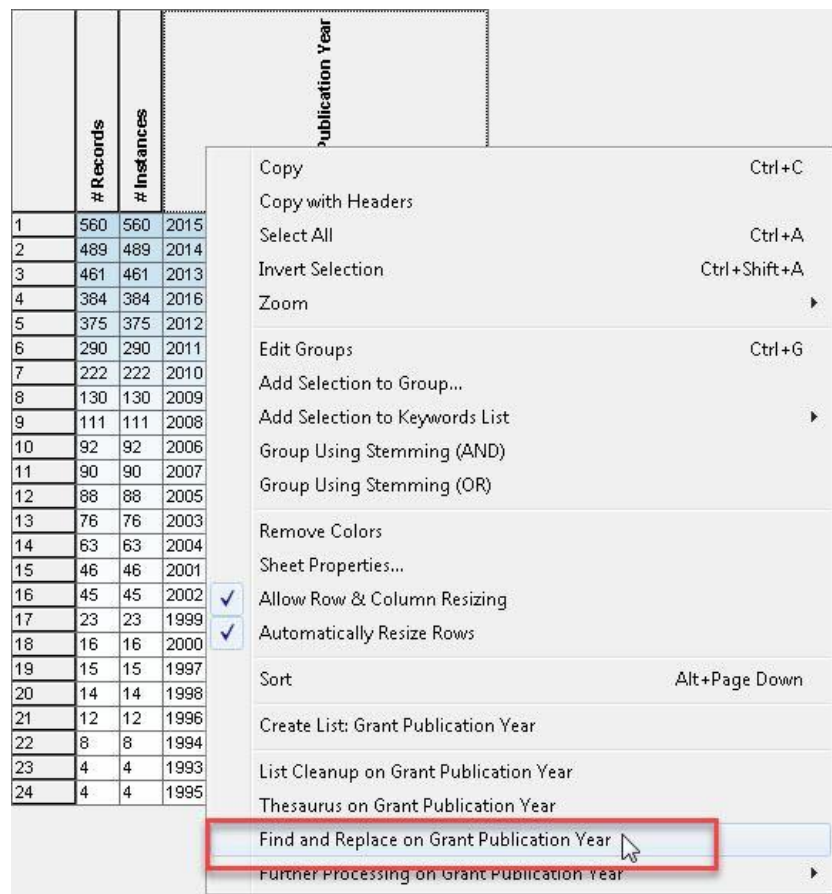
"airplane" – combining "airplane" and "aeroplane"  
 "jet airplane" – combining "jet airplane" and "jet aeroplane" – and  
 "turboprop airplane" – combining "turboprop aeroplanes" and "turboprop airplane."

**Note:** The Find and Replace thesaurus can be quite powerful, but it should be used with a great deal of thought, because it can have unintended results. A simple bad example is trying to short-cut alternative spellings using fragments of words, as in matching colour:color and behaviour:behavior using our:or. This has the unintended consequence of changing all occurrences of the word "our" to "or."

To apply a "Find and Replace" thesaurus to a list, select **Find and replace...** from the Thesaurus dropdown on the Refine ribbon.

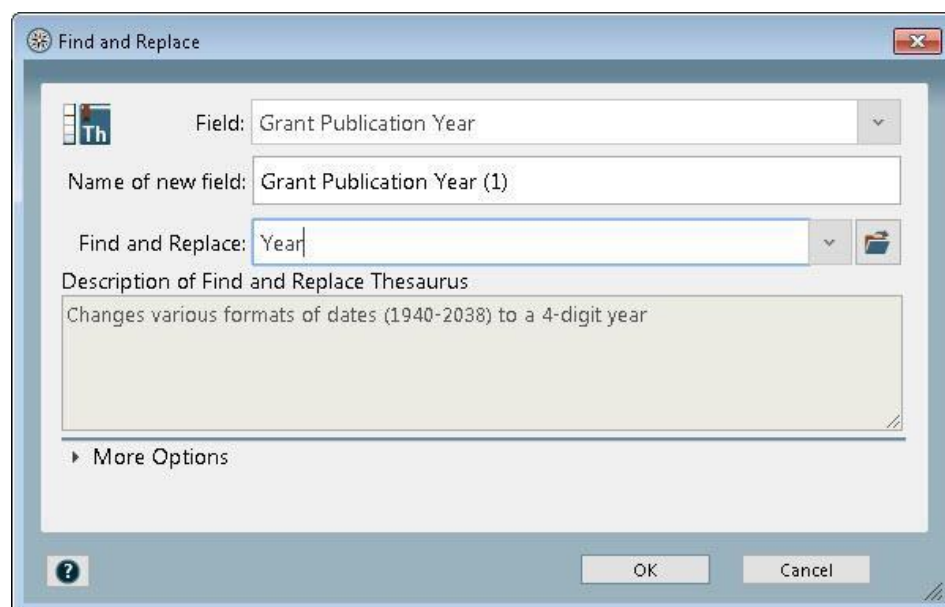


Or, from the List view, Right-click on the Column Header of the Field name and select **Find and Replace on <Field name>**.



Or, from the Summary View, Right-click on the Field name and select **Find and Replace ....**

The user interaction is the same as described in the section [Thesaurus - Applying a Thesaurus to a list.](#)



## Manage Fields

The Manage Fields function is located on the Refine ribbon.

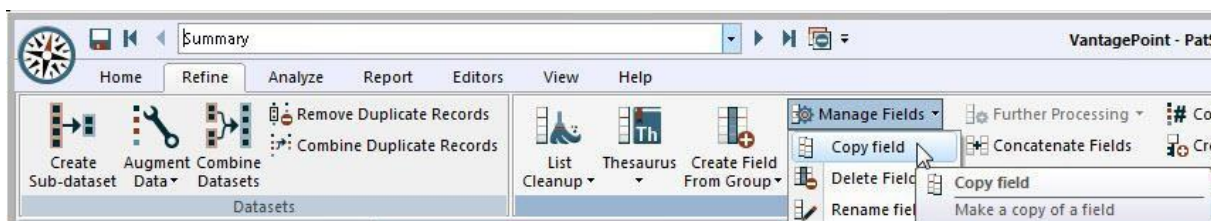


See the individual topics for Copying a field; Deleting a field, and Renaming a field.

### Copying a field

You can use VantagePoint to create a copy of a field. Copying a field does not affect the original field; VantagePoint creates a totally new field. You can elect to copy the old field's groups in the new field.

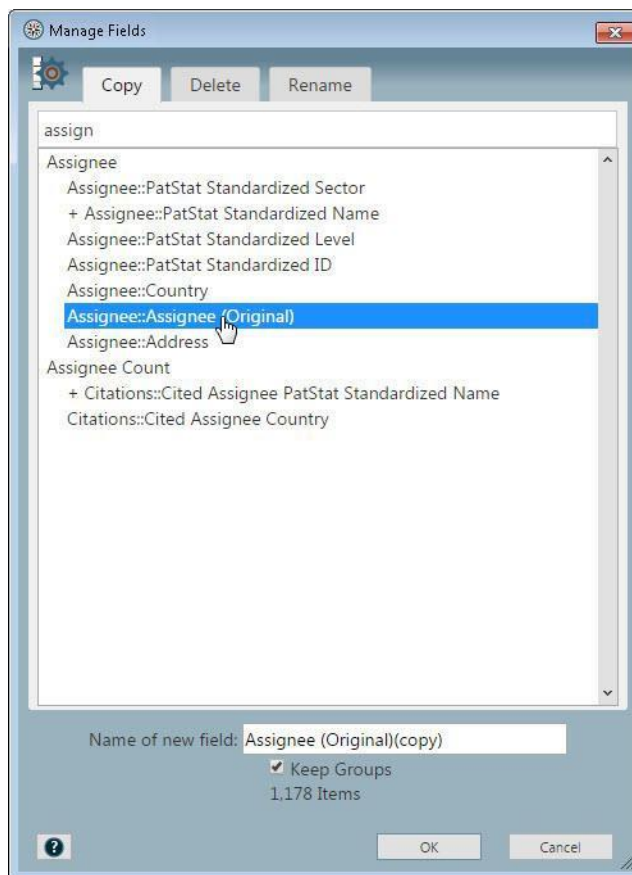
1. From the Refine ribbon, choose **Manage Fields** and **Copy field**.



2. The lists (or fields) in your dataset are shown in the **Manage Fields** dialog box. Select the field you want to copy. (You can also type to filter the matches, as illustrated below.)

3. In the "Name of new field" box, VantagePoint enters a name for the new list that will be created. You can type in another name if you wish.
4. If your original field has groups, you can choose to preserve those groups in the new field by checking the checkbox "Keep Groups".
5. Click **OK** to copy the field.

Once the action is complete, a view of the new list is created and displayed.

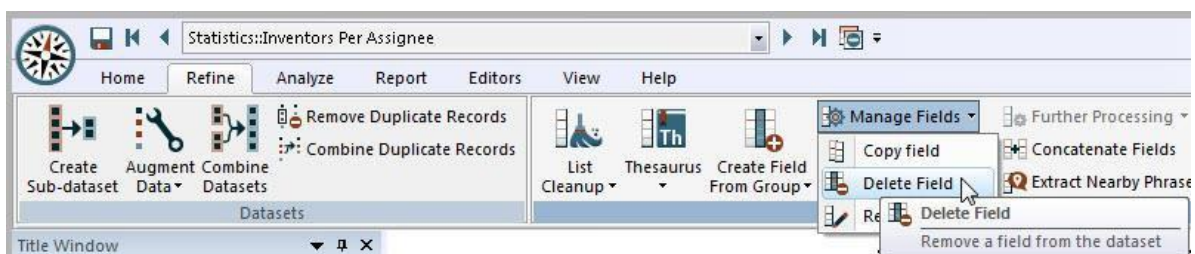


## Deleting a field



**CAUTION:** Deleting a field permanently removes the field from the dataset. This is not the same as deleting a sheet (**Manage Sheets** and **Delete Sheet**). Deleting a sheet simply removes a view of a list or matrix, but has no effect on the dataset. Deleting a field actually removes data from the dataset. You will no longer be able to view a field after deleting it. Additionally, all views created from the deleted field will be deleted automatically.

1. From the Refine ribbon, choose **Manage Fields** and **Delete field**.

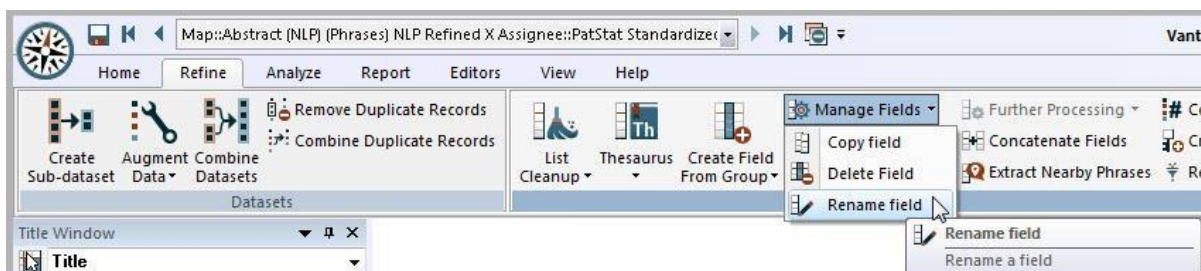


2. You are presented with a list of fields in the current dataset. Click on the field(s) you want to delete, and click **OK**. (You can delete more than one field by multi-selecting the fields to be deleted.)
3. You then must confirm the operation through a confirmation dialog box to complete the deletion.

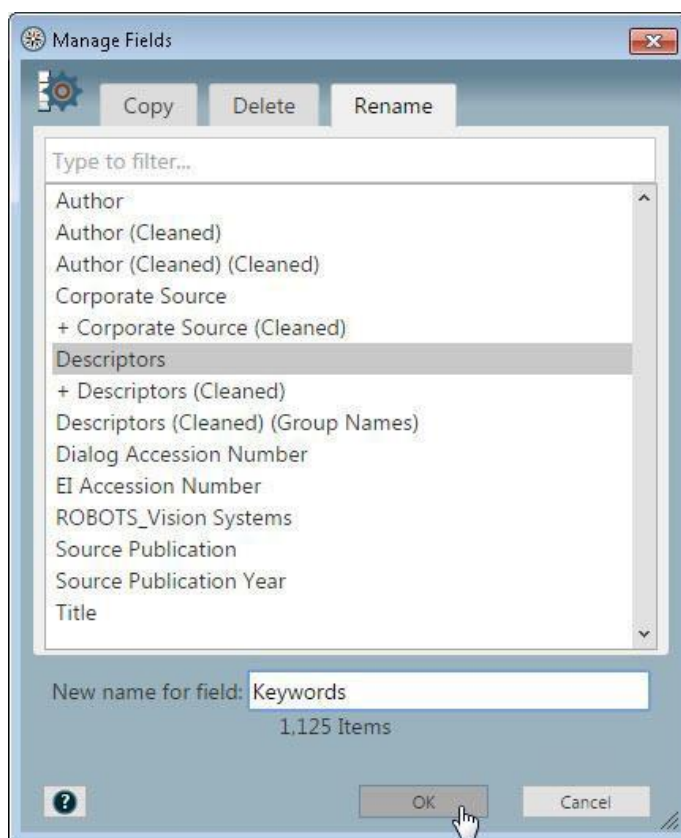
## Renaming a field

You can rename a field in VantagePoint.

1. From the Refine ribbon, choose **Manage Fields** and **Rename field**.



2. The lists (or fields) in your dataset are shown in the **Rename** dialog box. Select the field you want to rename.
3. In the "New name for field" box, the existing name appears. Type the new field name.
4. Click **OK** to rename the field.





## Create Field From Group

You can create a new field that contains only the Group Names in a field. This is useful for displaying the results of clustering analysis in Detail Windows and/or map drop-down lists.

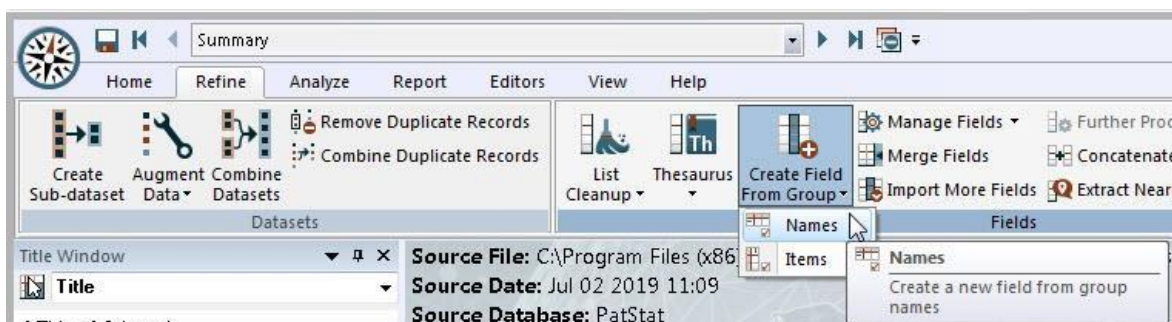
You can also create a new field that contains only the list items in a group. This is useful for confining items displayed in a detail window or a map drop-down list to a select set. For example, you can create a field that contains only the multi-word NLP phrases from the Abstracts in your dataset.

See the topics for more information on how to Create Field from Group Names and [Create Field From Group Items](#).

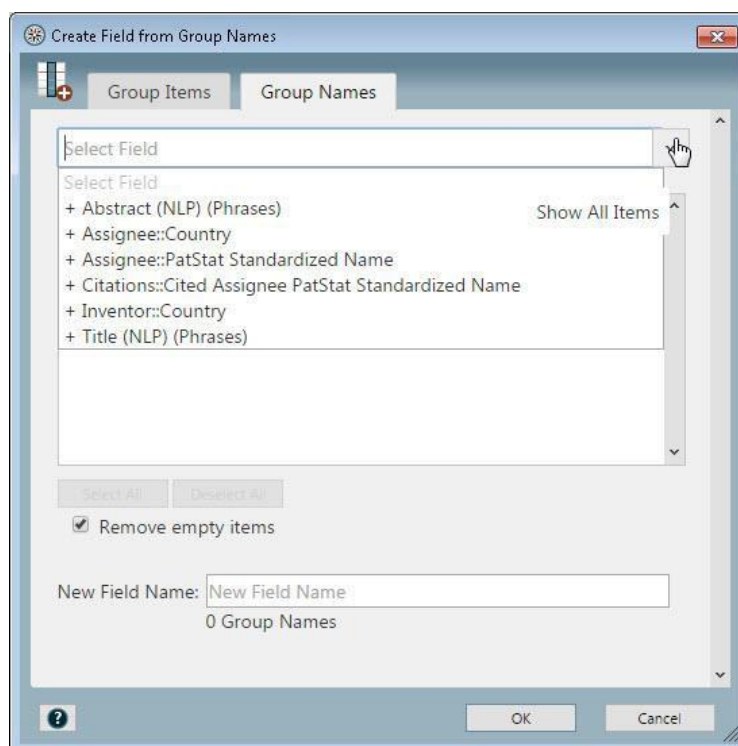
### Create field from group names

You can create a new field that contains only the Group Names in a field. This is useful for displaying the results of clustering analysis in Detail Windows and/or map drop-down lists.

1. From the Refine ribbon, select **Create Field from Group** and click **Names**.



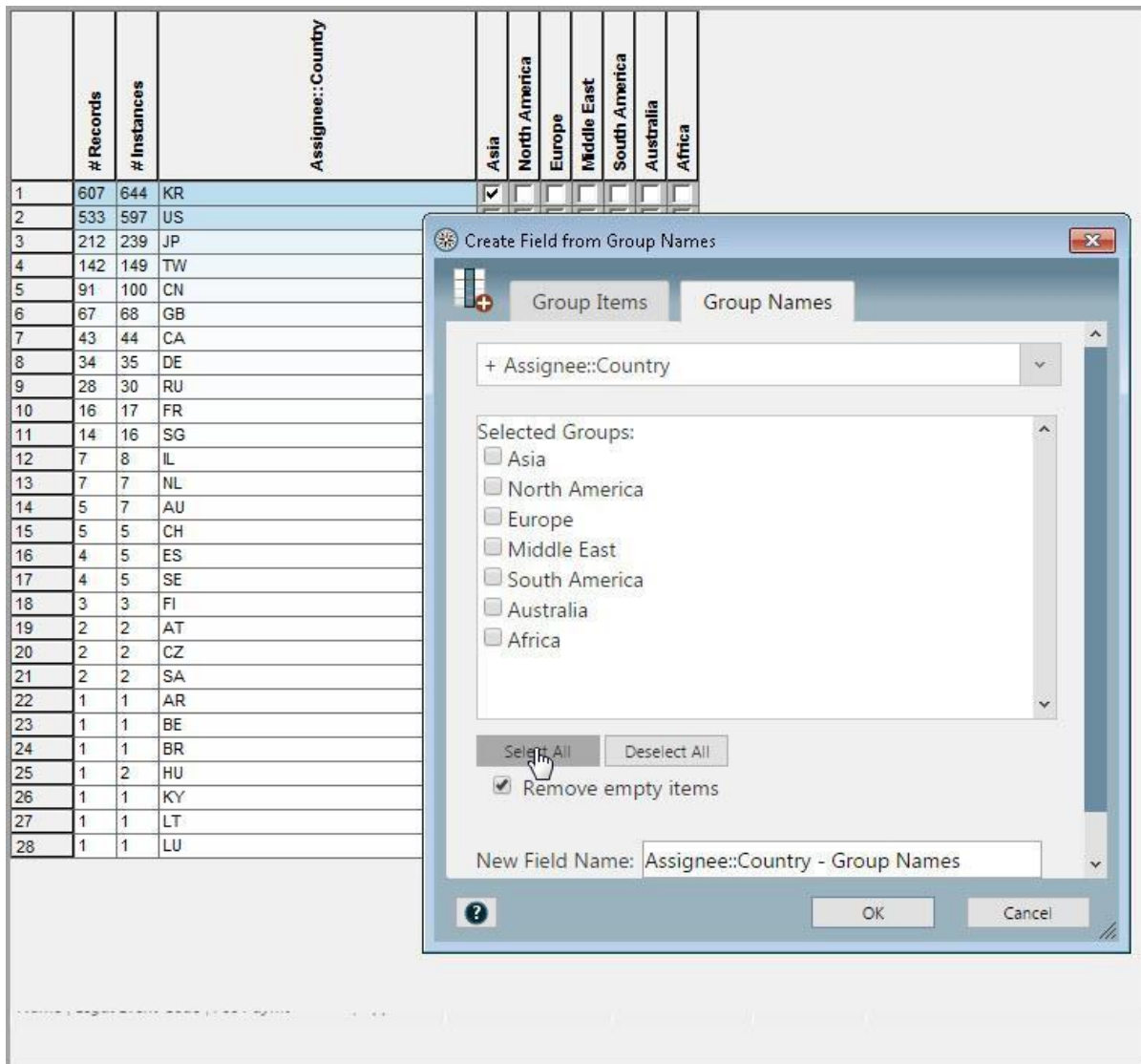
2. The dialog box is displayed. Click the dropdown box to show fields that have groups assigned. Select the field you want to work with.





- The Groups for that field are displayed. Select the Group(s) to use by checking the box next to the name, or click the **Select All** button.

In this example, the user was already viewing a List of Assignee:Country with groups assigned. When the user selected Create Field From Group Names, VantagePoint automatically presented the dialog box with the Groups from the List being viewed. The user is choosing to Select All Groups.



- VantagePoint automatically fills in the "New field name". You can accept the field name VantagePoint assigned or create your own.
  - You can choose to "Remove empty items" by leaving the checkbox checked.
- A List View of the New Field is created, and the New Field is added to the [Summary View](#).

Here is the result of the List created from our example above:

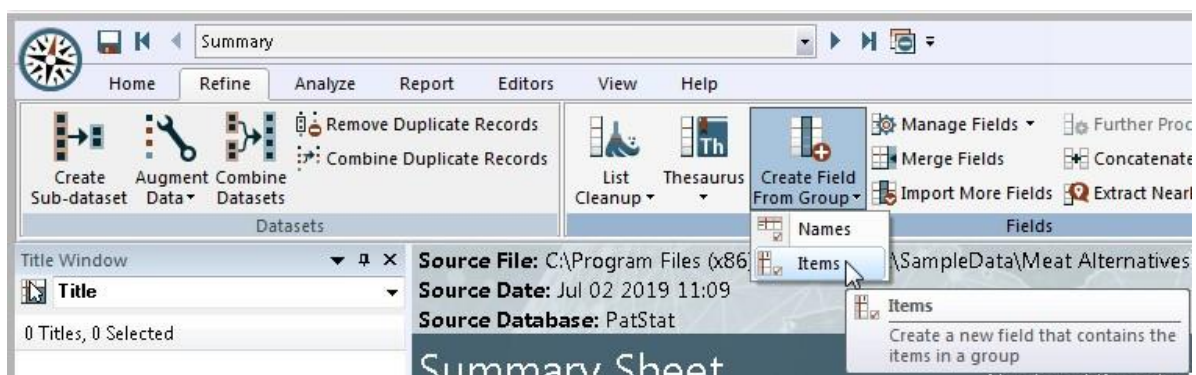
|   | # Records | # Instances | Assignee::Country - Group Na |
|---|-----------|-------------|------------------------------|
| 1 | 1062      | 1148        | Asia                         |
| 2 | 576       | 641         | North America                |
| 3 | 182       | 192         | Europe                       |
| 4 | 5         | 7           | Australia                    |
| 5 | 3         | 3           | South America                |
| 6 | 2         | 2           | Middle East                  |

**Note:** After you have created the new field, changes to the group membership in the original field will have no effect in this new field. In other words, the new field is a "snapshot" of the groups.

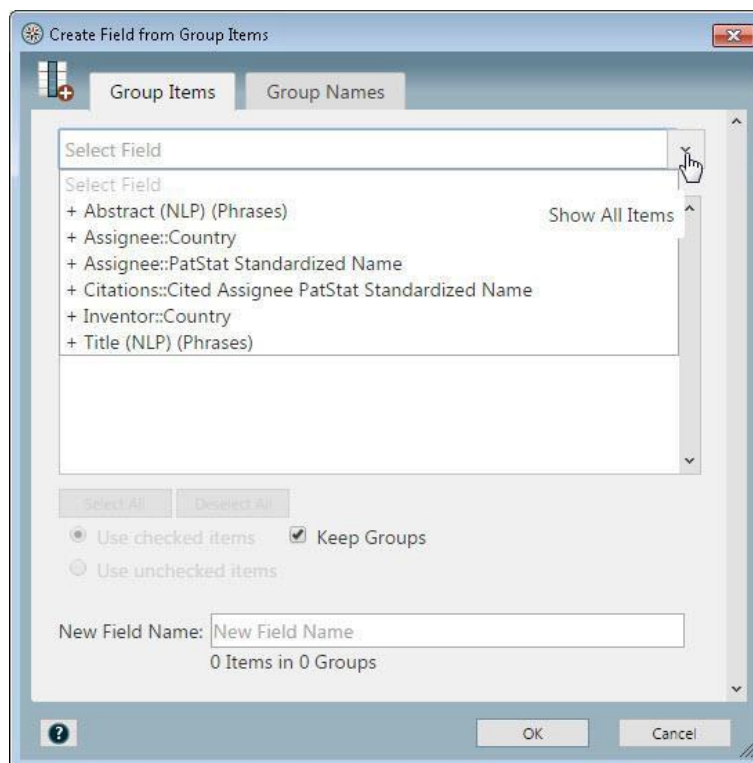
### Create field from group items

You can create a new field that contains only the list items in a group. This is useful for confining items displayed in a detail window or a map drop-down list to a select set. For example, you can create a field that contains only the multi-word NLP phrases from the Abstracts in your dataset.

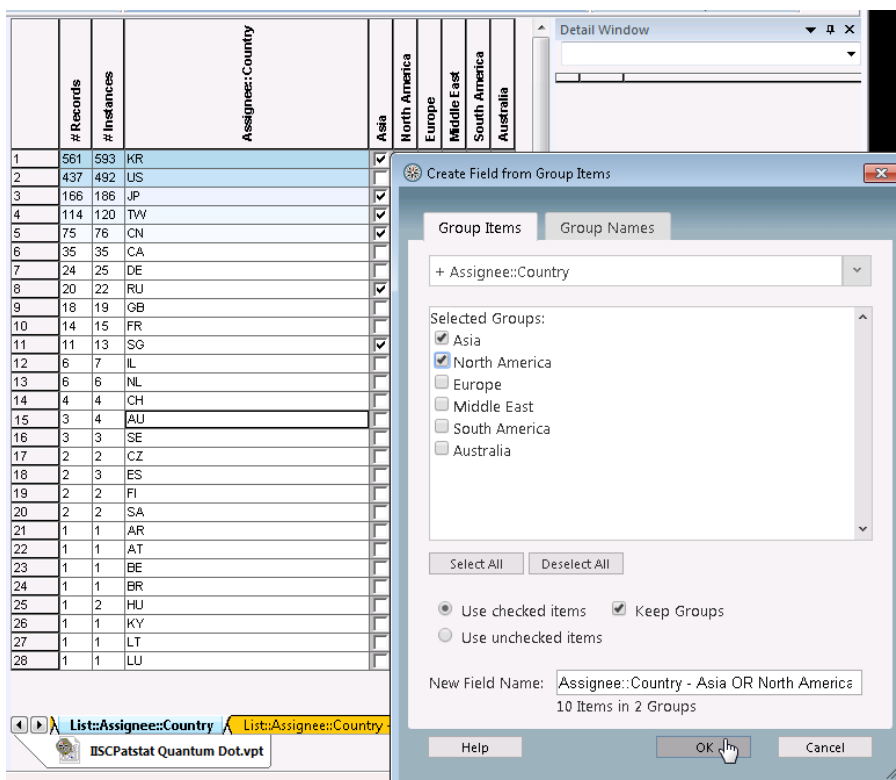
1. From the Refine ribbon, select **Create Field from Group** and click **Items**.



- In the dialog box, click the dropdown box to show fields that have groups assigned. Select the field that has the Group(s) you want to work with.
- When you click on a field name, the groups associated with that field are displayed. VantagePoint automatically fills in the "New field name". You can accept the field name assigned by VantagePoint or create your own.



In this example, the user was already viewing a List of Assignee:Country with groups assigned. When the user selected Create Field From Group Items, VantagePoint automatically presented the Groups from the List being viewed. The user is selecting the Groups "Asia" and "North America".



4. The radio buttons allow you to select either the checked items or the unchecked items in the group. (In this example, notice that the selection of "Use checked items" results in the New Field Name "Assignee::Country - Asia OR North America". If the user had chosen to Use unchecked items, the New Field Name given would be "Assignee::Country - NOT Asia OR North America".)
5. If you want to keep the groups defined, leave the "Keep Groups" box checked.
6. Click **OK**.

A List View of the New Field is created, and the New Field is added to the Summary View.

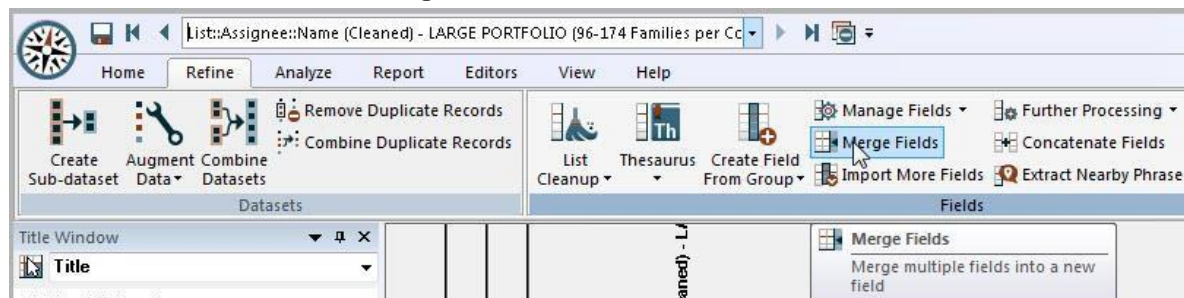
Here is the result of the List created from our example above:

|   | # Records | # Instances | Assignee::Country - Asia OR North America | Asia                                | North America                       | Europe                   | Middle East              | South America            | Australia                | Africa                   |
|---|-----------|-------------|---|-------------------------------------|-------------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| 1 | 607       | 644         | KR  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 2 | 533       | 597         | US  | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 3 | 212       | 239         | JP  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 4 | 142       | 149         | TW  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 5 | 91        | 100         | CN  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 6 | 43        | 44          | CA  | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 7 | 14        | 16          | SG  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

**Note:** After you have created the new field, changes to the group membership in the original field will have no effect in this new field. In other words, the new field is a "snapshot" of the items in the group in the original field.

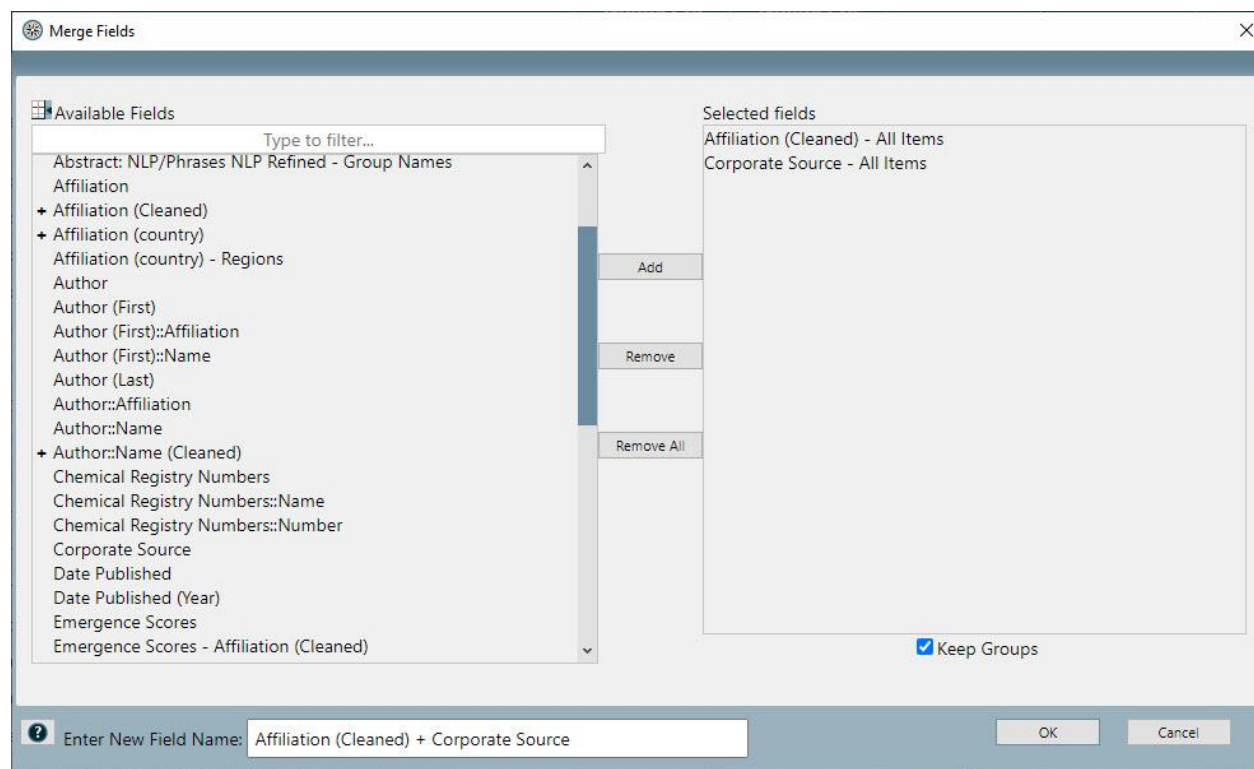
## Merge fields

From the Refine ribbon, select **Merge Fields**.



The **Merge Fields** dialog box appears.

Choose the fields from the "Available Fields" panel to merge. Use Ctrl Click or Shift Click to select more than one, and click **Add**. You can also double-click a field to move it to the "Selected fields" panel. If a field has groups, you can choose to keep them in the new field by checking the "Keep groups" checkbox. The fields appearing in the right-hand window are those that will be merged. You can rearrange the order in which they appear by clicking and dragging the field(s) to the desired order.



If you have added a field or group that should not be merged, select that field in the "Selected fields" panel and click **Remove** (or double-click the field name). **Remove All** clears the "Selected fields" panel.

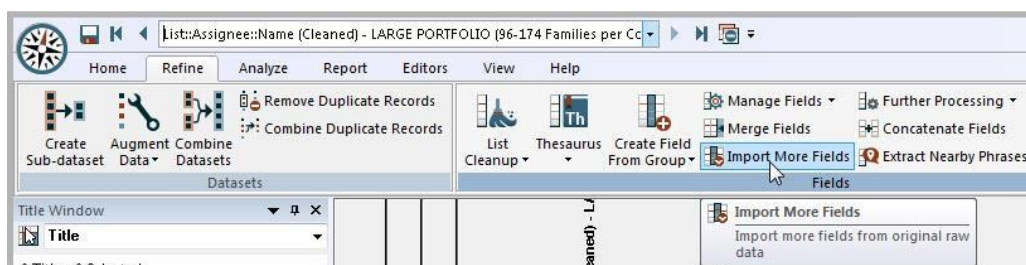
In the "New Field Name" box, VantagePoint assigns a new field name. You can accept it or type in your own. Click **OK** to complete the operation.

A list of the new field is created. The new field name has been added to the Summary view.

**Tip!** List Cleanup is better if you merge fields first and then run cleanup.

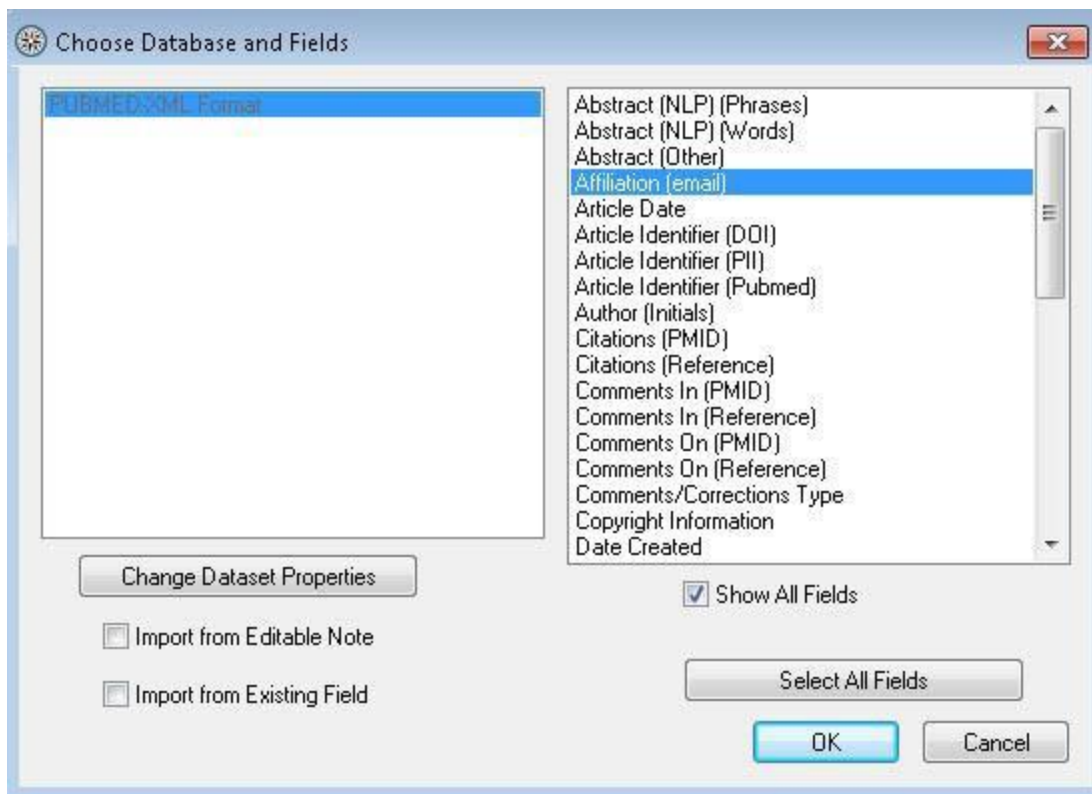
## Import more fields

1. From the Refine ribbon, select **Import More Fields**.





- In the right-hand window of the **Choose Database and Fields** dialog box, select the fields you want to import or click the **Select All Fields** button, if desired, and click **OK**. (If no fields are shown, check the "Show All Fields" checkbox.)



VantagePoint files contain the database definitions used when the raw data file was originally imported. These can be thought of as "internal" database definitions. Each record in the \*.vpt file is associated with one of these "internal" database definitions. The names of these database definitions are shown in the left-hand window and are disabled during this Import function - VantagePoint uses the "internal" database definition file associated with each record to parse the fields from that record.

#### Checkboxes:

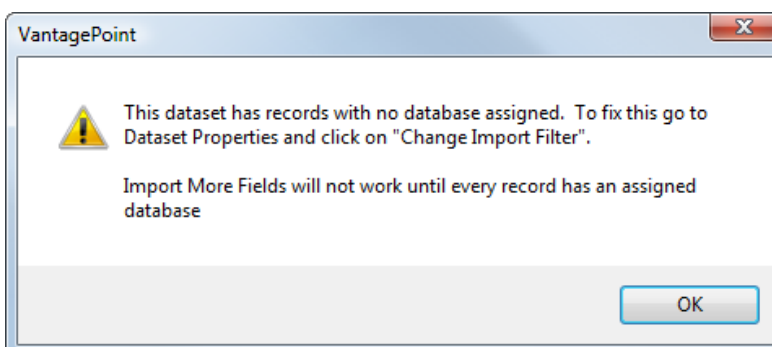
Import from Editable Note: Use the text in the "Notes about this Record" (see [Record View](#)) as input to additional field import (instead of using the raw record).

Import from Existing Field: Use the text in an existing field as input to additional field import (instead of using the raw record).

**Note:** For both "Import from Editable Note" and "Import from Existing Field," the embedded import filter in your VantagePoint file must contain the parsing commands for the new field.

In the unlikely event you encounter an old VantagePoint file that does not contain the database definitions, you will see this message:

See [Dataset Properties](#) and [Changing Import Filter in a Dataset](#) for instructions on how to assign database definitions to old files.





## Further Processing

Further Processing lets the user apply Import Filter text processing commands to an existing field without modifying the Import Filter. When **Further Processing** is used, a new field is created in the dataset. The original field is left unchanged.

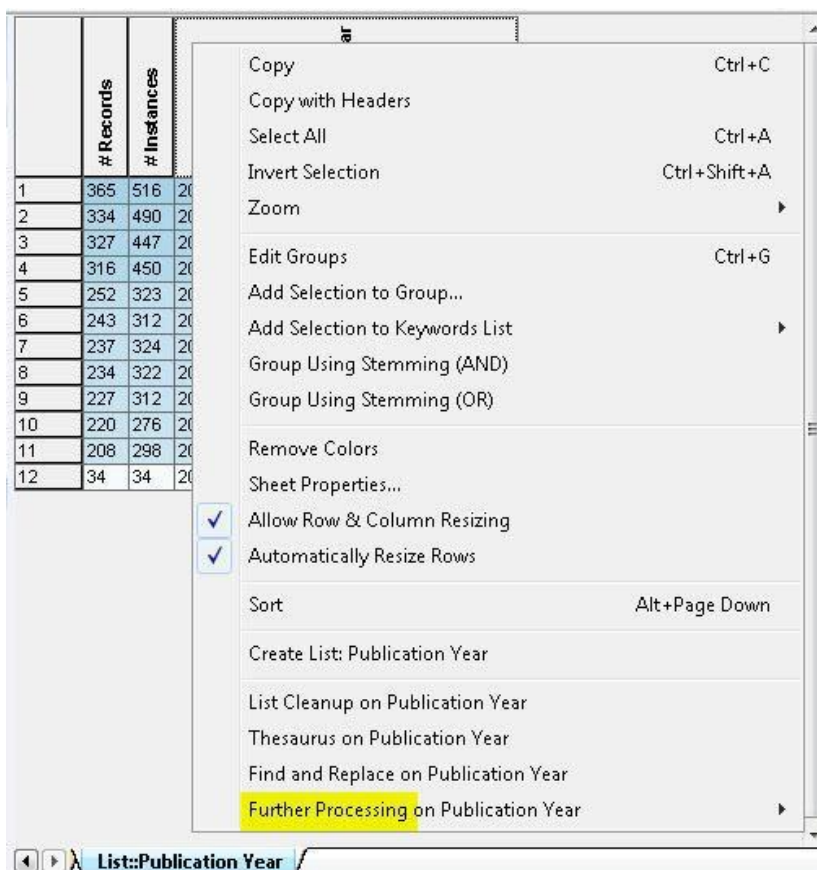
**Further Processing** can be accessed from three places:

1. In a List view, select the Refine ribbon and **Further Processing**; then select the procedure you want to use.



or

2. In a List view, Right-click on the Column header of the Field name. Select **Further Processing on <Field Name>**, and select the procedure.



or

3. From the **Summary View**: Right-click on the field you want to process, choose **Further Processing**, and select the procedure.

| Field  | Application ID                        | Number of Items | Number of Groups | % Coverage | Data Type | Meta Tags     |
|--|---------------------------------------|-----------------|------------------|------------|-----------|---------------|
| (filters)  |                                       |                 |                  |            |           |               |
| Inventor Count   |                                       | 20              |                  | 100%       | Number    |               |
| Inventor   |                                       | 8,391           |                  | 99%        |           | Parent        |
| Name   |                                       | 7,766           |                  | 99%        |           | Person, Child |
| Harmol   |                                       | 8,381           |                  | 99%        |           | Person, Child |
| PatStat  |                                       | 3               |                  | 99%        |           | Child         |
| PatStat  |                                       | 3               |                  | 83%        |           | Child         |
| Harmol   |                                       |                 |                  | 99%        |           | Person, Child |
| Harmol   |                                       |                 |                  | 99%        |           | Person, Child |
| Address  |                                       |                 |                  |            |           |               |
| Country  |                                       |                 |                  |            |           |               |
| Std Name   |                                       |                 |                  |            |           |               |
| Std Name   |                                       |                 |                  |            |           |               |
| PatStat  |                                       |                 |                  |            |           |               |
| PatStat Standardized ID                                |                                       |                 |                  |            |           |               |
| IPC Class Symbol (copy): Read Until - First/Whitespace |                                       |                 |                  |            |           |               |
| IPC Codes  | IPC Class Symbol   IPC Position   IPC |                 |                  |            |           |               |
| Generating Authority   IPC Version                     |                                       |                 |                  |            |           |               |
| IPC Subclass (1)                                       |                                       |                 |                  |            |           |               |

After the procedure is run, you may be prompted by a **Rename Field...** dialog. Here, you can enter a new Field Name, or accept the one assigned by VantagePoint (the original field name appended by the procedure executed on it [e.g., "Inventor: Author Cleanup", or "Inventor: Apply Proper Case"].) You can also check the "Don't Ask When Running Further Processing" box to allow VantagePoint to rename the new field automatically. (To reinstate this prompt, go to the Confirmation Settings in the Options dialog and check the Confirmation box.)

Rename Field...

Field Name:

Inventor::Name: Author Cleanup

Continue

☐ Don't Ask When Running Further Processing

Click **Continue**.

A new list appears. The new field also appears on the Summary View.

The process routines for **Further Processing** are little import filters called "Library Procedures" - a library of procedures to manipulate text. See the [Creating or Editing Library Procedures](#) topic for additional information.

## Chinese/Japanese Tokenizer

The Further Processing function includes both Chinese and Japanese tokenizers, which split strings of characters into distinct words.

In the first illustration below, the user has Right-clicked on the List header and is offered a menu from which "Further Processing on Claims: Read After - First/Period" is selected, which leads to a selection of operations including "Tokenize", then "Chinese text". The results are presented in a new List (see below). The new field also appears in the Summary View.

Alternatively, with the Claims sheet displayed, the user could select **Further Processing** from the Refine ribbon, then make the same selections shown.

The screenshot displays a software interface with a list of records. A right-click context menu is open over the list header. The menu includes the following options:

- Copy (Ctrl+C)
- Copy with Headers
- Select All (Ctrl+A)
- Invert Selection (Ctrl+Shift+A)
- Zoom
- Edit Groups (Ctrl+G)
- Add Selection to Group...
- Add Selection to Keywords List
- Group Using Stemming (AND)
- Group Using Stemming (OR)
- Remove Colors
- Sheet Properties...
- Allow Row & Column Resizing
- Automatically Resize Rows
- Sort (Alt+Page Down)
- Create List: Claims: Read After - First/Period
- List Cleanup on Claims: Read After - First/Period
- Thesaurus on Claims: Read After - First/Period
- Find and Replace on Claims: Read After - First/Period
- Further Processing on Claims: Read After - First/Period** (highlighted)
- Apply Proper Case
- Author Cleanup
- Dates
- Divide at
- Divide Authors
- Extract Country
- NLP
- Patent Numbers
- Read After - First
- Read After - Last
- Read Until - First
- Read Until - Last
- Remove
- Tokenize
- Chinese Text

The 'Further Processing on Claims: Read After - First/Period' option is selected, leading to a submenu with 'Tokenize' and 'Chinese Text'.

Results appear on the next page.

|    | # Records | # Instances | Claims: Read After - First/Period |
|----|-----------|-------------|-----------------------------------|
| 1  | 18450     | 662204      | ,                                 |
| 2  | 18434     | 150748      | 。                                 |
| 3  | 18384     | 704239      | 的                                 |
| 4  | 17470     | 149021      | ；                                 |
| 5  | 17430     | 520722      | 所述                                |
| 6  | 17310     | 117022      | 1                                 |
| 7  | 17241     | 121059      | 其                                 |
| 8  | 16770     | 124957      | 权利要求                              |
| 9  | 16600     | 45401       | 一种                                |
| 10 | 16110     | 104949      | 特征                                |
| 11 | 15466     | 106446      | ：                                 |
| 12 | 14762     | 95377       | 在于                                |
| 13 | 14561     | 61603       | 包括                                |
| 14 | 14325     | 184395      | 、                                 |
| 15 | 14176     | 94845       | 和                                 |
| 16 | 14088     | 90582       | 在                                 |
| 17 | 14063     | 87280       | 2                                 |
| 18 | 13709     | 121773      | ；                                 |
| 19 | 13520     | 85104       | 为                                 |
| 20 | 13355     | 95002       | 根据                                |
| 21 | 12723     | 75895       | 与                                 |
| 22 | 12477     | 58925       | 3                                 |
| 23 | 11911     | 82276       | 中                                 |
| 24 | 11267     | 46934       | 5                                 |
| 25 | 11045     | 44199       | 4                                 |
| 26 | 9898      | 43809       | 将                                 |
| 27 | 9560      | 58896       | 方法                                |
| 28 | 9429      | 54618       | 或                                 |
| 29 | 9389      | 47425       | 上                                 |
| 30 | 9079      | 258662      | )                                 |
| 31 | 9011      | 30827       | 6                                 |
| 32 | 8533      | 236650      | (                                 |
| 33 | 8210      | 28100       | 通过                                |
| 34 | 7516      | 130778      | -                                 |
| 35 | 7507      | 36012       | i                                 |
| 36 | 7459      | 21085       | 8                                 |
| 37 | 7344      | 30649       | 进行                                |
| 38 | 7299      | 20645       | 7                                 |
| 39 | 7118      | 22952       | 10                                |
| 40 | 6992      | 54676       | 其中                                |
| 41 | 6973      | 24732       | 后                                 |
| 42 | 6829      | 25530       | 有                                 |
| 43 | 6820      | 40478       | 连接                                |
| 44 | 6819      | 17794       | 由                                 |
| 45 | 6646      | 27311       | 是                                 |
| 46 | 6629      | 34573       | 步骤                                |
| 47 | 6586      | 60695       | .                                 |



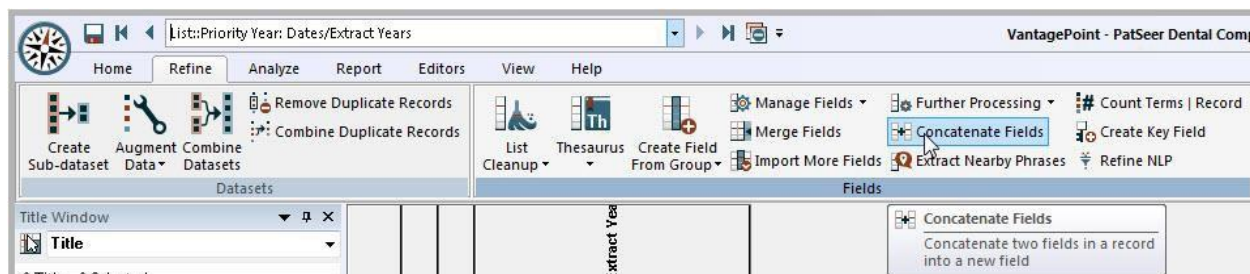
## Concatenate Fields

**Description:** Concatenate two fields in a record into a new field. The second field can have multiple values per record.

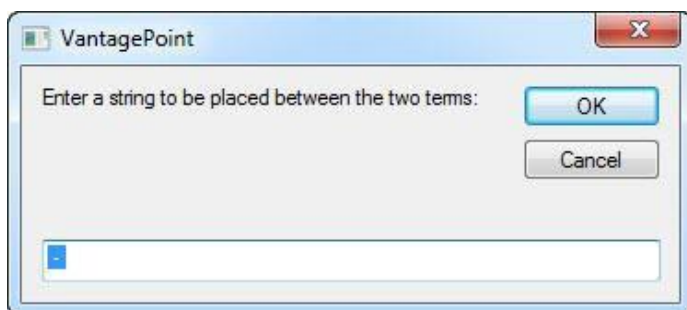
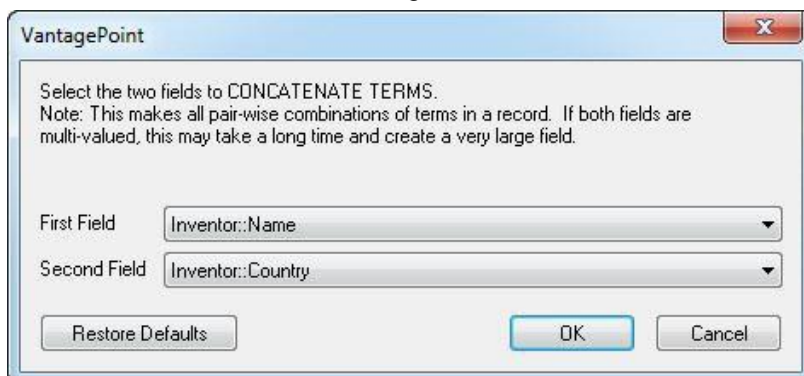
**Requirements:** The first field is a 'single' field

**Usage:** Helpful for putting together a citation using cleaned data fields.

From the Refine ribbon, select **Concatenate Fields**.



Follow the instructions in the dialog boxes that follow:



Result:

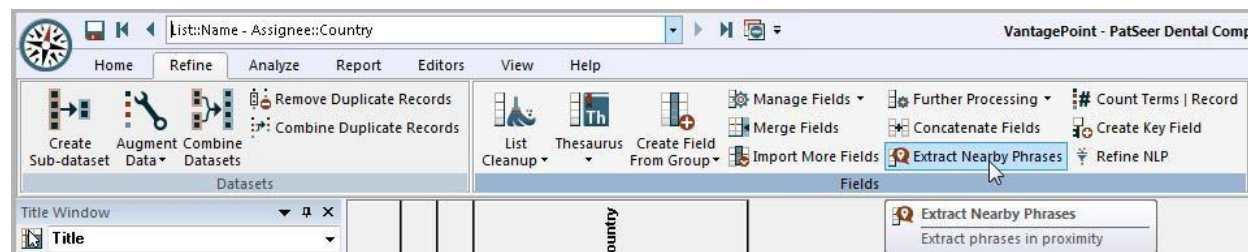
|    | # Records | # Instances | Name - Inventor::Country |
|----|-----------|-------------|--------------------------|
| 25 | 10        | 10          | CUI YIPING - NONE        |
| 26 | 10        | 10          | Jensen, Klavs F. - US    |
| 27 | 10        | 10          | KIM, YOUNG WOO - KR      |
| 28 | 10        | 10          | LEE, CHANG KEUN - KR     |
| 29 | 10        | 10          | Medintz, Igor L. - US    |
| 30 | 10        | 10          | YANG, TSUN-NENG - TW     |
| 31 | 9         | 9           | Ebe, Hiroji - JP         |
| 32 | 9         | 9           | GU JINGXIA - NONE        |
| 33 | 9         | 9           | KIM, KI BUM - KR         |
| 34 | 9         | 9           | KIM, KYUNG NAM - KR      |
| 35 | 9         | 9           | KIM, SANG JIN - KR       |
| 36 | 9         | 9           | MA LAN - NONE            |
| 37 | 9         | 9           | OH, KYOUNG SUK - KR      |
| 38 | 9         | 9           | SUGAWARA MITSURU - NONE  |
| 39 | 9         | 9           | TAIHONG WANG - CN        |
| 40 | 9         | 9           | XU BO - NONE             |
| 41 | 9         | 9           | YOO, SUK JAE - KR        |
| 42 | 9         | 9           | YUAN HANG - NONE         |
| 43 | 9         | 9           | ZHANG FENG - NONE        |

## Extract Nearby Phrases

Using this feature, you can extract NLP Phrases from a free text field that occur in proximity to any of the terms in a group.

The first step is to create a group of terms of interest in a field (list). (See [Creating a Group](#).)

Then, from the Refine ribbon, select **Extract Nearby Phrases**.



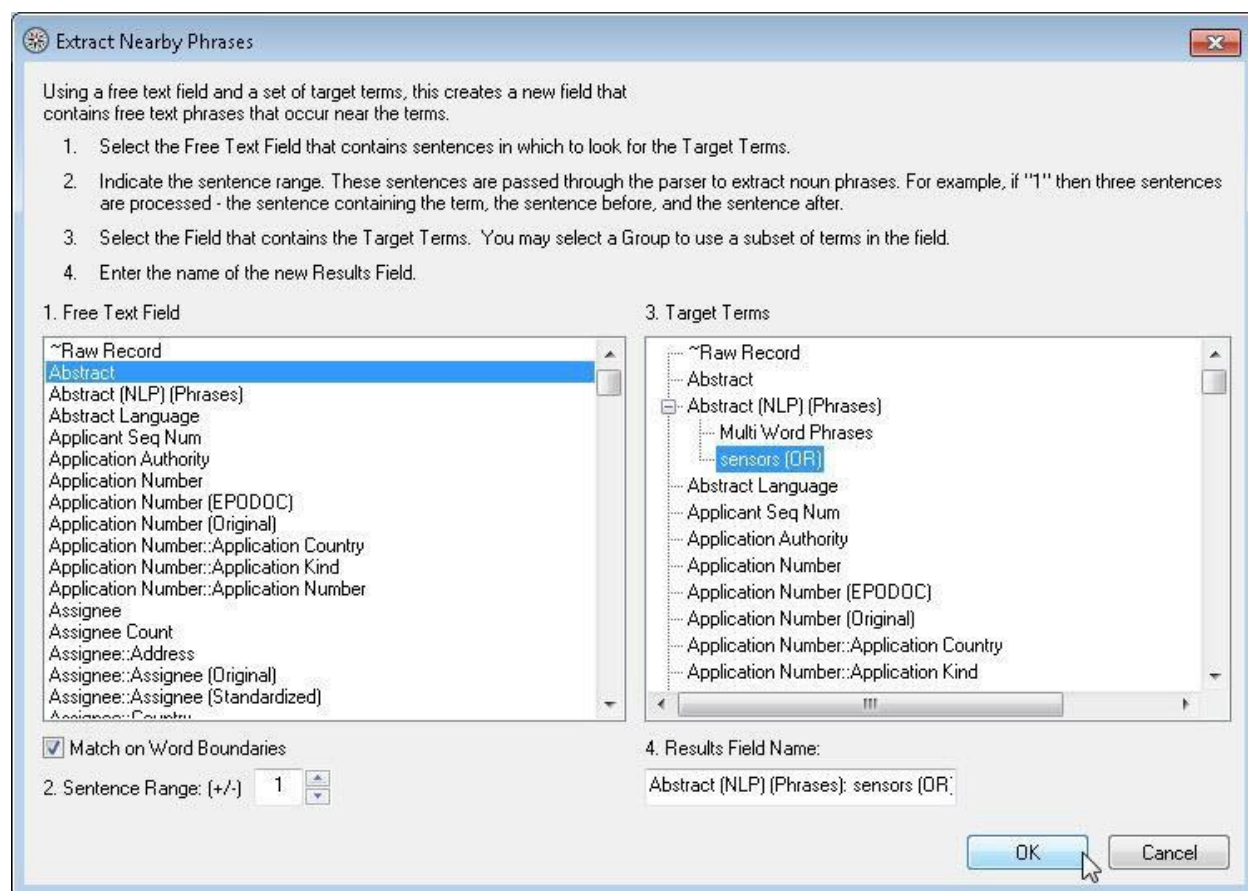
The **Extract Nearby Phrases** dialog box appears.

From the "Free Text Field" window, select the field that contains the sentences in which to look for the Target Terms. Select the group in the "Target Terms" window containing the terms of interest.

All sentences containing these terms will be processed through the Natural Language Processor and the



results will appear as a new field name specified in "Results Field Name".



When you click **OK**, a List View of the new field name is returned:

|    | # Records | # Instances | Abstract (NLP) (Phrases)       | Multi Word Phrases |
|----|-----------|-------------|--------------------------------|--------------------|
| 1  | 5         | 6           | air bags                       | ✓                  |
| 2  | 4         | 5           | crush zone                     | ✓                  |
| 3  | 3         | 9           | acceleration sensor            | ✓                  |
| 4  | 3         | 3           | air bag                        | ✓                  |
| 5  | 3         | 3           | air bag systems                | ✓                  |
| 6  | 3         | 3           | automotive applications        | ✓                  |
| 7  | 3         | 5           | non-crush zone                 | ✓                  |
| 8  | 3         | 3           | sensor requirements            | ✓                  |
| 9  | 2         | 2           | 0.0002 0.2 gal G               | ✓                  |
| 10 | 2         | 2           | 1 Achievement                  | ✓                  |
| 11 | 2         | 2           | acceleration evaluation system | ✓                  |

List::Abstract (NLP) (Phrases): sensors (OR): PIP1

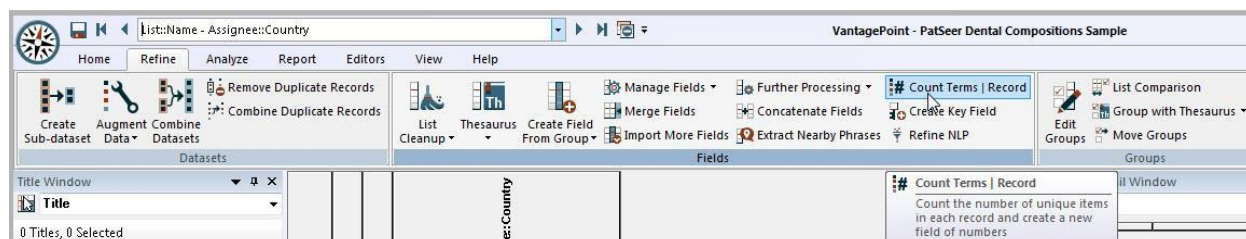
## Count Terms | Record

**Description:** Count the number of unique items in a record and put this in a new field.

**Requirements:** Dataset is open and key field can be found/created.

**Usage:** Helpful to get number of authors/inventors/classifications/etc. per record after running cleanup.

From the Refine ribbon, select **Count Terms | Record**.



Choose the field name from the dialog presented; decide whether to count Unique Terms or Instances.

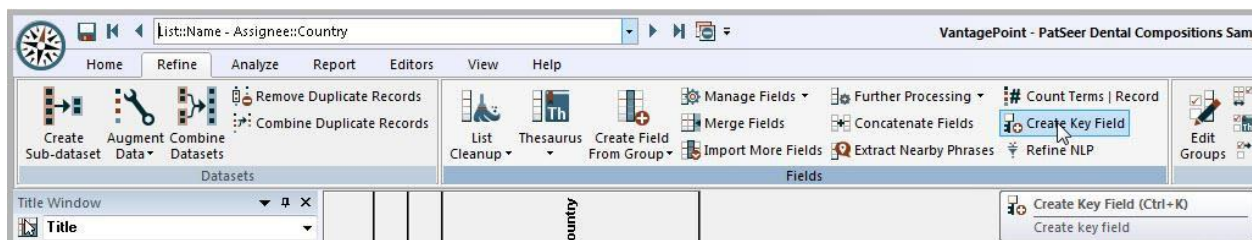
The result is a new list:

|    | # Records | # Instances | Inventor::Name (count unique) |
|----|-----------|-------------|-------------------------------|
| 1  | 762       | 762         | 3                             |
| 2  | 738       | 738         | 2                             |
| 3  | 615       | 615         | 1                             |
| 4  | 591       | 591         | 4                             |
| 5  | 368       | 368         | 5                             |
| 6  | 228       | 228         | 6                             |
| 7  | 123       | 123         | 7                             |
| 8  | 69        | 69          | 8                             |
| 9  | 41        | 41          | 0                             |
| 10 | 38        | 38          | 9                             |
| 11 | 19        | 19          | 10                            |
| 12 | 10        | 10          | 11                            |
| 13 | 5         | 5           | 12                            |
| 14 | 3         | 3           | 14                            |
| 15 | 3         | 3           | 13                            |
| 16 | 2         | 2           | 20                            |
| 17 | 2         | 2           | 15                            |
| 18 | 1         | 1           | 17                            |

## Create Key Field

A Key Field contains a short, unique identifier for each unique record in your dataset. This is useful for creating groups of records during an analysis. Frequently an Accession Number or the Raw Record field can be used. But many sources of data do not have Accession Numbers, and the Raw Record field can be cumbersome because each item contains hundreds of characters of text. VantagePoint creates a Key Field by running the text of the Raw Record through an algorithm that produces a short text string to represent the record. The short text strings in the Key Field can be compared (e.g., using List Comparison) very quickly with Key Fields in other datasets.

To create a Key Field in a dataset, select the Refine ribbon and click **Create Key Field** icon.

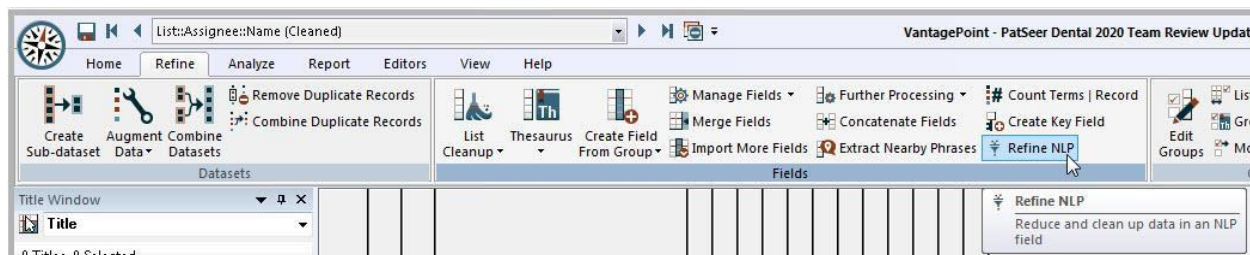


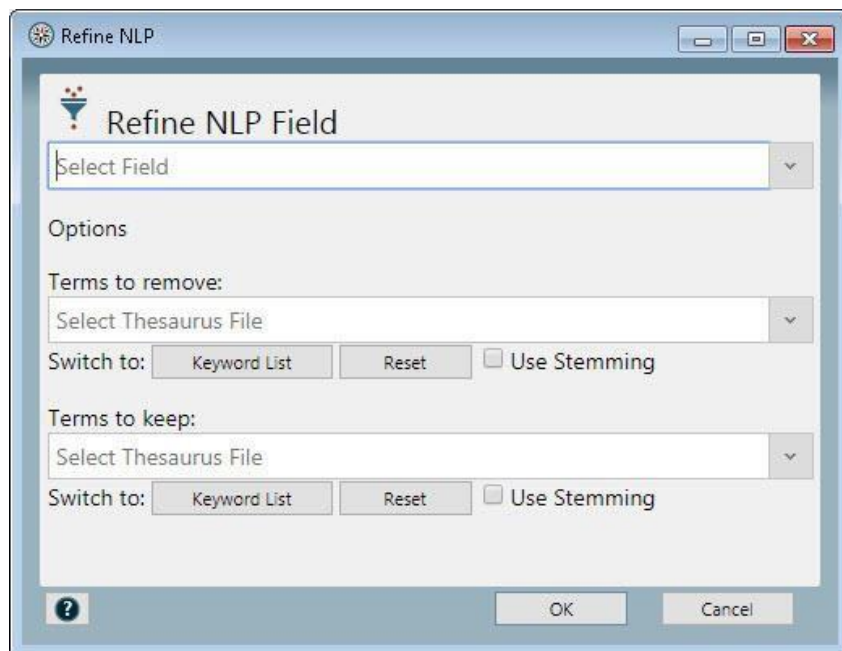
## Refine NLP

Cleans an NLP field by applying various thesauri.

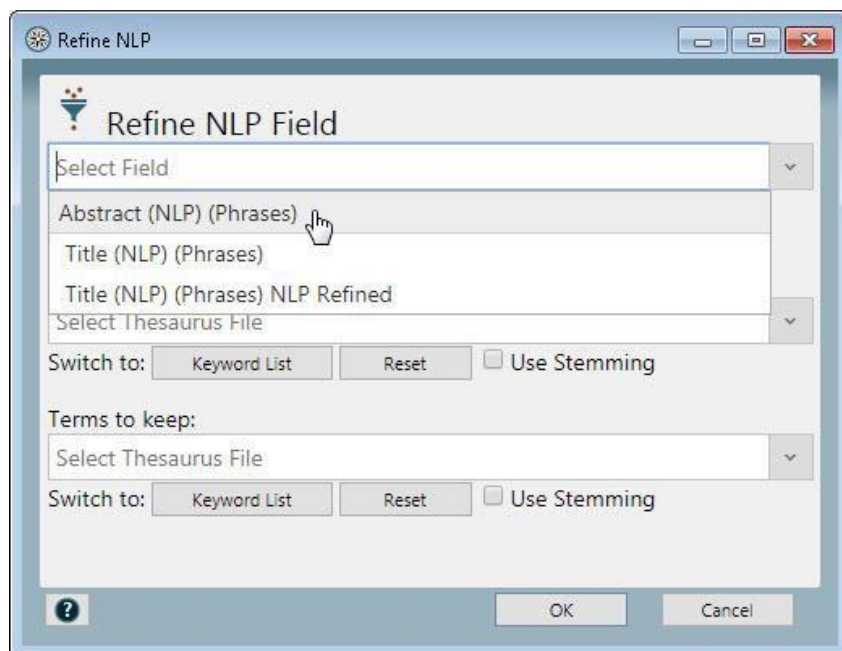
- Allows user to select a custom list of Terms to remove from the selected NLP field, from either the default thesaurus directory or a Keyword List.
- Allows user to select a custom list of Terms to keep that will supersede any other applied "Stopwords" list within the Refine NLP script, including any custom Stopwords list selected above. Can be either a thesaurus or keywords file like the "Stopwords" selection.

From the Refine Ribbon, select **Refine NLP**.





Click the dropdown arrow (or click in the Select Field box), which displays the NLP fields for selection.

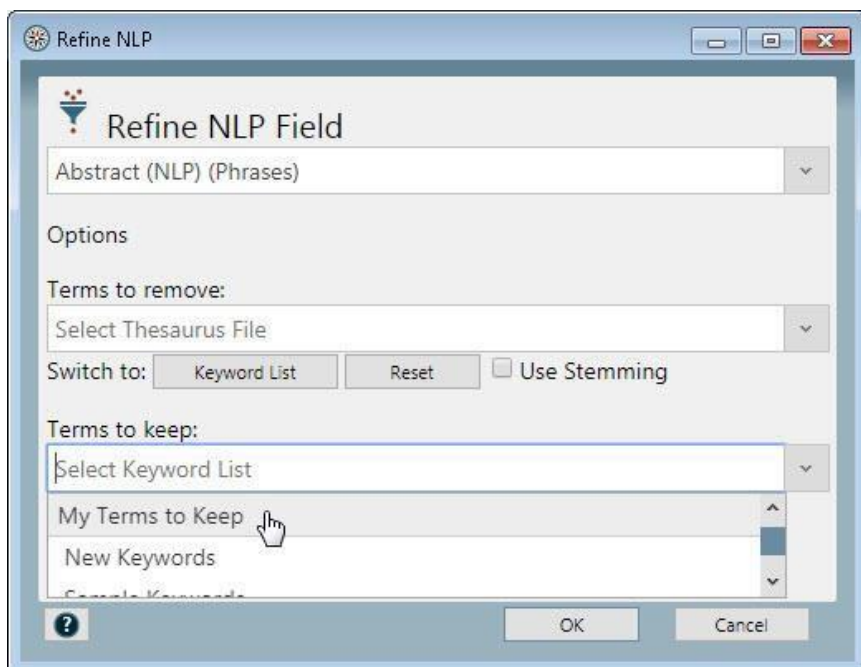
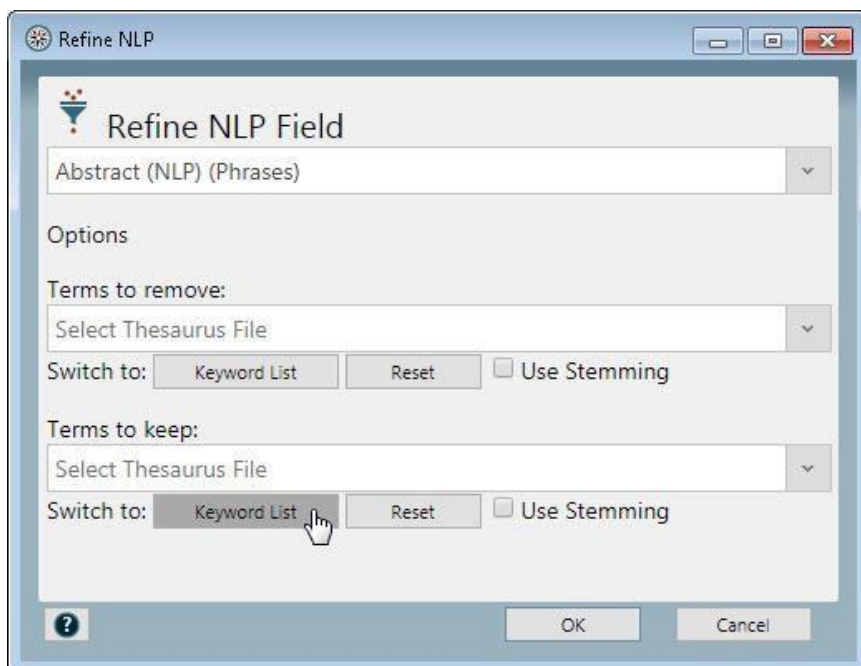


At this point you can click **OK**, and VantagePoint runs a script on that field using various thesauri. This results in a new Field based on the original field name with "NLP Refined" appended:



### Options:

You have the option of applying a set of custom Terms to remove or keep, choosing from either a Thesaurus file or Keyword List. Clicking in the Select Thesaurus File box or the dropdown arrow reveals the list of Thesaurus (or Keywords) files from which to select. Check the "Use Stemming" box, if desired.



Click **OK**.

VantagePoint then runs a script on that field using various thesauri and/or keyword files. Results in a new Field based on the original field name with "NLP Refined" appended.

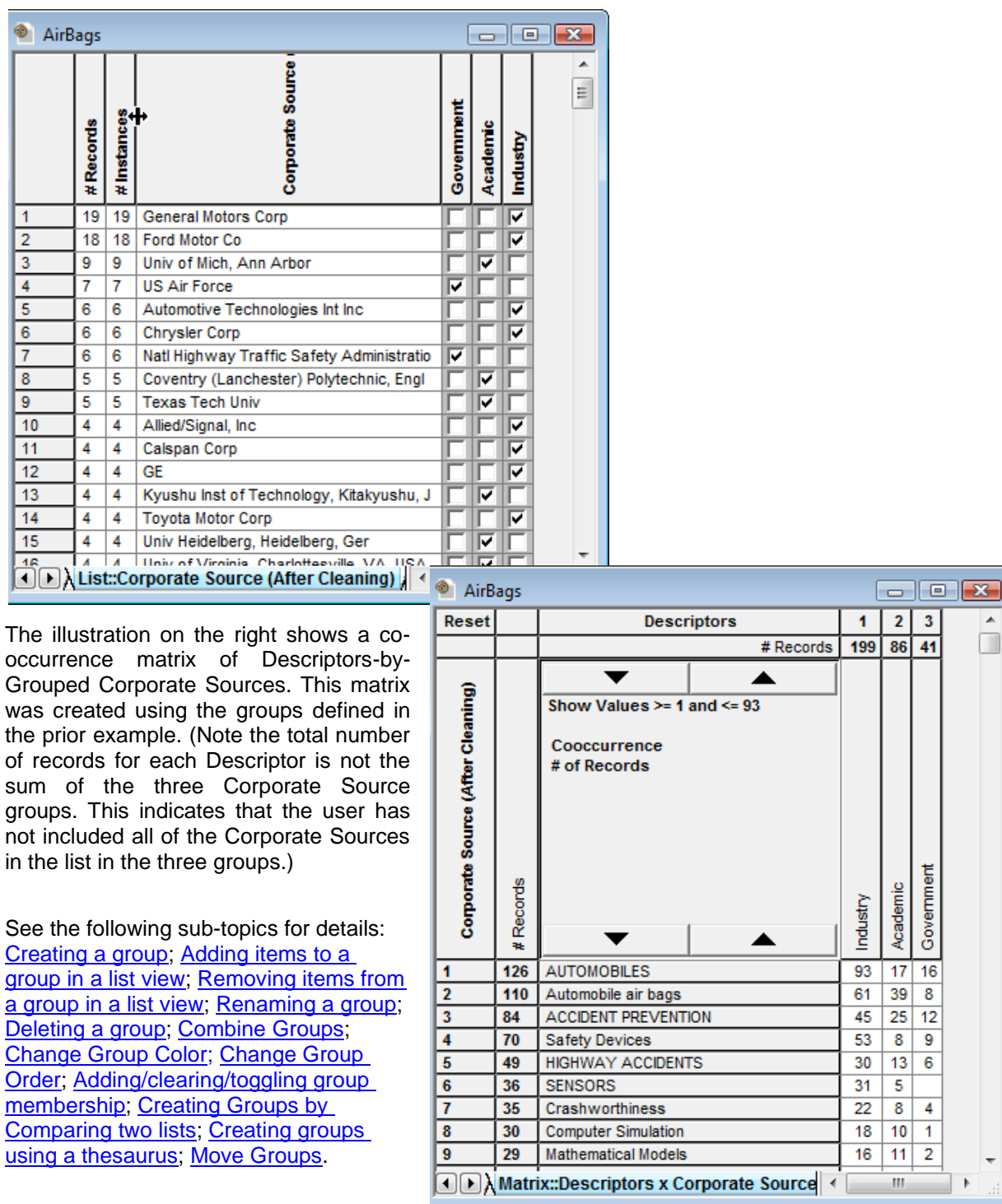




## Groups

Items in a list can be tagged as members of a larger collection or group. Groups are useful for reducing the size of co-occurrence matrices and for defining portions of the dataset to be extracted to a new dataset.

The following example shows three groups that have been defined by the user: **Government**, **Academic**, and **Industry**.



The illustration on the right shows a co-occurrence matrix of Descriptors-by-Grouped Corporate Sources. This matrix was created using the groups defined in the prior example. (Note the total number of records for each Descriptor is not the sum of the three Corporate Source groups. This indicates that the user has not included all of the Corporate Sources in the list in the three groups.)

See the following sub-topics for details:

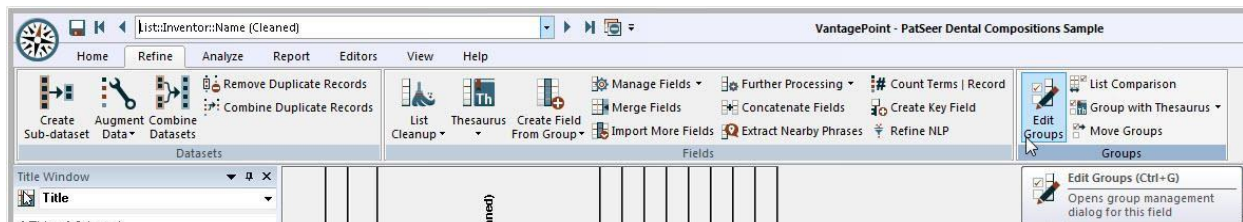
[Creating a group](#); [Adding items to a group in a list view](#); [Removing items from a group in a list view](#); [Renaming a group](#); [Deleting a group](#); [Combine Groups](#); [Change Group Color](#); [Change Group Order](#); [Adding/clearing/toggling group membership](#); [Creating Groups by Comparing two lists](#); [Creating groups using a thesaurus](#); [Move Groups](#).



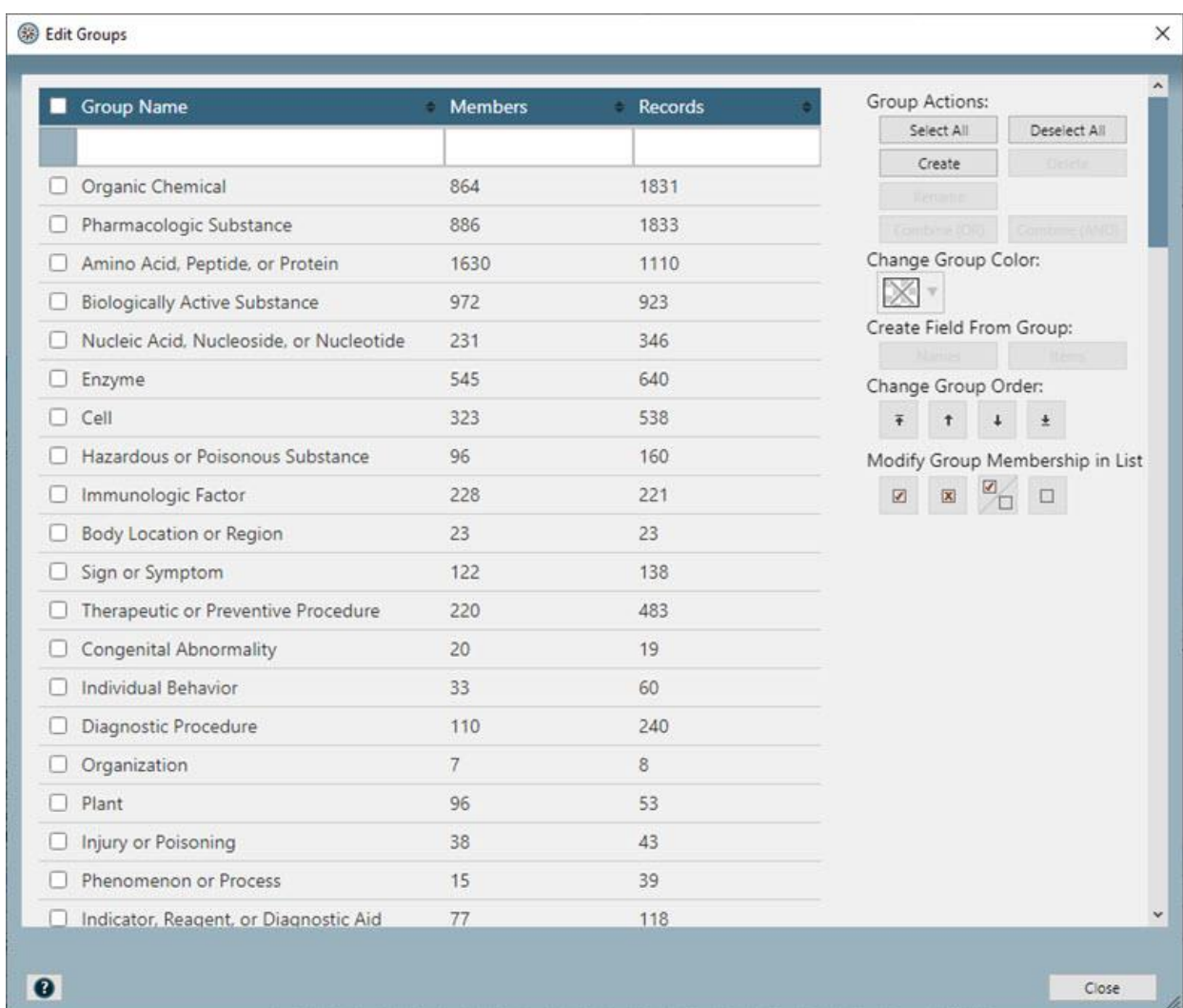
## The Edit Groups dialog box

From the Refine ribbon, choose **Edit Groups**. (Enabled only when viewing a List.) The hot-key shortcut is **Ctrl G**.

Or, you can now Right-click in a List view, and choose Edit Groups from the right-click menu.

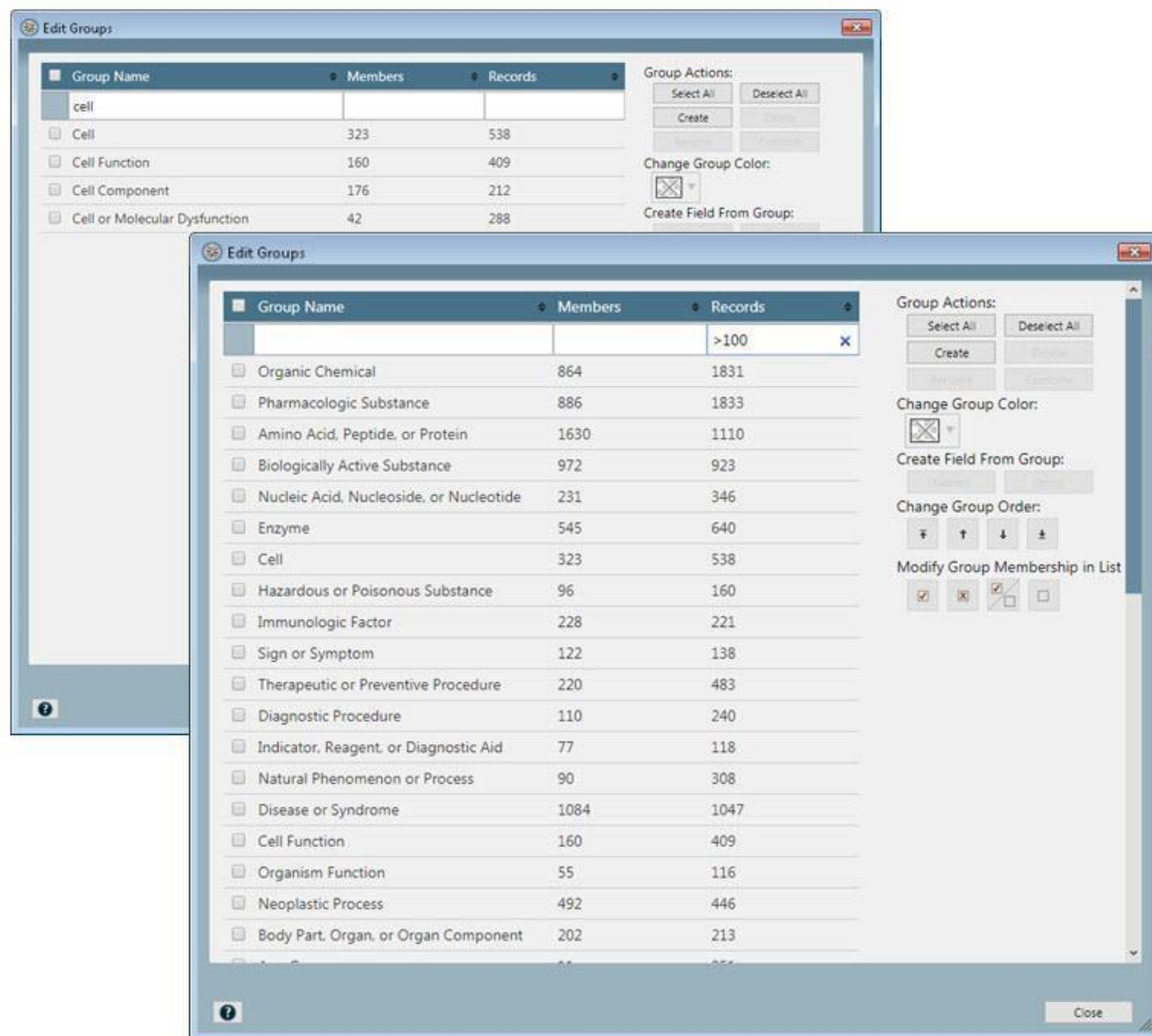


The **Edit Groups** dialog is displayed. This shows the user-defined groups for the field in the order they appear in the underlying List.



The white space at the top allows Type-to-Filter entries to quickly locate a group or pare down the groups displayed in the dialog.

In the illustrations below, the user is displaying only groups containing the word "cell", and in the other case only those groups with more than 100 records:

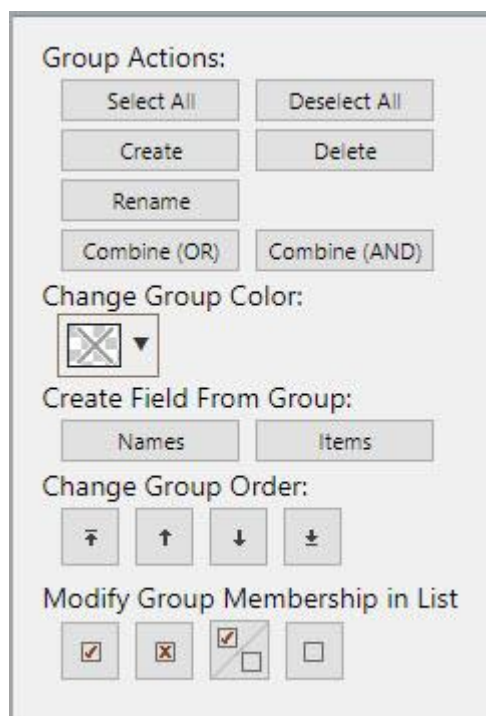


You can Sort the Group names by clicking the Group Name banner:



Click once for ascending order; Click again for the reverse order. The same Sort functionality applies to Members and Records columns.

Under Group Actions:



Use these buttons to Select All or Deselect All groups displayed in the dialog. (You can also use the checkbox in the Group Name banner.) Details in these sub-topics follow:

[Create](#), [Delete](#), [Rename](#), [Combine](#)

[Change Group Color](#)

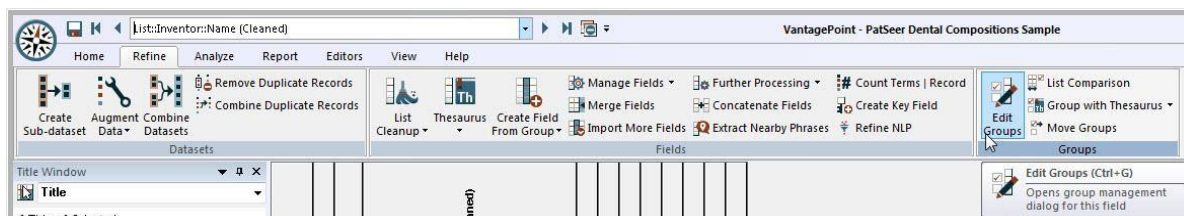
[Create Field From Group](#)

[Change Group Order](#)

[Modify Group Membership in List](#)

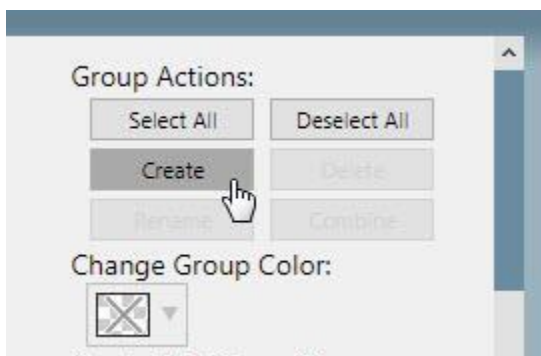
## Creating a group

1. Create (or open) a List View.
2. From the Refine ribbon, select **Edit Groups**

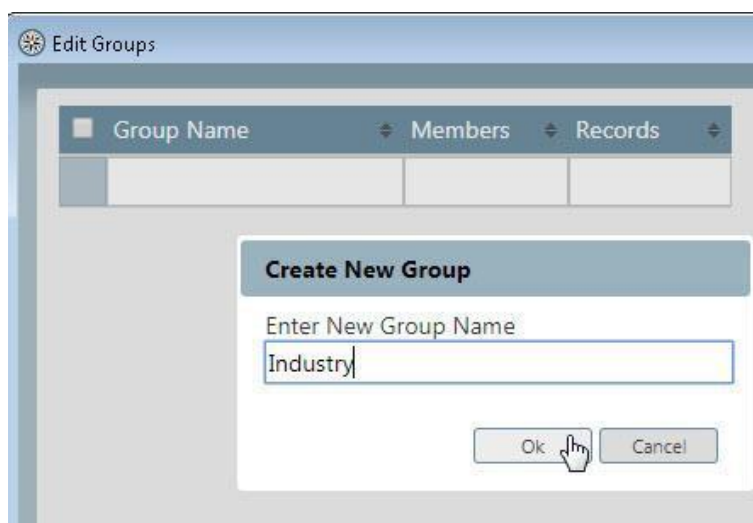


or right-click in the List and choose **Edit Groups**;  
or press **Ctrl G** on the keyboard.

3. In the **Edit Groups** dialog box (under "Group Actions:"), click **Create**.



4. Type the name of the group in the **Create New Group** dialog box and then click **OK**.



5. Close the **Edit Groups** dialog box.

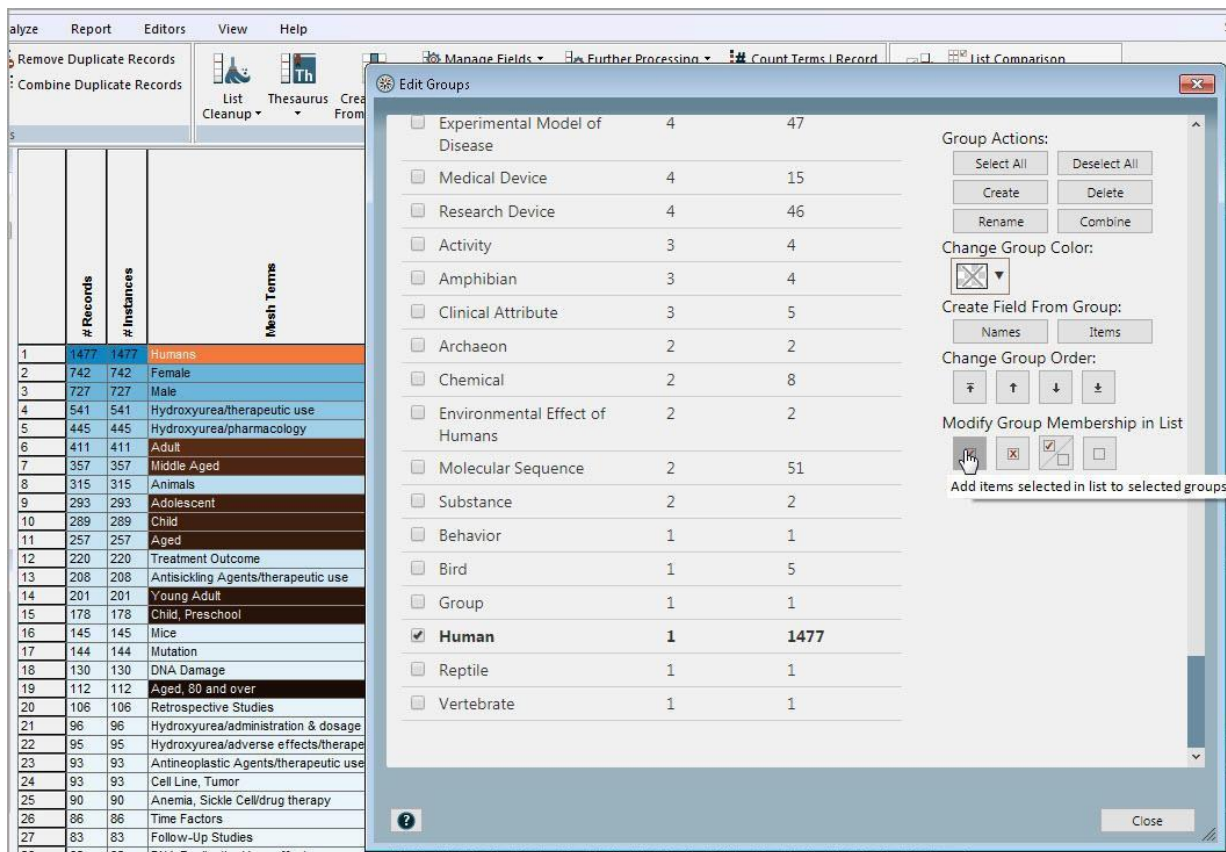
The new group shows up as a column of empty check boxes labeled with the group name. You can then check the box to add an item to the group.

|    | # Records | # Instances | Assignee: Assignee (Original)             | Industry                            |
|----|-----------|-------------|---|-------------------------------------|
| 1  | 113       | 113         | FUJITSU LTD                               | <input type="checkbox"/>            |
| 2  | 85        | 86          | Samsung Electronics Co., Ltd.             | <input type="checkbox"/>            |
| 3  | 49        | 49          | FUJITSU LIMITED                           | <input type="checkbox"/>            |
| 4  | 38        | 38          | Boe Technology Group Co., Ltd.            | <input type="checkbox"/>            |
| 5  | 36        | 36          | Industrial Technology Research Institute  | <input type="checkbox"/>            |
| 6  | 32        | 32          | SHANGHAI JIAO TONG UNIVERSITY             | <input type="checkbox"/>            |
| 7  | 32        | 32          | Wuhan University                          | <input type="checkbox"/>            |
| 8  | 31        | 31          | Institute of Semiconductors, Chinese Acad | <input type="checkbox"/>            |
| 9  | 31        | 31          | Korea Institute of Machinery & Materials  | <input type="checkbox"/>            |
| 10 | 28        | 28          | JAPAN SCIENCE & TECHNOLOGY AGENC          | <input type="checkbox"/>            |
| 11 | 26        | 26          | Electronics and Telecommunications Rese   | <input type="checkbox"/>            |
| 12 | 26        | 26          | Korea Institute of Science and Technology | <input type="checkbox"/>            |
| 13 | 26        | 26          | TOSHIBA CORP                              | <input checked="" type="checkbox"/> |
| 14 | 25        | 25          | Kabushiki Kaisha Toshiba                  | <input type="checkbox"/>            |
| 15 | 22        | 22          | LG INNOTEK CO., LTD.                      | <input type="checkbox"/>            |
| 16 | 22        | 22          | SONY CORP                                 | <input type="checkbox"/>            |
| 17 | 21        | 21          | Massachusetts Institute of Technology     | <input type="checkbox"/>            |

See [Adding items to a group in a list view](#) for additional ways to add items to a group.

## Adding items to a group in a list view

1. Create (or open) a List View of the field containing the group (or group to be named).
2. Select the items to be added to the group (or multi-select using Shift key or Ctrl Click).
3. From the Refine ribbon, choose **Edit Groups**. (or, Right-click in the List and select **Edit Groups**; or, press **Ctrl G**)
4. In the Edit Groups dialog box, click on the group name to which the list items are to be added. Click the **Add** items icon, as illustrated below.





Another option is, in the List view, to check the box under the group name for each item:

|    | # Records | # Instances | Mesh Terms                              | Fish | Regulation or Law | Anatomical Structure | Animal | Daily or Recreational Activity | Experimental Model of Disease | Medical Device | Research Device | Activity | Amphibian | Clinical Attribute | Archaeon | Chemical | Environmental Effect of Human | Molecular Sequence | Substance | Behavior | Bird | Group | Human | Reptile | Vertebrate |
|----|-----------|-------------|---|------|-------------------|----------------------|--------|--------------------------------|-------------------------------|----------------|-----------------|----------|-----------|--------------------|----------|----------|-------------------------------|--------------------|-----------|----------|------|-------|-------|---------|------------|
| 1  | 1477      | 1477        | Humans                                  |      |                   |                      |        |                                |                               |                |                 |          |           |                    |          |          |                               |                    |           |          |      |       |       |         |            |
| 2  | 742       | 742         | Female                                  |      |                   |                      |        |                                |                               |                |                 |          |           |                    |          |          |                               |                    |           |          |      |       |       |         |            |
| 3  | 727       | 727         | Male                                    |      |                   |                      |        |                                |                               |                |                 |          |           |                    |          |          |                               |                    |           |          |      |       |       |         |            |
| 4  | 541       | 541         | Hydroxyurea/therapeutic use             |      |                   |                      |        |                                |                               |                |                 |          |           |                    |          |          |                               |                    |           |          |      |       |       |         |            |
| 5  | 445       | 445         | Hydroxyurea/pharmacology                |      |                   |                      |        |                                |                               |                |                 |          |           |                    |          |          |                               |                    |           |          |      |       |       |         |            |
| 6  | 411       | 411         | Adult                                   |      |                   |                      |        |                                |                               |                |                 |          |           |                    |          |          |                               |                    |           |          |      |       |       |         |            |
| 7  | 357       | 357         | Middle Aged                             |      |                   |                      |        |                                |                               |                |                 |          |           |                    |          |          |                               |                    |           |          |      |       |       |         |            |
| 8  | 315       | 315         | Animals                                 |      |                   |                      |        |                                |                               |                |                 |          |           |                    |          |          |                               |                    |           |          |      |       |       |         |            |
| 9  | 293       | 293         | Adolescent                              |      |                   |                      |        |                                |                               |                |                 |          |           |                    |          |          |                               |                    |           |          |      |       |       |         |            |
| 10 | 289       | 289         | Child                                   |      |                   |                      |        |                                |                               |                |                 |          |           |                    |          |          |                               |                    |           |          |      |       |       |         |            |
| 11 | 257       | 257         | Aged                                    |      |                   |                      |        |                                |                               |                |                 |          |           |                    |          |          |                               |                    |           |          |      |       |       |         |            |
| 12 | 220       | 220         | Treatment Outcome                       |      |                   |                      |        |                                |                               |                |                 |          |           |                    |          |          |                               |                    |           |          |      |       |       |         |            |
| 13 | 208       | 208         | Antisickling Agents/therapeutic use     |      |                   |                      |        |                                |                               |                |                 |          |           |                    |          |          |                               |                    |           |          |      |       |       |         |            |
| 14 | 201       | 201         | Young Adult                             |      |                   |                      |        |                                |                               |                |                 |          |           |                    |          |          |                               |                    |           |          |      |       |       |         |            |
| 15 | 178       | 178         | Child, Preschool                        |      |                   |                      |        |                                |                               |                |                 |          |           |                    |          |          |                               |                    |           |          |      |       |       |         |            |
| 16 | 145       | 145         | Mice                                    |      |                   |                      |        |                                |                               |                |                 |          |           |                    |          |          |                               |                    |           |          |      |       |       |         |            |
| 17 | 144       | 144         | Mutation                                |      |                   |                      |        |                                |                               |                |                 |          |           |                    |          |          |                               |                    |           |          |      |       |       |         |            |
| 18 | 130       | 130         | DNA Damage                              |      |                   |                      |        |                                |                               |                |                 |          |           |                    |          |          |                               |                    |           |          |      |       |       |         |            |
| 19 | 112       | 112         | Aged, 80 and over                       |      |                   |                      |        |                                |                               |                |                 |          |           |                    |          |          |                               |                    |           |          |      |       |       |         |            |
| 20 | 106       | 106         | Retrospective Studies                   |      |                   |                      |        |                                |                               |                |                 |          |           |                    |          |          |                               |                    |           |          |      |       |       |         |            |
| 21 | 96        | 96          | Hydroxyurea/administration & dosage     |      |                   |                      |        |                                |                               |                |                 |          |           |                    |          |          |                               |                    |           |          |      |       |       |         |            |
| 22 | 95        | 95          | Hydroxyurea/adverse effects/therapeutic |      |                   |                      |        |                                |                               |                |                 |          |           |                    |          |          |                               |                    |           |          |      |       |       |         |            |
| 23 | 93        | 93          | Antineoplastic Agents/therapeutic use   |      |                   |                      |        |                                |                               |                |                 |          |           |                    |          |          |                               |                    |           |          |      |       |       |         |            |
| 24 | 93        | 93          | Cell Line, Tumor                        |      |                   |                      |        |                                |                               |                |                 |          |           |                    |          |          |                               |                    |           |          |      |       |       |         |            |
| 25 | 90        | 90          | Anemia, Sickle Cell/drug therapy        |      |                   |                      |        |                                |                               |                |                 |          |           |                    |          |          |                               |                    |           |          |      |       |       |         |            |
| 26 | 86        | 86          | Time Factors                            |      |                   |                      |        |                                |                               |                |                 |          |           |                    |          |          |                               |                    |           |          |      |       |       |         |            |
| 27 | 83        | 83          | Follow-Up Studies                       |      |                   |                      |        |                                |                               |                |                 |          |           |                    |          |          |                               |                    |           |          |      |       |       |         |            |
| 28 | 82        | 82          | DNA Replication/drug effects            |      |                   |                      |        |                                |                               |                |                 |          |           |                    |          |          |                               |                    |           |          |      |       |       |         |            |
| 29 | 77        | 77          | Blood Transfusion                       |      |                   |                      |        |                                |                               |                |                 |          |           |                    |          |          |                               |                    |           |          |      |       |       |         |            |

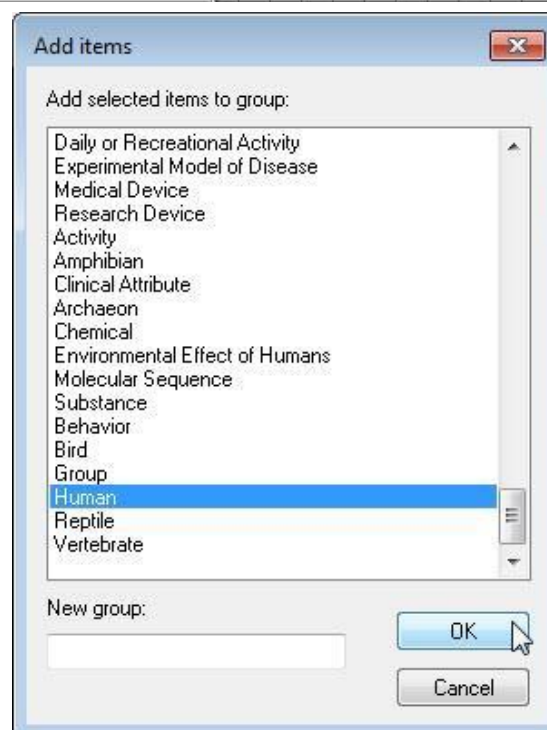


Or, where several items are to be added to the same group, right-click in the list and select **Add Selection to Group...**

|    | # Records | # Instances | Mesh Terms                            | Fish | Regulation or Law | Anatomical Structure | Animal | Daily or Recreational Activity | Experimental Model of Disease | Medical Device | Research Device | Activity | Amphibian | Clinical Attribute | Archaeon | Chemical | Environmental Effect of Human | Molecular Sequence | Substance | Behavior | Bird | Group | Human | Reptile | Vertebrate |
|----|-----------|-------------|---------------------------------------|------|-------------------|----------------------|--------|--------------------------------|-------------------------------|----------------|-----------------|----------|-----------|--------------------|----------|----------|-------------------------------|--------------------|-----------|----------|------|-------|-------|---------|------------|
| 1  | 1477      | 1477        | Humans                                |      |                   |                      |        |                                |                               |                |                 |          |           |                    |          |          |                               |                    |           |          |      |       |       |         |            |
| 2  | 742       | 742         | Female                                |      |                   |                      |        |                                |                               |                |                 |          |           |                    |          |          |                               |                    |           |          |      |       |       |         |            |
| 3  | 727       | 727         | Male                                  |      |                   |                      |        |                                |                               |                |                 |          |           |                    |          |          |                               |                    |           |          |      |       |       |         |            |
| 4  | 541       | 541         | Hydroxyurea/therapeutic use           |      |                   |                      |        |                                |                               |                |                 |          |           |                    |          |          |                               |                    |           |          |      |       |       |         |            |
| 5  | 445       | 445         | Hydroxyurea/pharmacology              |      |                   |                      |        |                                |                               |                |                 |          |           |                    |          |          |                               |                    |           |          |      |       |       |         |            |
| 6  | 411       | 411         | Adult                                 |      |                   |                      |        |                                |                               |                |                 |          |           |                    |          |          |                               |                    |           |          |      |       |       |         |            |
| 7  | 357       | 357         | Middle Aged                           |      |                   |                      |        |                                |                               |                |                 |          |           |                    |          |          |                               |                    |           |          |      |       |       |         |            |
| 8  | 315       | 315         | Animals                               |      |                   |                      |        |                                |                               |                |                 |          |           |                    |          |          |                               |                    |           |          |      |       |       |         |            |
| 9  | 293       | 293         | Adolescent                            |      |                   |                      |        |                                |                               |                |                 |          |           |                    |          |          |                               |                    |           |          |      |       |       |         |            |
| 10 | 289       | 289         | Child                                 |      |                   |                      |        |                                |                               |                |                 |          |           |                    |          |          |                               |                    |           |          |      |       |       |         |            |
| 11 | 257       | 257         | Aged                                  |      |                   |                      |        |                                |                               |                |                 |          |           |                    |          |          |                               |                    |           |          |      |       |       |         |            |
| 12 | 220       | 220         | Treatment Outcome                     |      |                   |                      |        |                                |                               |                |                 |          |           |                    |          |          |                               |                    |           |          |      |       |       |         |            |
| 13 | 208       | 208         | Antisickling Agents/therapeutic use   |      |                   |                      |        |                                |                               |                |                 |          |           |                    |          |          |                               |                    |           |          |      |       |       |         |            |
| 14 | 201       | 201         | Young Adult                           |      |                   |                      |        |                                |                               |                |                 |          |           |                    |          |          |                               |                    |           |          |      |       |       |         |            |
| 15 | 178       | 178         | Child, Preschool                      |      |                   |                      |        |                                |                               |                |                 |          |           |                    |          |          |                               |                    |           |          |      |       |       |         |            |
| 16 | 145       | 145         | Mice                                  |      |                   |                      |        |                                |                               |                |                 |          |           |                    |          |          |                               |                    |           |          |      |       |       |         |            |
| 17 | 144       | 144         | Mutation                              |      |                   |                      |        |                                |                               |                |                 |          |           |                    |          |          |                               |                    |           |          |      |       |       |         |            |
| 18 | 130       | 130         | DNA Damage                            |      |                   |                      |        |                                |                               |                |                 |          |           |                    |          |          |                               |                    |           |          |      |       |       |         |            |
| 19 | 112       | 112         | Aged, 80 and over                     |      |                   |                      |        |                                |                               |                |                 |          |           |                    |          |          |                               |                    |           |          |      |       |       |         |            |
| 20 | 106       | 106         | Retrospective Studies                 |      |                   |                      |        |                                |                               |                |                 |          |           |                    |          |          |                               |                    |           |          |      |       |       |         |            |
| 21 | 96        | 96          | Hydroxyurea/administrative use        |      |                   |                      |        |                                |                               |                |                 |          |           |                    |          |          |                               |                    |           |          |      |       |       |         |            |
| 22 | 95        | 95          | Hydroxyurea/adverse effects           |      |                   |                      |        |                                |                               |                |                 |          |           |                    |          |          |                               |                    |           |          |      |       |       |         |            |
| 23 | 93        | 93          | Antineoplastic Agents/therapeutic use |      |                   |                      |        |                                |                               |                |                 |          |           |                    |          |          |                               |                    |           |          |      |       |       |         |            |
| 24 | 93        | 93          | Cell Line, Tumor                      |      |                   |                      |        |                                |                               |                |                 |          |           |                    |          |          |                               |                    |           |          |      |       |       |         |            |
| 25 | 90        | 90          | Anemia, Sickle Cell/drug therapy      |      |                   |                      |        |                                |                               |                |                 |          |           |                    |          |          |                               |                    |           |          |      |       |       |         |            |
| 26 | 86        | 86          | Time Factors                          |      |                   |                      |        |                                |                               |                |                 |          |           |                    |          |          |                               |                    |           |          |      |       |       |         |            |
| 27 | 83        | 83          | Follow-Up Studies                     |      |                   |                      |        |                                |                               |                |                 |          |           |                    |          |          |                               |                    |           |          |      |       |       |         |            |
| 28 | 82        | 82          | DNA Replication/drug effects          |      |                   |                      |        |                                |                               |                |                 |          |           |                    |          |          |                               |                    |           |          |      |       |       |         |            |
| 29 | 77        | 77          | Blood Transfusion                     |      |                   |                      |        |                                |                               |                |                 |          |           |                    |          |          |                               |                    |           |          |      |       |       |         |            |

The **Add items** dialog appears with the list of group names. Select the desired group name and click **OK**.

You could also add a New group by entering a New group name here.



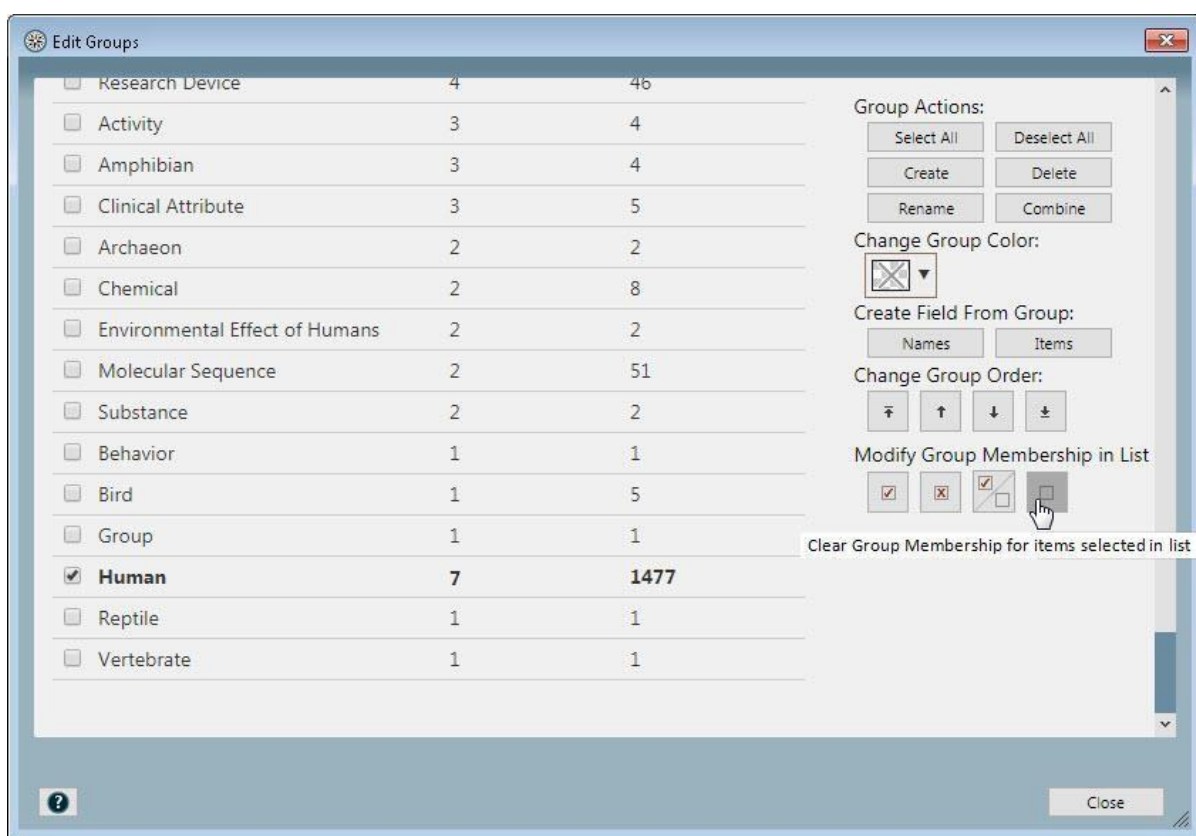
### Removing items from a group in a list view

There are two ways to remove list items from a group. In the List View,

1. Click on the check box corresponding to the list item and group until the box is empty. When the checkmark disappears, the list item is not included in the group.

or

2. Select the item(s) in the list by clicking, (or Shift-click or Ctrl-click for multiple selections). Then:
  - a) From the Refine ribbon choose **Edit Groups**.
  - b) In the **Edit Groups** dialog box, click on the group name from which the list items are to be removed and click the Clear icon.



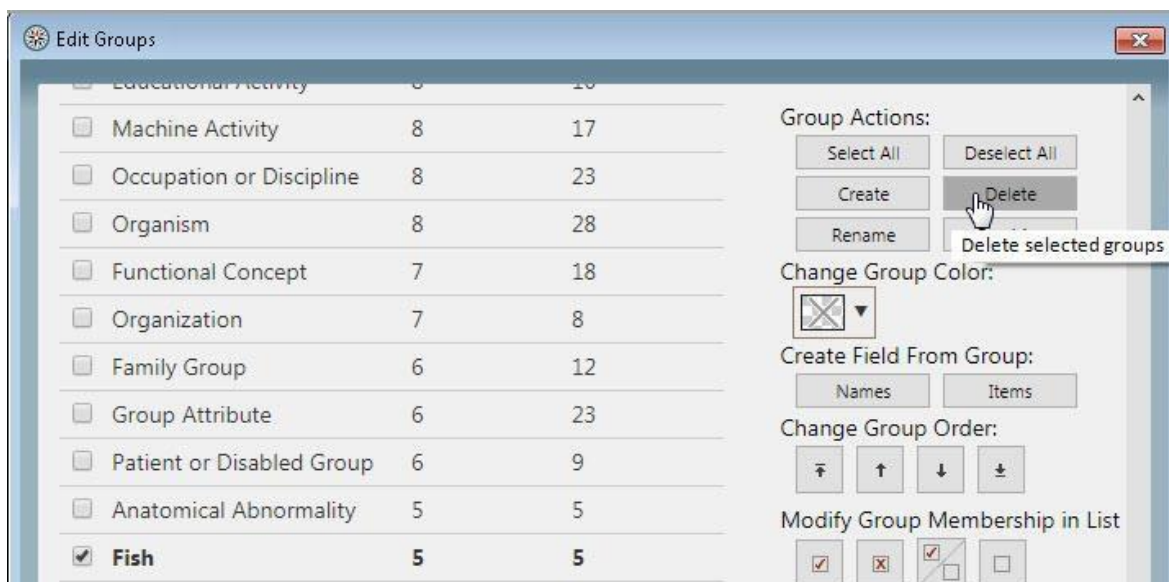
- c) Close the **Edit Groups** dialog box.

### Deleting a group

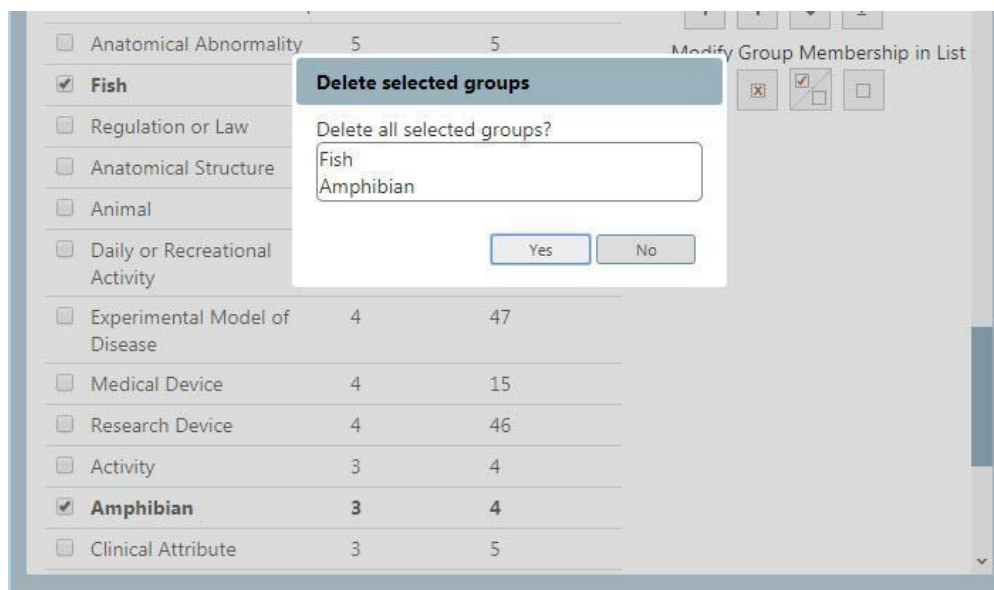
1. Create (or open) a List View of the field containing the group to be deleted.
2. From the Refine ribbon, select **Edit Groups**.

or press **Ctrl G** on the keyboard.

- On the **Edit Groups** dialog box, click on the name(s) of the group(s) you want to delete.
- Click the **Delete** button.

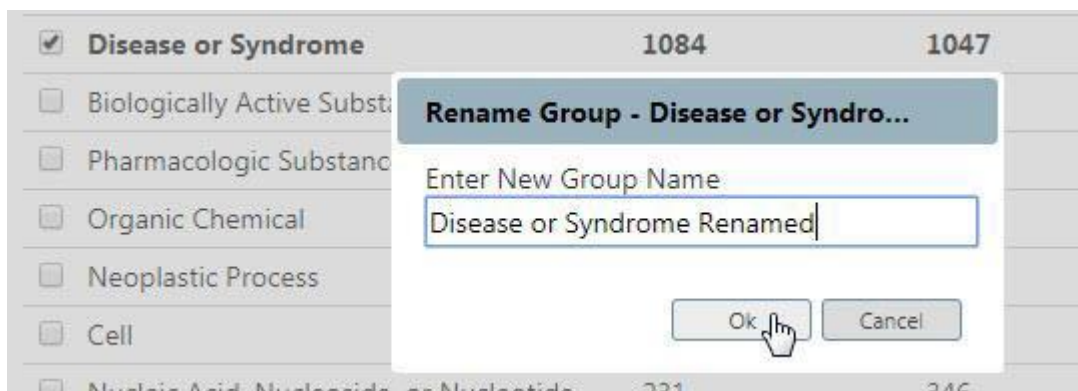


- A confirmation is presented. Click **Yes**. The selected group(s) are removed. If more than one group was selected, it will list all the groups selected, as shown below.
- Close** the Edit Groups dialog box.



## Renaming a group

1. Create (or open) a List View of the field containing the group to be renamed.
2. From the Refine ribbon, select **Edit Groups**.  
or press **Ctrl G** on the keyboard.
3. In the **Edit Groups** dialog box, click on the group name you want to change.
4. Click the **Rename** button.



5. Change the name in the **Rename Group** dialog box and then click **OK**.

|  |             |             |
|--|-------------|-------------|
| <input type="checkbox"/> Amino Acid, Peptide, or Protein               | 1630        | 1110        |
| <input checked="" type="checkbox"/> <b>Disease or Syndrome Renamed</b> | <b>1084</b> | <b>1047</b> |
| <input type="checkbox"/> Biologically Active Substance                 | 972         | 923         |
| <input type="checkbox"/> Pharmacologic Substance                       | 886         | 1833        |

6. **Close** the Edit Groups dialog box.

## Combine Groups

**Description:** Combine selected groups in a list.

**Requirements:** List with groups must exist and should preferably be open.

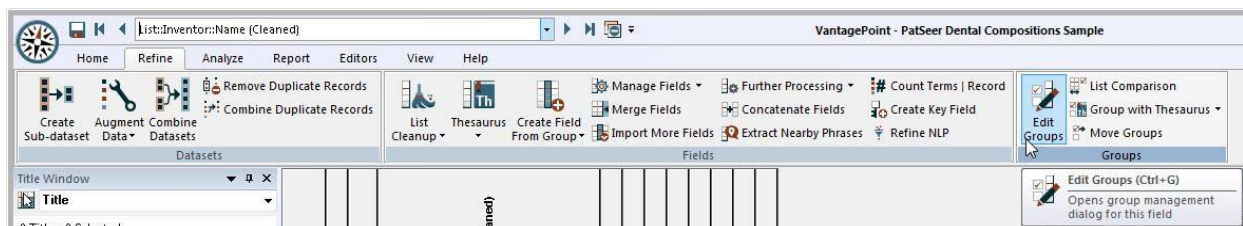
Two options are offered:

- Combine (OR), which adds all items from selected groups to a new group
- [Combine \(AND\)](#), which will combine groups and select membership based on items contained in all combined groups

### Combine (OR)

This operation combines existing groups and creates a new group, or adds group members from existing groups to another existing group. This is the equivalent of OR-ing groups together by using the list comparison function to identify common terms within the list.

Open the List you want to work with, and from the Refine ribbon, select **Edit Groups**.



You are presented with a dialog showing all the groups in the List. Check the groups you want to combine and click the **Combine** button.



Enter a New Group Name for the combined groups and click **OK**.





The List view now reflects the New Group name and membership assigned to all items with membership in the groups that were combined.

|    | # Records | # Instances | Grant Publication Year | 2000-2009 | 1990's | 2010-2019 | 2000's |
|----|-----------|-------------|------------------------|-----------|--------|-----------|--------|
| 1  | 774       | 774         | 2016                   |           |        |           |        |
| 2  | 563       | 563         | 2015                   |           |        |           |        |
| 3  | 495       | 495         | 2014                   |           |        |           |        |
| 4  | 459       | 459         | 2013                   |           |        |           |        |
| 5  | 377       | 377         | 2012                   |           |        |           |        |
| 6  | 287       | 287         | 2011                   |           |        |           |        |
| 7  | 203       | 203         | 2010                   |           |        |           |        |
| 8  | 112       | 112         | 2008                   |           |        |           |        |
| 9  | 91        | 91          | 2009                   |           |        |           |        |
| 10 | 85        | 85          | 2007                   |           |        |           |        |
| 11 | 78        | 78          | 2006                   |           |        |           |        |
| 12 | 74        | 74          | 2005                   |           |        |           |        |
| 13 | 73        | 73          | 2003                   |           |        |           |        |
| 14 | 57        | 57          | 2004                   |           |        |           |        |
| 15 | 44        | 44          | 2001                   |           |        |           |        |
| 16 | 42        | 42          | 2002                   |           |        |           |        |
| 17 | 25        | 25          | 1999                   |           |        |           |        |
| 18 | 19        | 19          | 2000                   |           |        |           |        |
| 19 | 17        | 17          | 1998                   |           |        |           |        |
| 20 | 15        | 15          | 1997                   |           |        |           |        |
| 21 | 11        | 11          | 1996                   |           |        |           |        |
| 22 | 8         | 8           | 1994                   |           |        |           |        |
| 23 | 4         | 4           | 1993                   |           |        |           |        |
| 24 | 3         | 3           | 1995                   |           |        |           |        |

### Combine (AND)

Select the groups to combine and click Combine (AND).

**Edit Groups**

| Group Name  | Members    | Records     |
|---|------------|-------------|
| <input type="checkbox"/> Organic Chemical                                   | 864        | 1831        |
| <input checked="" type="checkbox"/> <b>Pharmacologic Substance</b>          | <b>886</b> | <b>1833</b> |
| <input type="checkbox"/> Amino Acid, Peptide, or Protein                    | 1630       | 1110        |
| <input type="checkbox"/> Biologically Active Substance                      | 972        | 923         |
| <input type="checkbox"/> Nucleic Acid, Nucleoside, or Nucleotide            | 231        | 346         |
| <input type="checkbox"/> Enzyme   | 545        | 640         |
| <input checked="" type="checkbox"/> <b>Hazardous or Poisonous Substance</b> | <b>96</b>  | <b>160</b>  |
| <input type="checkbox"/> Immunologic Factor                                 | 228        | 221         |

**Group Actions:**

Select All Deselect All

Create Delete

Combine (OR) **Combine (AND)**

Change Group Color

Combine overlapping items in selected groups

Create Field From Group:

Names Items

Change Group Order:

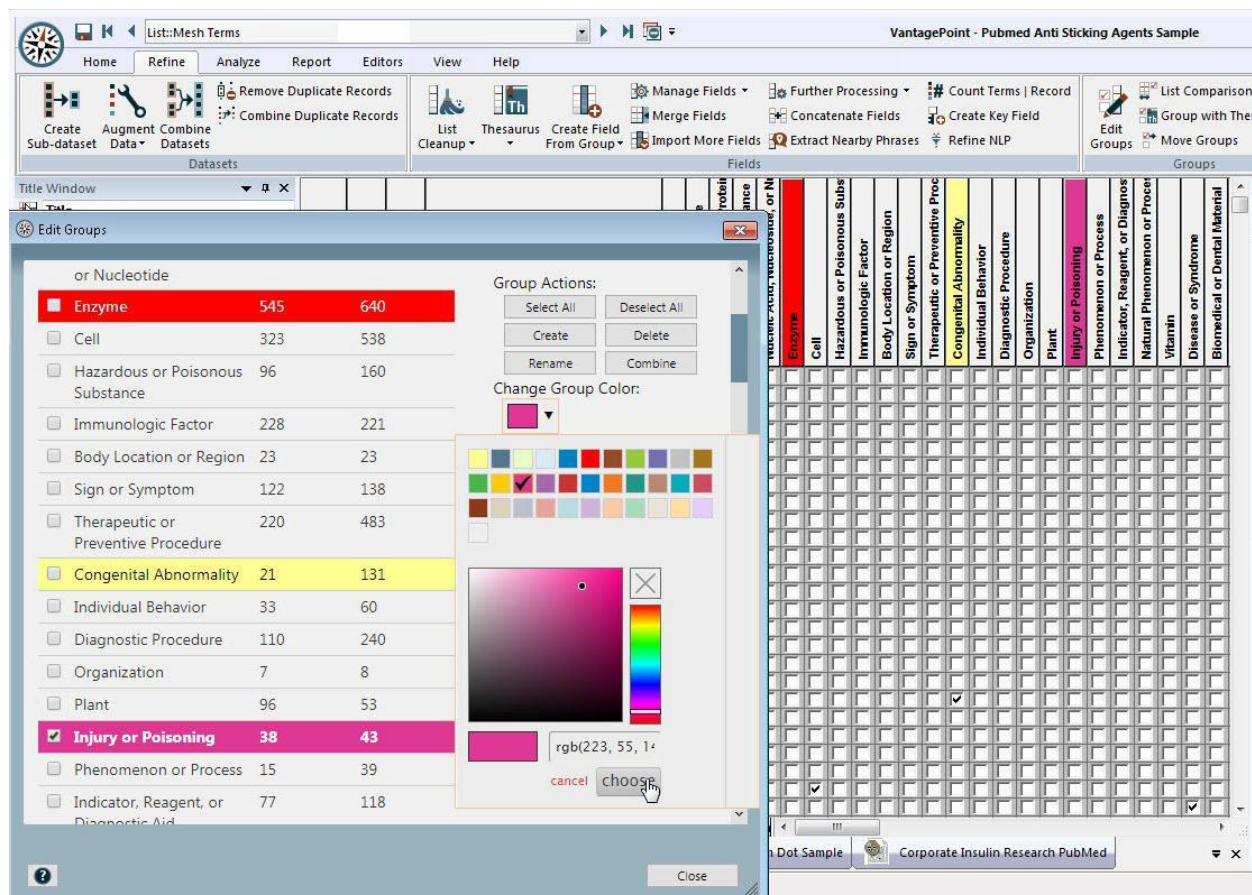
Modify Group Membership in List



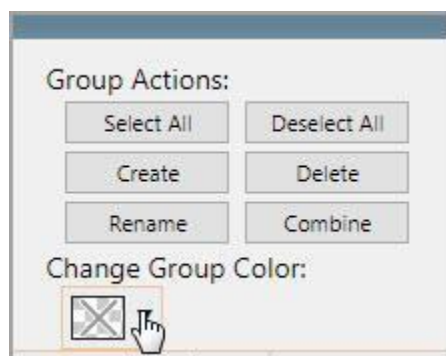


## Change Group Color

You can assign/change colors for groups, as shown here:

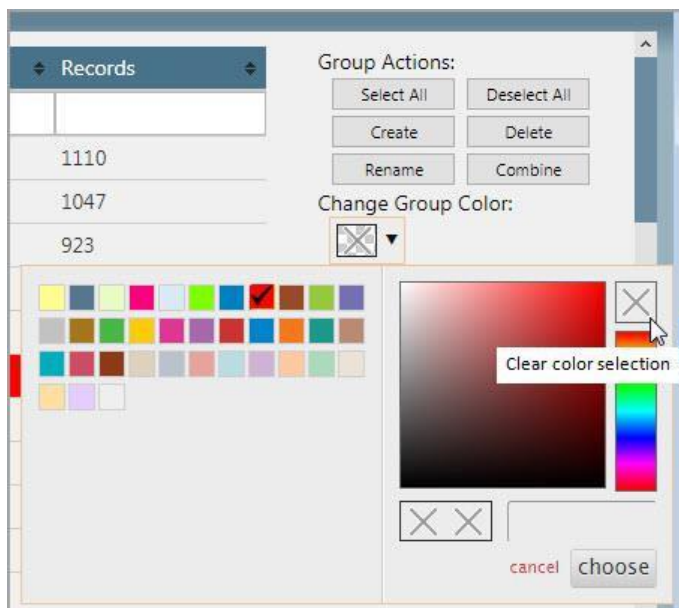


First, select the group name. Then, under Change Group Color, click the button which opens the palette.

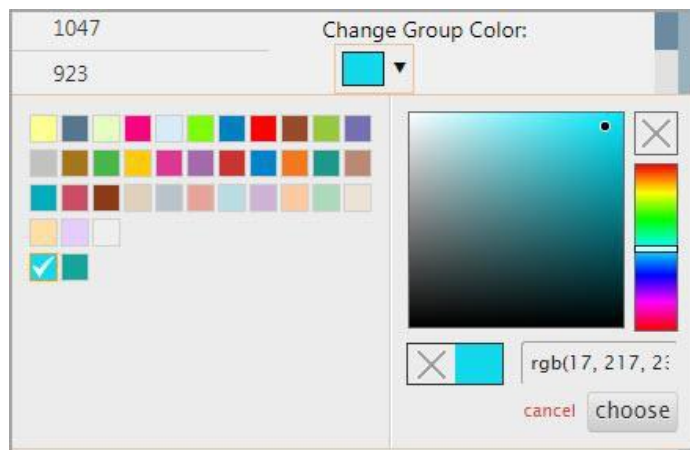
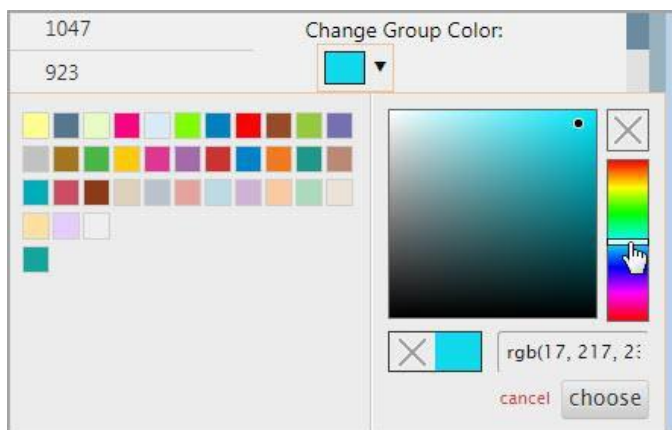


Select the desired color and click the **choose** button. The color is applied to that group in the underlying list.

To remove the color, select the group(s) and click the "Clear color selection" box shown here, then click the **choose** button:



You can also use the slider on the spectrum to change colors, or edit the rgb numbers in the window below the spectrum to arrive at the color of your choice.



As colors are selected, they are added to the palette for future selection.

The boxes below the selected color gradient indicate the previous color (left) and the current color (right).



### Create Field From Group...

You can create a new field that contains only the Group Names in a field. This is useful for displaying the results of clustering analysis in Detail Windows and/or map drop-down lists. You can also create a new field that contains only the list items in a group. This is useful for confining items displayed in a detail window or a map drop-down list to a select set. For example, you can create a field that contains only the multi-word NLP phrases from the Abstracts in your dataset.

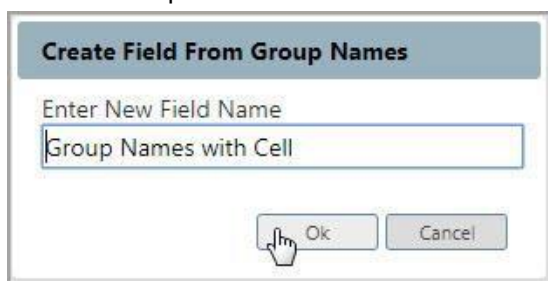
From the **Edit Groups** dialog, select the group or group names for which you want to create a field. Then, under "Create Field From Group:", select **Names** or **Items**.



In the illustration above, the user has used the Type-to-Filter feature to locate all groups containing the word "cell" for easy selection.

After clicking Create Field from Group: **Names**, you are presented with a dialog to Enter a New Field Name.

A List view is presented of the new field.



The Create Field From Group Items works the same way. It returns a list of the selected group items and retains the group assignment.

See Also:

- [Create field from group names](#)
- [Create field from group items](#)

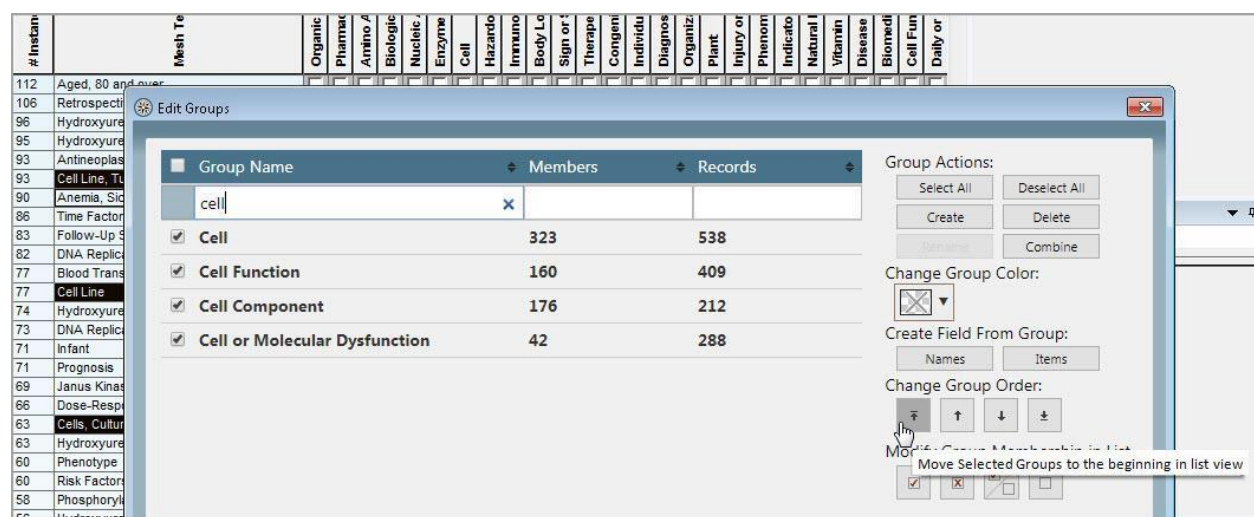


## Change Group Order

Change the Group Order by selecting one or more Groups (checking the box next to the Group name[s]) and moving up or down, to the top or to the bottom.



In this case, the user wants to move all the Group names containing the word "cell" to the top (beginning/first) in the list view. The Type-to-filter feature enables the quick location of those groups. The user selects these groups and clicks the "Move to the top" icon.



As Groups in the **Edit Groups** dialog are arranged, the underlying List is arranged accordingly, as seen in the next picture.

|    | # Records | # Instances | Mesh Terms                 | Cell | Cell Function | Cell Component | Cell or Molecular Dysfunction | Organic Chemical | Pharmacologic Substance | Amino Acid, Peptide, or Protein | Biologically Active Substance | Nucleic Acid, Nucleoside, or Nucleotide | Enzyme | Hazardous or Poisonous Substance | Immunologic Factor | Body Location or Region | Sign or Symptom | Therapeutic or Preventive Procedure | Congenital Abnormality | Individual Behavior | Diagnostic Procedure | Organization | Plant | Injury or Poisoning | Phenomenon or Process |
|----|-----------|-------------|----------------------------|------|---------------|----------------|-------------------------------|------------------|-------------------------|---------------------------------|-------------------------------|---|--------|----------------------------------|--------------------|-------------------------|-----------------|-------------------------------------|------------------------|---------------------|----------------------|--------------|-------|---------------------|-----------------------|
| 19 | 112       | 112         | Aged, 80 and over          |      |               |                |                               |                  |                         |                                 |                               |   |        |                                  |                    |                         |                 |                                     |                        |                     |                      |              |       |                     |                       |
| 20 | 106       | 106         | Retrospective Studies      |      |               |                |                               |                  |                         |                                 |                               |   |        |                                  |                    |                         |                 |                                     |                        |                     |                      |              |       |                     |                       |
| 21 | 96        | 96          | Hydroxyurea                |      |               |                |                               |                  |                         |                                 |                               |   |        |                                  |                    |                         |                 |                                     |                        |                     |                      |              |       |                     |                       |
| 22 | 95        | 95          | Hydroxyurea                |      |               |                |                               |                  |                         |                                 |                               |   |        |                                  |                    |                         |                 |                                     |                        |                     |                      |              |       |                     |                       |
| 23 | 93        | 93          | Antineoplastic Agents      |      |               |                |                               |                  |                         |                                 |                               |   |        |                                  |                    |                         |                 |                                     |                        |                     |                      |              |       |                     |                       |
| 24 | 93        | 93          | Cell Line, Tumor           |      |               |                |                               |                  |                         |                                 |                               |   |        |                                  |                    |                         |                 |                                     |                        |                     |                      |              |       |                     |                       |
| 25 | 90        | 90          | Anemia, Sickle Cell        |      |               |                |                               |                  |                         |                                 |                               |   |        |                                  |                    |                         |                 |                                     |                        |                     |                      |              |       |                     |                       |
| 26 | 86        | 86          | Time Factors               |      |               |                |                               |                  |                         |                                 |                               |   |        |                                  |                    |                         |                 |                                     |                        |                     |                      |              |       |                     |                       |
| 27 | 83        | 83          | Follow-Up Studies          |      |               |                |                               |                  |                         |                                 |                               |   |        |                                  |                    |                         |                 |                                     |                        |                     |                      |              |       |                     |                       |
| 28 | 82        | 82          | DNA Replication            |      |               |                |                               |                  |                         |                                 |                               |   |        |                                  |                    |                         |                 |                                     |                        |                     |                      |              |       |                     |                       |
| 29 | 77        | 77          | Blood Transfusion          |      |               |                |                               |                  |                         |                                 |                               |   |        |                                  |                    |                         |                 |                                     |                        |                     |                      |              |       |                     |                       |
| 30 | 77        | 77          | Cell Line                  |      |               |                |                               |                  |                         |                                 |                               |   |        |                                  |                    |                         |                 |                                     |                        |                     |                      |              |       |                     |                       |
| 31 | 74        | 74          | Hydroxyurea                |      |               |                |                               |                  |                         |                                 |                               |   |        |                                  |                    |                         |                 |                                     |                        |                     |                      |              |       |                     |                       |
| 32 | 73        | 73          | DNA Replication            |      |               |                |                               |                  |                         |                                 |                               |   |        |                                  |                    |                         |                 |                                     |                        |                     |                      |              |       |                     |                       |
| 33 | 71        | 71          | Infant                     |      |               |                |                               |                  |                         |                                 |                               |   |        |                                  |                    |                         |                 |                                     |                        |                     |                      |              |       |                     |                       |
| 34 | 71        | 71          | Prognosis                  |      |               |                |                               |                  |                         |                                 |                               |   |        |                                  |                    |                         |                 |                                     |                        |                     |                      |              |       |                     |                       |
| 35 | 69        | 69          | Janus Kinase Inhibitors    |      |               |                |                               |                  |                         |                                 |                               |   |        |                                  |                    |                         |                 |                                     |                        |                     |                      |              |       |                     |                       |
| 36 | 66        | 66          | Dose-Response Relationship |      |               |                |                               |                  |                         |                                 |                               |   |        |                                  |                    |                         |                 |                                     |                        |                     |                      |              |       |                     |                       |
| 37 | 63        | 63          | Cells, Cultured            |      |               |                |                               |                  |                         |                                 |                               |   |        |                                  |                    |                         |                 |                                     |                        |                     |                      |              |       |                     |                       |
| 38 | 63        | 63          | Hydroxyurea                |      |               |                |                               |                  |                         |                                 |                               |   |        |                                  |                    |                         |                 |                                     |                        |                     |                      |              |       |                     |                       |
| 39 | 60        | 60          | Phenotype                  |      |               |                |                               |                  |                         |                                 |                               |   |        |                                  |                    |                         |                 |                                     |                        |                     |                      |              |       |                     |                       |
| 40 | 60        | 60          | Risk Factors               |      |               |                |                               |                  |                         |                                 |                               |   |        |                                  |                    |                         |                 |                                     |                        |                     |                      |              |       |                     |                       |
| 41 | 58        | 58          | Phosphorylation            |      |               |                |                               |                  |                         |                                 |                               |   |        |                                  |                    |                         |                 |                                     |                        |                     |                      |              |       |                     |                       |
| 42 | 56        | 56          | Hydroxyurea                |      |               |                |                               |                  |                         |                                 |                               |   |        |                                  |                    |                         |                 |                                     |                        |                     |                      |              |       |                     |                       |
| 43 | 56        | 56          | Hydroxyurea                |      |               |                |                               |                  |                         |                                 |                               |   |        |                                  |                    |                         |                 |                                     |                        |                     |                      |              |       |                     |                       |
| 44 | 56        | 56          | Nucleic Acid               |      |               |                |                               |                  |                         |                                 |                               |   |        |                                  |                    |                         |                 |                                     |                        |                     |                      |              |       |                     |                       |
| 45 | 52        | 52          | HeLa Cells                 |      |               |                |                               |                  |                         |                                 |                               |   |        |                                  |                    |                         |                 |                                     |                        |                     |                      |              |       |                     |                       |
| 46 | 52        | 52          | Prospective Studies        |      |               |                |                               |                  |                         |                                 |                               |   |        |                                  |                    |                         |                 |                                     |                        |                     |                      |              |       |                     |                       |
| 47 | 52        | 52          | Saccharon                  |      |               |                |                               |                  |                         |                                 |                               |   |        |                                  |                    |                         |                 |                                     |                        |                     |                      |              |       |                     |                       |
| 48 | 51        | 51          | DNA Repair                 |      |               |                |                               |                  |                         |                                 |                               |   |        |                                  |                    |                         |                 |                                     |                        |                     |                      |              |       |                     |                       |
| 49 | 49        | 49          | Pregnancy                  |      |               |                |                               |                  |                         |                                 |                               |   |        |                                  |                    |                         |                 |                                     |                        |                     |                      |              |       |                     |                       |
| 50 | 48        | 48          | Cell Cycle                 |      |               |                |                               |                  |                         |                                 |                               |   |        |                                  |                    |                         |                 |                                     |                        |                     |                      |              |       |                     |                       |
| 51 | 48        | 48          | Imatinib Mesylate          |      |               |                |                               |                  |                         |                                 |                               |   |        |                                  |                    |                         |                 |                                     |                        |                     |                      |              |       |                     |                       |
| 52 | 46        | 46          | Cell Proliferation         |      |               |                |                               |                  |                         |                                 |                               |   |        |                                  |                    |                         |                 |                                     |                        |                     |                      |              |       |                     |                       |
| 53 | 46        | 46          | Combined Modality Therapy  |      |               |                |                               |                  |                         |                                 |                               |   |        |                                  |                    |                         |                 |                                     |                        |                     |                      |              |       |                     |                       |

Groups can also be sorted alphabetically, or according to their number of Members or Records. Clicking on the Group Name (or Members or Records) column header in the Edit Groups dialog sorts each. Clicking the column header again sorts in the reverse order from the previous sort.

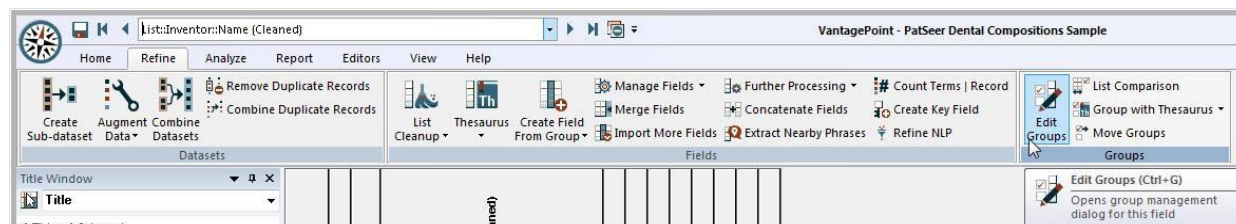


## Modify Group Membership

You can change the group membership for selected items in a list using the "Modify Group Membership in List" section in the **Edit Groups** dialog box.



Select an item (or items) in a List view, then select **Edit Groups** from the Refine ribbon.



Select the group (or groups) for which membership will be assigned/excluded/removed, and click the icon for the desired action (defined in the image below).

The explanation of each of the icons in this grouping are:



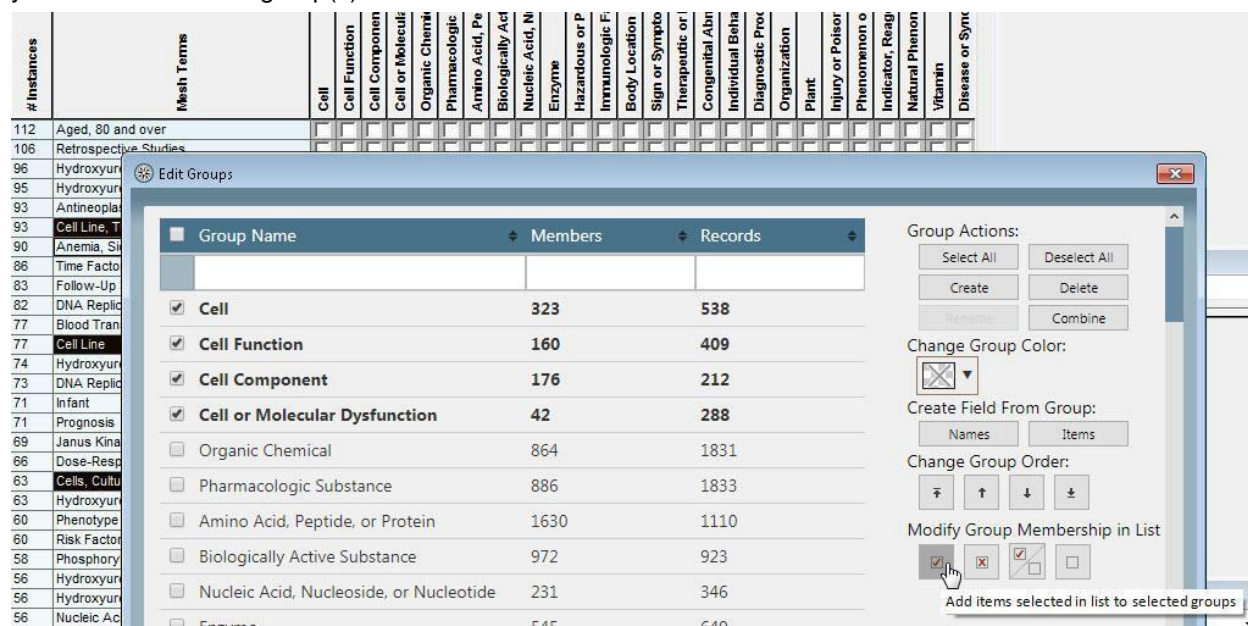
1. 2. 3. 4.

1. Add Selection to Group
2. Exclude Membership
3. Toggle Membership
4. Clear

1. **Add:** Add the items selected in the list view to the selected group.
2. **Exclude:** Adds an Exclude tag to the items selected in the list view.
3. **Toggle:** Toggle the group membership of the items selected in the list view. The selected items that are in the group are removed and the selected items that are not in the group are added.
4. **Clear:** remove the items selected in the list view from the selected group.

Here, the user is assigning Group membership for the items selected in the underlying List. In this example, Membership will be added to the selected Groups.

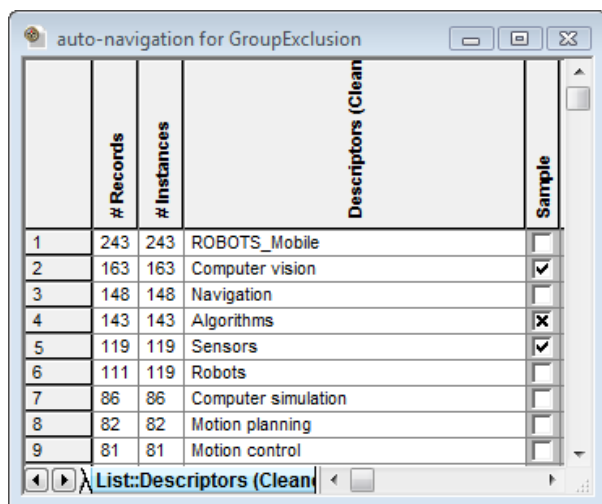
If group membership were already assigned and you wanted to remove the selected items from the groups, you would select the group(s) and click the "Clear" icon.



### Using Group Exclusion in new dataset operation

The group membership check box has three states: "blank," "checked," and "excluded" (x). For most operations, "excluded" is used in the same manner as "blank" (i.e., the list item is not a member of the group). However, when creating new datasets using a group, the "excluded" state has the specific meaning of a Boolean NOT operator. For example, in the following illustration, a new dataset created using the group "Sample" would include all records that meet the following criteria:

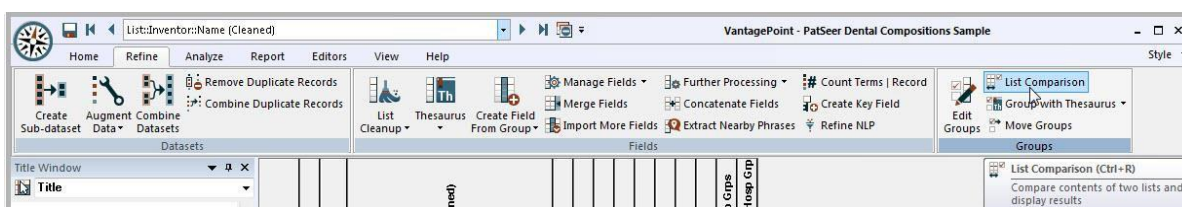
((Descriptors = "Computer vision" OR Descriptors = "Sensors") NOT Descriptors = "Algorithms")



## Creating Groups by Comparing two lists

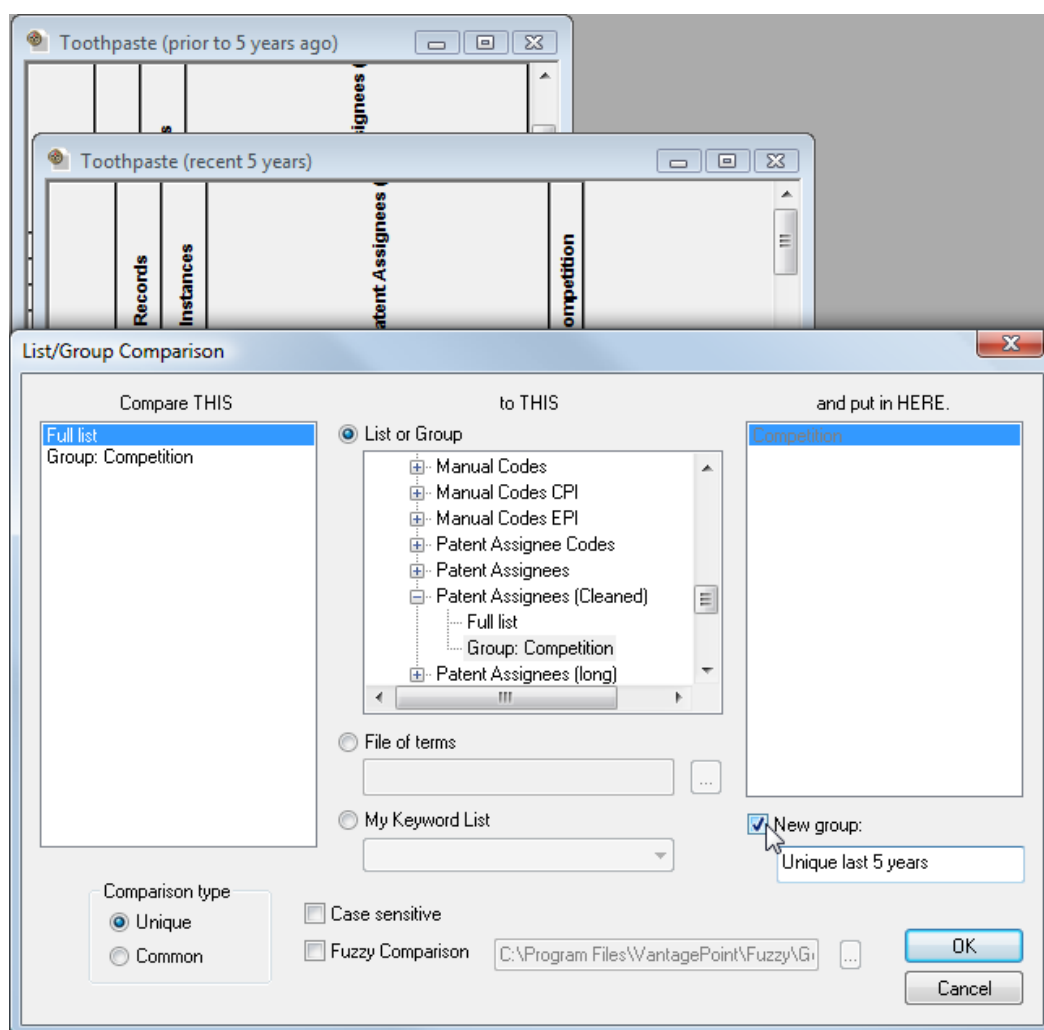
List comparison creates tags on the items in the first list that are either unique to the first list or shared in common with a second list.

1. To compare two lists, you first open the \*.vpt file(s) you want to compare.
2. Create (or open) a view of the first list.
3. From the Refine ribbon, select **List Comparison**



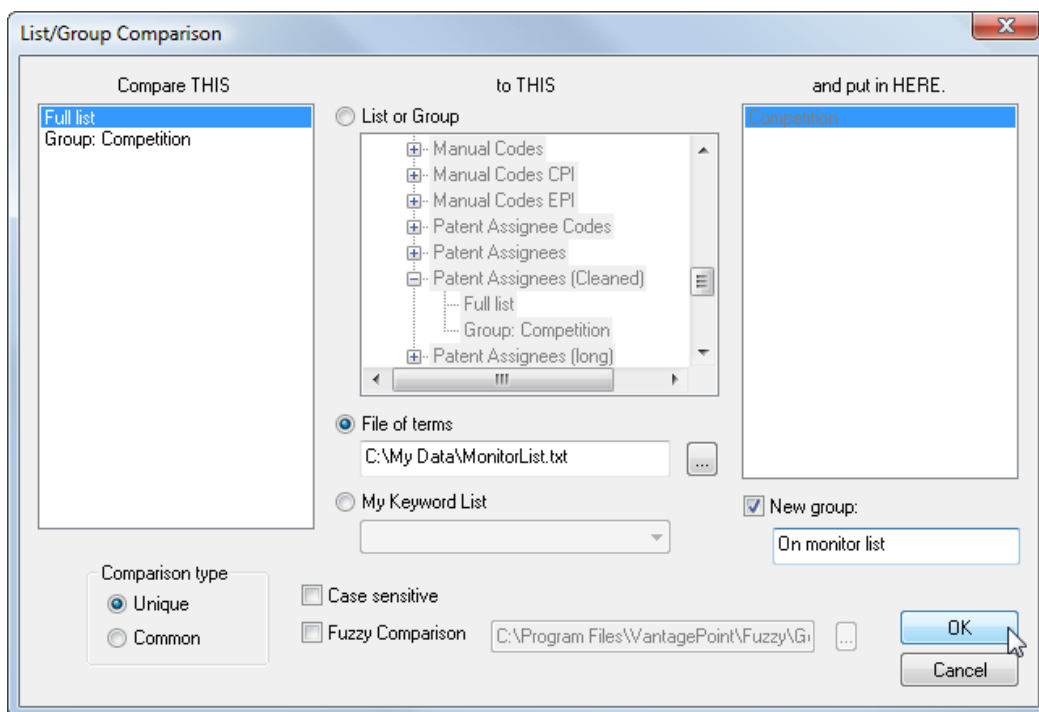
or press **Ctrl R** on the keyboard.

4. Click on the group name you want to compare ("Compare THIS"). If you want to use the whole list, click on "Full list."

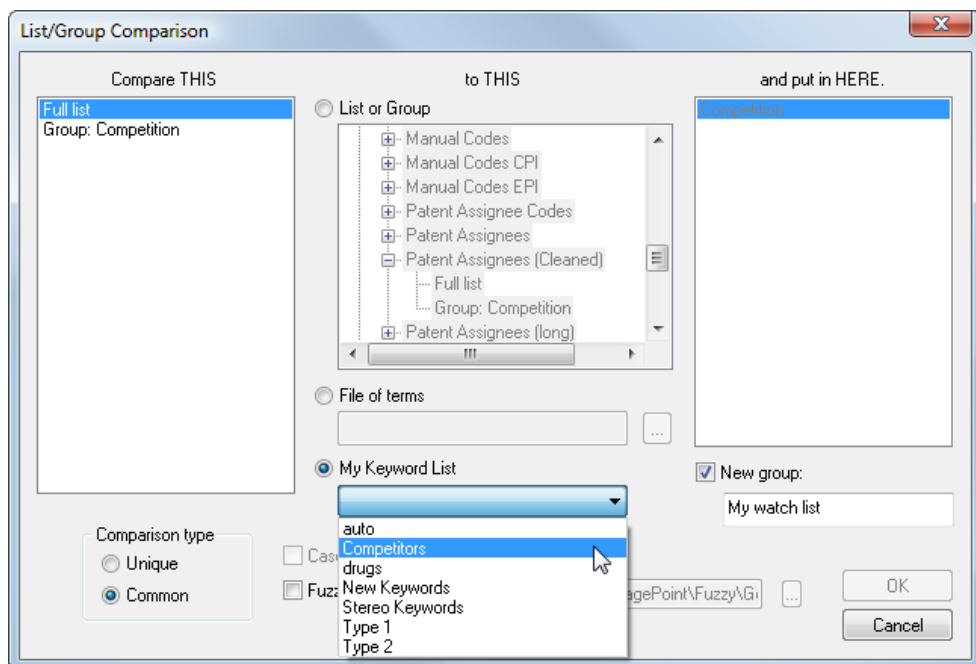


5. **List or Group** - If you want to compare to a List or Group, click on the list or group you want to compare with ("to THIS"). You may choose a list or group from the same dataset or from another open dataset.

**File of terms** - Alternatively, you may compare to a list of terms in a file by clicking on this radio button. The file must be a plain text file, with one term per line. The following illustration shows the user choosing to compare the list to a File of terms, and specifies the file "MonitorList.txt", which the user has created and stored in the "My Data" folder.



**My Keyword List** – You may compare to a [Keyword List](#) of terms you created in VantagePoint. The Keyword List is selected from the dropdown box, as shown here.

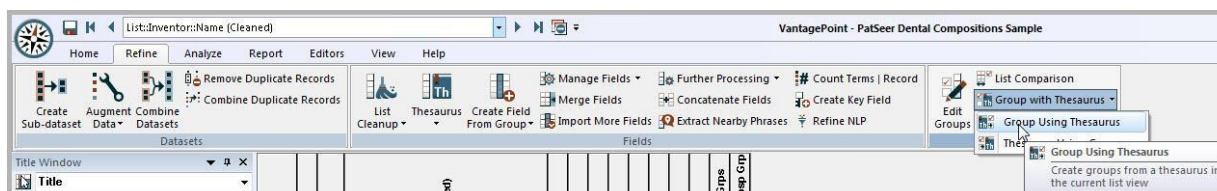


6. Determine the group name to which you want to add the tags ("and put in HERE"). By default, the tags go into a new group. You may name this group in the text box beside the "New group" checkbox. If you prefer, you can add the tags to an existing group by un-checking the "New group" checkbox and then clicking on the group name.
7. Indicate the type of comparison you want in the "Comparison type" box. If you choose "Unique", a checkmark will be added to the list items that occur in the first list and not in the second list. If you choose "Common", a checkmark will be added to the list items that occur in both the first and second lists.
8. Check the "Case sensitive" box if you want the comparison to be sensitive to upper and lower case. If this box is left unchecked, then comparisons are made without regard to upper- or lower-case characters.
9. If you want the comparisons to be made using the fuzzy matching module (The "Fuzzy" module specifies rules and parameters that guide the process of matching one term to another), check "Fuzzy Comparison". Then choose the fuzzy module to use (normally located in \Program Files\VantagePoint\Fuzzy) by clicking [...] next to the path location. Select the module from the **Choose Fuzzy Matching Configuration...** dialog box and click **Open**.
10. Click **OK** to perform the comparison.

## Creating groups using a thesaurus

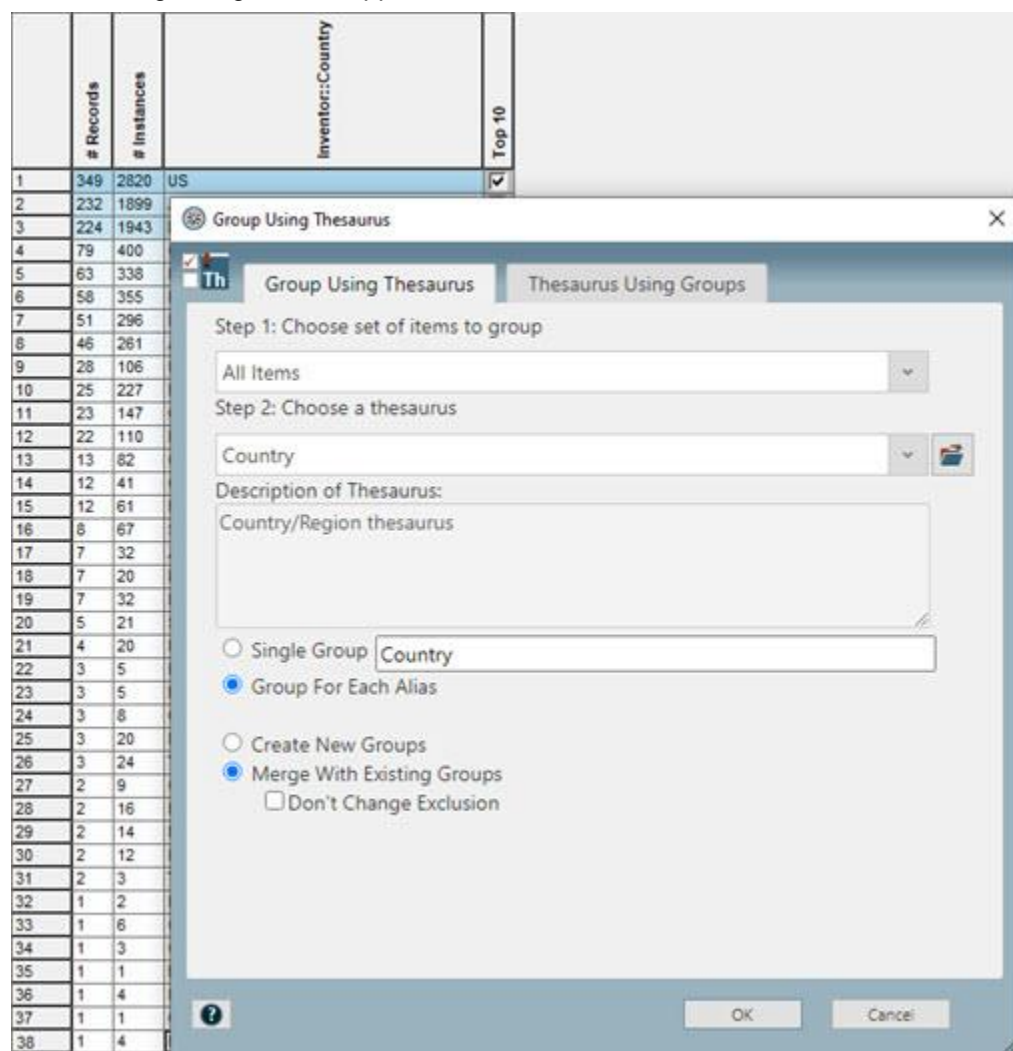
You can use thesauri to create groups in a list. This is useful for creating collections of list items using previously defined, reusable thesauri.

With the List View displayed, from the Refine ribbon, click the **Group with Thesaurus** dropdown and choose **Group Using Thesaurus**.



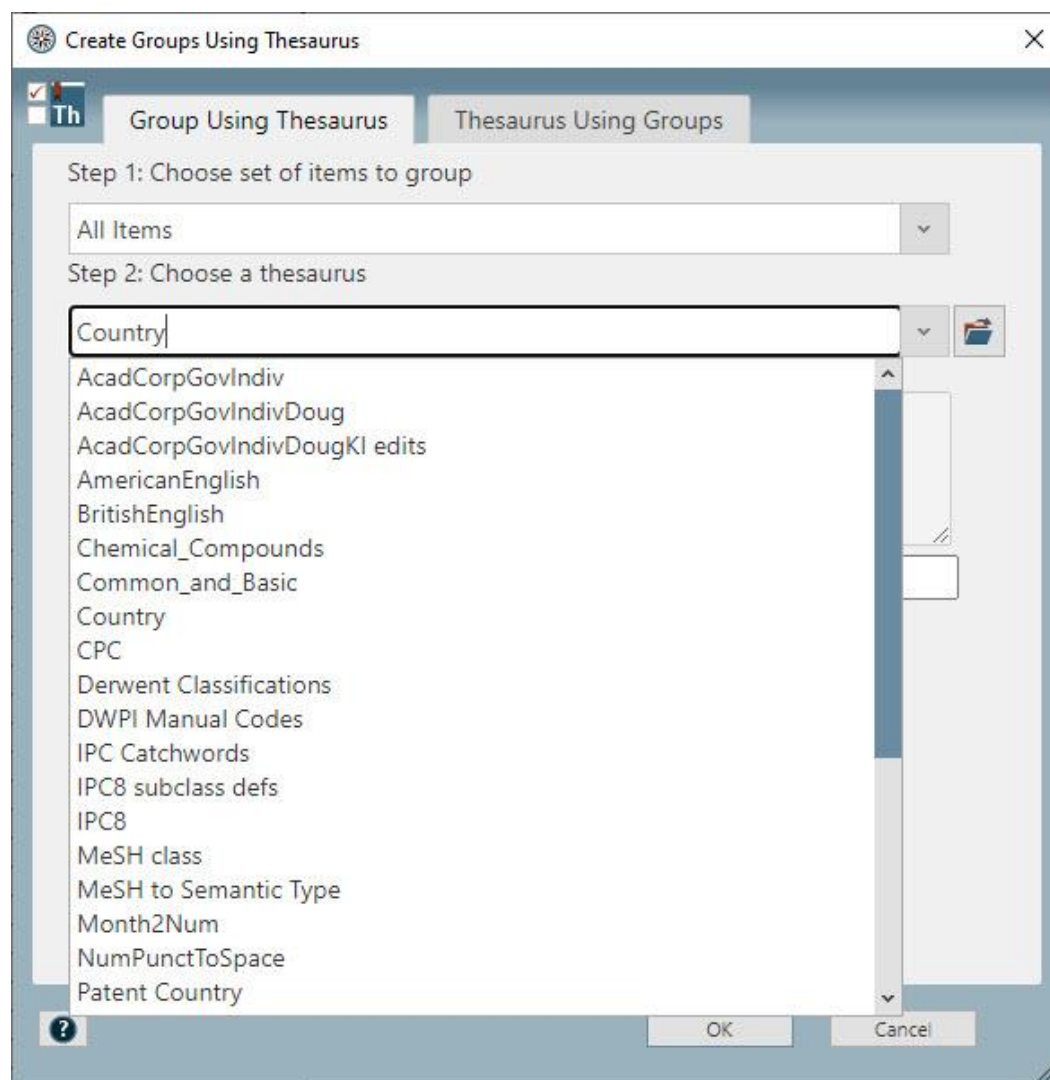


The following dialog box will appear.



In Step 1, Choose the set of items you want to work on (either All items in the list or one of the groups). If you have already defined some groups in the list, the group names will be shown in the dropdown below "All Items".

In Step 2, choose the Thesaurus you want to use. The dropdown displays the files available in the Thesaurus folder, as shown below. Or, if you want to use another Thesaurus, click the Browse button to the right of the dropdown to navigate to the file location and select the thesaurus you want to use to create the groups.



Next, specify how the groups are to be created.

**Single Group:** Choose this option to place ALL list items that match ANY pattern in the thesaurus to a single group (see illustration below).

**Group For Each Alias:** Choose this option to create a group for each alias in the thesaurus (see illustration below).

**Create New Groups:** Choose this option to make new groups. If your list already has a group with the same name as one being created, a number will be appended to the name to keep each group name unique.

**Merge With Existing Groups:** Choose this option to use the existing groups where possible (i.e., if there is a match between an existing group name and an alias in the thesaurus, put new matches in the existing group). The Create Groups Using Thesaurus operation does not remove list items from group membership - it only adds items to groups (but see "Don't Change Exclusion" below).

When merging with existing groups, there is an additional option:

**Don't Change Exclusion:** Check this box if you want to give precedence to pre-existing group exclusions. With this OFF (default - no checkmark), if a list item already has an exclusion (an "X") in the group membership and the list item is matched in the thesaurus, then the "X" will be removed and a checkmark will be put in its place. Click this ON (checkmark) if you want to retain the "X" in this situation.

Click **Finish**.

The following illustration contrasts the distinction between **Group For Each Alias** and **Single Group**. The same thesaurus was used to create the Groups "Europe", "Oceania", "Asia", "Middle East", and "Central America..." in one instance, and the "Known" group in the other.

#### Group for Each Alias:

|    | # Records | # Instances | Inventor::Country | Top 10 | Europe | Oceania | Asia | Middle East | Central America an |
|----|-----------|-------------|-------------------|--------|--------|---------|------|-------------|--------------------|
| 4  | 116       | 360         | TW                |        |        |         |      |             |                    |
| 5  | 91        | 260         | CN                |        |        |         |      |             |                    |
| 6  | 64        | 140         | GB                |        |        |         |      |             |                    |
| 7  | 50        | 110         | CA                |        |        |         |      |             |                    |
| 8  | 38        | 175         | RU                |        |        |         |      |             |                    |
| 9  | 26        | 73          | DE                |        |        |         |      |             |                    |
| 10 | 15        | 43          | FR                |        |        |         |      |             |                    |
| 11 | 9         | 17          | ES                |        |        |         |      |             |                    |
| 12 | 9         | 37          | RO                |        |        |         |      |             |                    |
| 13 | 9         | 26          | SG                |        |        |         |      |             |                    |
| 14 | 8         | 17          | IL                |        |        |         |      |             |                    |
| 15 | 7         | 7           | IN                |        |        |         |      |             |                    |
| 16 | 7         | 13          | MY                |        |        |         |      |             |                    |
| 17 | 7         | 11          | NL                |        |        |         |      |             |                    |
| 18 | 6         | 9           | SE                |        |        |         |      |             |                    |
| 19 | 4         | 8           | AU                |        |        |         |      |             |                    |
| 20 | 4         | 11          | CH                |        |        |         |      |             |                    |
| 21 | 3         | 5           | AT                |        |        |         |      |             |                    |
| 22 | 2         | 5           | BE                |        |        |         |      |             |                    |
| 23 | 2         | 6           | CH                |        |        |         |      |             |                    |

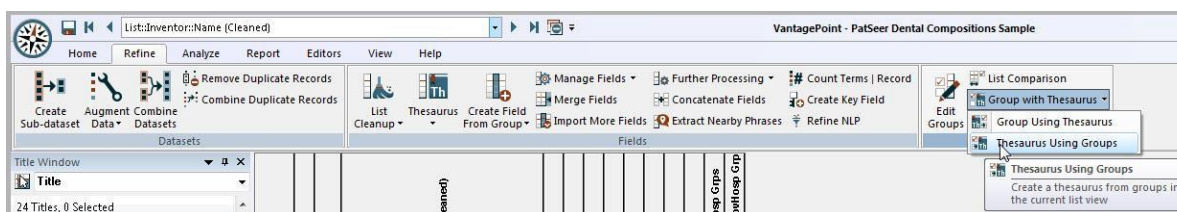
#### Single Group:

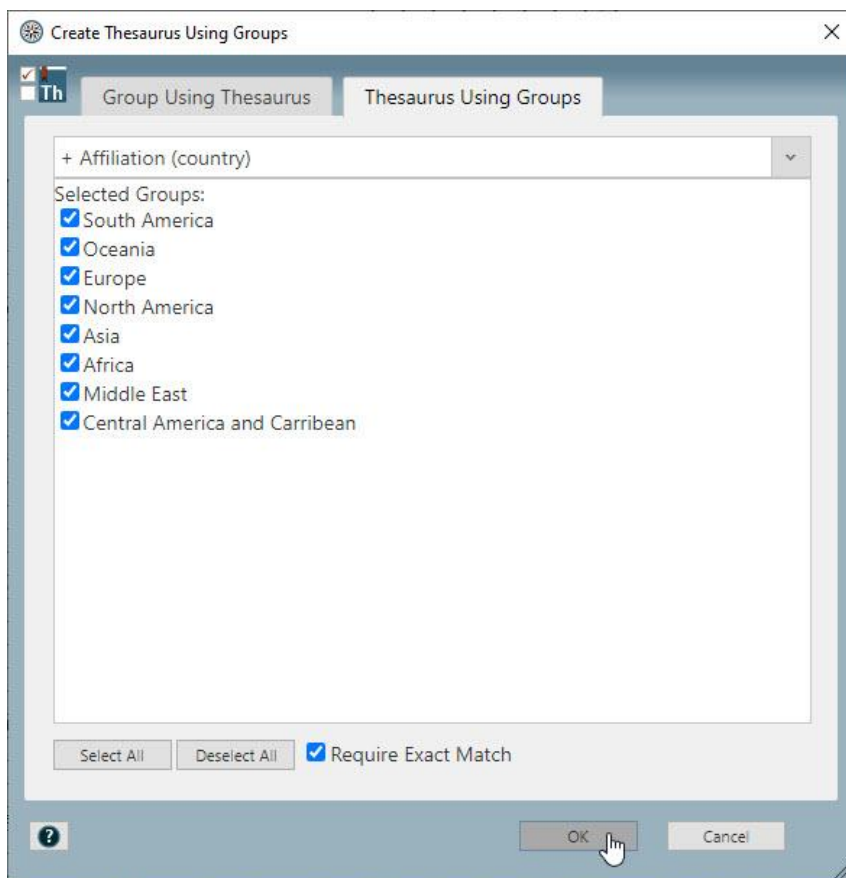
|    | # Records | # Instances | Inventor::Country | Top 10 | Known |
|----|-----------|-------------|-------------------|--------|-------|
| 4  | 116       | 360         | TW                |        |       |
| 5  | 91        | 260         | CN                |        |       |
| 6  | 64        | 140         | GB                |        |       |
| 7  | 50        | 110         | CA                |        |       |
| 8  | 38        | 175         | RU                |        |       |
| 9  | 26        | 73          | DE                |        |       |
| 10 | 15        | 43          | FR                |        |       |
| 11 | 9         | 17          | ES                |        |       |
| 12 | 9         | 37          | RO                |        |       |
| 13 | 9         | 26          | SG                |        |       |
| 14 | 8         | 17          | IL                |        |       |
| 15 | 7         | 7           | IN                |        |       |
| 16 | 7         | 13          | MY                |        |       |
| 17 | 7         | 11          | NL                |        |       |
| 18 | 6         | 9           | SE                |        |       |
| 19 | 4         | 8           | AU                |        |       |

### Creating a thesaurus using groups

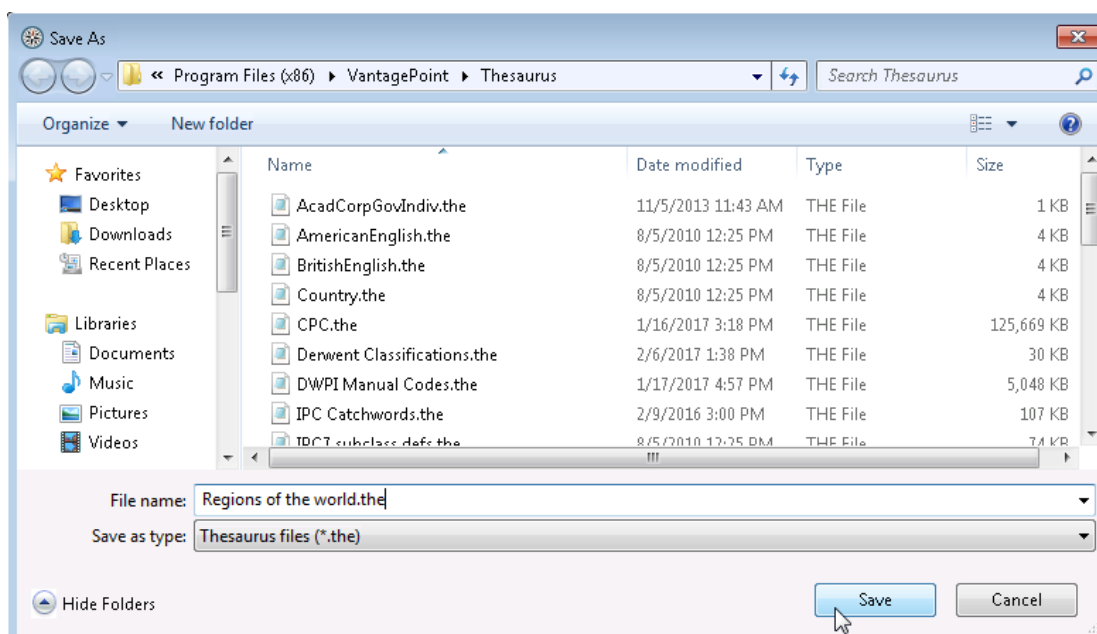
A thesaurus can be created from groups in a List View. This is useful for transferring the results of a statistical or manual grouping process from one dataset to another.

1. With a List View open and groups already created in your list, select the Refine ribbon, click **Group with Thesaurus**, and select **Thesaurus Using Groups**.





2. A list of the groups is presented. Select the groups that you want to use in your thesaurus (Click, Ctrl-Click, and/or Shift-Click). If you want the thesaurus to require an exact match to the list terms, place a checkmark in the "Require exact match" checkbox. If you uncheck this checkbox, the thesaurus will use the less restrictive condition of "contains" when matching terms. Click **OK** to continue.
3. Next you will be prompted for a file name and location in a **Save As ...** dialog box. You can create a new thesaurus, or you can merge with an existing thesaurus.

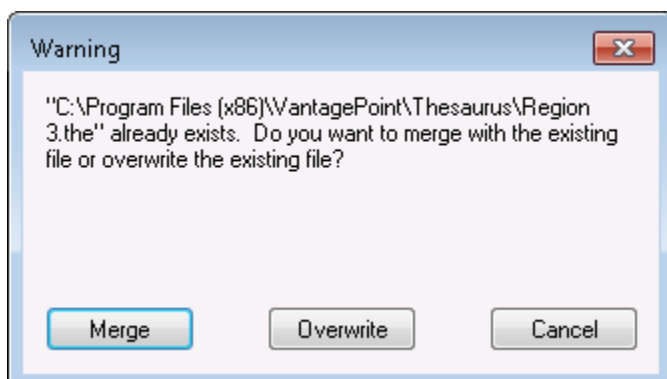


If you choose to merge the results with an existing thesaurus, refer to the next section: [Merging into an Existing Thesaurus](#).

Because a list item may belong to more than one group, you may also find multiple matches in your thesaurus. Refer to the section [Managing Multiple Matches in a Thesaurus](#) if this occurs.

### *Merging into an existing thesaurus*

When you click **Save As Thesaurus** in the **Cleanup Confirm** dialog box or create a thesaurus using groups (Menu item **Groups** and **Create Thesaurus using Groups ...**) and select an existing thesaurus file (\*.the) for the operation, you see the following warning:



**Merge** will preserve the existing thesaurus and add the new items to it. When multiple matches arise, you will see the **Multiple Matches in Thesaurus** dialog box (see the section on [Managing Multiple Matches in a Thesaurus](#)).

**Overwrite** will erase the contents of the existing thesaurus before continuing. If you are creating a thesaurus using groups, you may still encounter multiple matches.

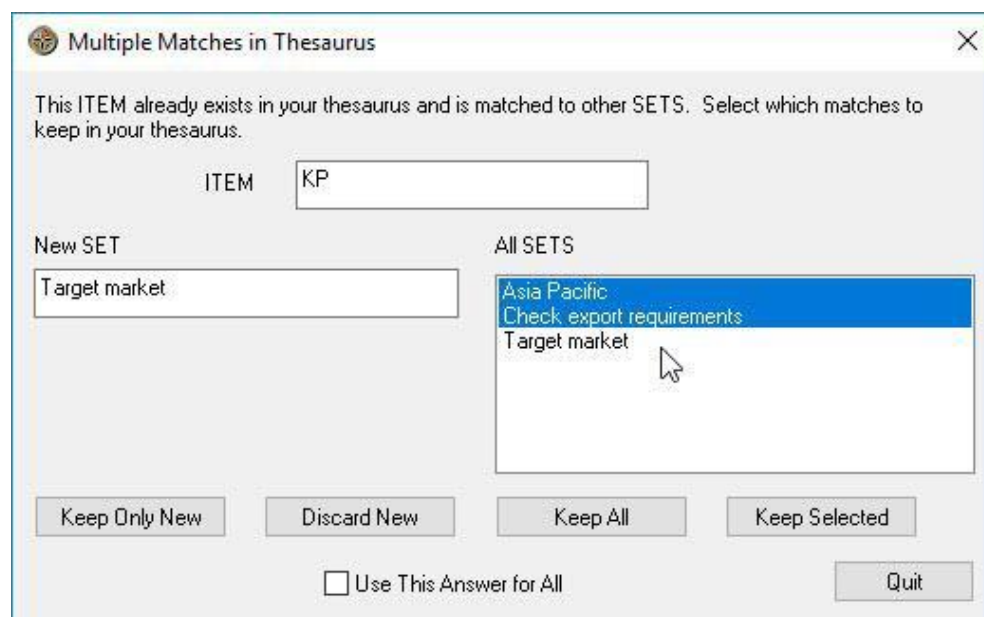
### *Managing Multiple Matches in a thesaurus*

When automatically adding to a thesaurus (from "[List Cleanup](#)" or creating "[Thesaurus using Groups](#)"), it is possible (even likely) that a list item gets matched to more than one "alias." This is allowable and even desirable when creating a thesaurus from groups for the purpose of creating groups in another dataset.

**Note:** If multiple matches exist in a thesaurus and that thesaurus is applied to a list for the purpose of list reduction (Refine ribbon and Thesaurus), currently only one entry in the thesaurus is used - the others are ignored. Therefore, allowing multiple matches in a thesaurus is only recommended for creating groups using a thesaurus.

If your "List Cleanup - Save as Thesaurus" or "Thesaurus using Groups" action results in multiple matches, you will see the following dialog box:





In this example, the list item "KP" already belongs to two groups – "Asia Pacific" and "Check export requirements". An additional match occurred when VantagePoint encountered the third group membership for "KP" ("Target market").

Here is an explanation of the dialog box:

**ITEM:** This is the Item that already exists in the thesaurus. In this example, the Item is 'KP'.

**New SET:** This is the new, additional Set for the ITEM. In this example "KP" newly belongs to the SET "Target market".

**All SETS:** This is a multi-select list of the prior SET(s) and the new SET. In the illustration above, this includes the previous sets "Asia Pacific" and "Check export requirements", and a new Set "Target market".

**Keep Only New** - Clicking this button will keep only the new match and delete all others. In this example, the thesaurus relationship between "KP" and the two SETS "Asia Pacific" and "Check export requirements" would be deleted, and only one thesaurus relation between "KP" and "Target market" would be added.

**Discard New** - Clicking this button will keep only the existing matches and not enter the new one. In this example, the thesaurus relation between "KP" and "Target market" would not be added. The other two would be retained.

**Keep All** - Clicking this button keeps the existing matches and the new match also (i.e., keeps all matches shown in the "All SETS" list).

**Keep Selected** - You can select the matches you want to keep in the "All SETS" list and click this button to keep only the selected matches. Click, Ctrl-Click, and Shift-Click all work to select items in this list box.

**Use This Answer for All** - "Checking" this checkbox will use the next button you click for all subsequent ambiguities in this operation. When this box is checked, here are the functions of each of the buttons:

**Keep Only New** - When any multiple matches occur, all existing matches will be deleted and only the new one will remain. If there are multiple new matches for an item, only the last one encountered survives. This prefers the new matches.

**Discard New** - When any multiple matches occur, only the existing matches will be retained - the new one will be discarded. This prefers the old matches.

**Keep All** - This adds all new matches to the thesaurus and retains all of the existing matches, too.

**Keep Selected** - This button is disabled when "Use This Answer for All" is checked.

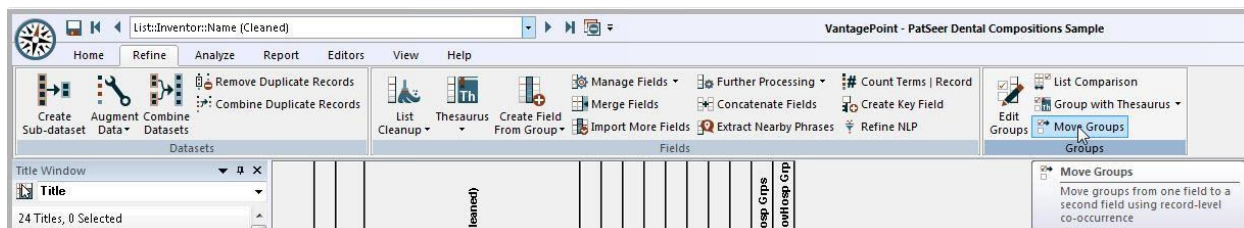
## Move Groups

*Description:* Move groups from one list to another.

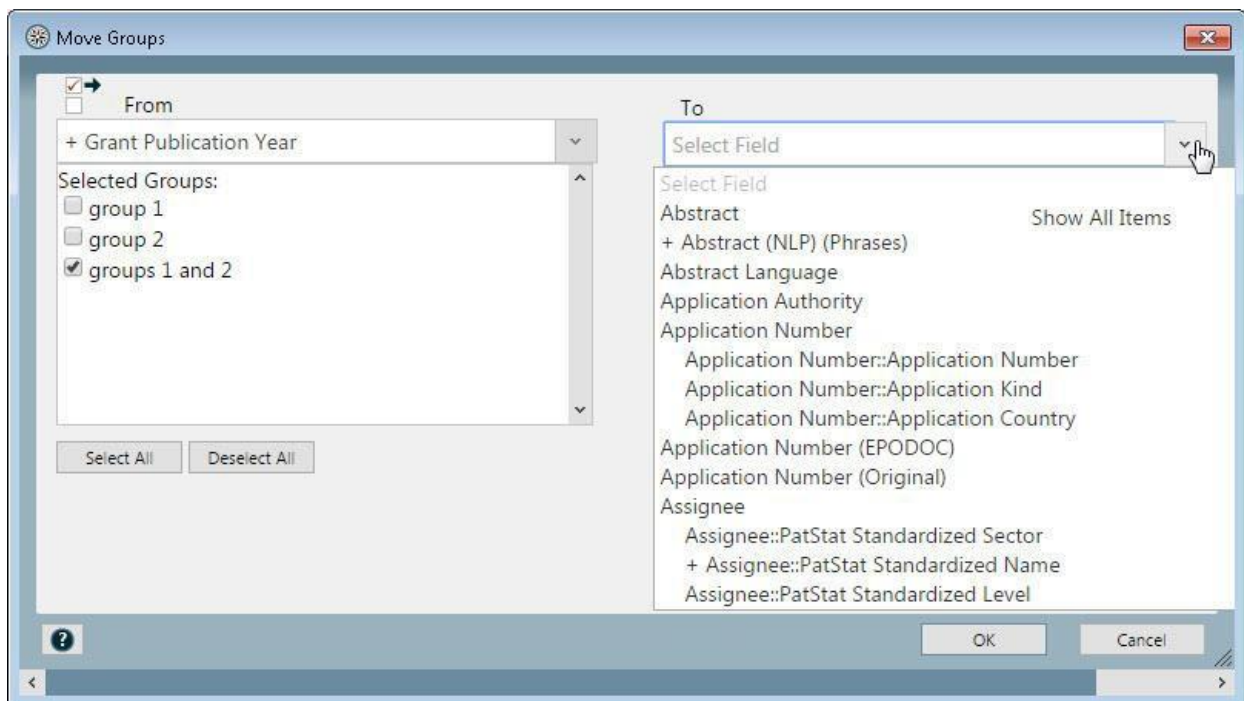
*Requirements:* List with groups is open.

*Usage:* Handy way to apply categories created in one field to another field (e.g., applying groups of subject terms to a list of organizations).

Open the List you want to work with, and from the Refine ribbon, select **Move Groups**.



In the left panel, select the Group(s) in the field you want to move **From**:



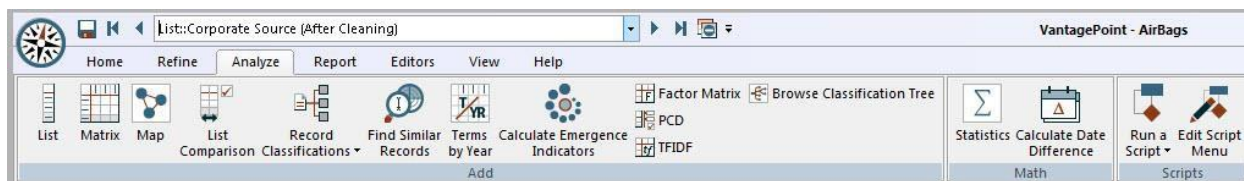
In the right panel, select the field you want to move the Group(s) **To**.

A list view of the field to which the Group(s) were moved is displayed with the group membership assigned.

## Analyze

The **Analyze Ribbon** includes these functions:

Add Lists, Matrices, Maps; perform List Comparison, assign Record Classifications, Find Records similar to text input; run Terms by Year report, Calculate Emergence Indicators, create Factor Matrix, PCD, TFIDF, Browse Classification Tree, run Statistics on a field, Calculate Date Difference, and Run Scripts/Edit Script Menu.



## List Views

A list shows all of the items of a field for a dataset. For example, an Authors List would show all of the names contained in the Authors field of the dataset. As another example, the Abstract Words List would list all of the words contained in all of the Abstracts in the dataset.

The following illustration shows a List View of Assignees.

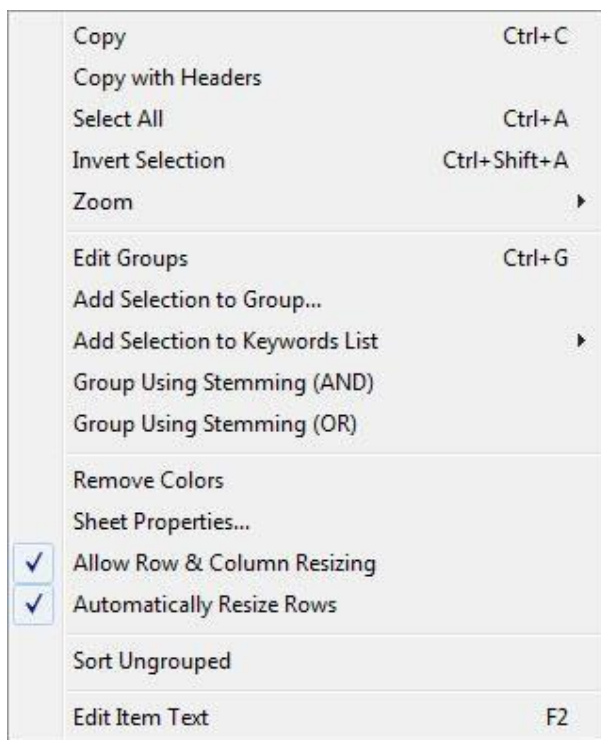
- The column heading **#Records** shows the number of records in the dataset containing that organization named in the Assignee field.
- The column heading **#Instances** shows the total number of times the organization appears in the dataset. In this example, Samsung Electronics Company appears two (2) additional times and Sony Corporation appears one additional time.
- The column heading **Assignee: PatStat Standardize** lists the names of the organizations in the dataset.
- The column headings **Top 15, Corporate, Government, Academic, Hospital, People** are user-defined groups.

|    | #Records | #Instances | Assignee: PatStat Standardize        | Top 15                              | Corporate                           | Government                          | Academic                            | Hospital                 | People                   |
|----|----------|------------|--------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|--------------------------|--------------------------|
| 1  | 165      | 165        | FUJITSU                              | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/> | <input type="checkbox"/> |
| 2  | 149      | 149        | CHINESE ACADEMY OF SCIENCES          | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/> | <input type="checkbox"/> |
| 3  | 97       | 99         | SAMSUNG ELECTRONICS COMPANY          | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/> | <input type="checkbox"/> |
| 4  | 51       | 51         | TOSHIBA CORPORATION                  | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/> | <input type="checkbox"/> |
| 5  | 45       | 45         | JAPAN SCIENCE AND TECHNOLOGY AGE     | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/> | <input type="checkbox"/> |
| 6  | 41       | 41         | SHANGHAI JIAO TONG UNIVERSITY        | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 7  | 38       | 38         | BOE TECHNOLOGY GROUP COMPANY         | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/> | <input type="checkbox"/> |
| 8  | 38       | 38         | ITRI (INDUSTRIAL TECHNOLOGY RESEAR   | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 9  | 37       | 37         | SEOUL NATIONAL UNIVERSITY            | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 10 | 34       | 34         | WUHAN UNIVERSITY                     | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 11 | 32       | 32         | ETRI (ELECTRONICS AND TELECOMMUNIC   | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 12 | 31       | 31         | KIMM (KOREA INSTITUTE OF MACHINERY   | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 13 | 31       | 32         | SONY CORPORATION                     | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/> | <input type="checkbox"/> |
| 14 | 28       | 28         | UNIVERSITY OF TOKYO                  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 15 | 26       | 26         | KIST (KOREA INSTITUTE OF SCIENCE AND | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 16 | 25       | 25         | LG INNOTEK COMPANY                   | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/> | <input type="checkbox"/> |

The List View can be magnified by

selecting “Zoom” from the right-click menu. See [Zooming in a List or Matrix](#) for more details.

Rows and columns can also be manually resized, if enabled on the right-click menu. Rows are Automatically Resized, when this setting is checked. See [Display Settings](#) for more information.



See Also:

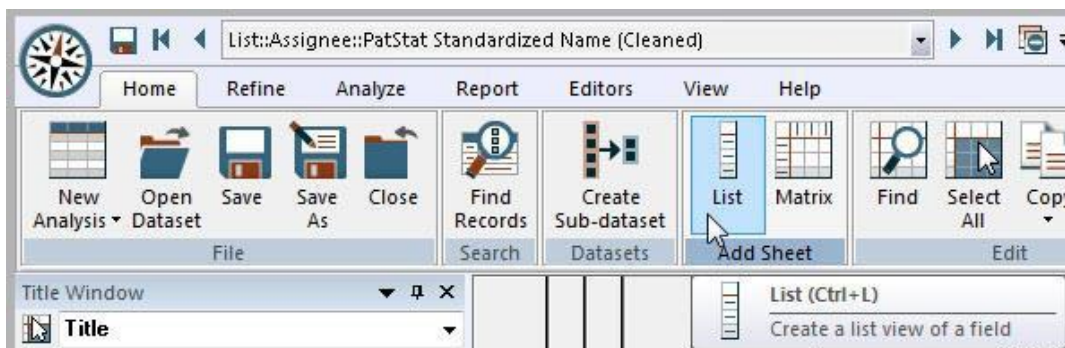
[Edit Groups](#)

[Display Settings](#)

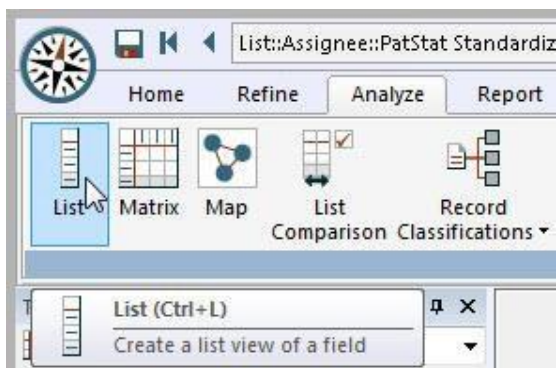
## Creating a list view

There are several ways to Create a List view:

1. From the Home ribbon



2. From the Analyze ribbon



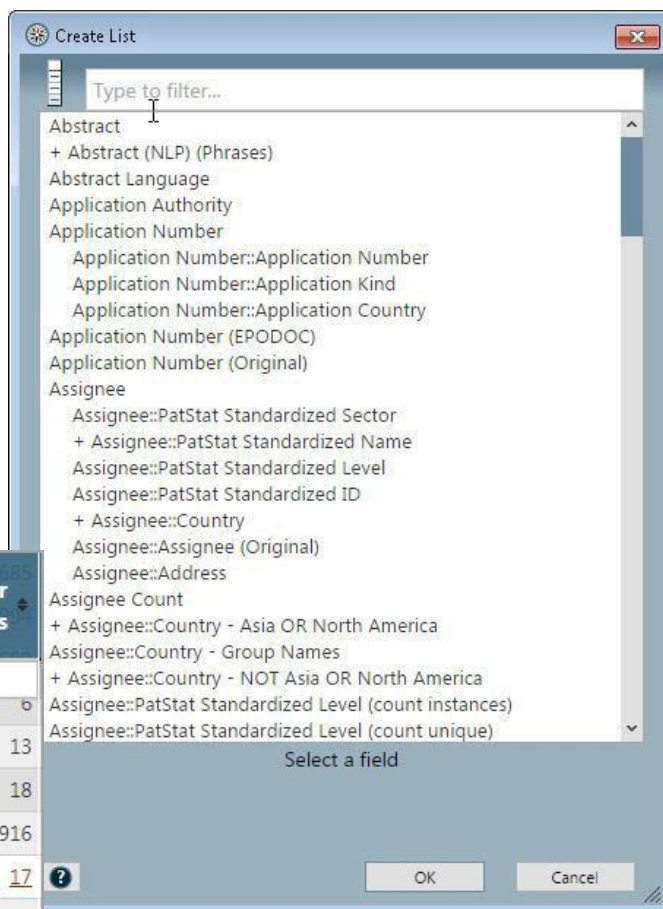
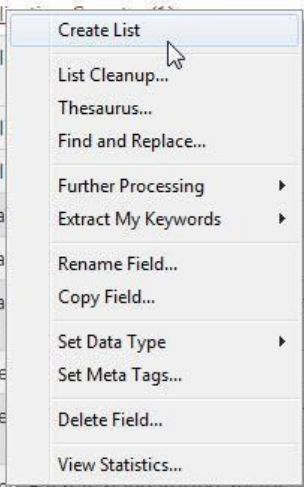
3. Press **Ctrl L** on the keyboard.

A list of the fields is shown in the **Create List** dialog box. This list contains the names of the fields that were imported when the VantagePoint file was first created. Double-click on the list you want to view, or select the field and click **OK**.

4. or, From the Summary view:

- a) Double-click on a field name;
- b) Right-click on a field name and select "Create List".

| Field   | Number of Items |
|---|-----------------|
| Abstract (NLP) (Phrases)                              | 43,685          |
| Abstract Language                                     | 6               |
| Applicant Seq Num                                     | 13              |
| Application Authority                                 | 18              |
| Application Number                                    | 3,916           |
| Application Number (EPODOC)                           | 17              |
| Application Number (Original)                         | 18              |
| Assignee  | 3,916           |
| Assignee Count  | 2               |
| Assignee:Country - Asia OR North America              | 3,916           |
| Assignee:Country - Group Names                        | 3,916           |
| Assignee:Country - NOT Asia OR North America          | 4               |
| Assignee:PatStat Standardized Level (count instances) | 6               |
| Assignee:PatStat Standardized Level (count unique)    | 1               |
| Assignee:PatStat Standardized Sector                  | 6               |
| Assignee:PatStat Standardized Name                    |                 |
| Assignee:PatStat Standardized Level                   |                 |
| Assignee:PatStat Standardized ID                      |                 |
| Assignee:Country                                      |                 |
| Assignee:Assignee (Original)                          |                 |
| Assignee:Address                                      |                 |





### Sorting rows in a list view

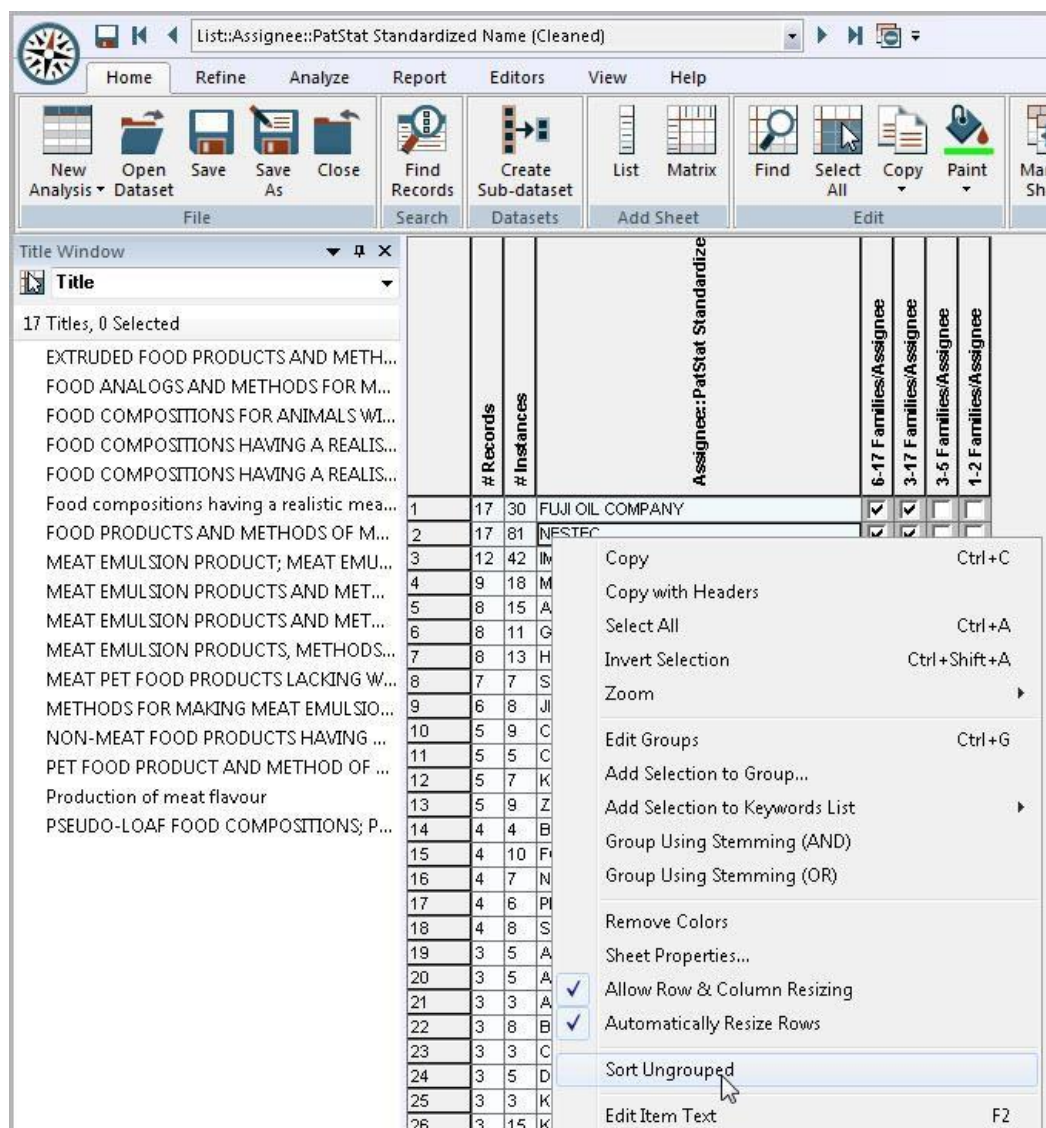
You can sort the rows in a list by any of the column headings (including group names).

1. Double-click on the column heading you wish to sort by. The rows are re-sorted in either alphabetical order (if the column contains text), decreasing numeric order (if the column contains numbers), or group membership (if the column is a group).
2. Double-click on the column again to reverse the order of the previous sort (i.e., to sort in reverse alphabetical order or increasing numeric order).

### Sort Ungrouped

Many times, a user will want to sort a list by "ungrouped" or unclassified items so they can easily locate and assign a grouping or classification to them.

In a List view, select a column or an item in the List and right-click. From the menu, select "Sort Ungrouped". All the ungrouped items then appear at the top of the List.



### Selecting multiple items in a list view

You can select multiple items in a List View by using the shift or control keys while you click on the list items.

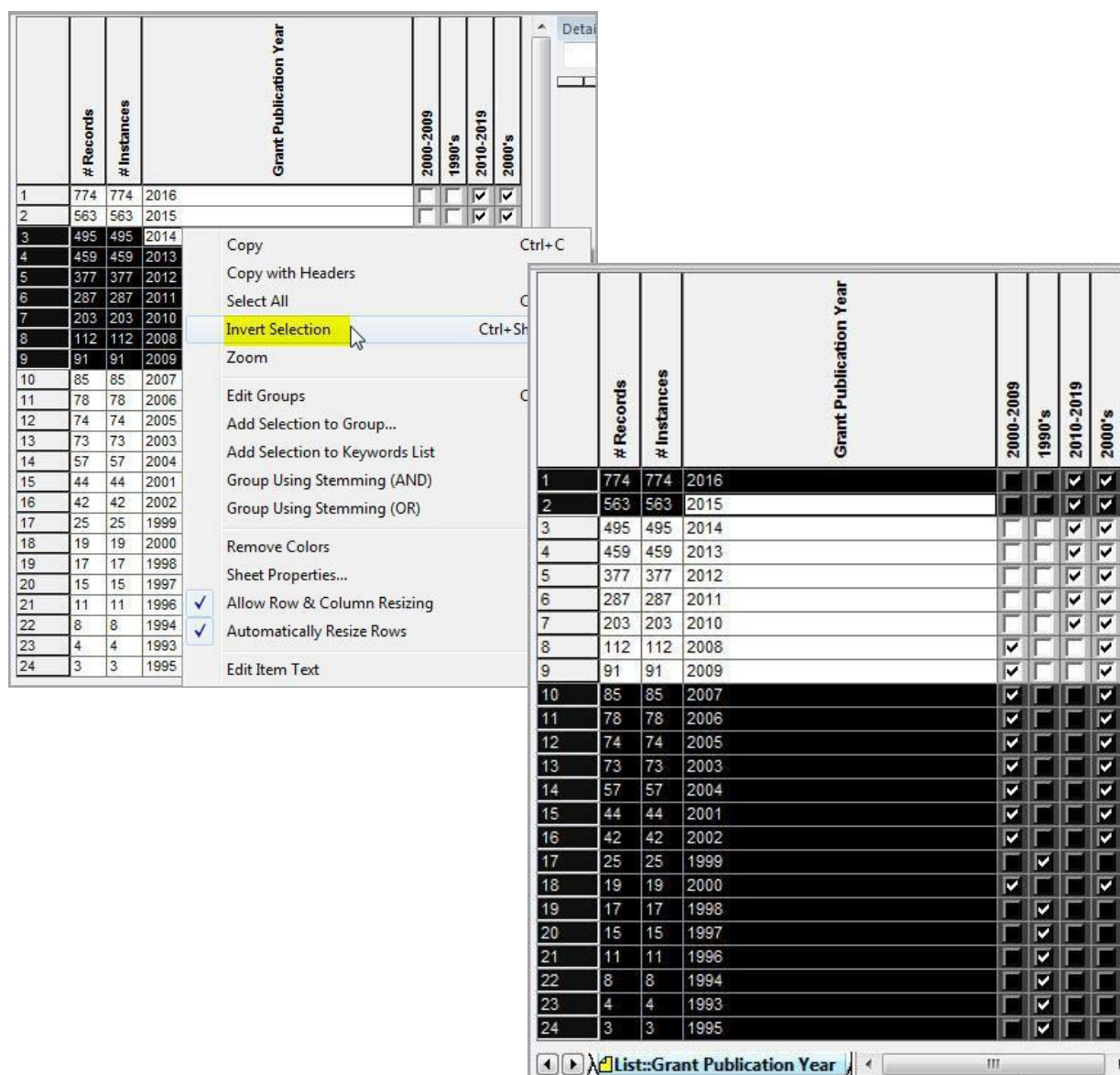
**To add selections one at a time:** Press the control key as you click on the list item (Ctrl-Click). The item you click on is added to the selections already made.

**To add a range of selections at one time:** Press the shift key as you click on the list item (Shift-Click). All of the items between the first item you Shift-Click on and the last selected item are added to the selections already made.

You can also use a string search to add items to your selection.

The right-click menu now contains "Invert Selection", illustrated below.

Here, the user has selected rows 3 through 9 in the list. Using the Right-click menu, he/she chooses "Invert Selection". As a result, VantagePoint selects all rows EXCEPT rows 3 through 9 in the list.



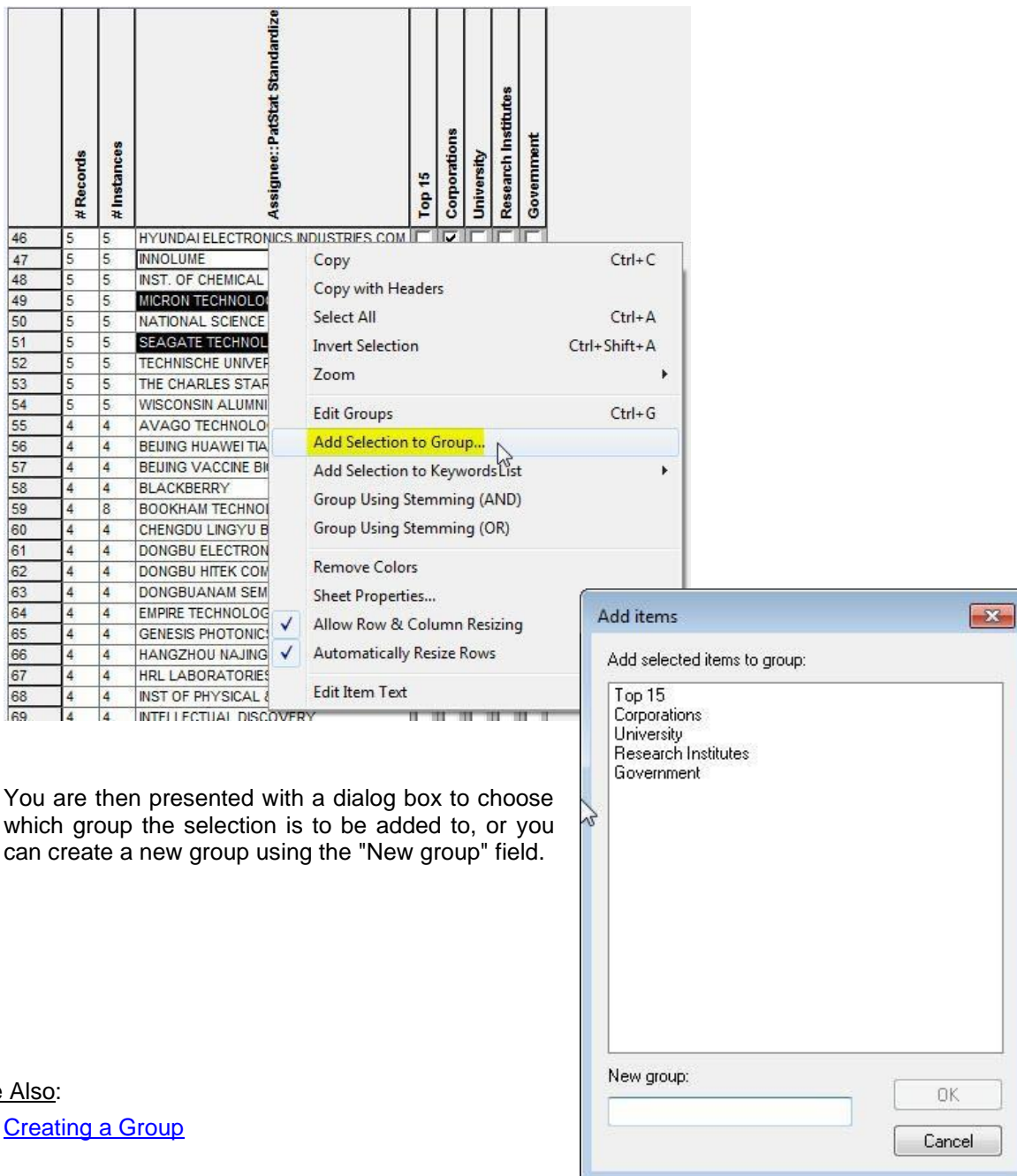
## Adding list items to a group

Here are two ways to add list items to a group. In the List View,

1. Click on the check box corresponding to the list item and group. When a checkmark appears, the list item is included in the group.

or

2. Use Multi-select (Shift key or Ctrl key and click selections) and, using the right-click menu, select **Add Selection to Group**, as shown below:



You are then presented with a dialog box to choose which group the selection is to be added to, or you can create a new group using the "New group" field.

See Also:

[Creating a Group](#)

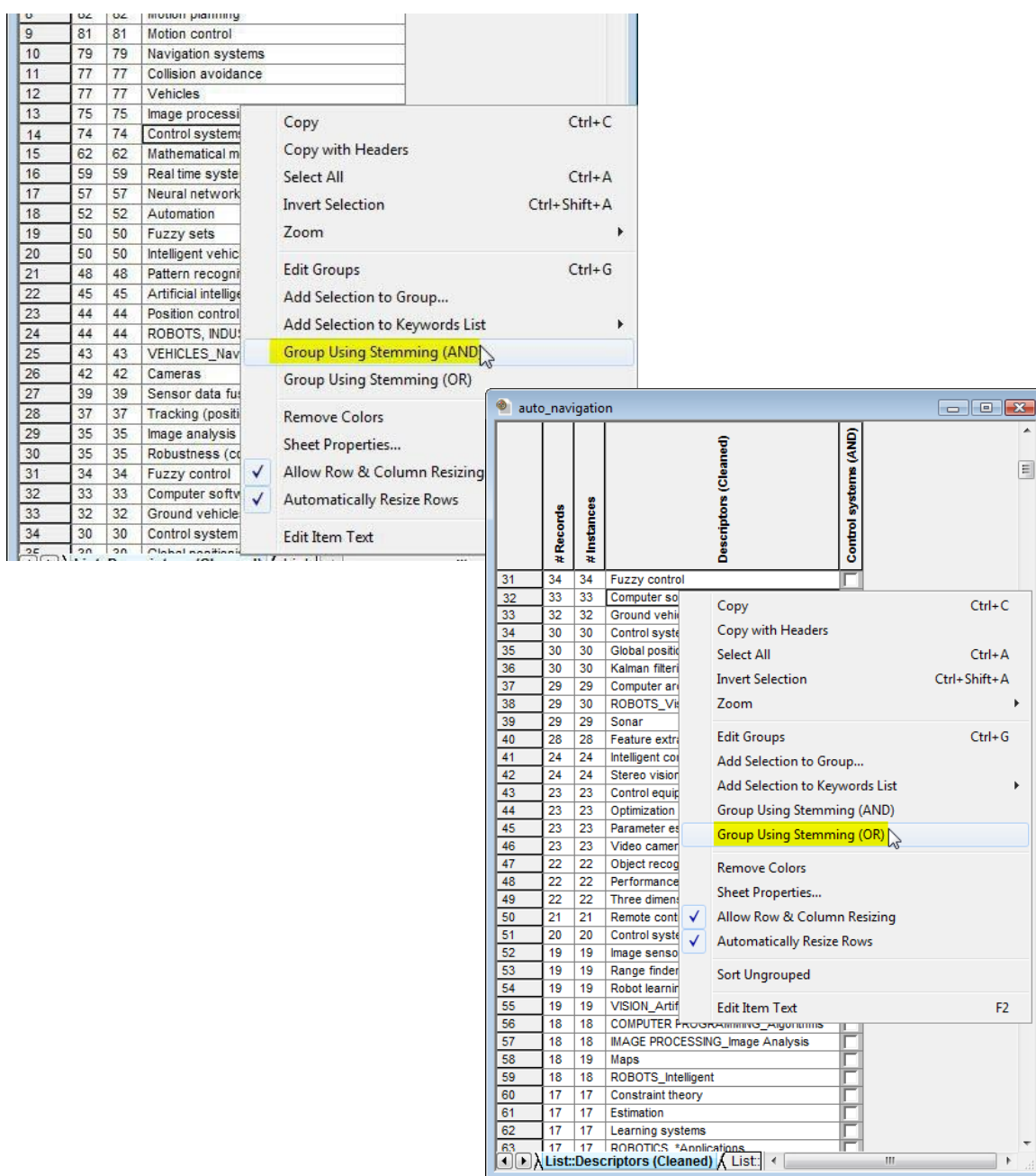
## Creating groups using stemming

Creating Groups using stemming is another powerful technique for creating groups in a list.

There are two options for creating groups using stemming - "AND" and "OR". This operation 1) takes a single list item, 2) breaks the item into individual words, 3) stems each word, 4) searches the list for matches to the stems using either "AND" or "OR," 5) creates a new group containing each list item that matches the stems, and 6) names the new group with the original list item.

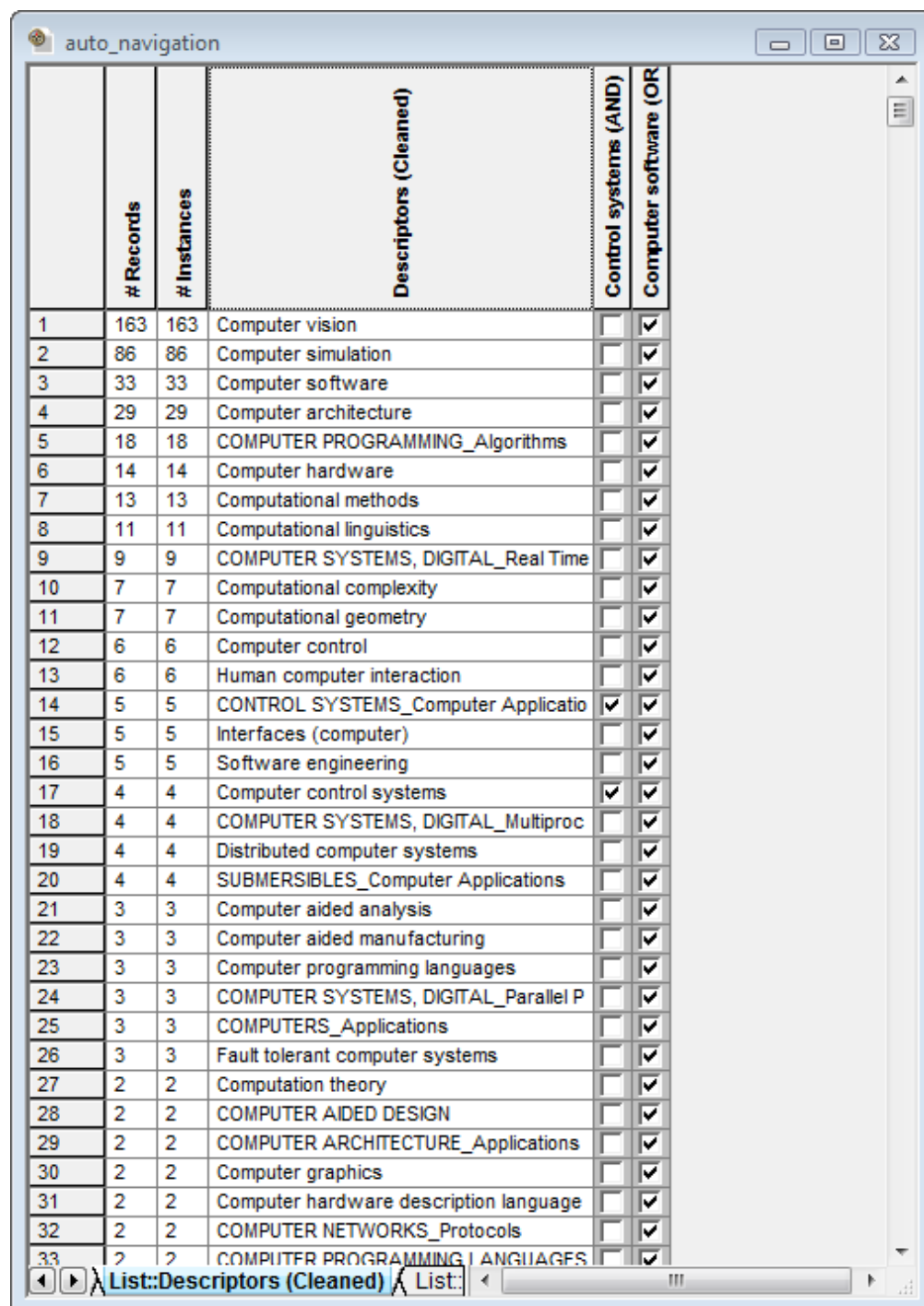
To create a group using stemming:

1. In a List View, select a single item. In the following illustration the user has selected "Control systems".
2. Right-click on the item and select **Group Using Stemming** with either AND or OR.





The following illustrations show the results. The first group "Control systems" was created using "AND," and the second group "Computer software" was created using "OR."



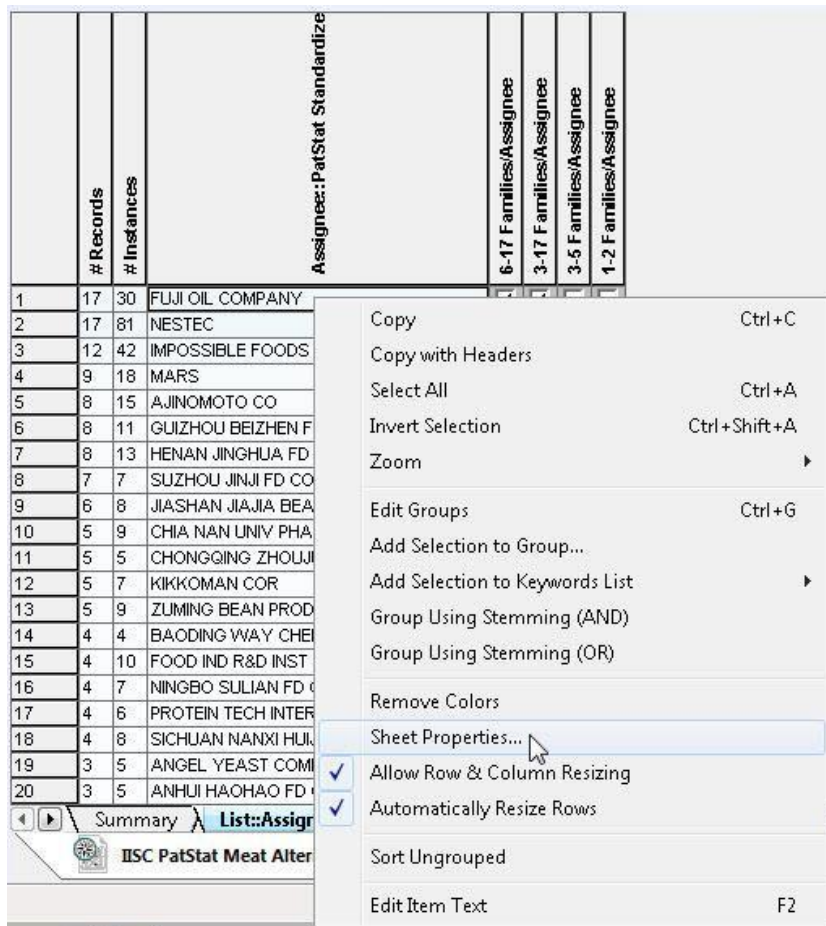
|    | #Records | #Instances | Descriptors (Cleaned)                  | Control systems (AND)               | Computer software (OR)   |
|----|----------|------------|--|-------------------------------------|--------------------------|
| 1  | 163      | 163        | Computer vision                        | <input type="checkbox"/>            | <input type="checkbox"/> |
| 2  | 86       | 86         | Computer simulation                    | <input type="checkbox"/>            | <input type="checkbox"/> |
| 3  | 33       | 33         | Computer software                      | <input type="checkbox"/>            | <input type="checkbox"/> |
| 4  | 29       | 29         | Computer architecture                  | <input type="checkbox"/>            | <input type="checkbox"/> |
| 5  | 18       | 18         | COMPUTER PROGRAMMING_Algorithms        | <input type="checkbox"/>            | <input type="checkbox"/> |
| 6  | 14       | 14         | Computer hardware                      | <input type="checkbox"/>            | <input type="checkbox"/> |
| 7  | 13       | 13         | Computational methods                  | <input type="checkbox"/>            | <input type="checkbox"/> |
| 8  | 11       | 11         | Computational linguistics              | <input type="checkbox"/>            | <input type="checkbox"/> |
| 9  | 9        | 9          | COMPUTER SYSTEMS, DIGITAL_Real Time    | <input type="checkbox"/>            | <input type="checkbox"/> |
| 10 | 7        | 7          | Computational complexity               | <input type="checkbox"/>            | <input type="checkbox"/> |
| 11 | 7        | 7          | Computational geometry                 | <input type="checkbox"/>            | <input type="checkbox"/> |
| 12 | 6        | 6          | Computer control                       | <input type="checkbox"/>            | <input type="checkbox"/> |
| 13 | 6        | 6          | Human computer interaction             | <input type="checkbox"/>            | <input type="checkbox"/> |
| 14 | 5        | 5          | CONTROL SYSTEMS_Computer Applicatio    | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 15 | 5        | 5          | Interfaces (computer)                  | <input type="checkbox"/>            | <input type="checkbox"/> |
| 16 | 5        | 5          | Software engineering                   | <input type="checkbox"/>            | <input type="checkbox"/> |
| 17 | 4        | 4          | Computer control systems               | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 18 | 4        | 4          | COMPUTER SYSTEMS, DIGITAL_Multiproc    | <input type="checkbox"/>            | <input type="checkbox"/> |
| 19 | 4        | 4          | Distributed computer systems           | <input type="checkbox"/>            | <input type="checkbox"/> |
| 20 | 4        | 4          | SUBMERSIBLES_Computer Applications     | <input type="checkbox"/>            | <input type="checkbox"/> |
| 21 | 3        | 3          | Computer aided analysis                | <input type="checkbox"/>            | <input type="checkbox"/> |
| 22 | 3        | 3          | Computer aided manufacturing           | <input type="checkbox"/>            | <input type="checkbox"/> |
| 23 | 3        | 3          | Computer programming languages         | <input type="checkbox"/>            | <input type="checkbox"/> |
| 24 | 3        | 3          | COMPUTER SYSTEMS, DIGITAL_Parallel P   | <input type="checkbox"/>            | <input type="checkbox"/> |
| 25 | 3        | 3          | COMPUTERS_Applications                 | <input type="checkbox"/>            | <input type="checkbox"/> |
| 26 | 3        | 3          | Fault tolerant computer systems        | <input type="checkbox"/>            | <input type="checkbox"/> |
| 27 | 2        | 2          | Computation theory                     | <input type="checkbox"/>            | <input type="checkbox"/> |
| 28 | 2        | 2          | COMPUTER AIDED DESIGN                  | <input type="checkbox"/>            | <input type="checkbox"/> |
| 29 | 2        | 2          | COMPUTER ARCHITECTURE_Applications     | <input type="checkbox"/>            | <input type="checkbox"/> |
| 30 | 2        | 2          | Computer graphics                      | <input type="checkbox"/>            | <input type="checkbox"/> |
| 31 | 2        | 2          | Computer hardware description language | <input type="checkbox"/>            | <input type="checkbox"/> |
| 32 | 2        | 2          | COMPUTER NETWORKS_Protocols            | <input type="checkbox"/>            | <input type="checkbox"/> |
| 33 | 2        | 2          | COMPUTER PROGRAMMING_LANGUAGES         | <input type="checkbox"/>            | <input type="checkbox"/> |

Navigation controls: List::Descriptors (Cleaned) | List:: |



## Display Settings

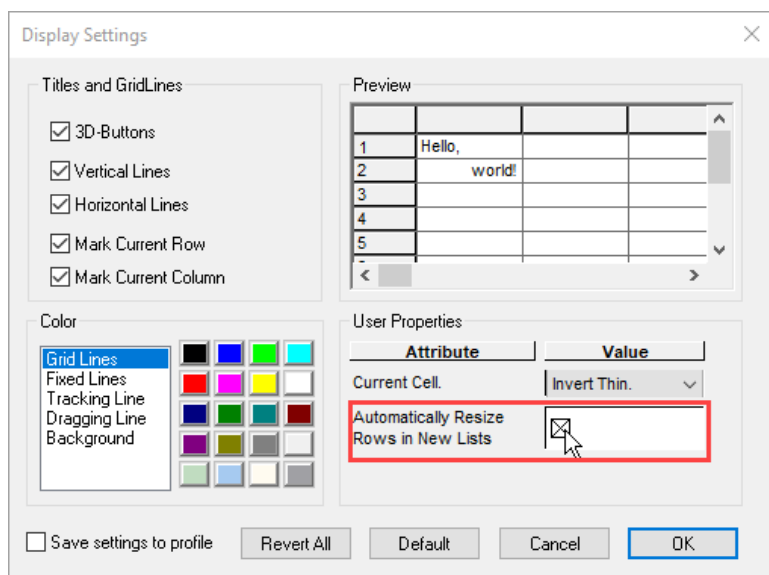
Users can set preferences for **Sheet Properties** from the Right-click menu in a List view:



You can change the appearance of GridLines. As you make selections, the effect of the change appears in the "Preview" window.

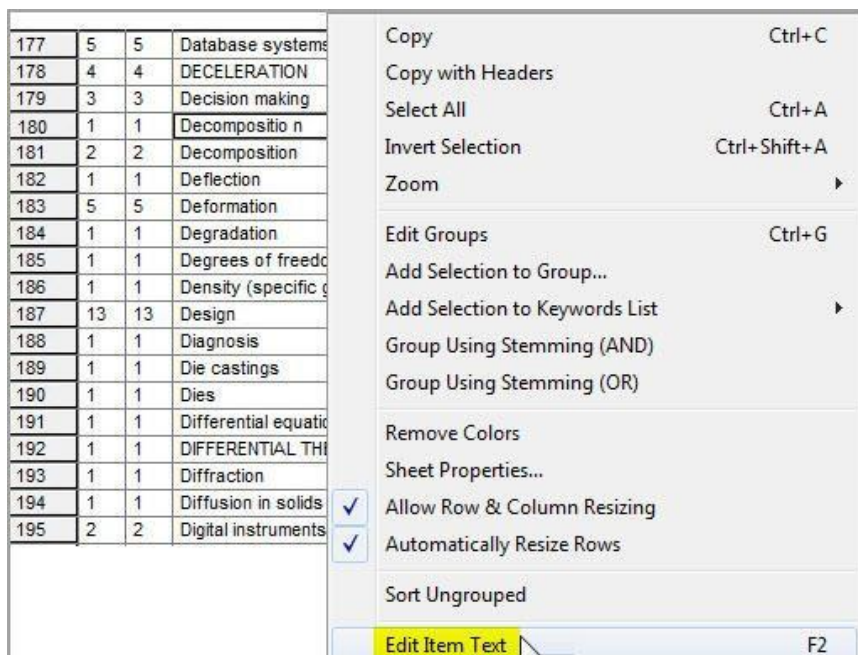
The default behavior for Lists is to "Automatically Resize Rows in New Lists". Uncheck the box to disable.

Check the "Save settings to profile box" (in the lower left corner) and click the **OK** button to save. Or, click the **Default** button to restore to Default settings. The **Revert All** button resets to your previous settings.

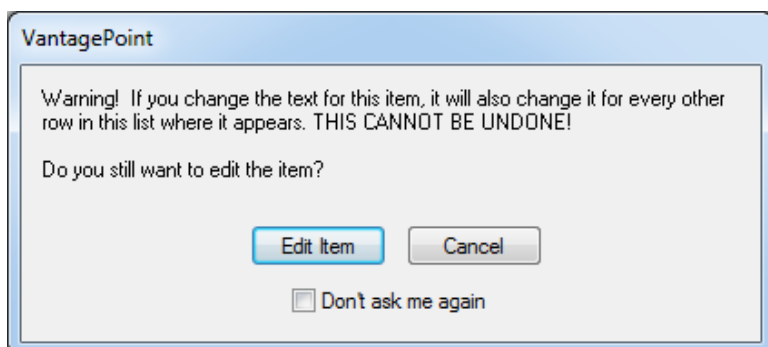


## Edit Item Text

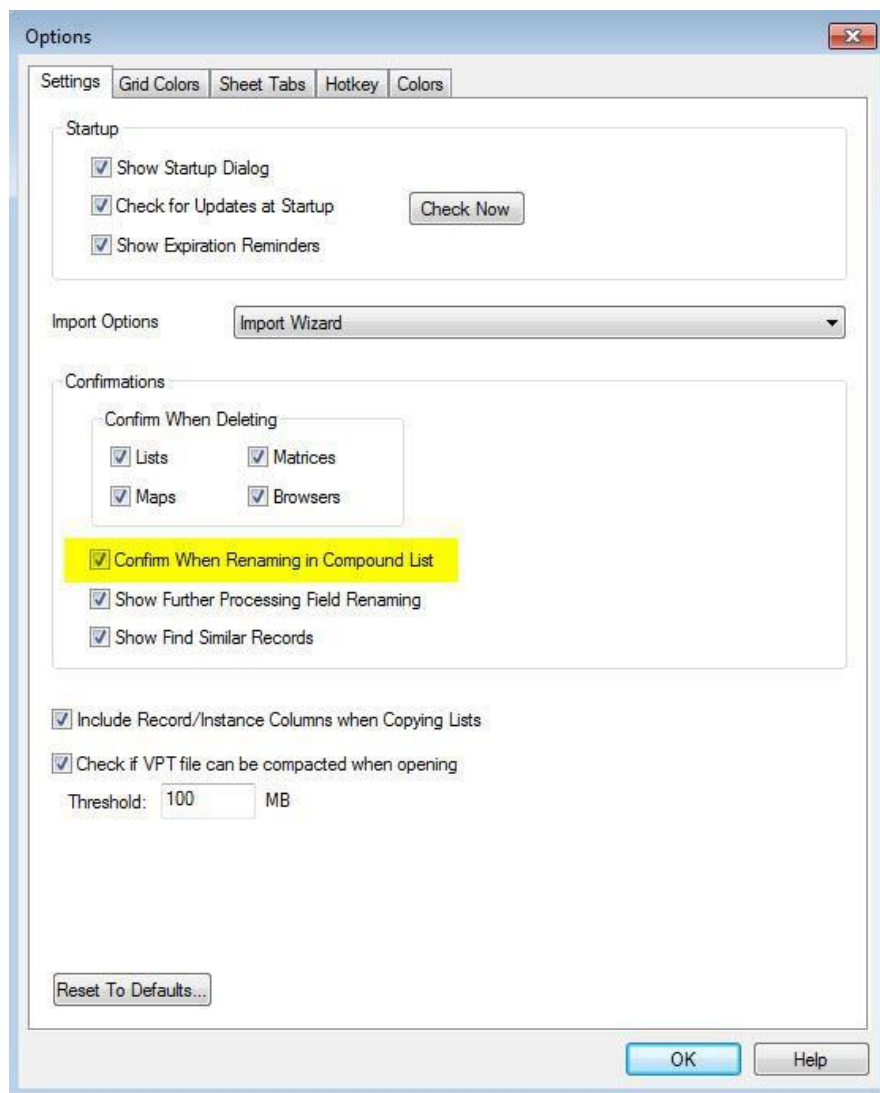
You can change the text of an item in a List View by right-clicking the selected item and choosing **Edit Item Text** from the menu. You may use this to correct simple misspellings or other errors that occur in your data. (With the item selected, you can also press F2 for an editable field.)



**Note:** If the item you are editing is one of a parent/child field, the change will apply to every other appearance of the item in the List, as the Warning states:



This Warning will **ONLY** appear if the "Confirm When Renaming in Compound List" checkbox is checked in the Options Dialog box:



---

## Matrix

In VantagePoint, you can create a Co-occurrence, Auto-correlation or Cross-Correlation Matrix.

A [Co-occurrence Matrix](#) shows the number of records in the dataset containing two given list items.

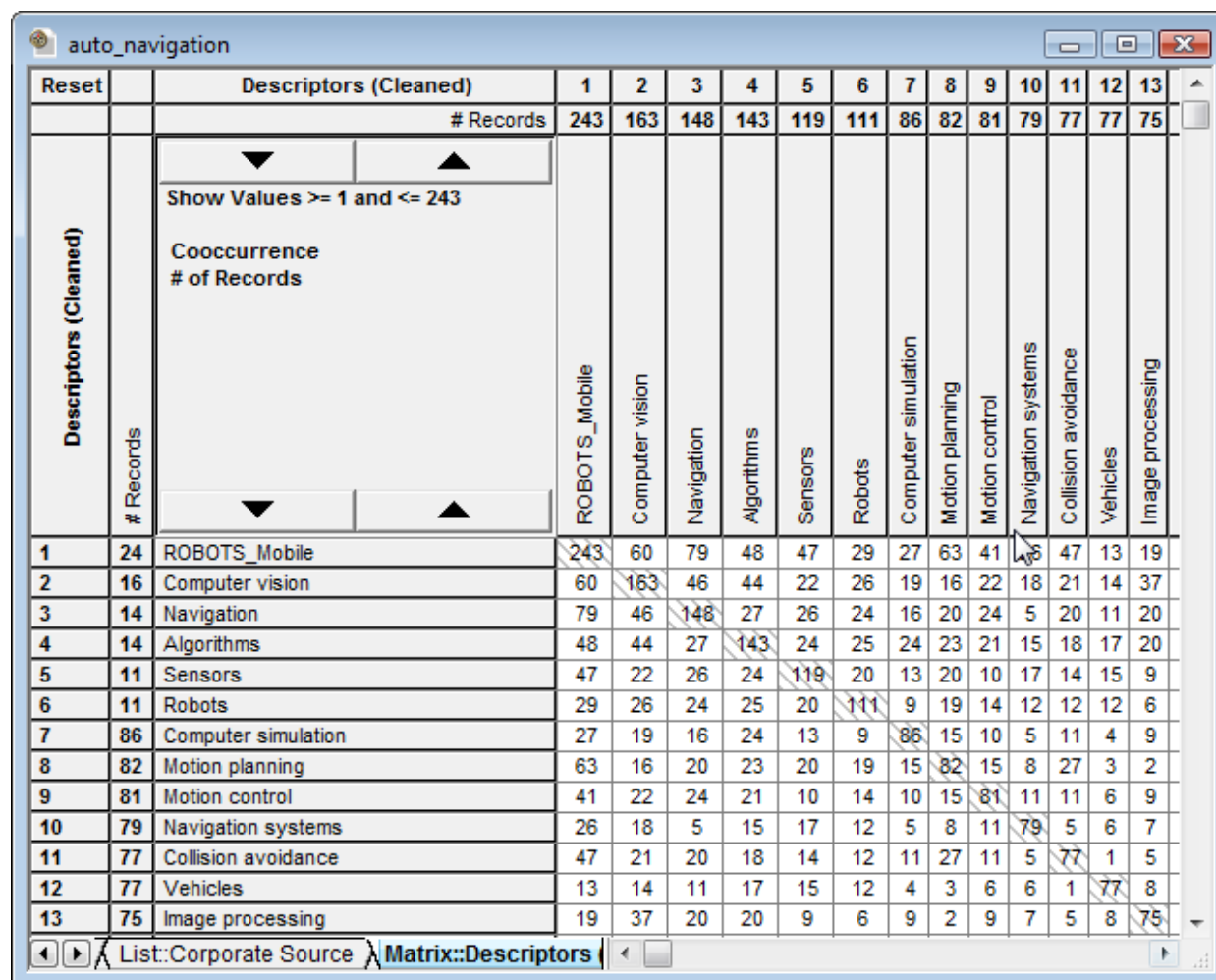
An [Auto-Correlation Matrix](#) shows the correlations among items in a list.

A [Cross-Correlation Matrix](#) shows correlations among items in a list based on the values in another list.

Follow the links to the individual topics for details and illustrations of each Matrix.

## Co-occurrence matrix

A co-occurrence matrix shows the number of records in the dataset containing two given list items. The following illustration shows a Descriptors-by-Descriptors co-occurrence matrix.



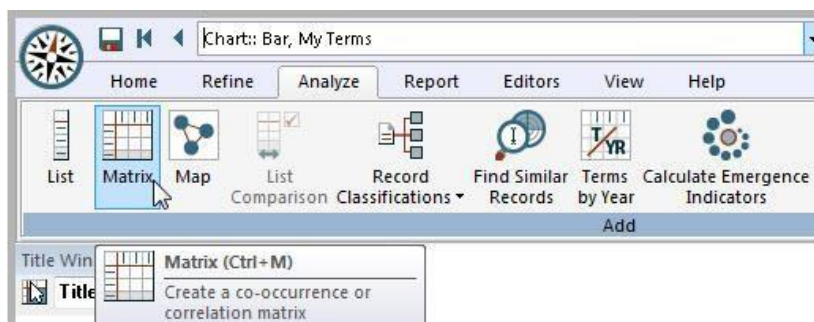
The list items (in this example, Descriptors) are listed as the column and row headings (e.g., *ROBOTS\_Mobile*, *Computer vision*, etc.). The column and row headings **# Records** shows the number of records in the dataset containing the associated list item. The numbers in the matrix show the number of records in the dataset containing both the row item and the column item. In this example there are 19 records containing both *Computer vision* and *Computer simulation* as descriptors.

Notice that the matrix is symmetrical. This will always be the case when you create a co-occurrence matrix of one list with itself. For symmetric matrices, VantagePoint codes the diagonal cells with a colored cross-hatch.

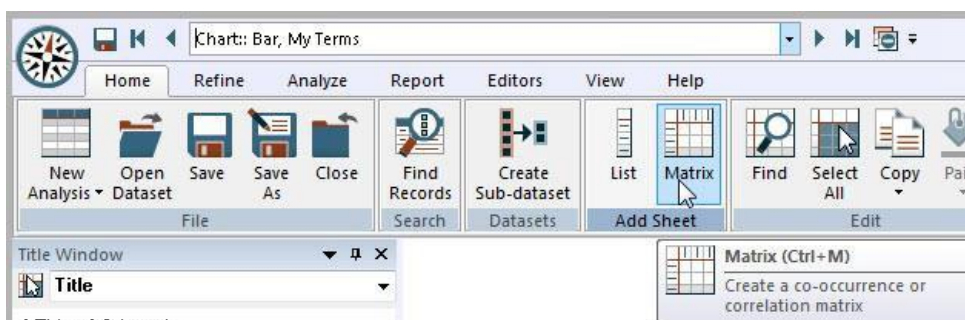
Within a co-occurrence matrix, you can: Zoom, Resize the Rows and Columns, Sort, Make Heat Map (or Remove Colors), Paint cells, "Flood" the matrix, Select multiple cells, Find a string, or List Cells in the Matrix. See [Working with a Matrix](#) for details.

## Creating a co-occurrence matrix

1. Open the **Create Matrix** dialog box by selecting **Matrix** from the Analyze ribbon.



or from the Home ribbon:

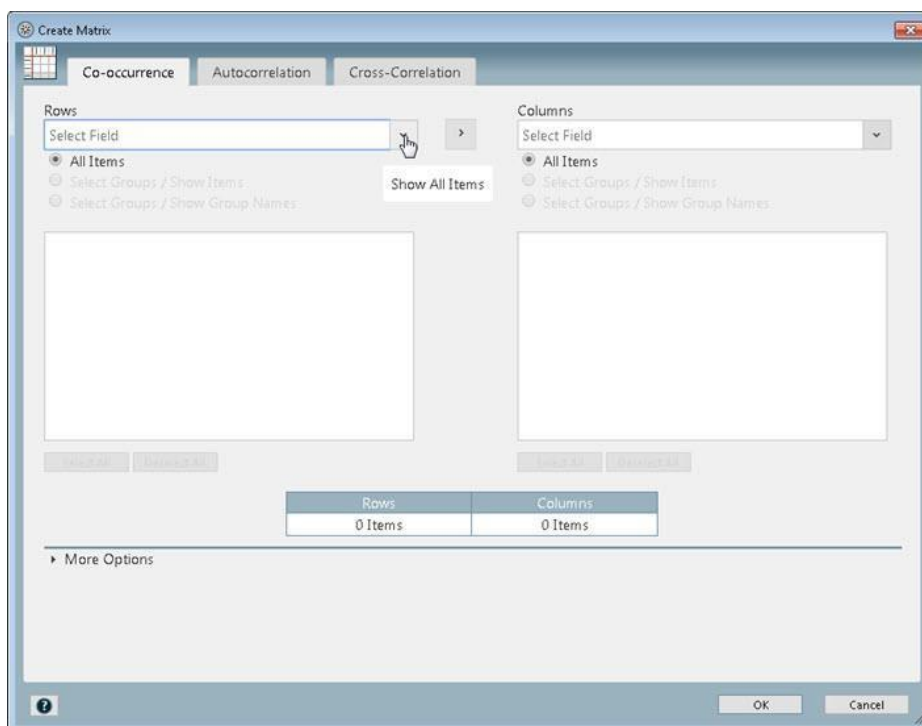


or press **Ctrl M** on the keyboard.

You are presented with the **Create Matrix** dialog. The tabs at the top are used to select the type of Matrix to create.

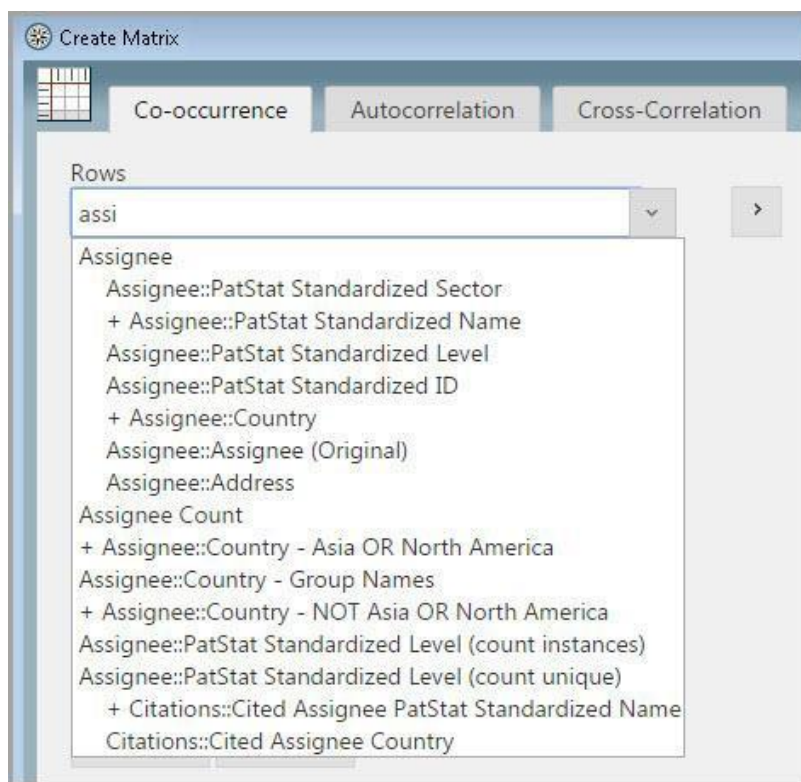
Under **Rows**, select the desired field from the dropdown list. Whatever you select from the first window will appear as **Rows** on the matrix.

The selection from the second window will define the **Columns** of the matrix. Select the field for the Rows by using the dropdown box.

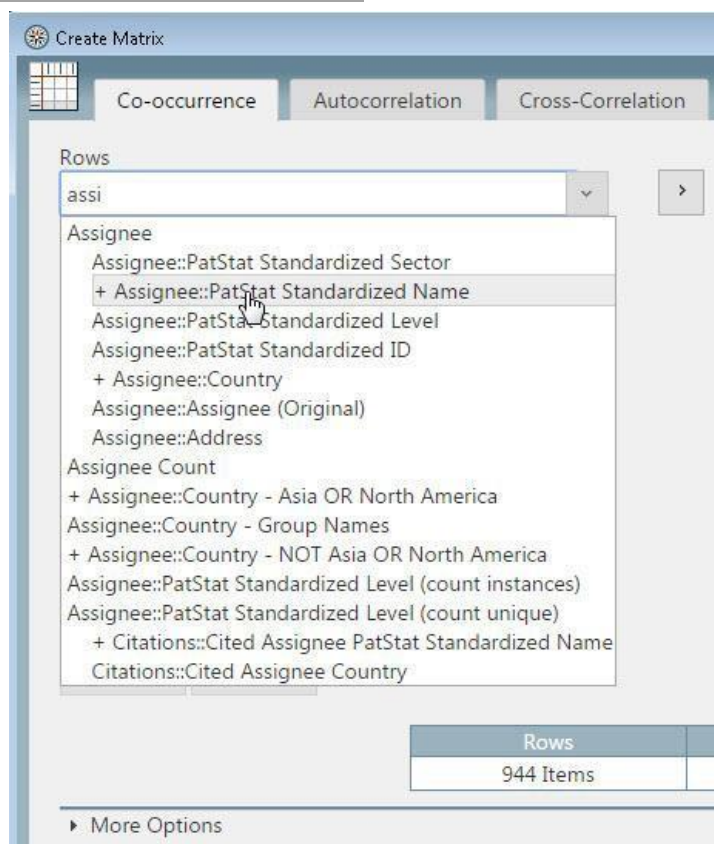




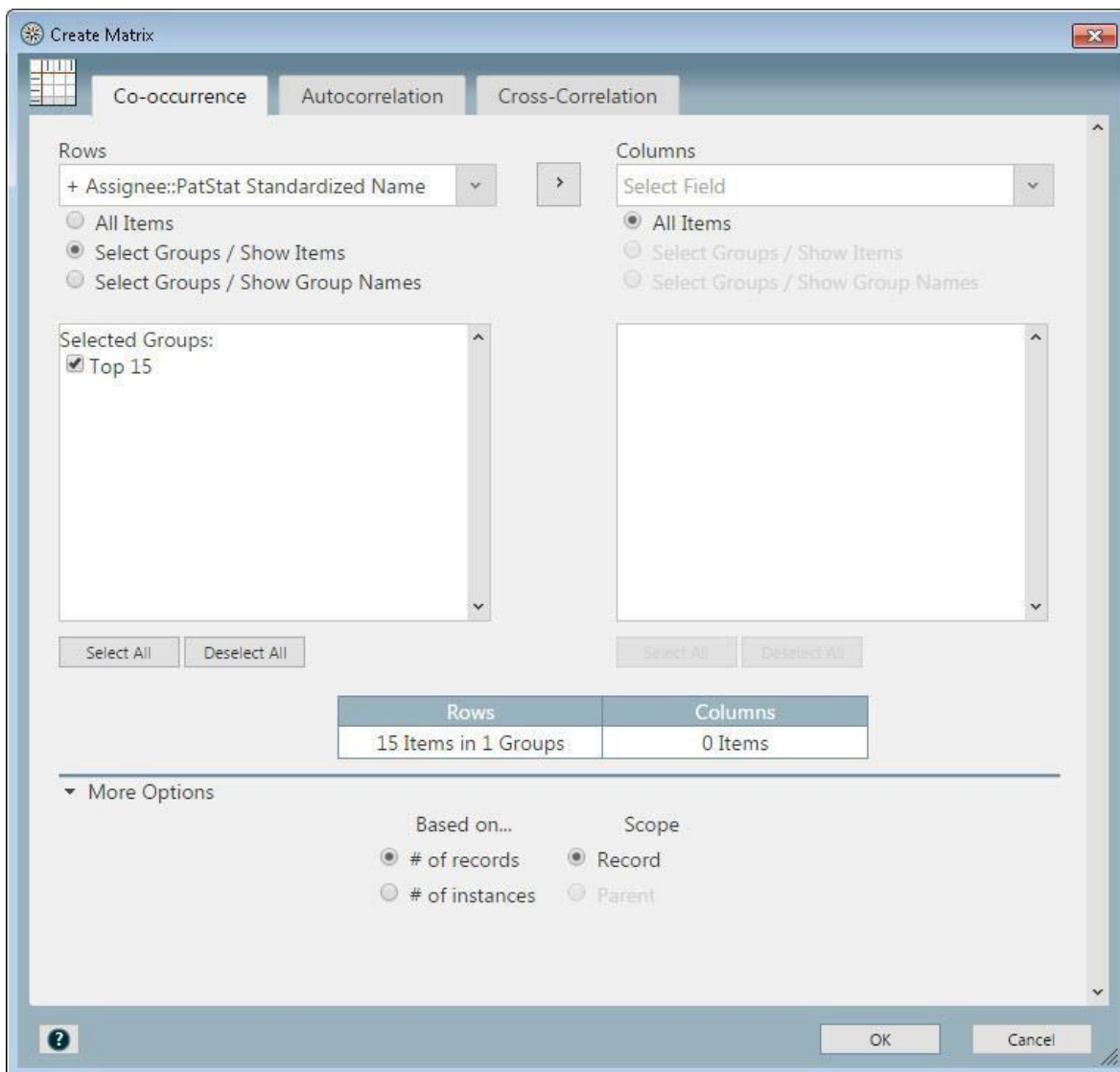
Another option is to type the field name in the "Select Field" box. As you type, the matches appear for selection.



Clicking on the field name selects "All Items" as the default. A field name beginning with "+" indicates the field has groups.



Selecting a field with groups enables you to select a smaller set within the field by clicking the box next to the Group name:



If a field has multiple groups assigned, you can select any or all Groups.

Selection choices include:

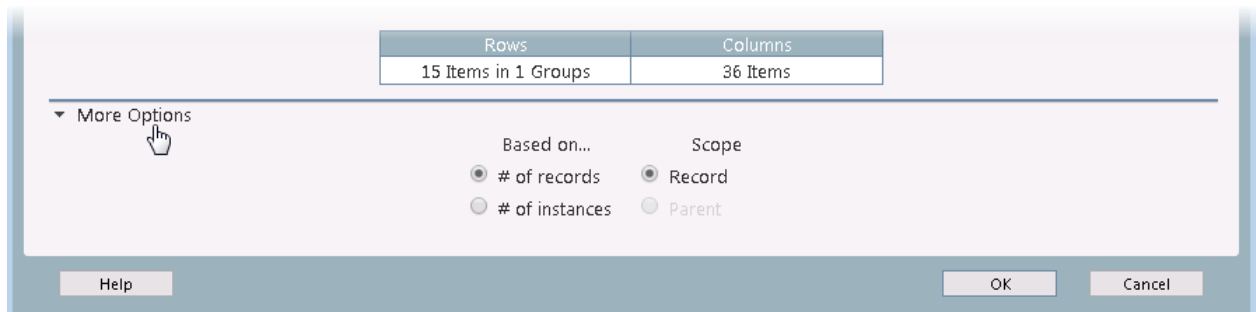
- **All Items** - all of the list items
- **Select Groups / Show Items** - Select Group(s) with list items as labels
- **Select Groups / Show Group Names** - Select Group(s) using group names as labels

2. Under **Columns**, select the list item (or group) you want to appear in the Columns of the co-occurrence matrix. (Clicking the right-pointing arrow between the windows allows you to quickly move the Row selections to the Columns.)

Notice the matrix definition (below the two windows) is built as choices are made. This allows you to get an idea of the size of the matrix you are creating.

After you have selected fields for the Rows and Columns, you could click **OK** and the Matrix would be created. However, more options are available.

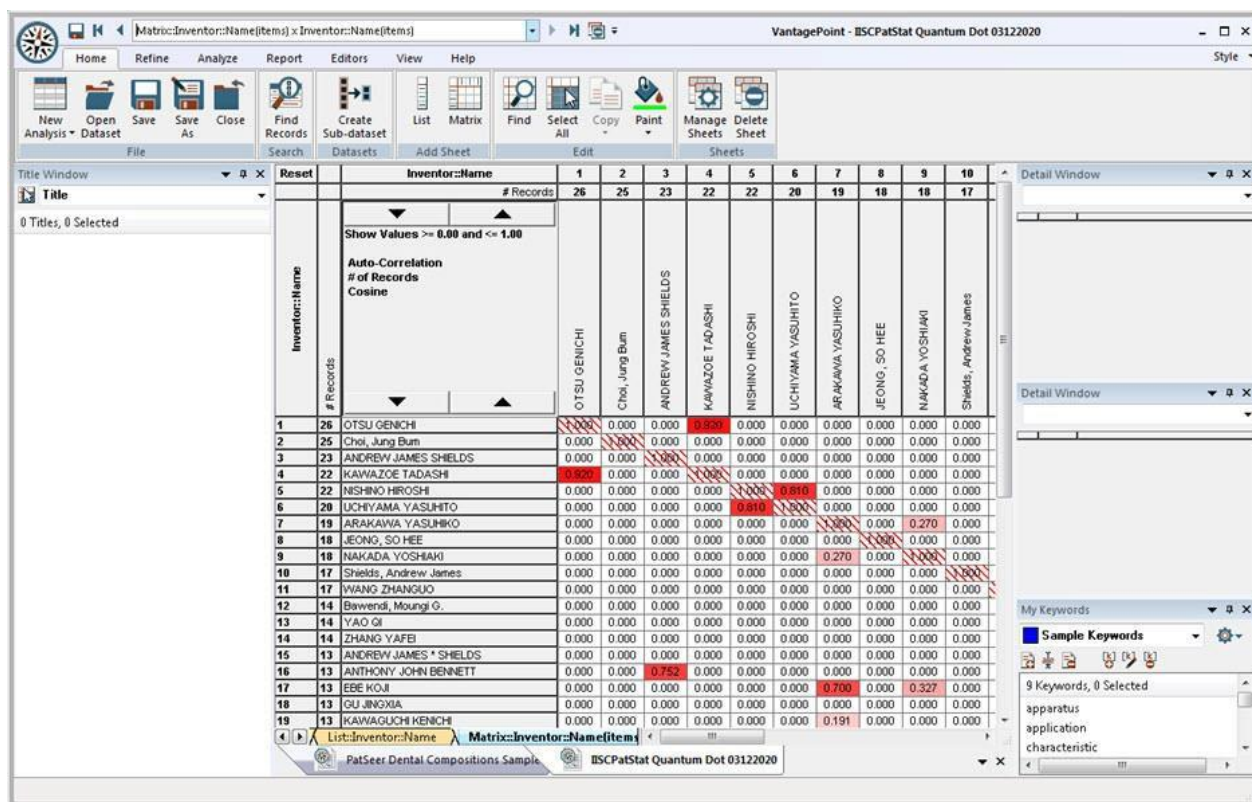
By default, the Matrix is based on the number of Records. You can choose other options by clicking **More Options**:



3. Select the Basis for the Matrix - either **# of Records** or **# of Instances**. Usually you should choose **# of Records**.
4. Select the Scope. If you are creating a co-occurrence matrix using: (1) a Parent and a related Child field; or (2) two related Child fields, you can select the "Scope" of the co-occurrence:
  - Record - This is the default selection and is the normal usage of co-occurrence matrices. The record will be included in the cell if row and column items co-occur in the record, whether or not they occur in the same Parent.
  - Parent - The record will be included in the cell if the row and column items co-occur in the same record AND in the same Parent. This can be useful in the somewhat rare case that a Child item is multi-valued within a single Parent item.
5. Click **OK** to create the matrix.

## Auto-Correlation Matrix

An Auto-Correlation Matrix shows the correlations among items in a list. For example, an Auto-Correlation Matrix of Authors will show high correlations among members of a team who write together. In the following illustration of Inventor Names, OTSU shows high correlation with KAWAZOE, and UCHIYAMA (row 10) shows high correlation with NISHINO.



An Auto-Correlation Matrix of Descriptors will show descriptors that have a high degree of correlation by virtue of being used in the same records. In this illustration, the default "Heat Map" is used to identify Inventors with high correlation.

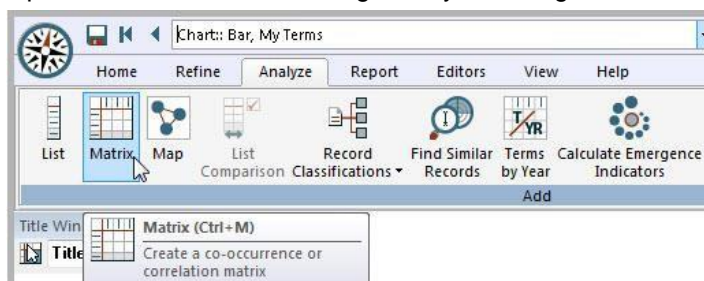
**Note:** For Auto-Correlation Matrix, you should only use fields that have multiple values in most of the records. For example, Authors or Descriptors are good choices. Date of Publication is not a good choice, since there is only one date of publication for each record.

See [Creating an auto-correlation matrix](#).

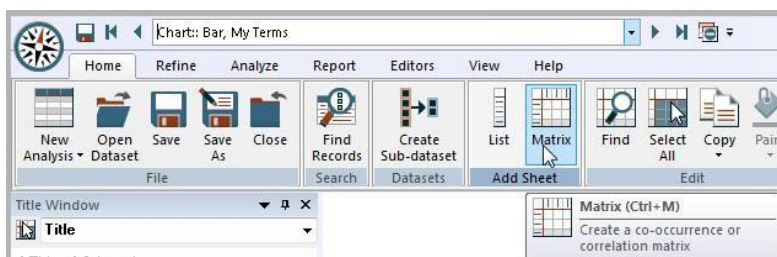
Within an Auto-Correlation matrix, you can: Zoom, Resize the Rows and Columns, Sort, Make Heat Map (or Remove colors), Paint cells, "Flood" the matrix, Select multiple cells, Find a string, or List Cells in the Matrix. See [Working with a Matrix](#) for details.

## Creating an auto-correlation matrix

1. Open the **Create Matrix** dialog box by selecting **Matrix** from the Analyze ribbon:



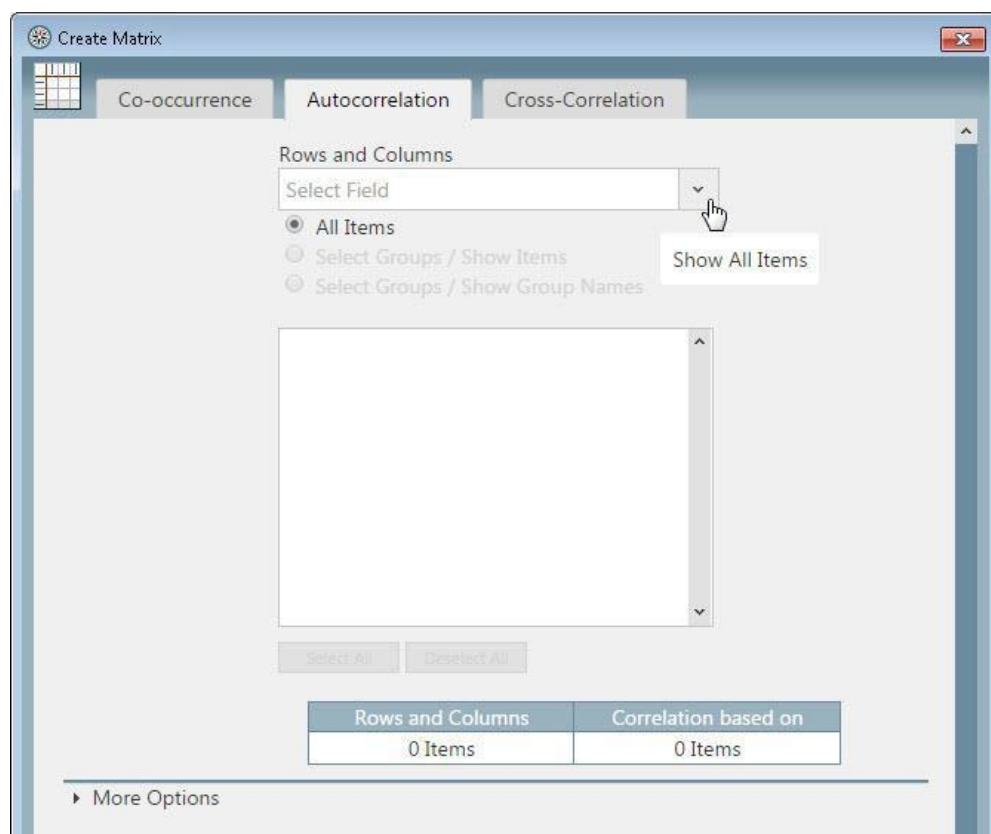
or from the Home Ribbon:



1.

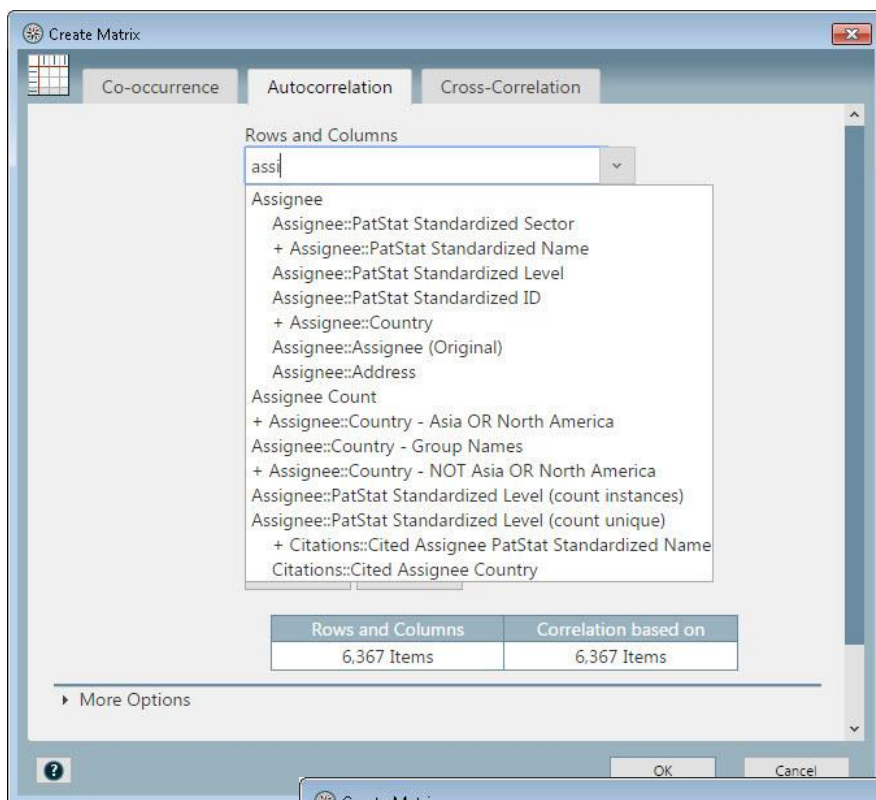
or press **Ctrl M** on the keyboard.

2. You are presented with the **Create Matrix** dialog. Click the **Auto-Correlation** tab.



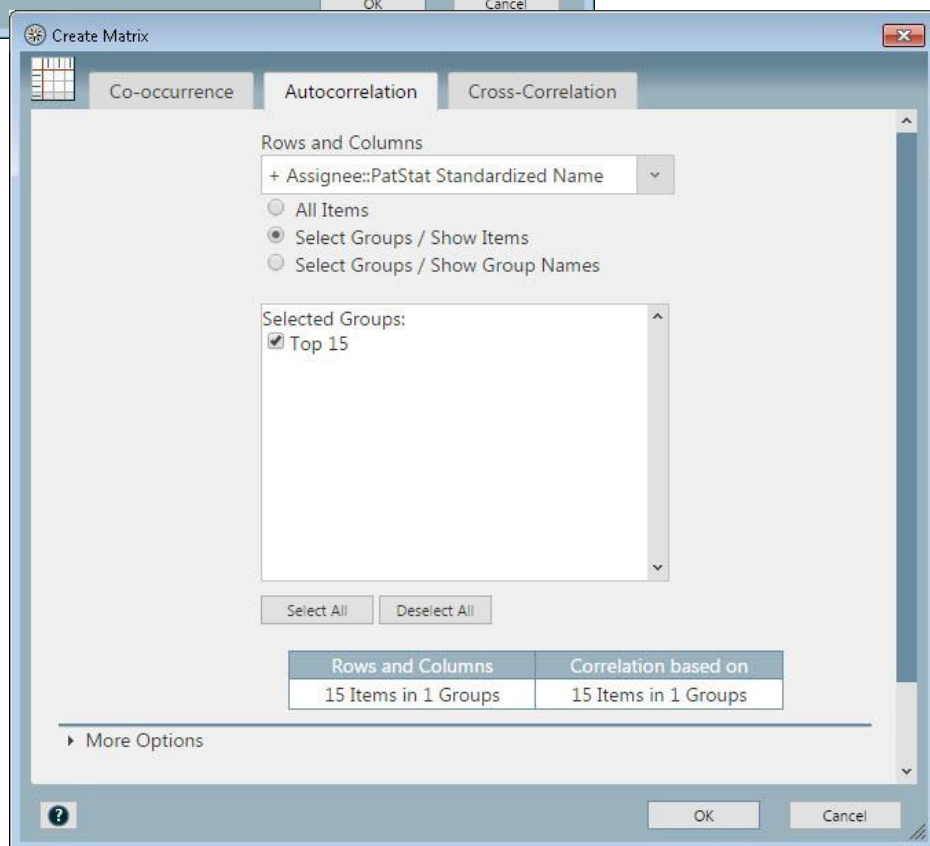


- From the Rows and Columns dropdown, choose the field and/or groups for which you want to show correlations. Another option is to type the field name in the "Select Field" box. As you type, the matches appear for selection. These items will appear on the **Row** and **Column** headers on the matrix. (This operation creates a symmetrical matrix.)



Clicking on the field name selects "All Items" as the default. A field name beginning with "+" indicates the field has groups. Selecting a field with groups enables you to select a smaller set within the field by clicking the box next to the Group name.

If a field has multiple groups assigned, you can select any or all Groups.



Selection choices include:

- **All Items** - all of the list items
- **Select Groups / Show Items** - Select Group(s) with list items as labels
- **Select Groups / Show Group Names** - Select Group(s) using group names as labels

Notice the matrix definition (below the two windows) is built as choices are made. This allows you to get an idea of the size of the matrix you are creating.

After you have selected fields for the Rows and Columns, you could click **OK** and the Matrix would be created. However, more options are available.

By default, the Matrix is based on the number of Records. You can choose other options by clicking **More Options**:

| Rows and Columns     | Correlation based on |
|----------------------|----------------------|
| 15 Items in 1 Groups | 15 Items in 1 Groups |

▼ More Options

|   |   |
|---|---|
| Based on...                                   | Correlation function                    |
| <input checked="" type="radio"/> # of records | <input checked="" type="radio"/> Cosine |
| <input type="radio"/> # of instances          | <input type="radio"/> Pearson's r       |

Help OK Cancel

4. Select the Basis for the Matrix - either **# of Records** or **# of Instances**. For most “index” terms, **# of Records** is the correct choice. For fields that may have more than one instance of a given item in a record, **# of Instances** may be appropriate (e.g., NLP words or phrases).
5. Correlation function is enabled when a correlation matrix is chosen. Choose from **Cosine** (the default), or **Pearson's r**.
6. Click **OK**.

## Cross-Correlation Matrix

A Cross-Correlation Matrix shows correlations among items in a list based on the values in another list. For example, a Cross-Correlation Matrix of Authors using Descriptors can show groups of people who write about the same things. As another example, a Cross-Correlation Matrix of Organizations using Descriptors can show organizations that write about the same things.

| Reset |     | Assignee::Name (Cleaned)   | 1                            | 2       | 3             | 4             | 5              | 6                               | 7                    | 8                 | 9              | 10                            | 11                             | 12                              |  |
|-------|-----|--|------------------------------|---------|---------------|---------------|----------------|---------------------------------|----------------------|-------------------|----------------|-------------------------------|--------------------------------|---------------------------------|--|
|       |     | # Records  | 3                            | 4       | 5             | 3             | 3              | 4                               | 3                    | 3                 | 3              | 4                             | 6                              | 6                               |  |
|       |     | ▼ ▲  |                              |         |               |               |                |                                 |                      |                   |                |                               |                                |                                 |  |
|       |     | Show Values >= 0.00 and <= 1.00  |                              |         |               |               |                |                                 |                      |                   |                |                               |                                |                                 |  |
|       |     | Cross-Correlation<br>Crossed With: International<br>Classification Revised (1)<br>3 Groups (Items)<br># of Records<br>Cosine |                              |         |               |               |                |                                 |                      |                   |                |                               |                                |                                 |  |
|       |     | ▼ ▲  |                              |         |               |               |                |                                 |                      |                   |                |                               |                                |                                 |  |
|       |     |  | FRAUNHOFER GES ZUR FORDERUNG | DOXA AB | DEGUDENT GMBH | KLEE JOACHIME | SHUKLA BRIAN A | VITA ZAHNFABRIK H RAUTER GMBH & | COLTENE WHALEDENT AG | BRINGLEY JOSEPH F | ADA FOUNDATION | PROD DENTAIRES PIERRE ROLLAND | JAMES R GLIDEWELL DENTAL CERAM | PENTRON CLINICAL TECHNOLOGY LLC |  |
| 1     | 174 | TOKUYAMA DENTAL CORP   | 0.350                        | 0.457   | 0.455         | 0.668         | 0.699          | 0.477                           | 0.684                | 0.696             | 0.707          | 0.693                         | 0.534                          | 0.785                           |  |
| 2     | 145 | 3M CO  | 0.383                        | 0.468   | 0.502         | 0.674         | 0.756          | 0.521                           | 0.744                | 0.734             | 0.733          | 0.698                         | 0.576                          | 0.780                           |  |
| 3     | 128 | SHOFU INC  | 0.400                        | 0.465   | 0.504         | 0.674         | 0.719          | 0.520                           | 0.704                | 0.723             | 0.711          | 0.691                         | 0.569                          | 0.794                           |  |
| 4     | 114 | KURARAY NORITAKE DENTAL INC  | 0.379                        | 0.475   | 0.481         | 0.673         | 0.714          | 0.497                           | 0.692                | 0.737             | 0.733          | 0.689                         | 0.539                          | 0.794                           |  |
| 5     | 96  | DENTSPLY INTERNATIONAL INC   | 0.346                        | 0.438   | 0.444         | 0.726         | 0.764          | 0.481                           | 0.724                | 0.753             | 0.744          | 0.711                         | 0.504                          | 0.827                           |  |
| 6     | 73  | IVOCAR VIVADENT AG   | 0.550                        | 0.458   | 0.645         | 0.632         | 0.704          | 0.655                           | 0.720                | 0.702             | 0.676          | 0.652                         | 0.638                          | 0.748                           |  |
| 7     | 48  | GC DENTAL IND CORP   | 0.375                        | 0.458   | 0.473         | 0.623         | 0.701          | 0.504                           | 0.711                | 0.756             | 0.741          | 0.647                         | 0.544                          | 0.760                           |  |
| 8     | 23  | COLGATE PALMOLIVE CO   | 0.208                        | 0.239   | 0.266         | 0.267         | 0.271          | 0.250                           | 0.297                | 0.301             | 0.302          | 0.307                         | 0.326                          | 0.317                           |  |
| 9     | 23  | KULZER & CO GMBH   | 0.319                        | 0.422   | 0.436         | 0.643         | 0.703          | 0.482                           | 0.730                | 0.698             | 0.693          | 0.646                         | 0.490                          | 0.786                           |  |
| 10    | 19  | PROCTER & GAMBLE CO  | 0.264                        | 0.295   | 0.335         | 0.394         | 0.388          | 0.322                           | 0.406                | 0.407             | 0.395          | 0.435                         | 0.393                          | 0.453                           |  |
| 11    | 17  | VOCO GMBH  | 0.279                        | 0.374   | 0.371         | 0.674         | 0.750          | 0.423                           | 0.706                | 0.718             | 0.738          | 0.680                         | 0.431                          | 0.801                           |  |
| 12    | 15  | KERR CORP  | 0.330                        | 0.375   | 0.385         | 0.720         | 0.804          | 0.443                           | 0.732                | 0.752             | 0.733          | 0.703                         | 0.446                          | 0.821                           |  |
| 13    | 10  | MUHLBAUER TECHNOLOGY GMBH  | 0.267                        | 0.364   | 0.338         | 0.675         | 0.719          | 0.419                           | 0.642                | 0.713             | 0.713          | 0.658                         | 0.414                          | 0.807                           |  |
| 14    | 9   | GLAXO GROUP LTD  | 0.282                        | 0.304   | 0.355         | 0.421         | 0.407          | 0.351                           | 0.460                | 0.437             | 0.428          | 0.467                         | 0.403                          | 0.487                           |  |
| 15    | 8   | RUSSIAN FEDERATION: SARATOV  | 0.277                        | 0.326   | 0.357         | 0.373         | 0.373          | 0.336                           | 0.441                | 0.414             | 0.421          | 0.437                         | 0.436                          | 0.438                           |  |
| 16    | 8   | VERICOM CO LTD   | 0.331                        | 0.396   | 0.429         | 0.683         | 0.668          | 0.451                           | 0.660                | 0.653             | 0.664          | 0.677                         | 0.493                          | 0.757                           |  |
| 17    | 7   | NIPPON SHIKA YAKUJIN CO LTD  | 0.285                        | 0.347   | 0.367         | 0.420         | 0.438          | 0.358                           | 0.459                | 0.487             | 0.495          | 0.482                         | 0.449                          | 0.505                           |  |
| 18    | 7   | ULTRADENT PRODUCTS INC   | 0.246                        | 0.331   | 0.344         | 0.520         | 0.551          | 0.372                           | 0.568                | 0.577             | 0.587          | 0.536                         | 0.396                          | 0.722                           |  |
| 19    | 6   | BASF AG  | 0.164                        | 0.193   | 0.211         | 0.235         | 0.250          | 0.199                           | 0.241                | 0.278             | 0.282          | 0.301                         | 0.258                          | 0.285                           |  |

Creation of a Cross-Correlation Matrix requires you to select two fields. The first choice is for the items that will actually appear as row and column items in the matrix - usually a field or a smaller group of items you define in a List View. The second field you choose is the basis of the analysis of the relationships among the row and column items.

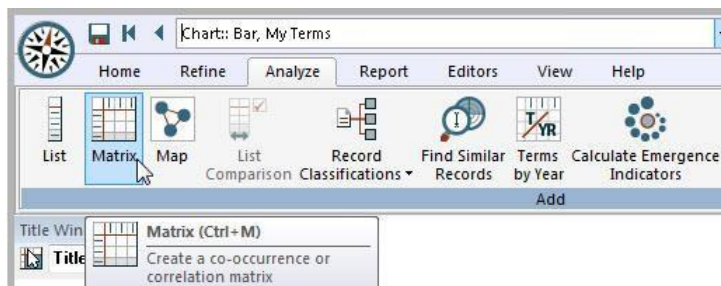
In this example, the default "Heat Map" helps to identify items with high correlation.

See [Creating a cross-correlation matrix](#).

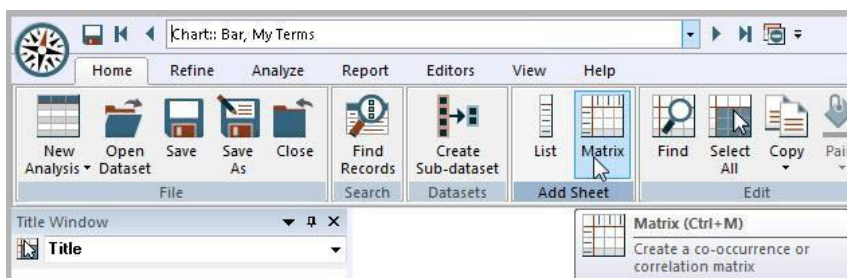
Within a Cross-Correlation matrix, you can: Zoom, Resize the Rows and Columns, Sort, Make Heat Map (or Remove Colors), Paint cells, "Flood" the matrix, Select multiple cells, Find a string, or List Cells in the Matrix. See [Working with a Matrix](#) for details.

## Creating a cross-correlation matrix

1. Open the **Create Matrix** dialog box by selecting **Matrix** from the Analyze ribbon:

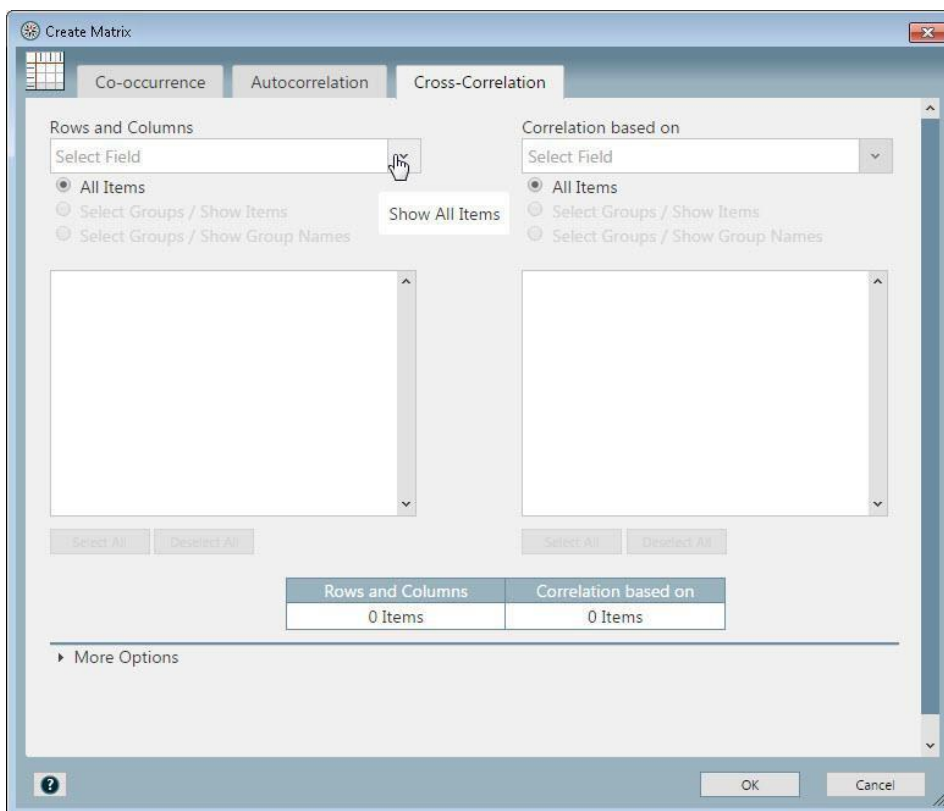


or from the Home Ribbon:



or press **Ctrl M** on the keyboard.

2. You are presented with the **Create Matrix** dialog. Click on the **Cross-Correlation** tab.



- From the Rows and Columns window, choose the field and/or groups for which you want to show correlations. Another option is to type the field name in the "Select Field" box. As you type, the matches appear for selection. These items will appear on the **Row** and **Column** headers on the matrix.

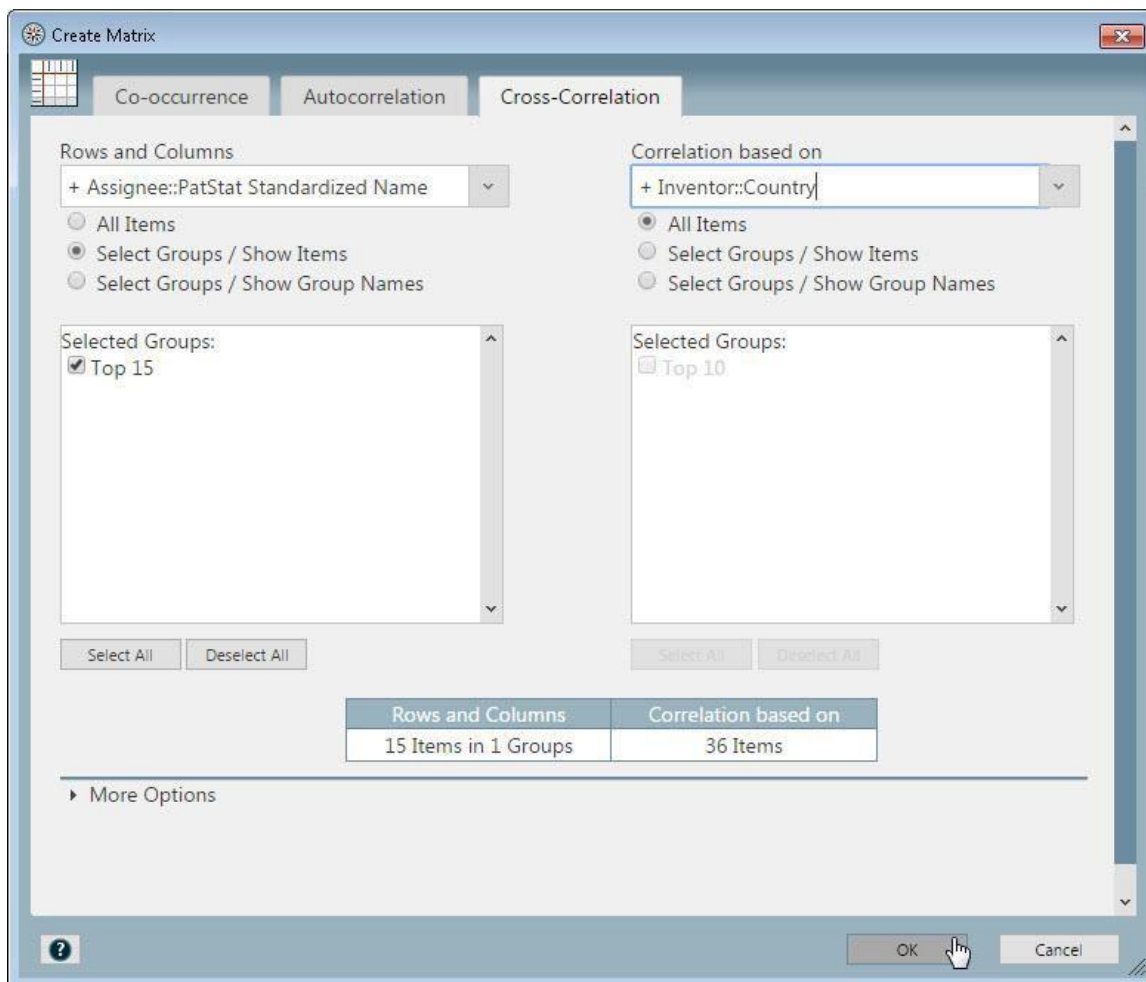
Clicking on the field name selects "All Items" as the default. A field name beginning with "+" indicates the field has groups. Selecting a field with groups enables you to select a smaller set within the field by clicking the box next to the Group name.

Selection choices include:

- **All Items** - all of the list items
- **Select Groups / Show Items** - Select Group(s) with list items as labels
- **Select Groups / Show Group Names** - Select Group(s) using group names as labels

If a field has multiple groups assigned, you can select any or all Groups.

- In the "Correlation based on" window, choose the field and/or groups that you want to use to determine the correlation between items. In general, Rows and Columns items that share many of the same "Correlation based on" values will have higher correlation values.



Notice the matrix definition (below the two windows) is built as choices are made. This allows you to get an idea of the size of the matrix you are creating.

After you have selected fields for "Rows and Columns" and "Correlation based on", you could click **OK** and the Matrix would be created. However, more options are available.



By default, the Matrix is based on the number of Records. You can choose other options by clicking **More Options**:

| Rows and Columns     | Correlation based on |
|----------------------|----------------------|
| 15 Items in 1 Groups | 15 Items in 1 Groups |

▼ More Options

|   |   |
|---|---|
| Based on...                                   | Correlation function                    |
| <input checked="" type="radio"/> # of records | <input checked="" type="radio"/> Cosine |
| <input type="radio"/> # of instances          | <input type="radio"/> Pearson's r       |

Help OK Cancel

5. Select the Basis for the Matrix - either **# of Records** or **# of Instances**. For most "index" terms, **# of Records** is the correct choice. For fields that may have more than one instance of a given item in a record, **# of Instances** may be appropriate (e.g., NLP words or phrases).
6. Correlation function is enabled when a correlation matrix is chosen. Choose from either **Cosine** (the default), or **Pearson's r**.
7. Click **OK**.

## Working with a Matrix

While viewing a Matrix, you can: Zoom, Resize Rows and Columns; Sort rows/columns; Flood a matrix; Make Heat Map; Paint cells; Select multiple cells; Find a string; Add Selections to a Group; List Cells in a Matrix.

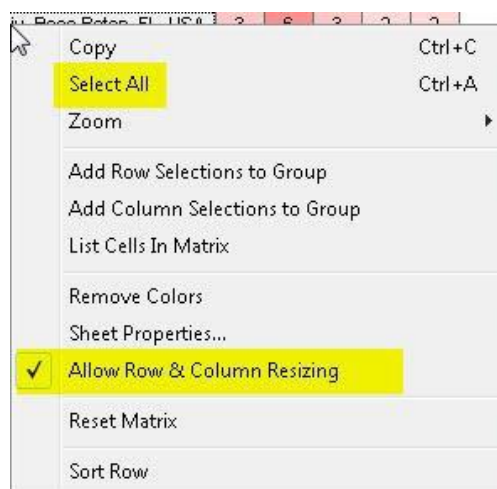
### Resize Rows and Columns

You can resize the rows and columns of a matrix.

First, using the Right-Click menu, be sure the "Allow Row & Column Resizing" option is enabled/checked. Then choose **Select All**.

The entire matrix is selected.

Next, near the outermost row or column numbers, hover your mouse over the border between the rows or columns, until your pointer changes:



Then click and drag to expand the row/column. The entire matrix will be resized. (The same procedure must be done for both rows and columns.)

| Reset |           | Corporate Source                           | 1             | 2               | 3          | 4          | 5       | 6      | 7                   | 8               | 9              | 10                 | 11                  | 12       | 13               | 14              | 15                  |
|-------|-----------|--|---------------|-----------------|------------|------------|---------|--------|---------------------|-----------------|----------------|--------------------|---------------------|----------|------------------|-----------------|---------------------|
|       |           | # Records                                  | 243           | 163             | 148        | 143        | 119     | 111    | 86                  | 82              | 81             | 79                 | 77                  | 77       | 75               | 74              | 62                  |
|       |           | ▼ ▲  |               |                 |            |            |         |        |                     |                 |                |                    |                     |          |                  |                 |                     |
|       |           | Show Values >= 1 and <= 14                 |               |                 |            |            |         |        |                     |                 |                |                    |                     |          |                  |                 |                     |
|       |           | Cooccurrence # of Records                  |               |                 |            |            |         |        |                     |                 |                |                    |                     |          |                  |                 |                     |
|       |           | ▼ ▲  |               |                 |            |            |         |        |                     |                 |                |                    |                     |          |                  |                 |                     |
|       | # Records |  | ROBOTS_Mobile | Computer vision | Navigation | Algorithms | Sensors | Robots | Computer simulation | Motion planning | Motion control | Navigation systems | Collision avoidance | Vehicles | Image processing | Control systems | Mathematical models |
| 1     | 22        | Carnegie Mellon Univ, Pittsburgh, PA, USA  | 14            | 7               | 11         | 4          | 3       | 5      | 3                   | 2               | 4              | 3                  | 5                   | 1        | 3                | 2               | 5                   |
| 2     | 12        | California Inst of Technology, Pasadena, C | 6             | 3               | 1          | 6          | 1       | 1      | 1                   | 2               | 2              | 2                  | 1                   | 1        | 2                |                 | 1                   |
| 3     | 11        | Texas A&M Univ, College Station, TX, USA   |               | 1               |            |            |         | 3      | 1                   |                 | 2              | 3                  |                     |          |                  | 1               | 1                   |
| 4     | 10        | Florida Atlantic Univ, Boca Raton, FL, USA | 3             | 6               | 3          | 2          | 2       |        |                     | 1               |                |                    | 3                   | 2        | 3                |                 | 2                   |
| 5     | 7         | North Carolina State Univ, Raleigh, NC, US | 7             | 1               |            |            | 1       |        |                     | 1               | 1              |                    |                     |          |                  |                 | 2                   |
| 6     | 7         | Ohio State Univ, Columbus, OH, USA         |               | 2               |            | 1          | 1       | 1      | 1                   |                 | 1              |                    |                     |          | 1                | 1               | 1                   |
| 7     | 6         | FMC Corp, Santa Clara, CA, USA             |               |                 |            |            |         |        |                     |                 |                |                    |                     |          |                  | 1               |                     |
| 8     | 6         | Naval Postgraduate Sch, Monterey, CA, US   |               |                 | 2          | 3          | 2       |        |                     | 1               | 1              | 1                  |                     | 1        |                  |                 | 1                   |

See Also:

[Zooming in a List or Matrix](#)

### Sorting rows or columns in a matrix

You can sort the rows or columns in a Matrix View by (refer to the illustration below for corresponding references):

1. Row or column **data**. Double-click on the row or column number (for the column headings, this is the number in the top-most row; for the row headings, it is the number in the left-most column). The rows or columns are sorted in decreasing numeric order. Double-click again, and the rows or columns are sorted in increasing numeric order. (The right-click menu also offers Sort Row/Sort Column.)
2. Row or column **headings**. Double-click on the list heading (for the column headings, this is the first cell in the third row; for the row headings, it is the first cell in the third column). The rows or columns are sorted in alphabetical order. Double-click again, and the rows or columns are sorted in reverse alphabetical order.
3. **Number of records** (# Records) column or row. In the **# Records** row or column, double click on the left (for columns) or top (for rows) cell. The rows or columns are sorted in decreasing numeric order. Double-click again, and the rows or columns are sorted in increasing numeric order.
4. Click on the **Reset** cell (top left) and select Reset Matrix. Both the rows and columns of the Matrix View are sorted by **# Records** in decreasing order.

|                                   | 1   | 2  | 3  | 4  | 5   | 6                              | 7   | 8   | 9   | 10                                 | 11                                      | 12                            | 13   | 14                                    | 15                                     |
|-----------------------------------|---|--|--|--|---|--------------------------------|---|---|---|------------------------------------|---|-------------------------------|--|---------------------------------------|--|
| <b># Records</b>                  | 31  | 14                                       | 13   | 11   | 10  | 9                              | 9   | 8   | 7   | 7                                  | 7                                       | 6                             | 6  | 6                                     |  |
| <b>Corporate Source (Cleaned)</b> | Carnegie Mellon Univ, Pittsburgh, PA, USA | Texas A&M Univ, College Station, TX, USA | California Inst of Technology, Pasadena, CA, USA | Florida Atlantic Univ, Boca Raton, FL, USA | Univ of California at Berkeley, Berkeley, CA, USA | FMC Corp, Santa Clara, CA, USA | Pennsylvania State Univ, University Park, PA, USA | Naval Postgraduate Sch, Monterey, CA, USA | North Carolina State Univ, Raleigh, NC, USA | Ohio State Univ, Columbus, OH, USA | Univ of Massachusetts, Amherst, MA, USA | Yale Univ, New Haven, CT, USA | Istituto Elaborazione Segnali ed Immagini, Rome, Italy | Jet Propulsion Lab, Pasadena, CA, USA | Oak Ridge Natl Lab, Oak Ridge, TN, USA |
| 1                                 | 163                                       | Computer vision                          | 8  | 3  | 3   | 7                              | 4   | 2   | 1   | 2                                  | 3                                       | 1                             | 2  |                                       |  |
| 2                                 | 42  | Cameras                                  | 1  | 2  | 1   | 4                              |   |   |   |                                    |   |                               |  |                                       | 1                                      |
| 3                                 | 22  | Three dimensional                        |  |  |   |                                | 1   | 1   |   |                                    | 1                                       |                               |  |                                       |  |
| 4                                 | 77  | Collision avoidance                      | 5  |  | 1   | 3                              | 2   | 2   |   |                                    | 1                                       |                               |  |                                       |  |
| 5                                 | 23  | Control equipment                        | 2  | 2  | 3   | 1                              |   | 3   |   |                                    |   |                               |  |                                       |  |
| 6                                 | 28  | Feature extraction                       |  | 1  | 3   | 2                              | 1   |   |   | 1                                  |   |                               | 2  |                                       |  |
| 7                                 | 75  | Image processing                         | 3  | 2  | 2   | 3                              | 1   | 1   |   | 1                                  | 1                                       |                               |  |                                       |  |
| 8                                 | 10  | Image quality                            |  |  |   | 3                              |   |   |   |                                    |   |                               |  |                                       |  |
| 9                                 | 148                                       | Navigation                               | 13   | 2  | 3   | 1                              | 1   | 2   |   | 5                                  | 1                                       | 4                             | 2  |                                       |  |
| 10                                | 243                                       | ROBOTS_Mobile                            | 19   | 7  | 3   |                                | 1   |   | 7   | 3                                  | 2                                       | 4                             | 1  |                                       |  |
| 11                                | 143                                       | Algorithms                               | 4  | 1  | 6   | 2                              | 2   | 1   | 2   | 3                                  | 1                                       | 1                             | 1  |                                       |  |
| 12                                | 50  | Fuzzy sets                               |  | 2  | 1   | 2                              |   | 3   |   |                                    |   | 3                             | 1  |                                       |  |
| 13                                | 35  | Image analysis                           | 1  | 1  | 1   | 2                              |   | 1   |   |                                    |   |                               |  |                                       |  |

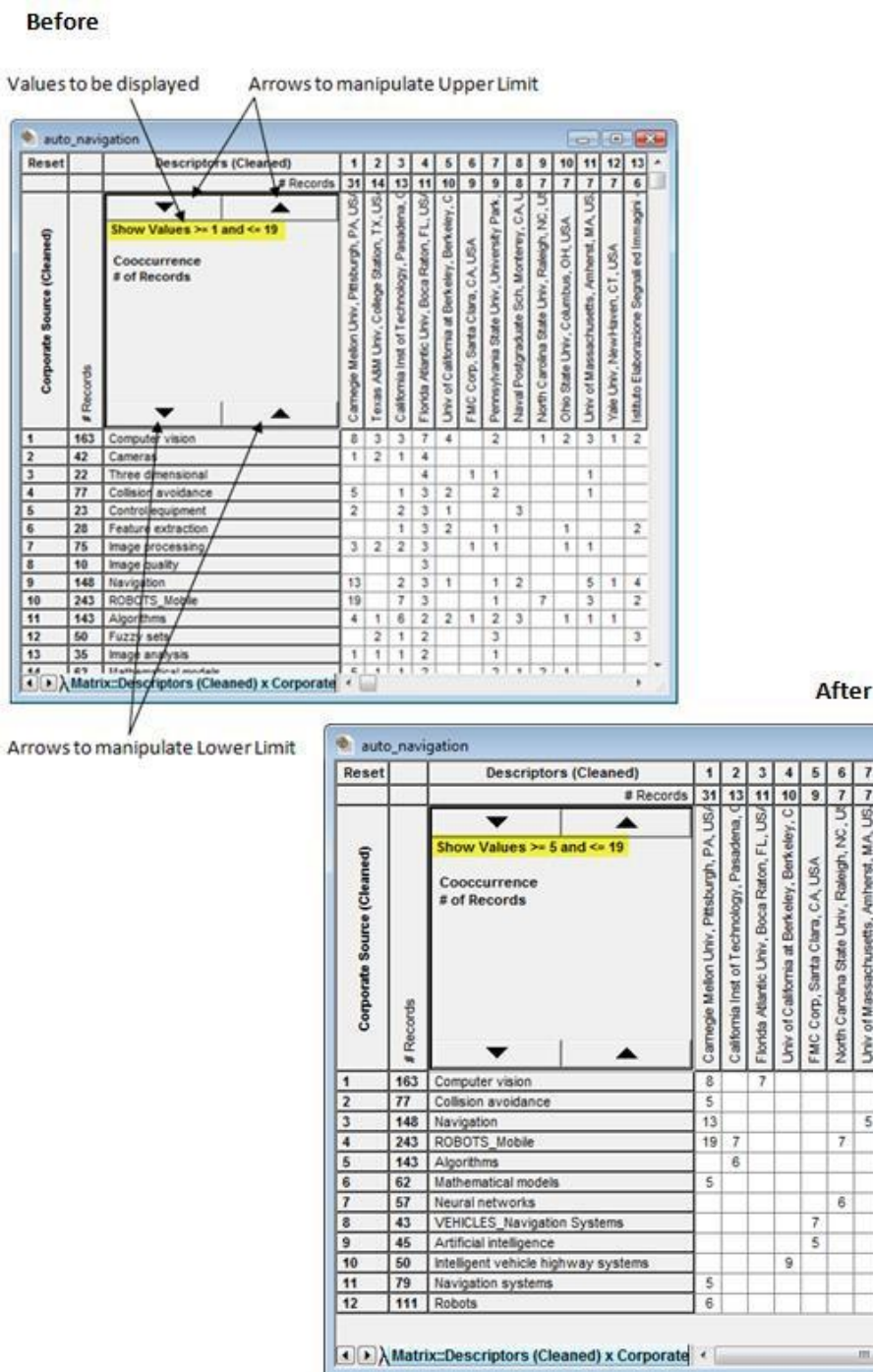
### Flooding a matrix

You can "flood" a matrix to remove the rows and columns which have values that fall outside the Floor/Ceiling range.

#### In a Matrix View:

The set of arrows at the top manipulates the upper limit for the matrix. The ceiling is initially set as the highest value in the matrix. The set of arrows at the bottom of the box manipulates the minimum value to be included in the matrix. Click on the **up** and **down arrows** to change the values. With each click of an arrow, the matrix changes, removing those values that fall outside the parameters.

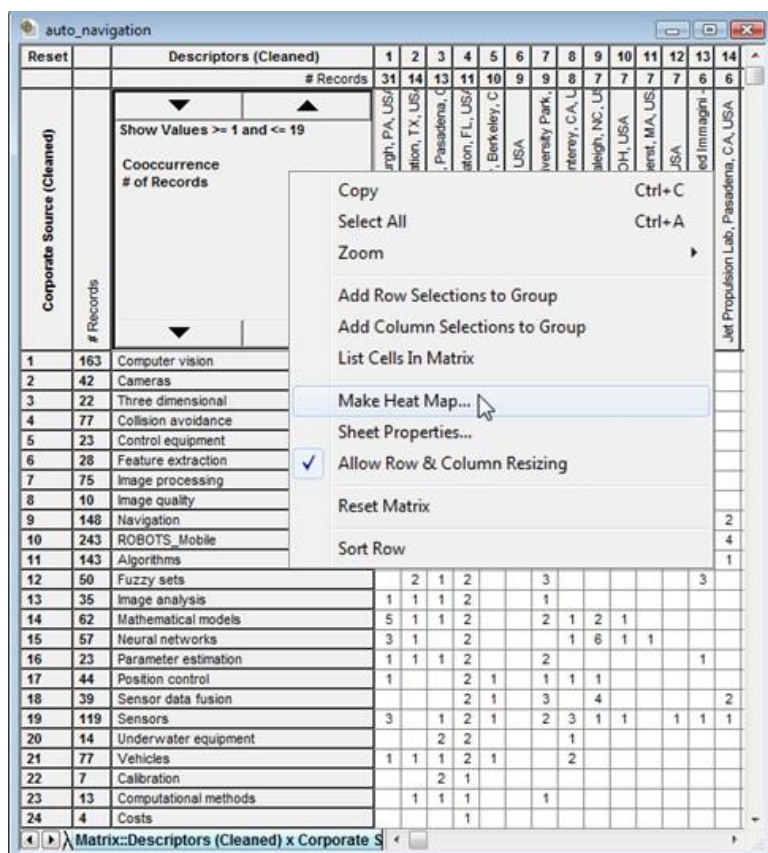
The "After" matrix (bottom picture) is a result of changing the lower limit to "5". Any entries with values of less than five were removed.



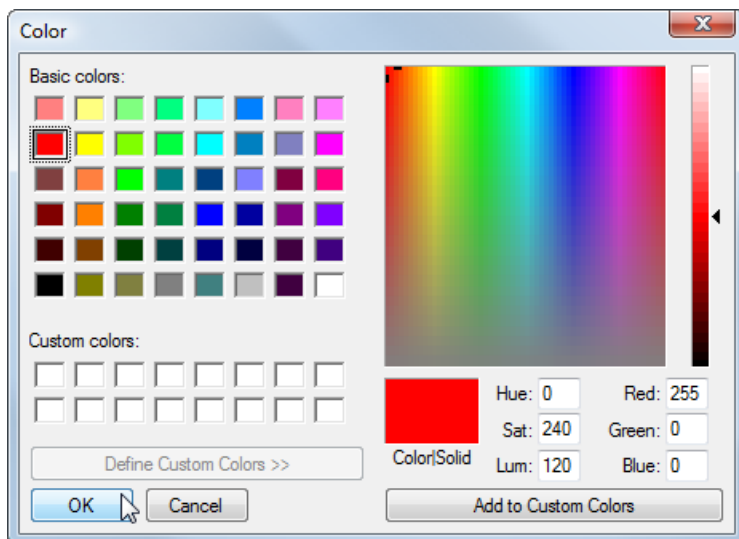
## Make Heat Map

Use a "Heat Map" to highlight the cells in a matrix with the highest numerical values, making it easy to identify the terms with the strongest relationships. This is now the default.

If a matrix does not have colors displayed, right-click in the matrix view, and select **Make Heat Map...**



You are presented with a color chart from which to choose a color to indicate the highest values:





When you have chosen a color, click **OK**. VantagePoint will color the cells in your matrix using gradients of your selected color. The lowest values will be closest to white, and the highest values will be fully saturated and highly visible. Here are the results:

auto\_navigation

| Reset                      | Descriptors (Cleaned) |                                     |   |  |   |  |  |                                |  |   |   |                                    |   |                               |  |                                       |  |
|----------------------------|-----------------------|-------------------------------------|---|--|---|--|--|--------------------------------|--|---|---|------------------------------------|---|-------------------------------|--|---------------------------------------|--|
|                            |                       | # Records                           | 1   | 2  | 3   | 4  | 5  | 6                              | 7  | 8   | 9   | 10                                 | 11                                      | 12                            | 13   | 14                                    |  |
| Corporate Source (Cleaned) | # Records             | <div><div>▼</div><div>▲</div></div> | 31  | 14                                       | 13  | 11   | 10   | 9                              | 9  | 8   | 7   | 7                                  | 7                                       | 7                             | 6  | 6                                     |  |
|                            |                       | Show Values >= 1 and <= 19          | Carnegie Mellon Univ, Pittsburgh, PA, USA | Texas A&M Univ, College Station, TX, USA | California Inst of Technology, Pasadena, CA | Florida Atlantic Univ, Boca Raton, FL, USA | Univ of California at Berkeley, Berkeley, CA | FMC Corp, Santa Clara, CA, USA | Pennsylvania State Univ, University Park, PA | Naval Postgraduate Sch, Monterey, CA, USA | North Carolina State Univ, Raleigh, NC, USA | Ohio State Univ, Columbus, OH, USA | Univ of Massachusetts, Amherst, MA, USA | Yale Univ, New Haven, CT, USA | Istituto Elaborazione Segnali ed Immagini, Rome, Italy | Jet Propulsion Lab, Pasadena, CA, USA |  |
|                            |                       |                                     |   |  |   |  |  |                                |  |   |   |                                    |   |                               |  |                                       |  |
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|                            |                       |                                     |   |  |   |  |  |                                |  |   |   |                                    |   |                               |  |                                       |  |
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|                            |                       |                                     |   |  |   |  |  |                                |  |   |   |                                    |   |                               |  |                                       |  |

To remove the colors, simply right-click and select **Remove Colors**.

See Also:

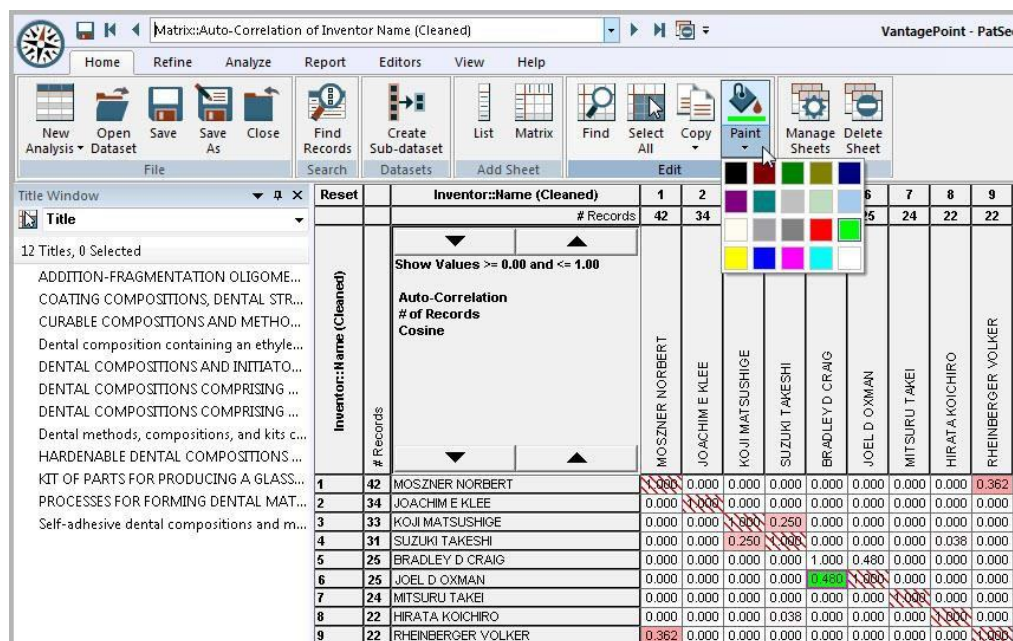
[Heat Maps Settings](#)

### Painting cells in a matrix

With a Matrix View active:

1. Select the cell or cells to be painted by clicking in the cell or multi-selecting cells.
2. Click the **Paint** dropdown, and select the color you want to use. This color will be used until you

select another color.



- Paint other cells by clicking the cell to be painted, then clicking the **Paint** icon, and choosing the color from the color palette.

### Selecting multiple cells in a matrix

You can select multiple cells in a Matrix View by using the Shift or Control keys while you click on the cells.

**To add selections one at a time:** Press the Ctrl key as you click on the cell (Ctrl-Click). The cell you click on is added to the selections already made.

**To add a range of selections at one time:** Press the Shift key as you click on the cell (Shift-Click). All of the cells between the cell you Shift-Click on and the last selected cell are added to the selections already made.

or

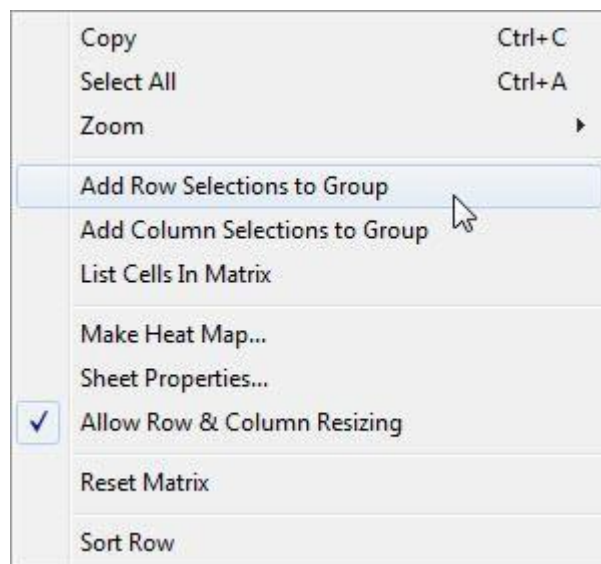
Use a "click and drag" method to highlight multiple adjacent cells to be selected.

### Finding a string in a matrix

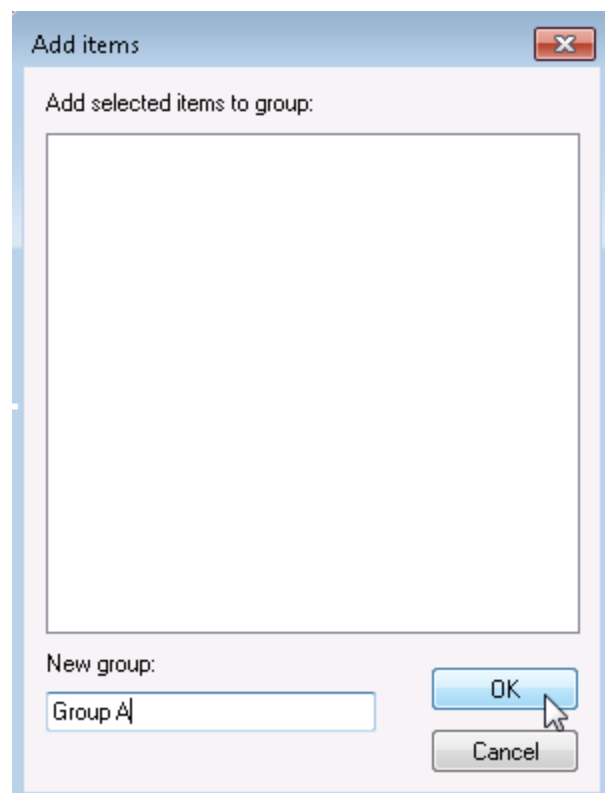
- From the Main Menu, select **Edit** and **Find...** or press **Ctrl F** on the keyboard.
- In the **Find** dialog box, type in the string of characters you want to find.
- Click **Find** to search for the string.

### Creating Groups from a Matrix

Within a Matrix, you can create a Group by right-clicking on the Row (or Column) and selecting **Add Row (Column) Selections To Group**.



The **Add Items** dialog box appears where you specify the Group name. Click **OK**.



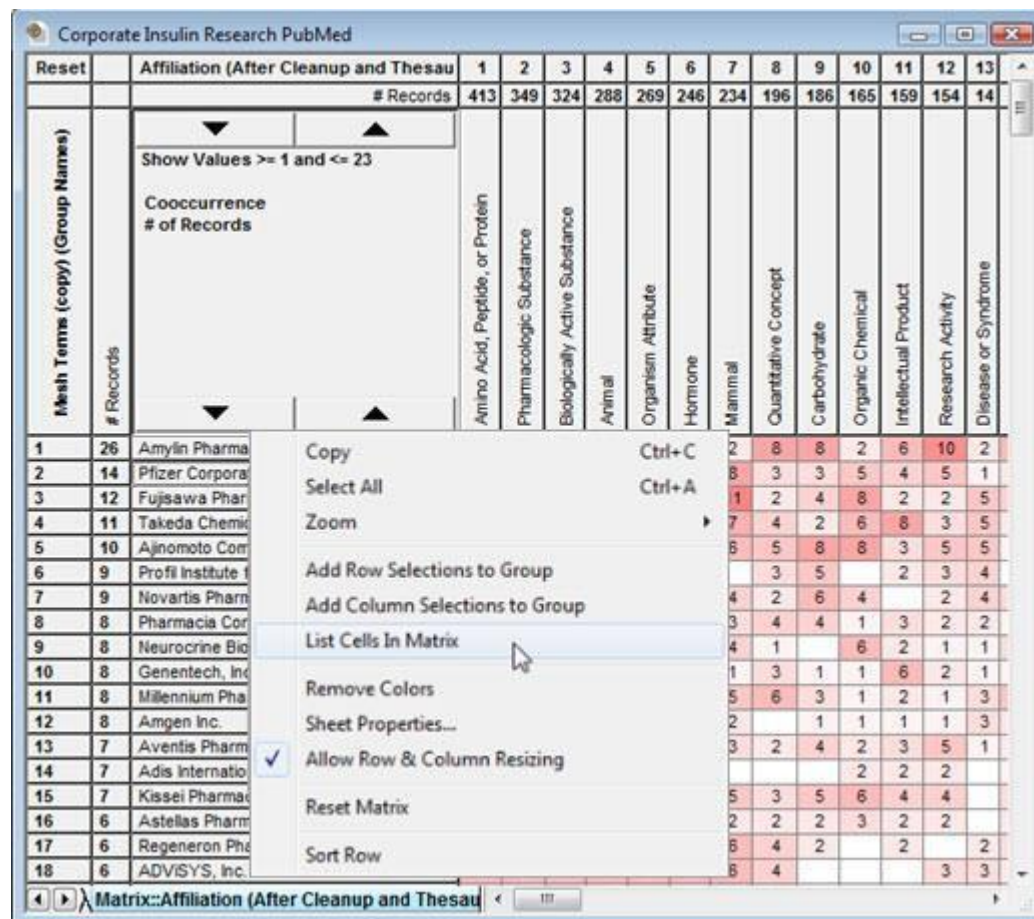
When you Create a List of the Field Name, the new Group will appear.

## List Cells in Matrix

It is difficult to find the biggest values in a large matrix. VantagePoint provides an alternative view of a matrix called the 'Matrix List'. The Matrix List is a list that has a row for each cell in the matrix.

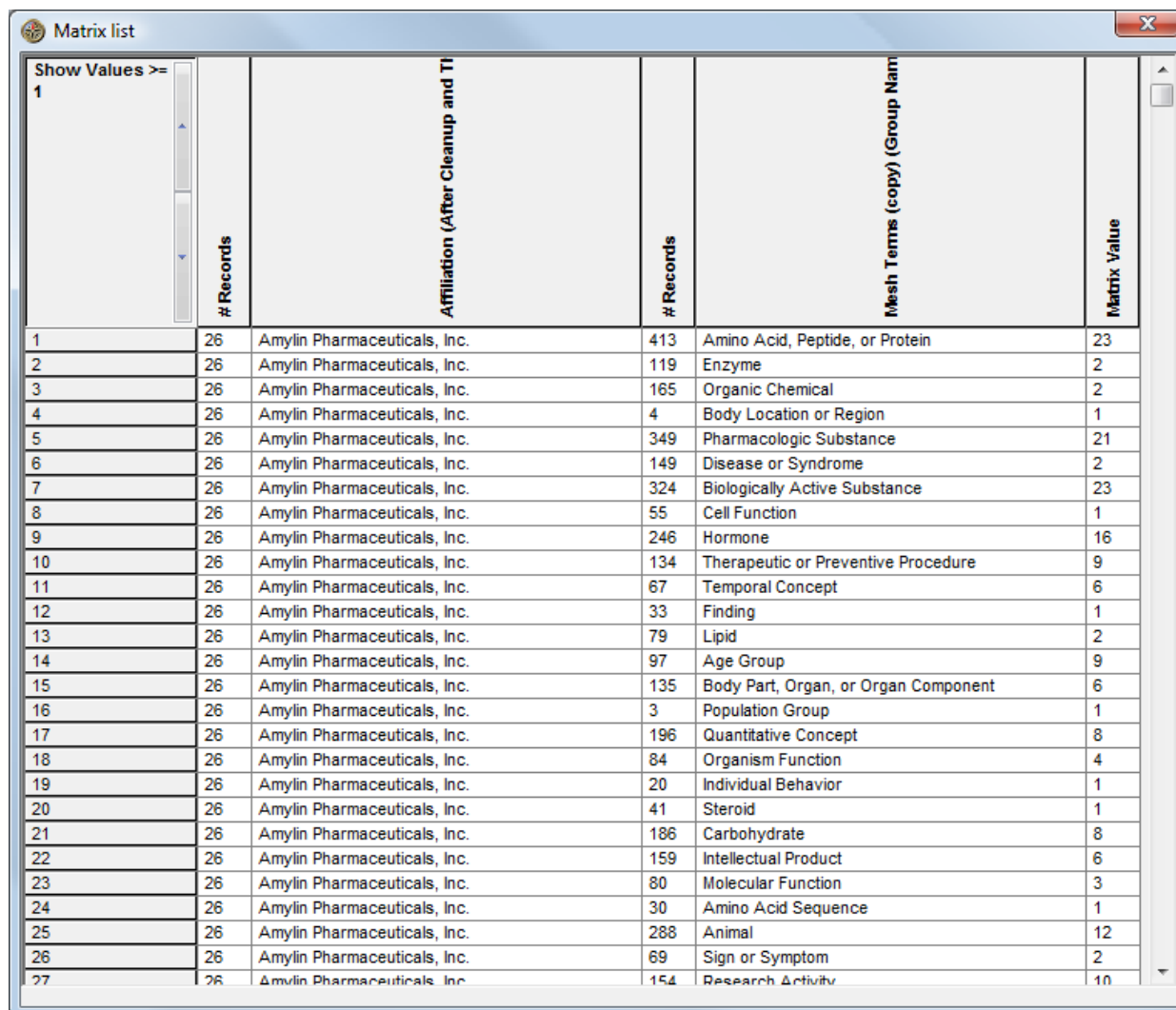
**Note:** The Matrix List is a temporary view of the matrix. It is not saved with the \*.vpt file. If you switch to another VantagePoint sheet or another application, the Matrix List is closed.

The Matrix List is created using the right-click menu in a matrix:



This illustration shows a co-occurrence matrix, but the Matrix List can be generated for a correlation matrix, too.

For the above co-occurrence matrix, the Matrix List looks like this:



|    | # Records | Affiliation (After Cleanup and T) | # Records | Mesh Terms (copy) (Group Name)       | Matrix Value |
|----|-----------|-----------------------------------|-----------|--------------------------------------|--------------|
| 1  | 26        | Amylin Pharmaceuticals, Inc.      | 413       | Amino Acid, Peptide, or Protein      | 23           |
| 2  | 26        | Amylin Pharmaceuticals, Inc.      | 119       | Enzyme                               | 2            |
| 3  | 26        | Amylin Pharmaceuticals, Inc.      | 165       | Organic Chemical                     | 2            |
| 4  | 26        | Amylin Pharmaceuticals, Inc.      | 4         | Body Location or Region              | 1            |
| 5  | 26        | Amylin Pharmaceuticals, Inc.      | 349       | Pharmacologic Substance              | 21           |
| 6  | 26        | Amylin Pharmaceuticals, Inc.      | 149       | Disease or Syndrome                  | 2            |
| 7  | 26        | Amylin Pharmaceuticals, Inc.      | 324       | Biologically Active Substance        | 23           |
| 8  | 26        | Amylin Pharmaceuticals, Inc.      | 55        | Cell Function                        | 1            |
| 9  | 26        | Amylin Pharmaceuticals, Inc.      | 246       | Hormone                              | 16           |
| 10 | 26        | Amylin Pharmaceuticals, Inc.      | 134       | Therapeutic or Preventive Procedure  | 9            |
| 11 | 26        | Amylin Pharmaceuticals, Inc.      | 67        | Temporal Concept                     | 6            |
| 12 | 26        | Amylin Pharmaceuticals, Inc.      | 33        | Finding                              | 1            |
| 13 | 26        | Amylin Pharmaceuticals, Inc.      | 79        | Lipid                                | 2            |
| 14 | 26        | Amylin Pharmaceuticals, Inc.      | 97        | Age Group                            | 9            |
| 15 | 26        | Amylin Pharmaceuticals, Inc.      | 135       | Body Part, Organ, or Organ Component | 6            |
| 16 | 26        | Amylin Pharmaceuticals, Inc.      | 3         | Population Group                     | 1            |
| 17 | 26        | Amylin Pharmaceuticals, Inc.      | 196       | Quantitative Concept                 | 8            |
| 18 | 26        | Amylin Pharmaceuticals, Inc.      | 84        | Organism Function                    | 4            |
| 19 | 26        | Amylin Pharmaceuticals, Inc.      | 20        | Individual Behavior                  | 1            |
| 20 | 26        | Amylin Pharmaceuticals, Inc.      | 41        | Steroid                              | 1            |
| 21 | 26        | Amylin Pharmaceuticals, Inc.      | 186       | Carbohydrate                         | 8            |
| 22 | 26        | Amylin Pharmaceuticals, Inc.      | 159       | Intellectual Product                 | 6            |
| 23 | 26        | Amylin Pharmaceuticals, Inc.      | 80        | Molecular Function                   | 3            |
| 24 | 26        | Amylin Pharmaceuticals, Inc.      | 30        | Amino Acid Sequence                  | 1            |
| 25 | 26        | Amylin Pharmaceuticals, Inc.      | 288       | Animal                               | 12           |
| 26 | 26        | Amylin Pharmaceuticals, Inc.      | 69        | Sign or Symptom                      | 2            |
| 27 | 26        | Amylin Pharmaceuticals, Inc.      | 154       | Research Activity                    | 10           |

Each row represents one cell in the matrix.

The Matrix List interacts with its underlying matrix view. When the user selects a line in a Matrix List, the corresponding row and column are selected in the underlying matrix view, as shown in the next illustration. See also [Detail Window Colors](#).

Notice that the Matrix List has a flood control on the top left. The flood control in the Matrix List removes the rows with lower Matrix Values from the list.



Corporate Insulin Research PubMed

| Reset | Affiliation (After Cleanup and Thesau | 1                                 | 2                       | 3                             | 4      | 5                  | 6       | 7      | 8                    | 9            | 10               | 11                   | 12                | 13                  |
|-------|---------------------------------------|-----------------------------------|-------------------------|-------------------------------|--------|--------------------|---------|--------|----------------------|--------------|------------------|----------------------|-------------------|---------------------|
|       | # Records                             | 413                               | 349                     | 324                           | 288    | 269                | 246     | 234    | 196                  | 186          | 165              | 159                  | 154               | 14                  |
|       | Show Values >= 1 and <= 23            |                                   |                         |                               |        |                    |         |        |                      |              |                  |                      |                   |                     |
|       | Cooccurrence # of Records             |                                   |                         |                               |        |                    |         |        |                      |              |                  |                      |                   |                     |
|       |                                       | Amino Acid, Peptide, or Protein   | Pharmacologic Substance | Biologically Active Substance | Animal | Organism Attribute | Hormone | Mammal | Quantitative Concept | Carbohydrate | Organic Chemical | Intellectual Product | Research Activity | Disease or Syndrome |
| 1     | 26                                    | Amylin Pharmaceuticals, Inc.      | 23                      | 21                            | 23     | 12                 | 12      | 16     | 2                    | 8            | 8                | 2                    | 6                 | 10                  |
| 2     | 14                                    | Pfizer Corporation                | 11                      | 11                            | 6      | 8                  | 7       | 7      | 8                    | 3            | 3                | 5                    | 4                 | 5                   |
| 3     | 12                                    | Fujisawa Pharmaceutical Co., Ltd. | 8                       | 10                            | 9      | 11                 | 4       | 3      | 11                   | 2            | 4                | 8                    | 2                 | 5                   |
| 4     | 11                                    | Takeda Chemical Industries Ltd.   | 9                       | 8                             | 8      | 10                 | 5       | 6      | 7                    | 4            | 2                | 6                    | 8                 | 5                   |

Matrix list

| Show Values >= 1 | # Records | Affiliation (After C         | # Records | Mesh Terms (copy                    | Matrix Value |
|------------------|-----------|------------------------------|-----------|-------------------------------------|--------------|
| 1                | 26        | Amylin Pharmaceuticals, Inc. | 413       | Amino Acid, Peptide, or Protein     | 23           |
| 2                | 26        | Amylin Pharmaceuticals, Inc. | 119       | Enzyme                              | 2            |
| 3                | 26        | Amylin Pharmaceuticals, Inc. | 165       | Organic Chemical                    | 2            |
| 4                | 26        | Amylin Pharmaceuticals, Inc. | 4         | Body Location or Region             | 1            |
| 5                | 26        | Amylin Pharmaceuticals, Inc. | 349       | Pharmacologic Substance             | 21           |
| 6                | 26        | Amylin Pharmaceuticals, Inc. | 149       | Disease or Syndrome                 | 2            |
| 7                | 26        | Amylin Pharmaceuticals, Inc. | 324       | Biologically Active Substance       | 23           |
| 8                | 26        | Amylin Pharmaceuticals, Inc. | 55        | Cell Function                       | 1            |
| 9                | 26        | Amylin Pharmaceuticals, Inc. | 246       | Hormone                             | 16           |
| 10               | 26        | Amylin Pharmaceuticals, Inc. | 134       | Therapeutic or Preventive Procedure | 9            |
| 11               | 26        | Amylin Pharmaceuticals, Inc. | 67        | Temporal Concept                    | 6            |
| 12               | 26        | Amylin Pharmaceuticals, Inc. | 33        | Finding                             | 1            |
| 13               | 26        | Amylin Pharmaceuticals, Inc. | 79        | Lipid                               | 2            |
| 14               | 26        | Amylin Pharmaceuticals, Inc. | 97        | Age Group                           | 9            |
| 15               | 26        | Amylin Pharmaceuticals, Inc. | 135       | Body Part, Organ, or Organ Compon   | 6            |
| 16               | 26        | Amylin Pharmaceuticals, Inc. | 3         | Population Group                    | 1            |
| 17               | 26        | Amylin Pharmaceuticals, Inc. | 196       | Quantitative Concept                | 8            |
| 18               | 26        | Amylin Pharmaceuticals, Inc. | 84        | Organism Function                   | 4            |
| 19               | 26        | Amylin Pharmaceuticals, Inc. | 20        | Individual Behavior                 | 1            |
| 20               | 26        | Amylin Pharmaceuticals, Inc. | 41        | Steroid                             | 1            |

**Important Performance Note:** Each row of a Matrix List corresponds to a cell of the matrix. Consequently, the list can be extremely long - a relatively small 1,000 x 1,000 item matrix has 1 million cells and, therefore, an unflooded Matrix List of 1 million items. For this reason, it is a good idea to flood the Matrix List before attempting to sort it. Flooding the matrix reduces the number of items displayed in the Matrix List, thereby reducing the number of items that must be sorted.

The Matrix List makes it very easy to examine the largest values in any matrix. The activities of sorting, browsing, and flooding the Matrix List work much like the other views in VantagePoint. The Matrix List initially uses the flood value of the underlying matrix; but, other than this, the flood values of the Matrix List and the underlying matrix are unrelated.

## Detail Window Colors

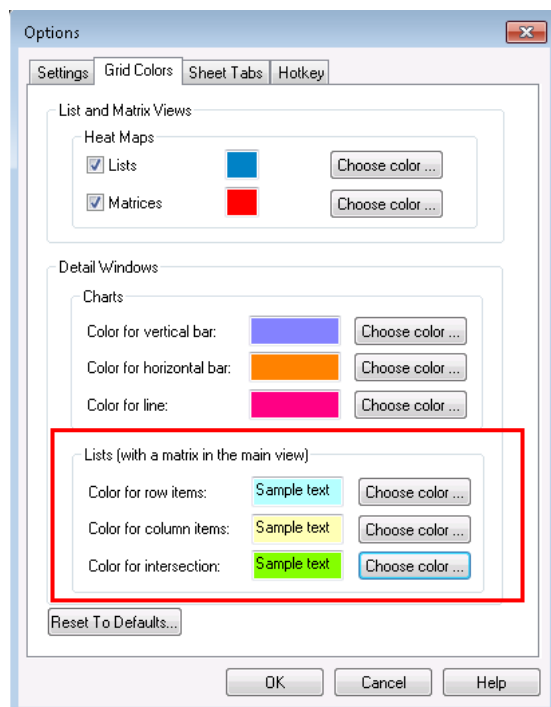
When entire rows or columns are selected in a Matrix View, the Detail Window uses color to highlight the items associated with the row(s) and column(s). In the illustration below, the items highlighted in yellow are those that co-occur with column selections only and the items highlighted in blue are those that co-occur with row selections only. The items highlighted in green are the items that co-occur with items selected in *both* rows and columns. Note that entire matrix rows and/or columns must be selected for color highlighting to appear in a List-type Detail Window.

The screenshot shows the VantagePoint software interface. On the left is a Matrix View with columns for Corporate Sources and rows for Descriptors. The matrix contains numerical values representing correlations. On the right is a Detail Window titled 'Descriptors (Cleaned)'. It shows a list of descriptors with color-coded highlights: yellow for items co-occurring with column selections, blue for items co-occurring with row selections, and green for items co-occurring with both. A right-click menu is open over the Detail Window, with 'Change Detail Window Colors' highlighted.

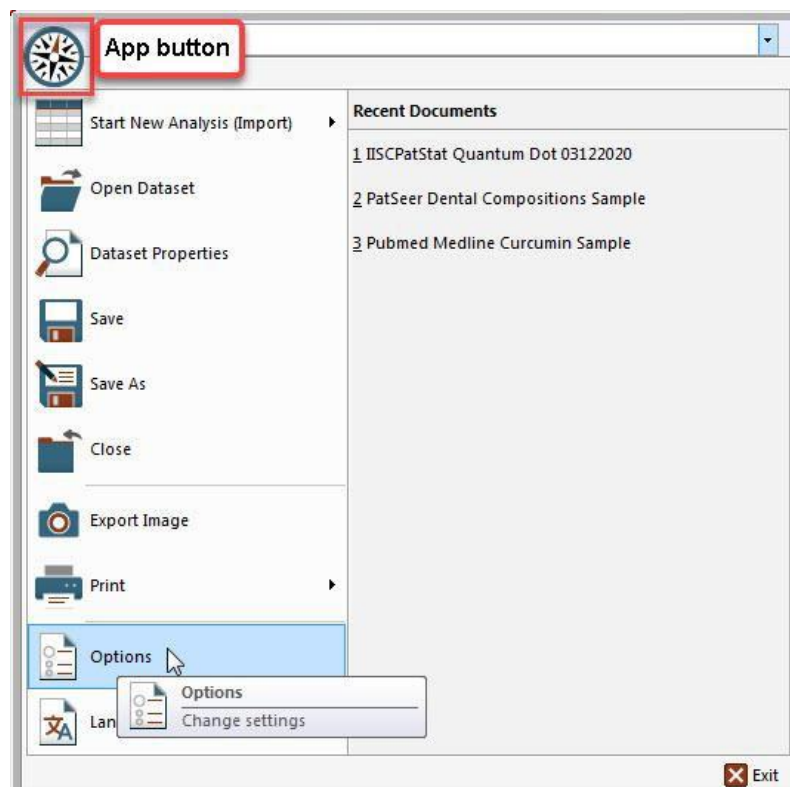
| Corporate Source | # Records | 1   | 2     | 3     | 4     | 5     | 6     | 7     | 8     |       |
|------------------|-----------|---|-------|-------|-------|-------|-------|-------|-------|-------|
| 1                | 22        | Carnegie Mellon Univ, Pittsburgh, PA, USA             | 1.000 | 0.613 | 0.255 | 0.519 | 0.448 | 0.260 | 0.013 | 0.302 |
| 2                | 12        | California Inst of Technology, Pasadena, CA, USA      | 0.613 | 1.000 | 0.211 | 0.524 | 0.323 | 0.197 | 0.096 | 0.340 |
| 3                | 11        | Texas A&M Univ, College Station, TX, USA              | 0.255 | 0.211 | 1.000 | 0.157 | 0.058 | 0.205 | 0.140 | 0.117 |
| 4                | 10        | Florida Atlantic Univ, Boca Raton, FL, USA            | 0.519 | 0.524 | 0.157 | 1.000 | 0.300 | 0.185 | -0.01 | 0.279 |
| 5                | 7         | North Carolina State Univ, Raleigh, NC, USA           | 0.448 | 0.323 | 0.058 | 0.300 | 1.000 | 0.099 | -0.01 | 0.157 |
| 6                | 7         | Ohio State Univ, Columbus, OH, USA                    | 0.260 | 0.197 | 0.205 | 0.185 | 0.099 | 1.000 | 0.011 | 0.113 |
| 7                | 6         | FMC Corp, Santa Clara, CA, USA                        | 0.013 | 0.096 | 0.140 | -0.01 | -0.01 | 0.011 | 1.000 | -0.01 |
| 8                | 6         | Naval Postgraduate Sch, Monterey, CA, USA             | 0.302 | 0.340 | 0.117 | 0.279 | 0.157 | 0.113 | -0.01 | 1.000 |
| 9                | 5         | Univ of Maryland, College Park, MD, USA               | 0.432 | 0.401 | 0.217 | 0.423 | 0.154 | 0.216 | 0.173 | 0.140 |
| 10               | 5         | Univ of Massachusetts, Amherst, MA, USA               | 0.643 | 0.320 | 0.237 | 0.363 | 0.242 | 0.197 | 0.000 | 0.183 |
| 11               | 5         | Univ of Sydney, Sydney, Aust                          | 0.559 | 0.435 | 0.081 | 0.372 | 0.528 | 0.121 | -0.01 | 0.299 |
| 12               | 5         | Yale Univ, New Haven, CT, USA                         | 0.227 | 0.235 | 0.127 | 0.194 | 0.078 | 0.054 | 0.164 | 0.244 |
| 13               | 4         | Ecole Polytechnique de Montreal, Montreal, QC, Canada | 0.319 | 0.321 | 0.114 | 0.209 | 0.207 | 0.108 | 0.006 | 0.251 |
| 14               | 4         | Georgia Inst of Technology, Atlanta, GA, USA          | 0.310 | 0.368 | 0.106 | 0.247 | 0.169 | 0.120 | 0.068 | 0.180 |
| 15               | 4         | Kyoto Univ, Kyoto, Jpn                                | 0.438 | 0.313 | 0.166 | 0.281 | 0.246 | 0.261 | 0.005 | 0.126 |
| 16               | 4         | Massachusetts Inst of Technology, Cambridge, MA, USA  | 0.181 | 0.189 | 0.072 | 0.169 | 0.217 | 0.047 | -0.01 | 0.165 |
| 17               | 4         | Pennsylvania State Univ, University Park, PA, USA     | 0.388 | 0.459 | 0.130 | 0.558 | 0.192 | 0.152 | 0.058 | 0.237 |

The colors can now be conveniently changed using the Right-click menu (right-click on the Detail window's List or Chart) and select **Change Detail Window Colors**.

The Grid Colors in the **Options** dialog appears. The lower half of the dialog controls the colors displayed in a Detail Window list for a matrix view, as shown above.



The colors can also be accessed by clicking the App button and choosing [Options](#). Then click the Grid Colors tab.



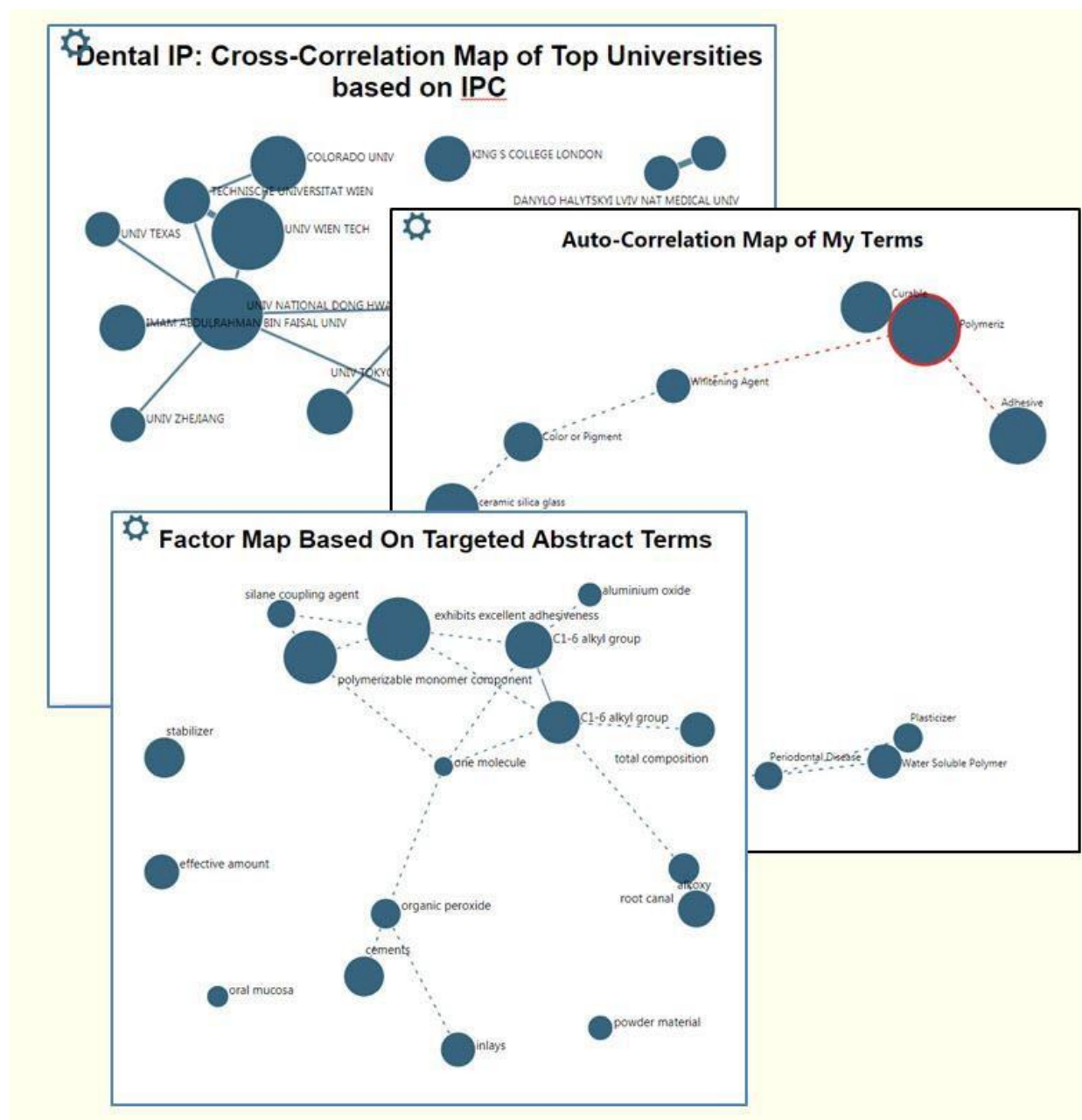
See Also:  
[Detail Windows - Colors for Charts](#)

## Maps

VantagePoint can be used to create visual maps of data. Three types of maps are offered in VantagePoint: [Cross-Correlation Map](#), [Auto-correlation Map](#), and [Factor Map](#).

Users can add Notes to newly-created Maps that will be saved with the image, even when it is exported.

Follow the links of each type for additional details.



See Also:

[Map Controls](#)

[Sticky Notes](#)

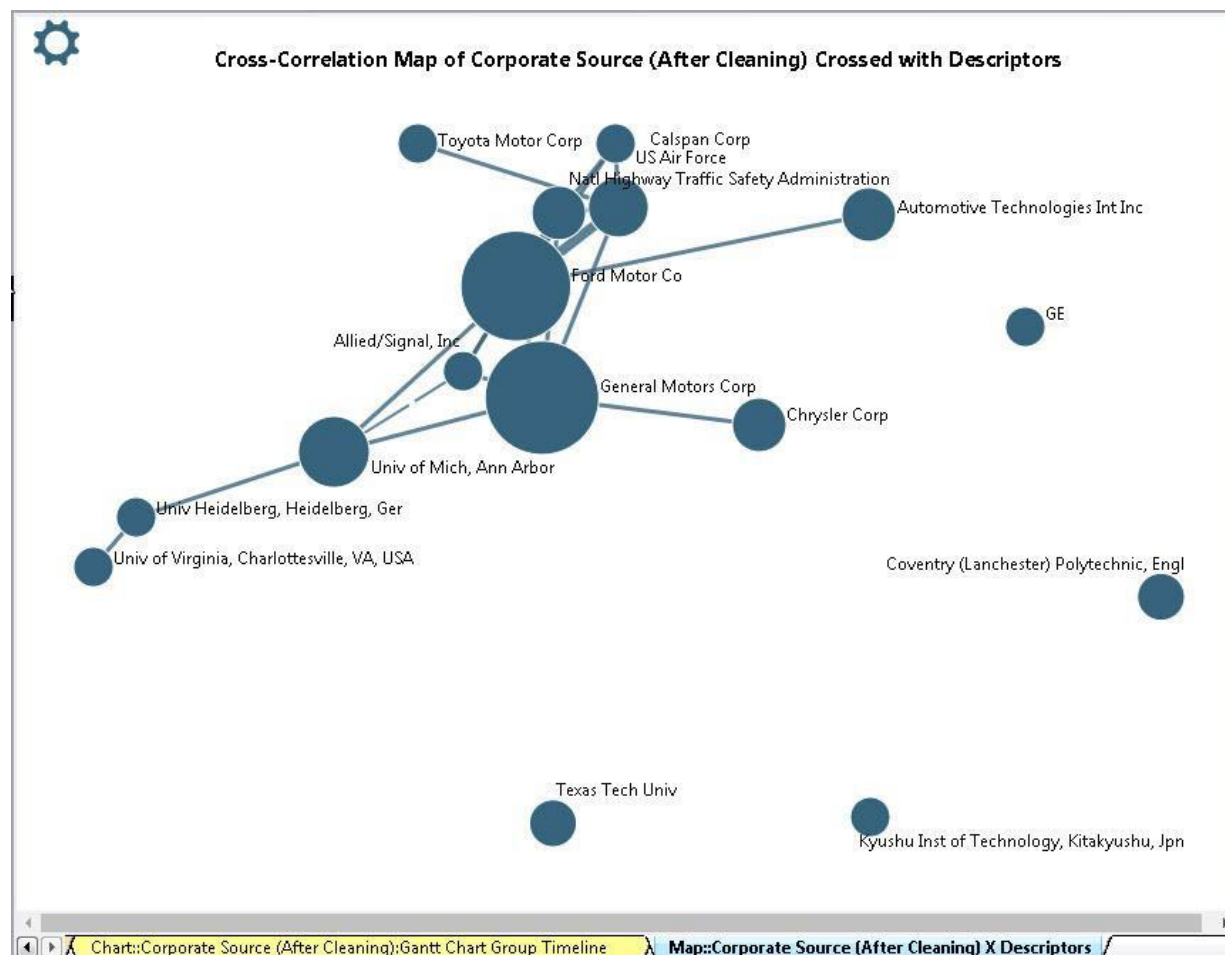
## Cross-correlation maps

A Cross-Correlation Map shows relationships among items in a list based on the values in another list. For example, a Cross-Correlation Map of authors using descriptors can show groups of people who write about the same things. As another example, a Cross-Correlation Map of organizations using descriptors can show organizations that write about the same things.

Creation of a Cross-Correlation Map requires you to select two fields. The first choice is for the items that will actually appear as nodes on the map - usually a group of items you define in a List View. The second field you choose is the basis of the analysis of the relationships among the nodes.

**Caution:** The constraints on relationships in Cross-Correlation Maps are slightly less restrictive than those in Factor and Auto-Correlation Maps. This enables depiction of some "one-off" relationships. For example, if Author "A" and Author "B" do not co-author, but both co-author with "C", a Cross-Correlation Map (Field1 = a group of Authors that includes "A" and "B" and Field2 = all Authors) can reveal that Authors "A" and "B" have a connection even if Author "C" is not shown on the map. Therefore, in Cross-Correlation Maps, you should be careful to further investigate relationships that are shown. View the "low similarity" relationships as "possible" relationships - and in some cases they show indirect relationships.

The following is an example of a Cross-Correlation Map of Corporate Sources in a dataset based on the Descriptors they used. The relationships in the illustration show organizations that are working on similar topics (as defined by the Descriptors field in their publications). To reduce visual clutter, only the strongest of the entire set of possible similarities are shown.

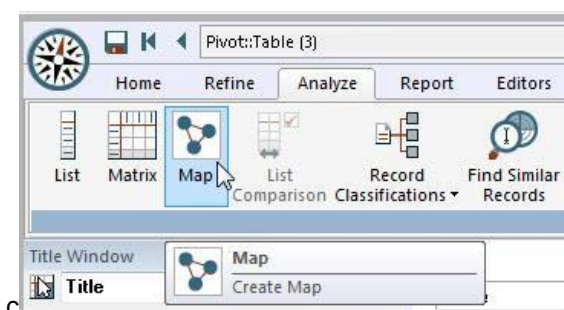




## Creating a Cross-Correlation Map

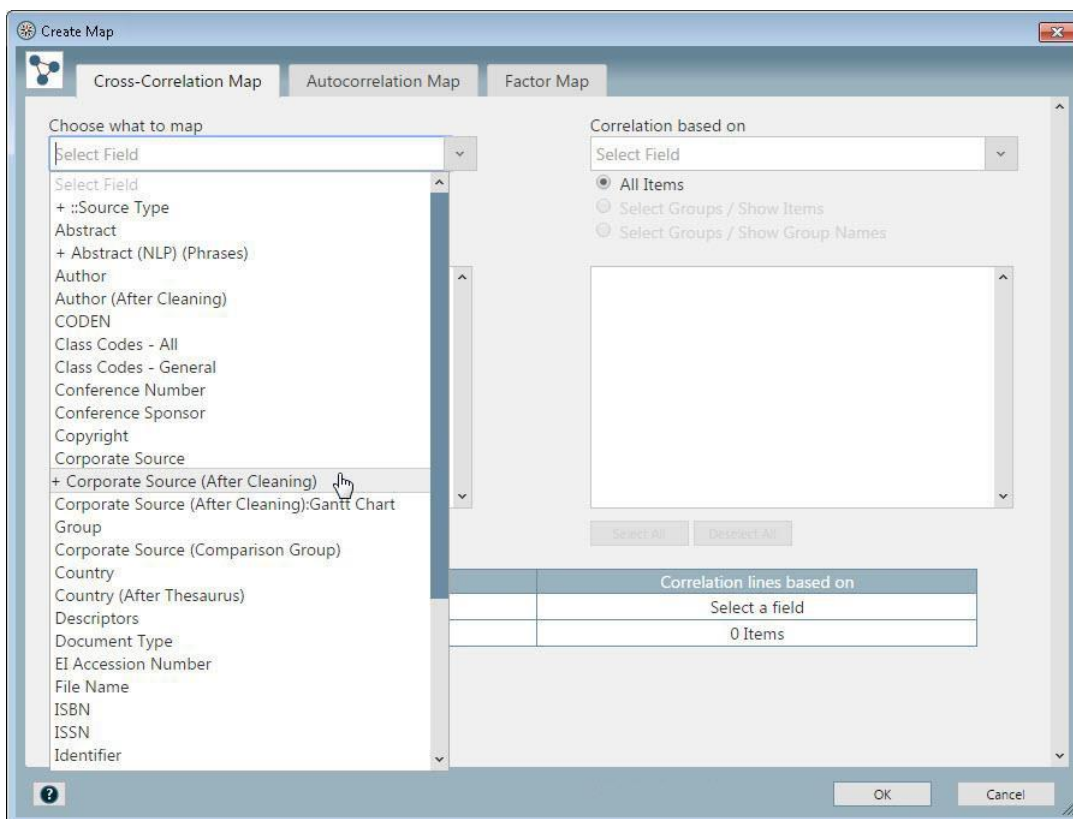
To create a Cross-Correlation Map:

1. Create a group in the list you wish to map.  
**Note:** Include enough terms in your map, but not too many. Unlike the Factor Map, all of the items you select will appear on the Cross-Correlation Map. Typically, 15 to 20 terms is the most that can fit on a one-page map and still be readable.
2. From the Analyze Ribbon, select **Map**

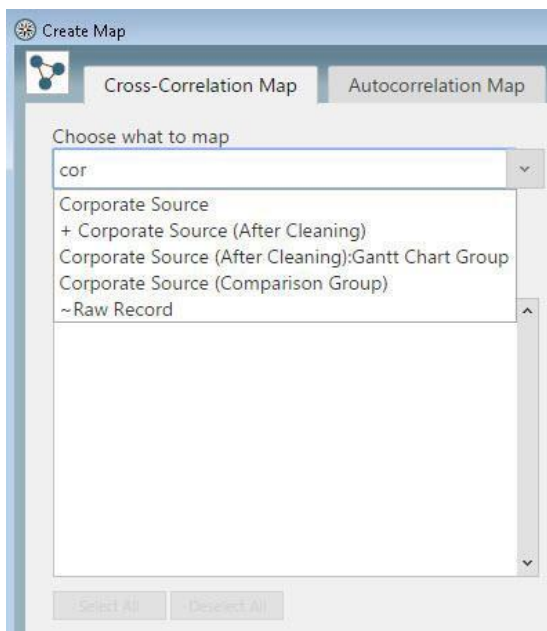


The **Cross-Correlation Map** tab is presented in the **Create Map** dialog box.

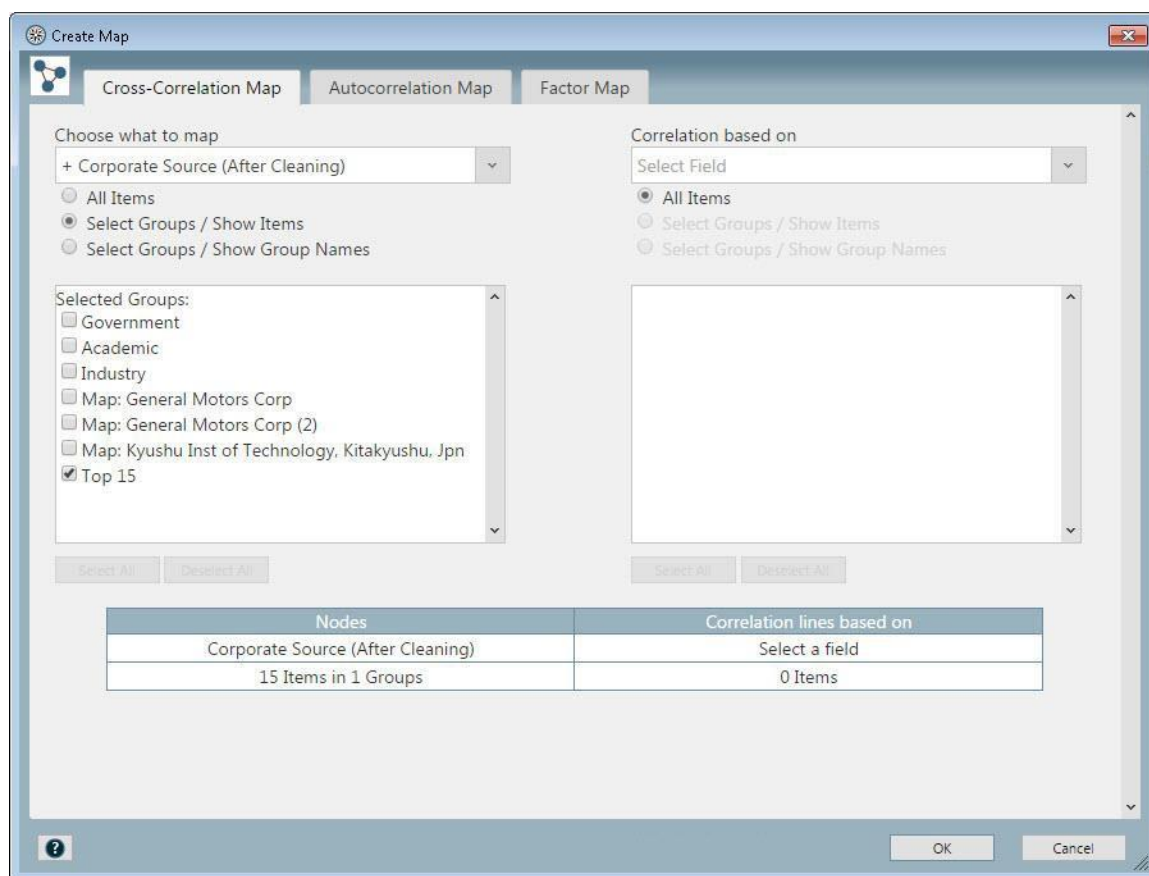
3. Select the field containing the group you created for this map using the dropdown box. A field name beginning with "+" indicates the field has groups.



Another option is to type the field name in the "Select Field" box. As you type, the matches appear for selection.

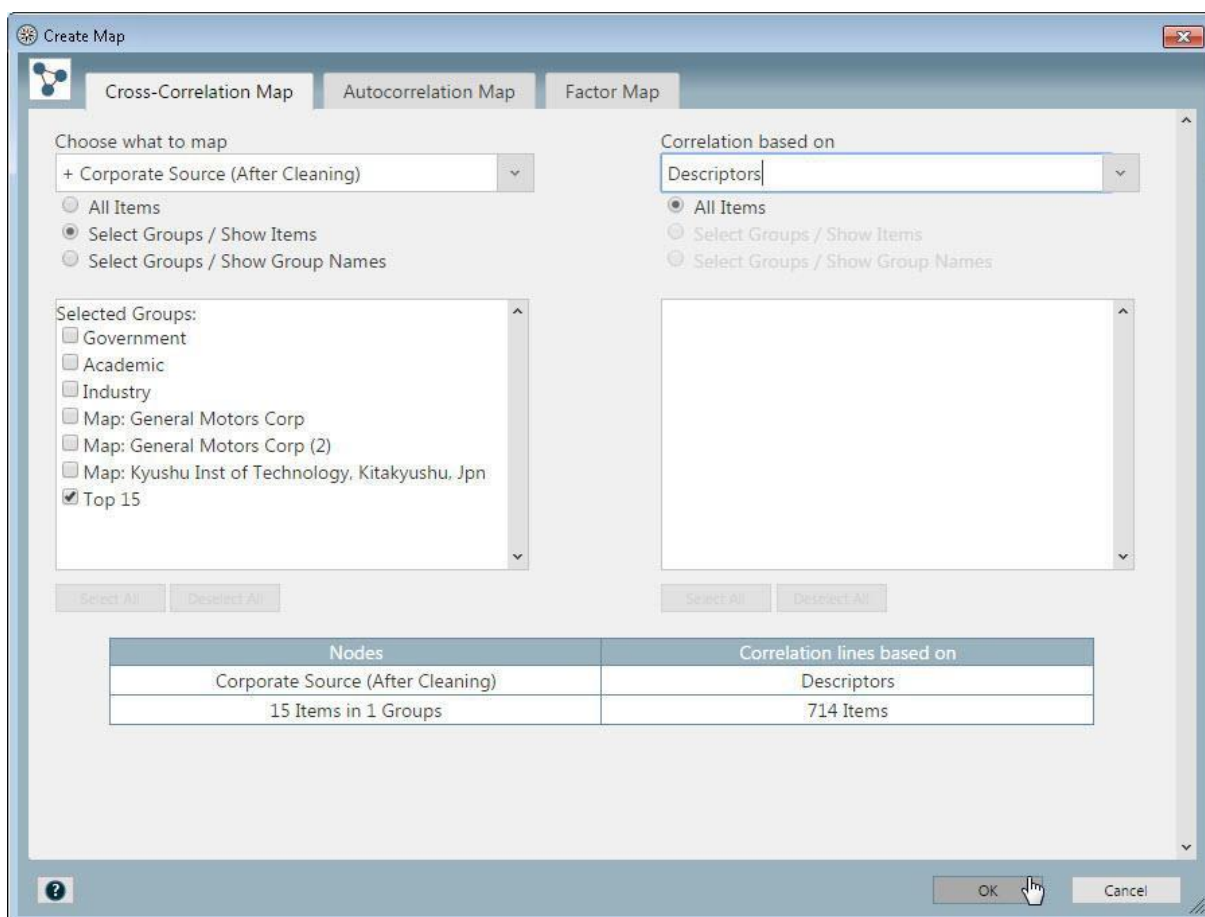


Clicking on the field name selects "All Items" as the default. A field name beginning with "+" indicates the field has groups. The groups within the selected field are displayed. Check the box next to the group name for selection.

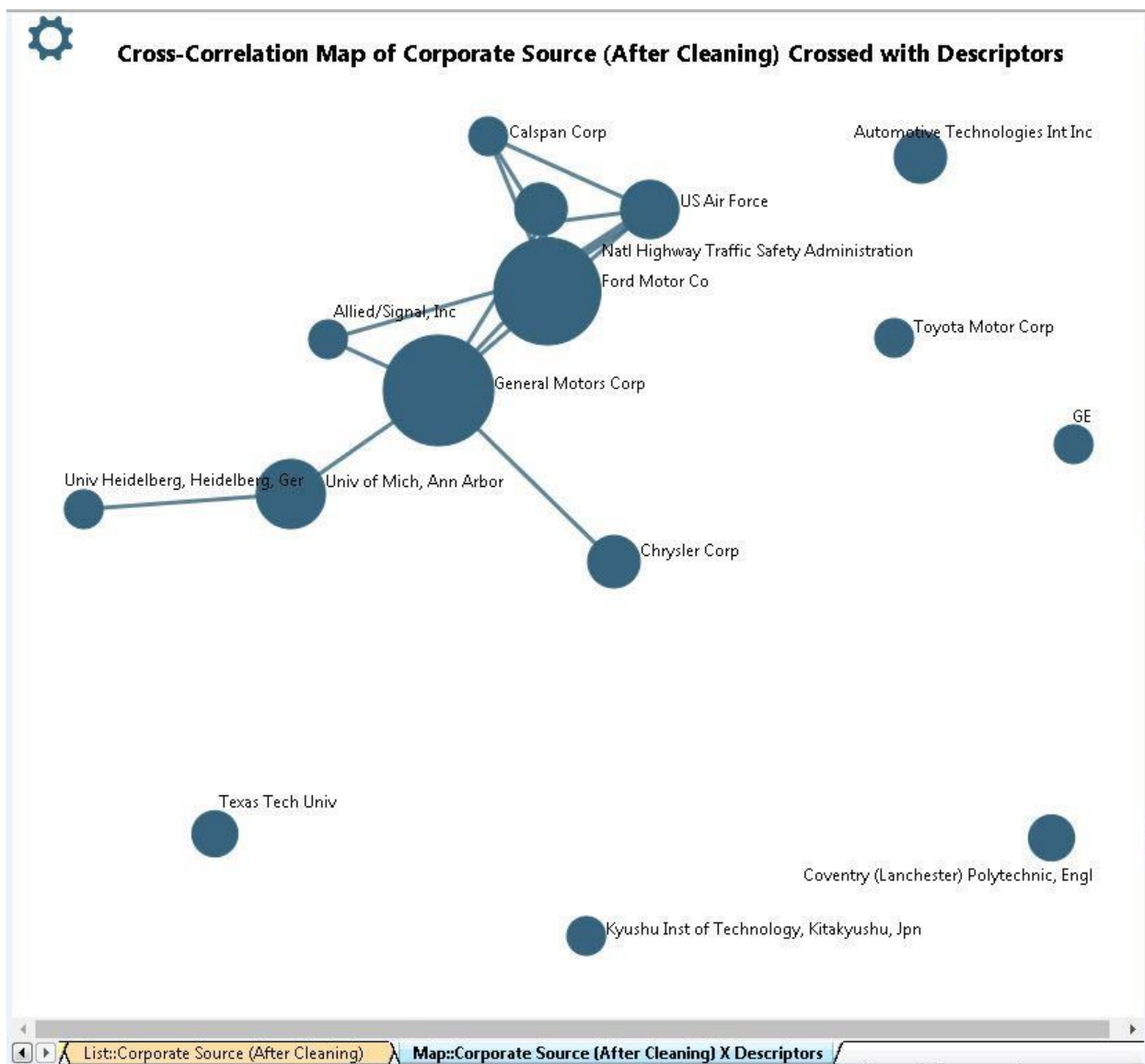


Selection choices include:

- **All Items** – this selects all of the list items
  - **Select Groups / Show Items** – Select Group using list items as labels. After selecting the field and this option, the groups in that field appear in the Selected Groups window. Check the box next to the desired group name for selection.
  - **Select Groups / Show Group Names** – Select Group(s) using group names as labels. After selecting the field and this option, the groups in that field appear in the Selected Groups window. Check the box next to the desired group name(s) for selection.
4. Next, select the field or group you would like to use to relate the mapped items (e.g., Descriptors). Notice the Map definition (below the two windows) is built as choices are made. This gives you an idea of the size of the map you are creating.



5. Click **OK** to create your map. The result appears below.



See Also:

[Map Controls](#)

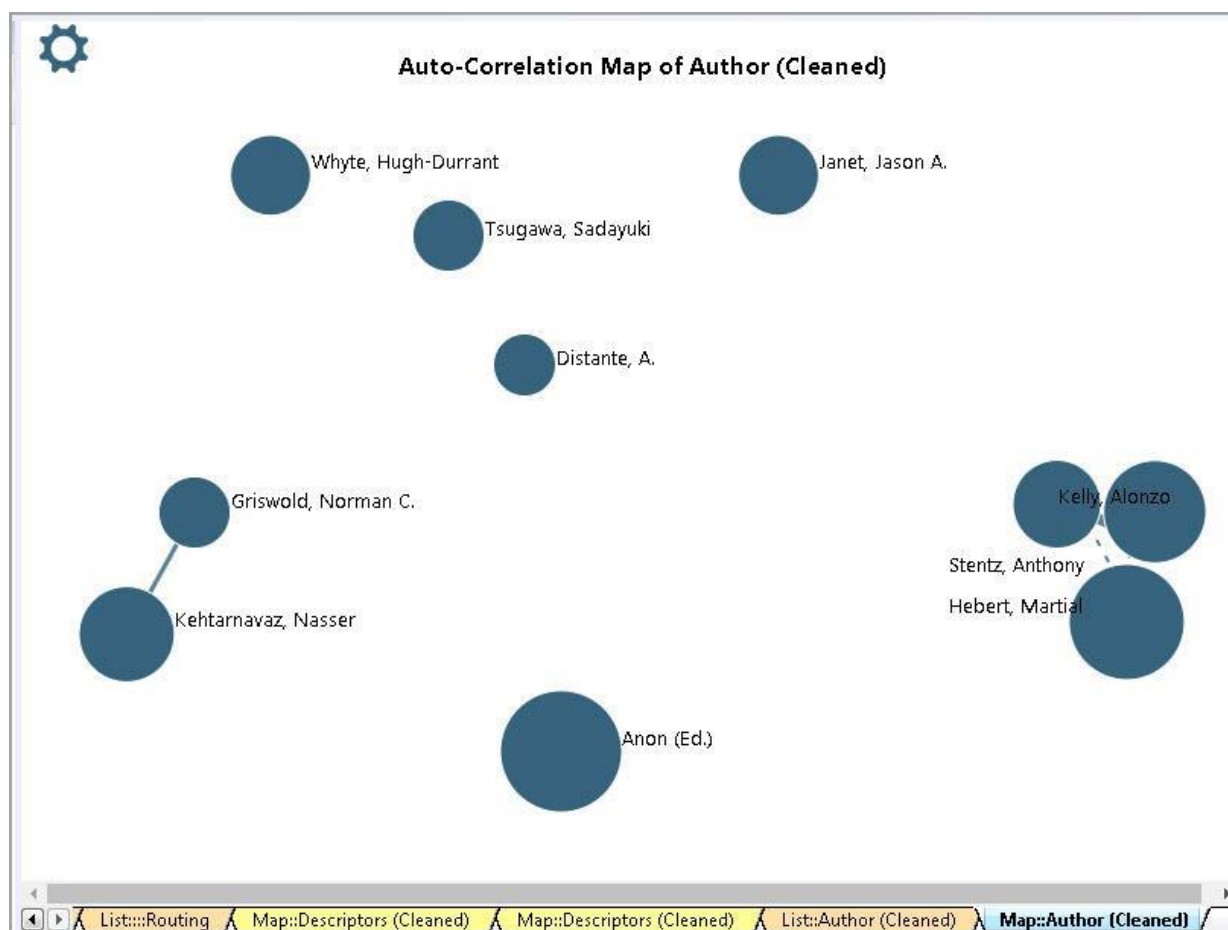
[Sticky Notes](#)

## Auto-Correlation Maps

An Auto-Correlation Map shows relationships among items in a list. For example, an Auto-Correlation Map of Authors can show teams of people who write together. An Auto-Correlation Map of descriptors will show descriptors that have a high degree of correlation by virtue of being used in the same records.

**Note:** For Auto-Correlation Maps, you should only use fields that have multiple values in most of the records. For example, Authors or Descriptors are good choices. Date of Publication is not a good choice, since there is only one date of publication for each record.

The following is an example of an Auto-Correlation Map of Authors in a dataset. Each node represents one Author. The size of the node reflects the number of records associated with the Author. The size of these nodes are similar because these Authors have a similar number of records (when compared to the total number of records in the dataset). As with Factor Maps, the lines reflect the similarity between the nodes. In this illustration, the strength of the lines is related to the number of articles authored together. To reduce visual clutter, only the strongest of the entire set of possible similarities are shown.

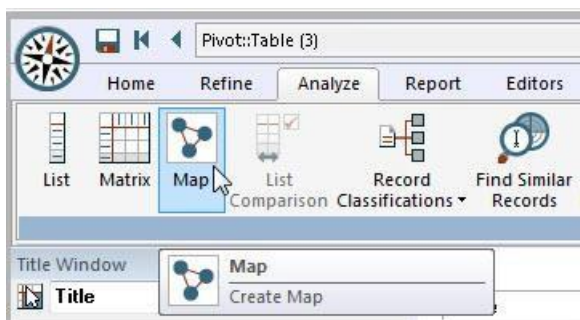




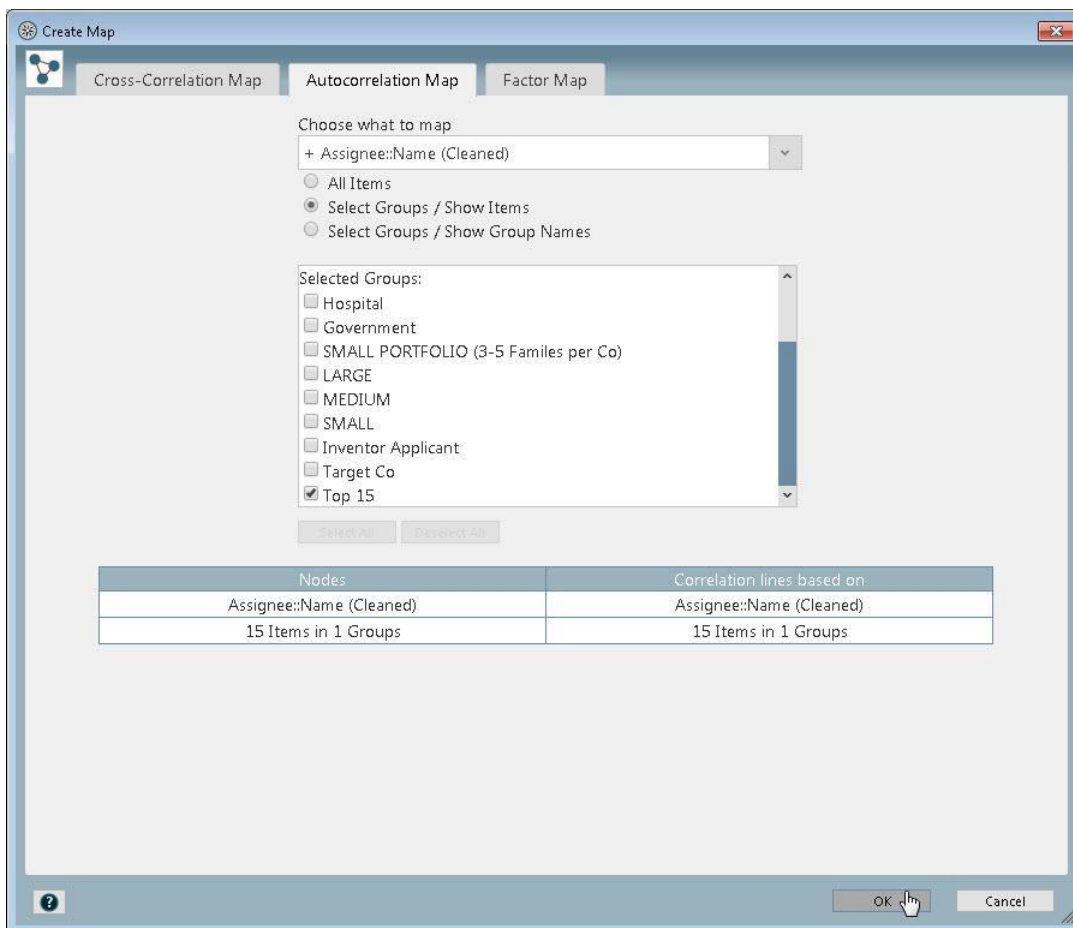
## Creating an Auto-Correlation Map

To create an Auto-Correlation Map:

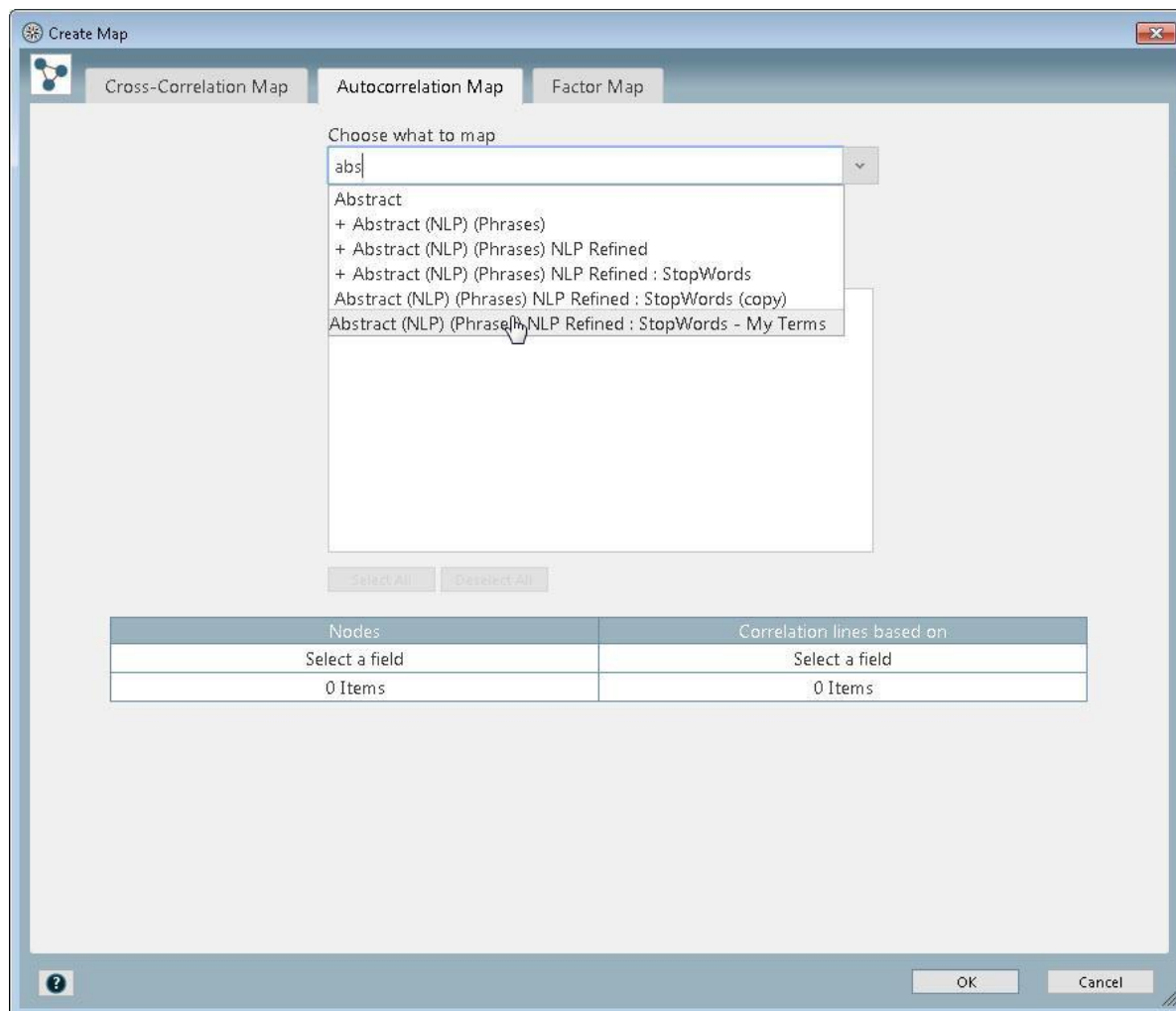
1. Create a group in the list you wish to map.  
**Note:** Include enough terms in your map, but not too many. Unlike the Factor Map, all of the items you select will appear on the Autocorrelation Map. Typically, 15 to 20 terms is the most that can fit on a map and still be readable.
2. From the Analyze Ribbon, select **Map**.



3. From the **Create Map** dialog box, select the **Autocorrelation Map** tab.
4. Select the field containing the group you created for this map using the dropdown box. A field name beginning with "+" indicates the field has groups.



Another option is to type the field name in the "Select Field" box. As you type, the matches appear for selection.



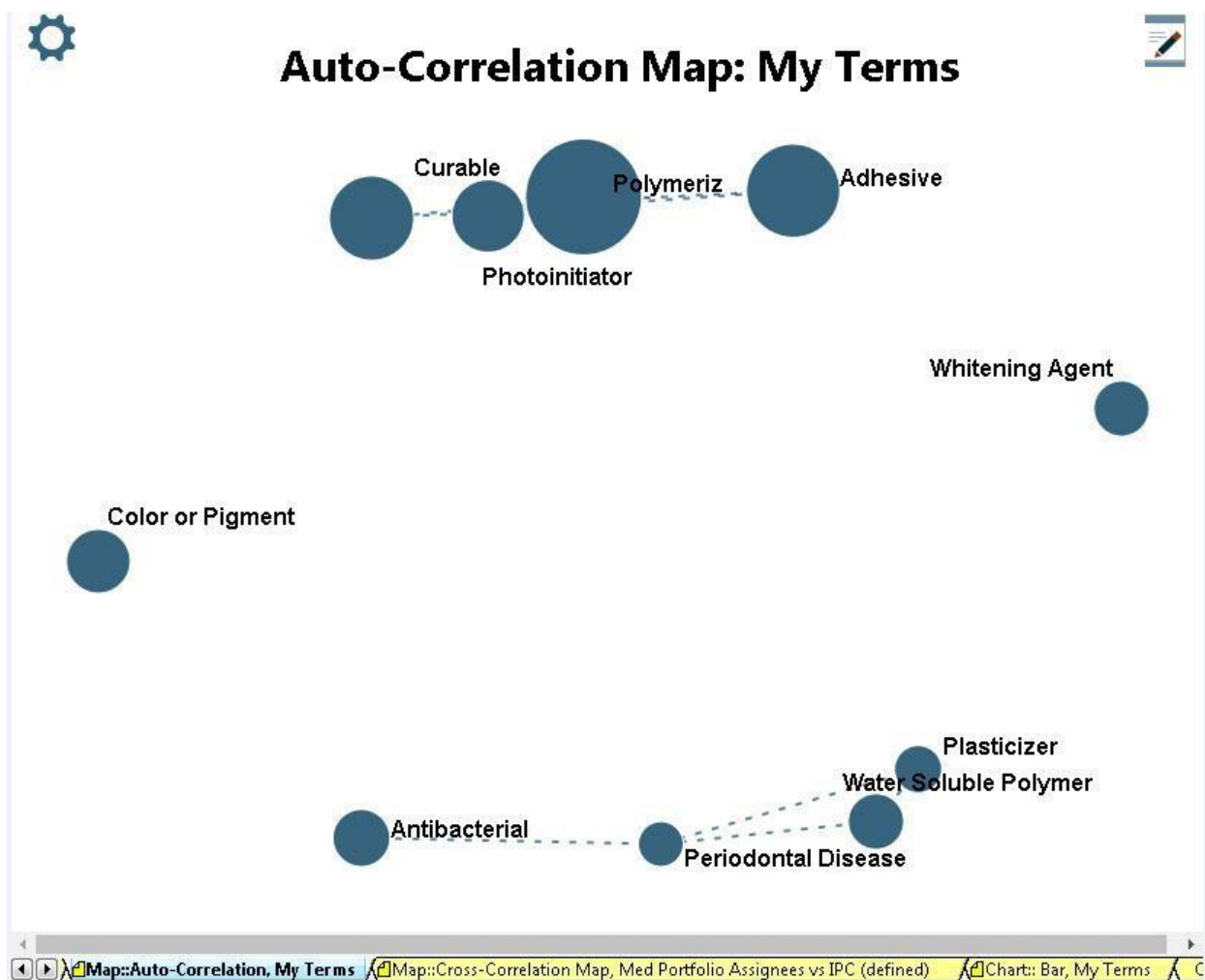
Clicking on the field name selects "All Items" as the default. A field name beginning with "+" indicates the field has groups. The groups within the selected field are displayed. Check the box next to the group name for selection.

Selection choices include:

- **All Items** – this selects all of the list items
- **Select Groups / Show Items** – Select Group using list items as labels. After selecting the field and this option, the groups in that field appear in the Selected Groups window. Check the box next to the desired group name for selection.
- **Select Groups / Show Group Names** – Select Group(s) using group names as labels. After selecting the field and this option, the groups in that field appear in the Selected Groups window. Check the box next to the desired group name(s) for selection.

Notice the Map definition (below the two windows) is built as choices are made. This gives you an idea of the size of the map you are creating.

4. Click **OK** to create your map. Results appear below.



See Also:

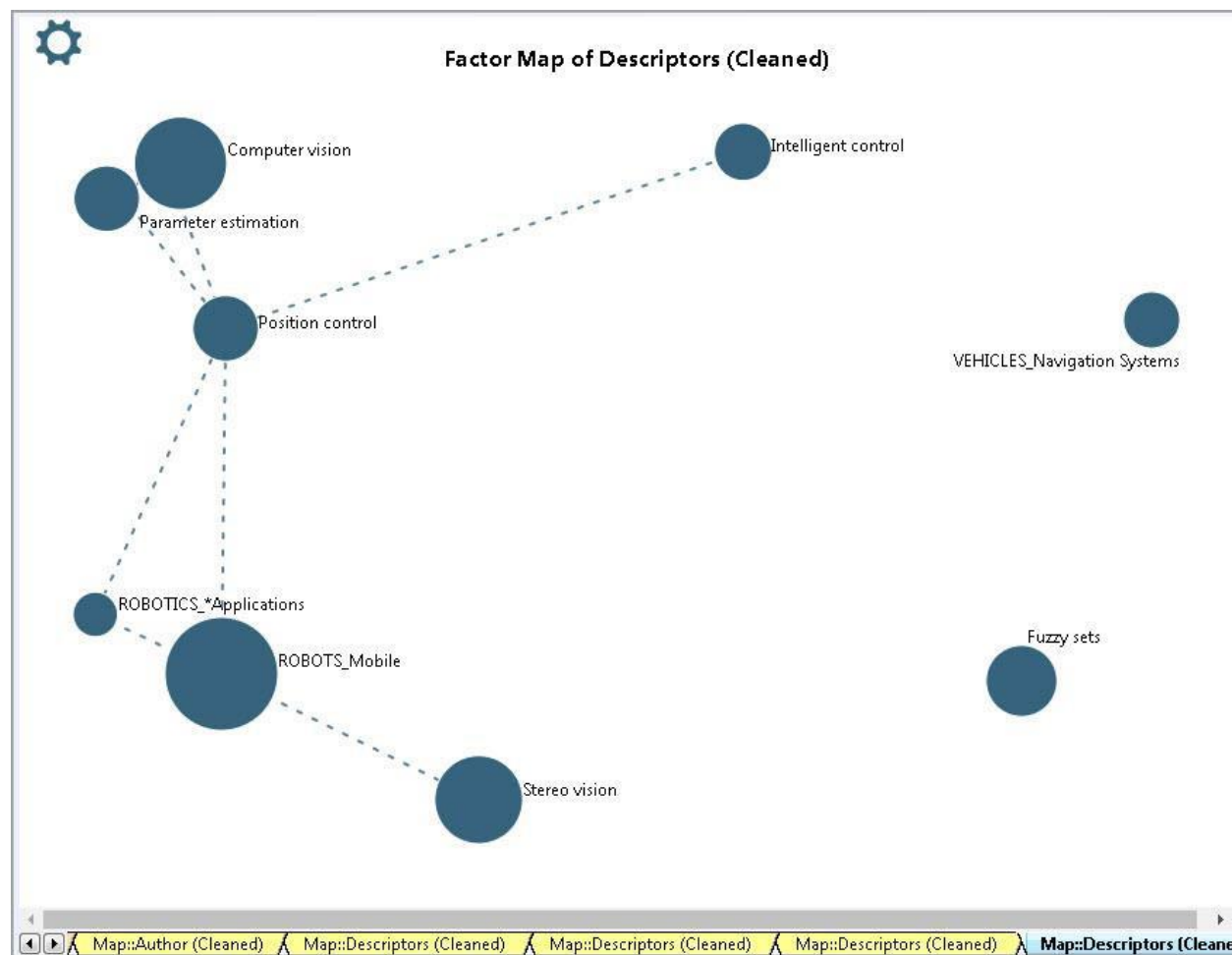
[Map Controls](#)

[Sticky Notes](#)

## Factor Maps

VantagePoint can be used to create visual maps of data. A Factor Map is a graphical representation of the results of a Principal Components Analysis (PCA). The PCA finds the list items that frequently occur together in the dataset. Each node in the map represents a cluster of terms. The lines between nodes represent a measure of similarity between the two clusters of terms. The thickness (or pattern) of the line indicates the degree of similarity (as defined in the legend) - a number between 0 and 1. To reduce visual clutter, only the strongest of the entire set of similarities are shown.

The following is an example of a Factor Map.



## Creating a Factor Map

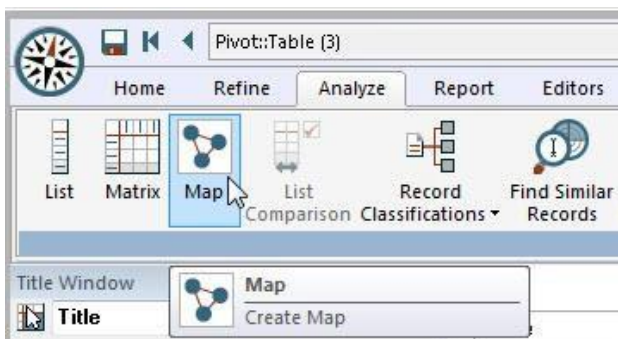
To create a Factor Map:

1. Create a group in the list you wish to analyze.

**Note:** Do not include in your analysis group any list items that occur only a few times. A general rule of thumb is to include only list items that occur in ten (10) or more records. Including list items that occur less frequently may cause the analysis to fail. As another rule of thumb, do not include in your analysis group any list items that occur in most of the records.

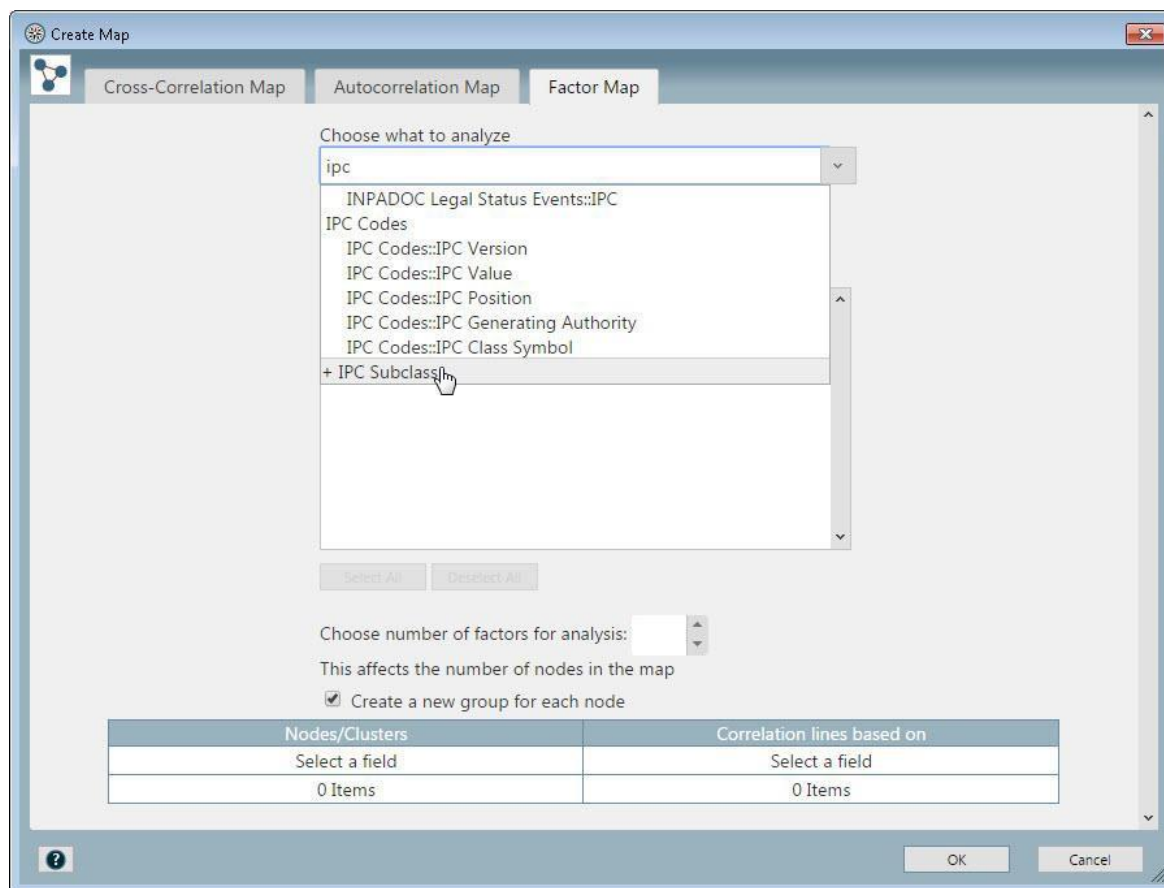
Finally, be sure to include enough terms in your analysis, but not too many. Depending on the number of records in your dataset, you should include no fewer than 15 or 20 terms and typically no more than a few hundred terms.

2. From the Analyze Ribbon, select **Map**



From the **Create Map** dialog box, select the **Factor Map** tab.

3. Under "Choose what to analyze", select the field containing the group you created for this map. The dropdown box would display all the fields available. In this illustration, the user has typed "ipc", and the fields containing that string are presented. The user is selecting IPC Subclass, which contains the group to be mapped.

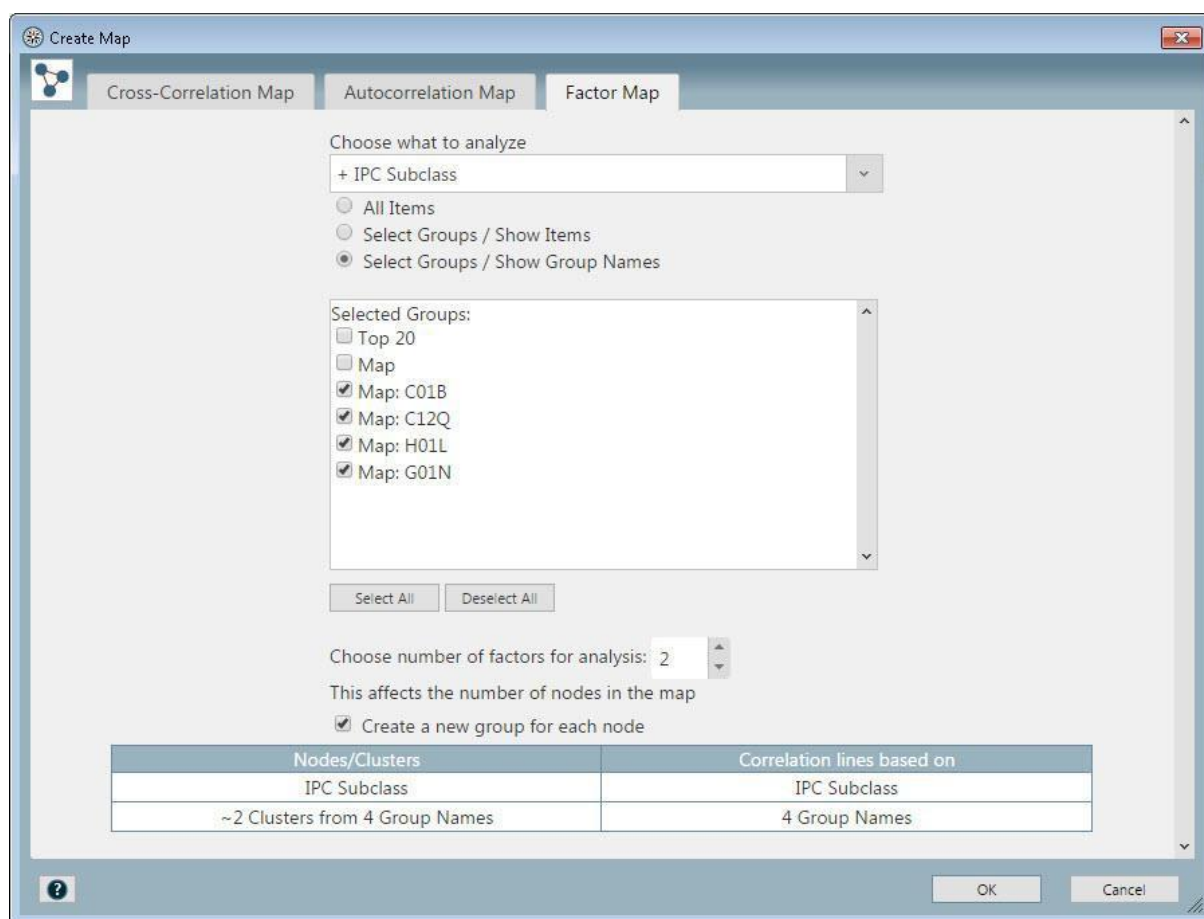




Clicking on the field name selects "All Items" as the default. A field name beginning with "+" indicates the field has groups. The groups within the selected field are displayed. Check the box next to the group name for selection.

Selection choices include:

- **All Items** – this selects all of the list items
- **Select Groups / Show Items** – Select (one) Group using list items as labels. After selecting the field and this option, the groups in that field appear in the Selected Groups window. Check the box next to the desired group name for selection.
- **Select Groups / Show Group Names** – Select Group(s) using group names as labels. After selecting the field and this option, the groups in that field appear in the Selected Groups window. Check the box next to the desired group name(s) for selection.



4. Next you specify the **Number of factors** to use in the analysis. This affects the number of nodes that are displayed on your map. A beginning rule of thumb is the square root of the number of terms in your analysis. This is the default value when the group is selected.
5. Finally, check **Create a new group for each node** if you would like to create a group for each node on the map.
6. Click **OK** to create your map.

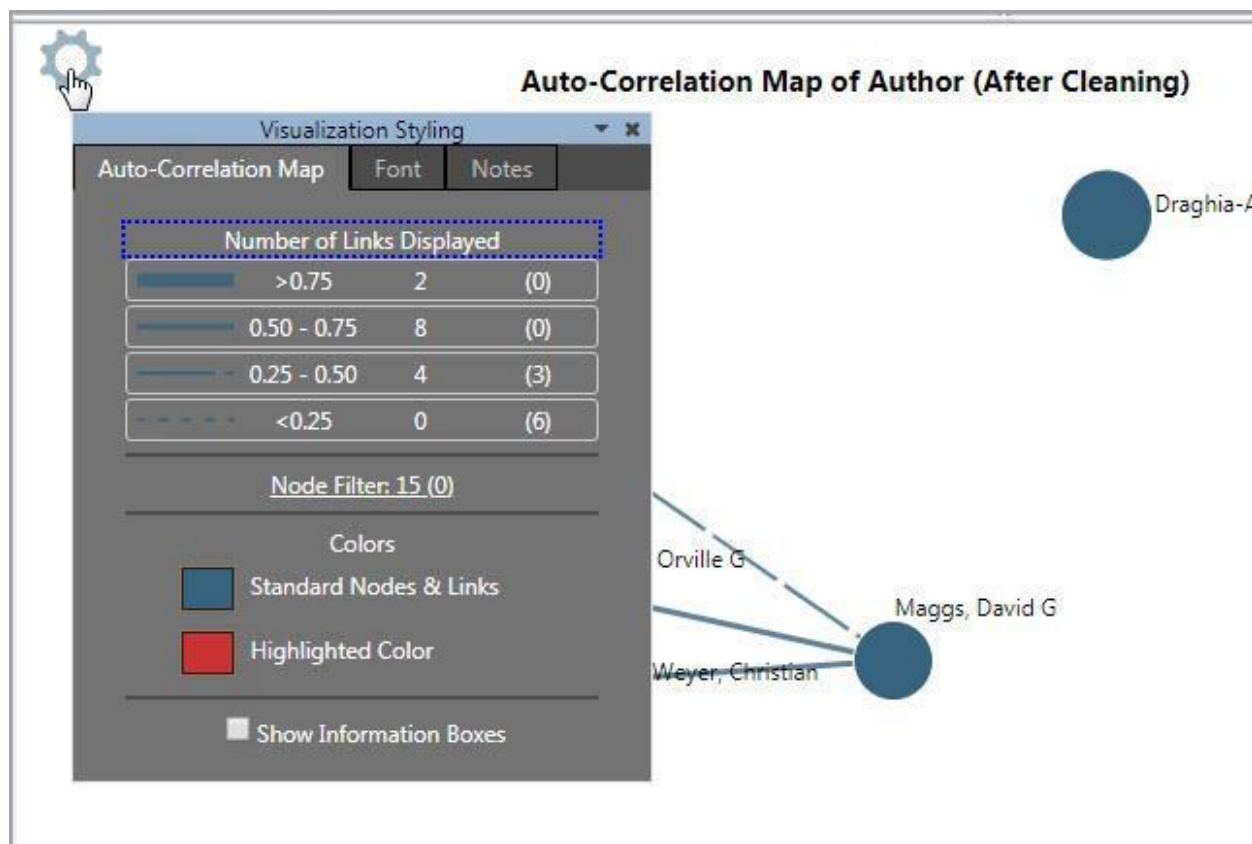
See Also:

[Map Controls](#)  
[Sticky Notes](#)

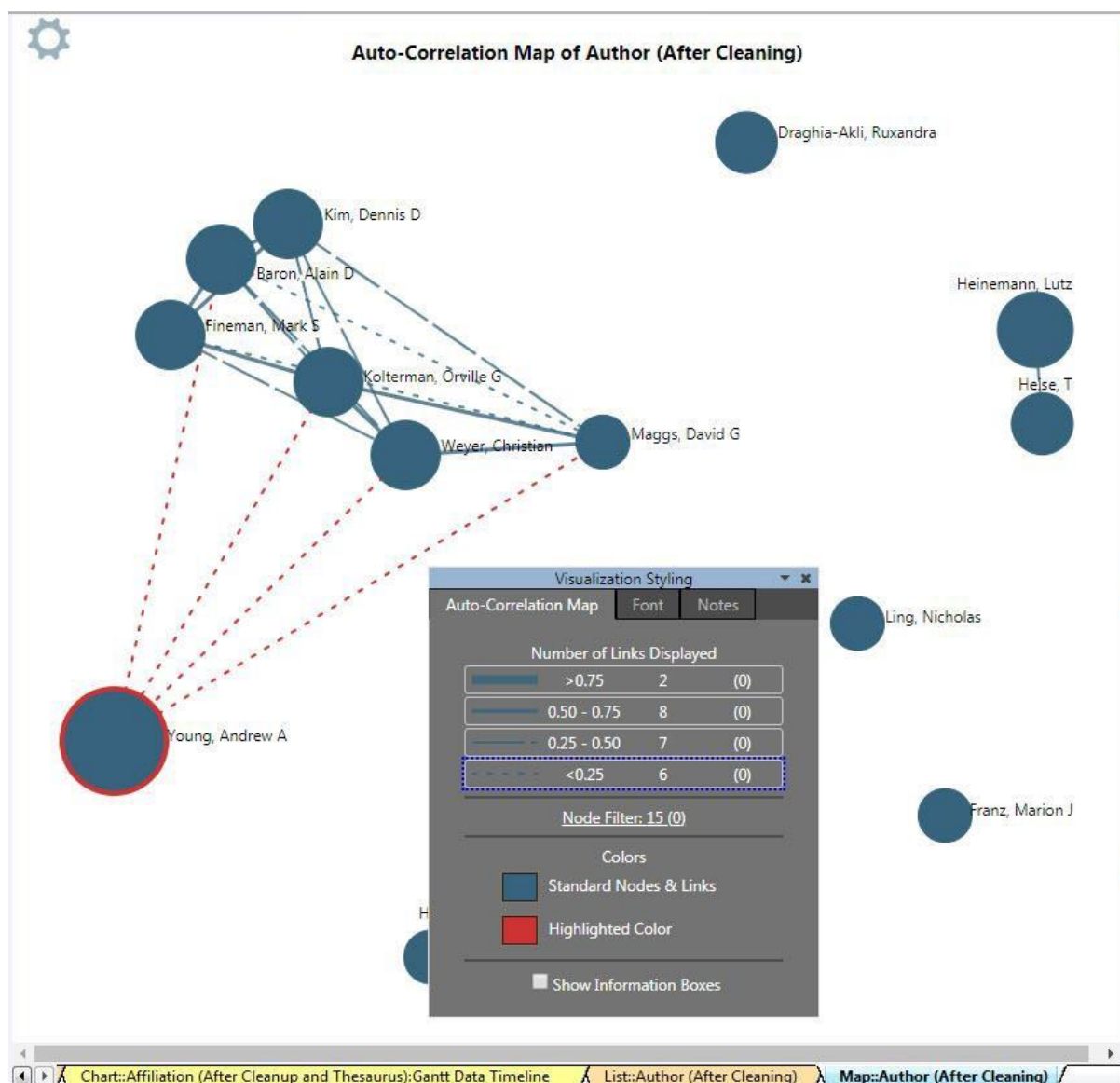
## Map Controls

For Cross-Correlation, Auto-Correlation and Factor Maps, the Node and Link controls (formerly "Legend") now appear in Map Visualization Control.

Click the gear icon in the upper left of the map:

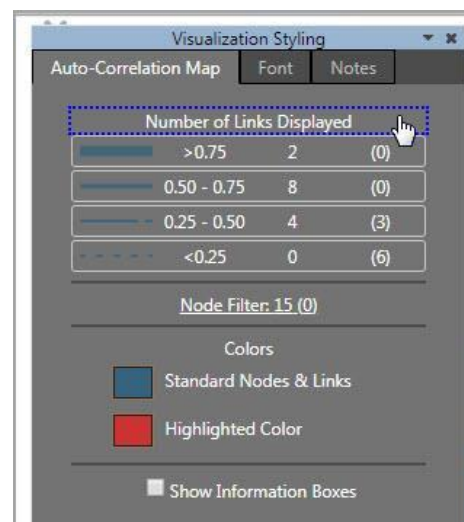


In the Map above, the Control shows the number of links shown for each range, and in parenthesis the number of links in that range but not shown on the map. The sum of these two numbers is the total number of links in that range for the map. By clicking on the Control's link ranges, you can change the map display. Clicking the >0.75 (thick line in the Control) causes all links in smaller ranges to disappear. Clicking a smaller range displays links for that range and higher ranges.

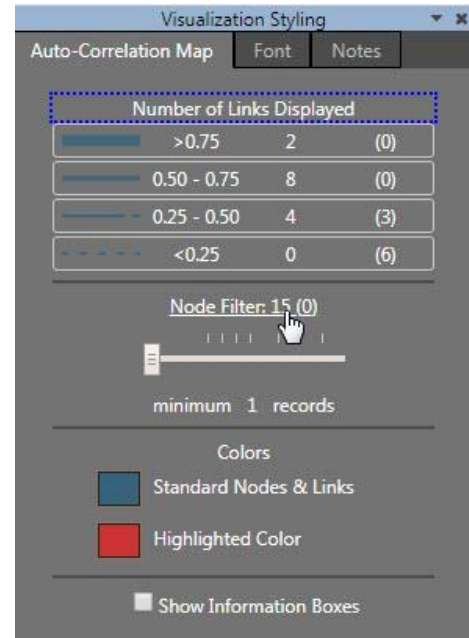


Clicking on a node in the map selects it and highlights the links for that node.

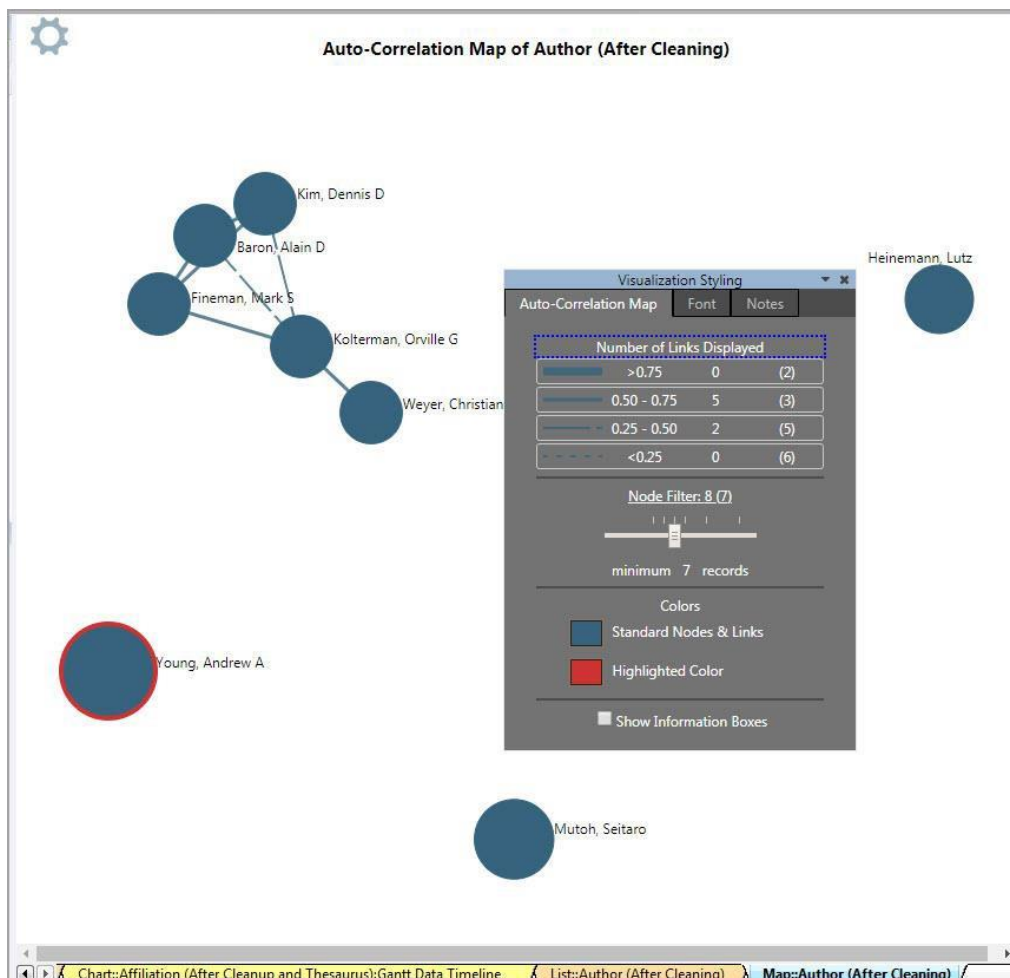
Reset the map to its original setting by clicking "Number of Links Displayed":



Clicking on the Node filter in the Control reveals a slider that affects the nodes displayed on the map.



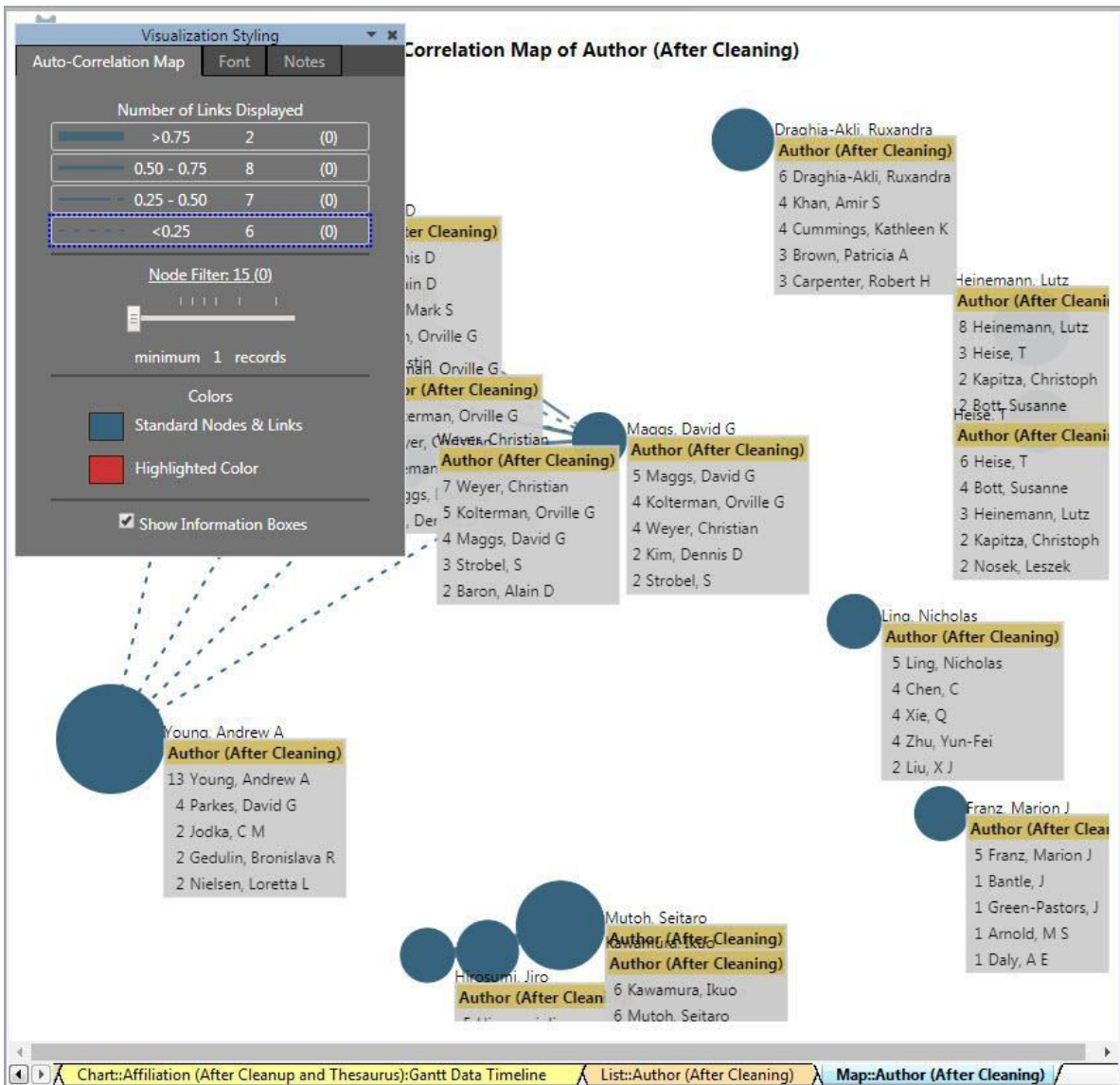
In the illustration below, the user has changed the minimum number of records to "7". This results in 8 nodes shown, and (7) nodes with fewer records are hidden. Now the Control shows 5 links displayed in the 0.50 - 0.75 range with (3) hidden, and 2 in the 0.25 - 0.50 range with (5) hidden. Links in the > 0.75 and < 0.25 ranges are hidden.



Hover your mouse over a node to temporarily display the information of that node. You can "stick" an information box by double-clicking on the node. Double-click on the node again to hide the information box.

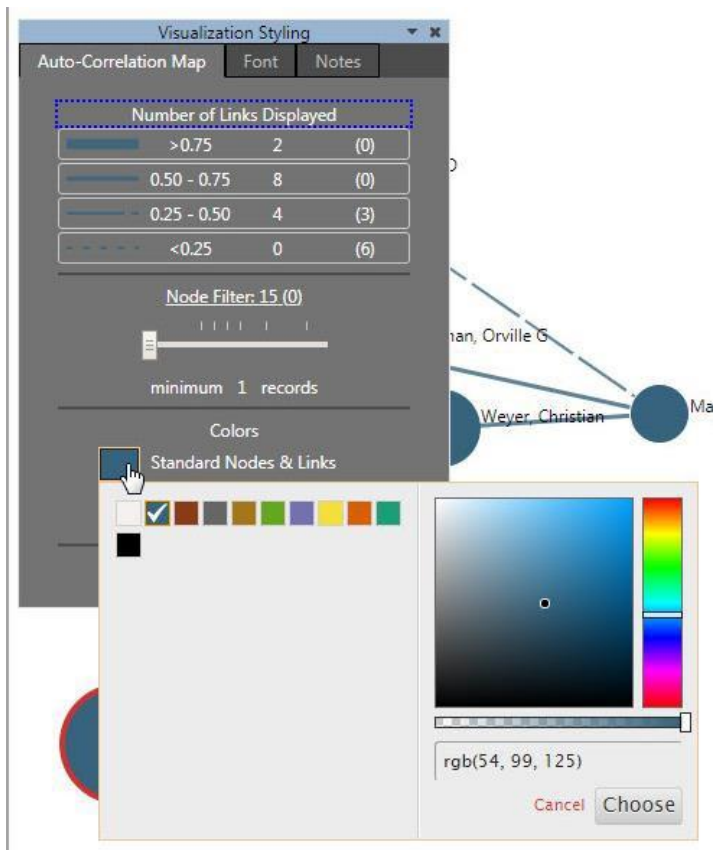


Checking "Show Information Boxes" in the Control causes the information of all the nodes to be (and remain) displayed.

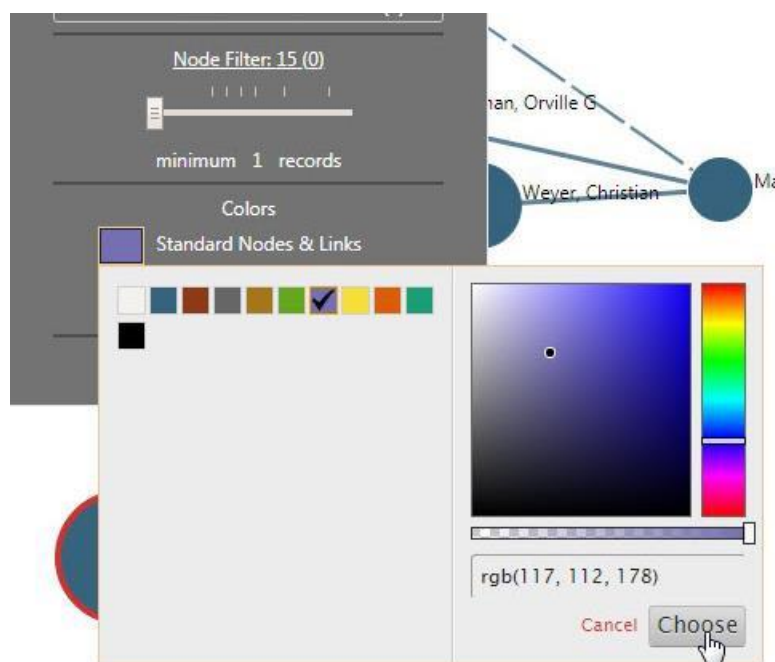




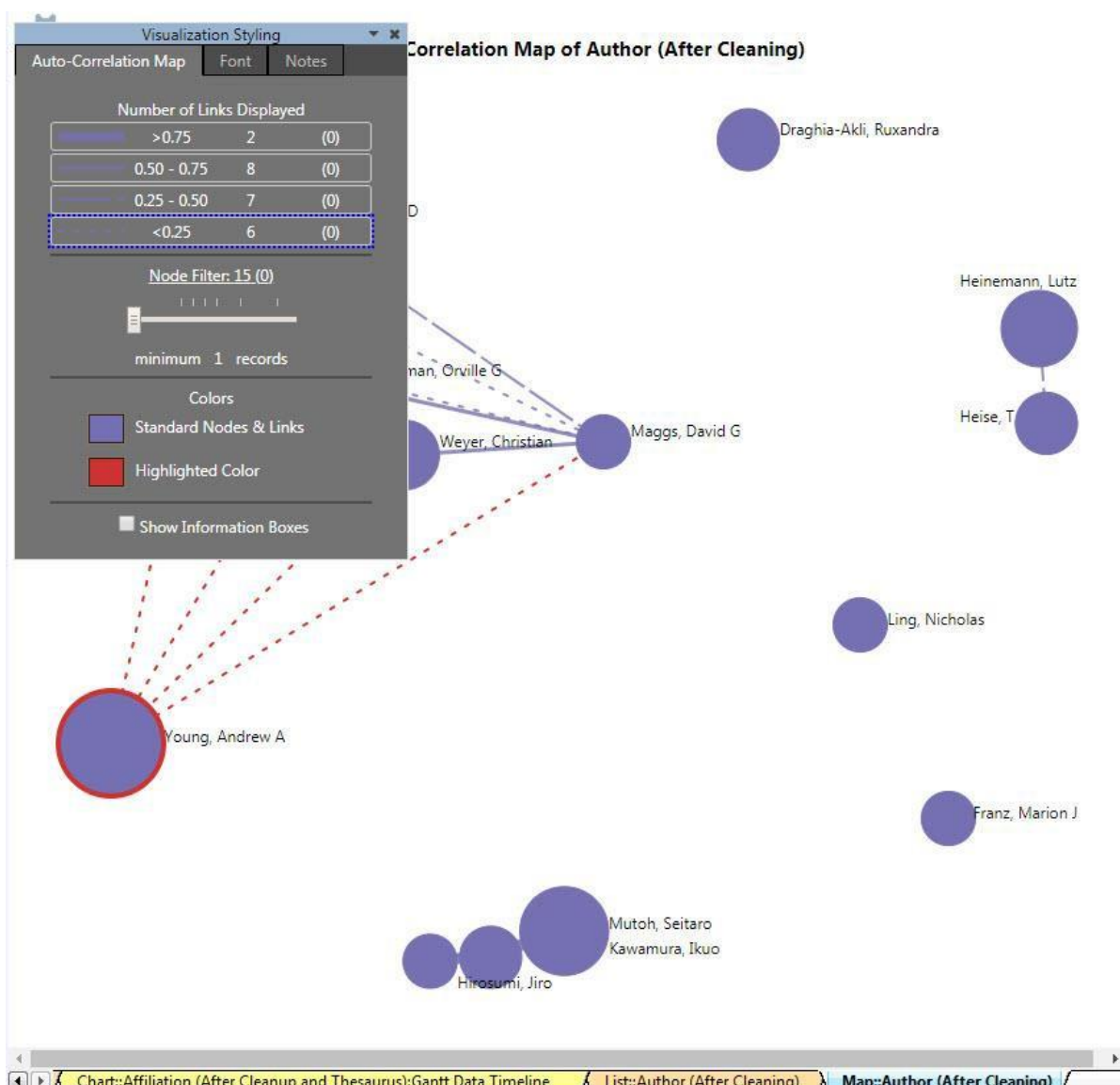
Change colors for Nodes & Links and the Highlighted Color by clicking the Color box. The Color Palette is displayed, from which to choose another color. (You can also enter the RGB or HEX codes in the box showing "rgb", below.) See [Visualization Controls](#) for details.



Make your selection, and click **Choose** to save the change.



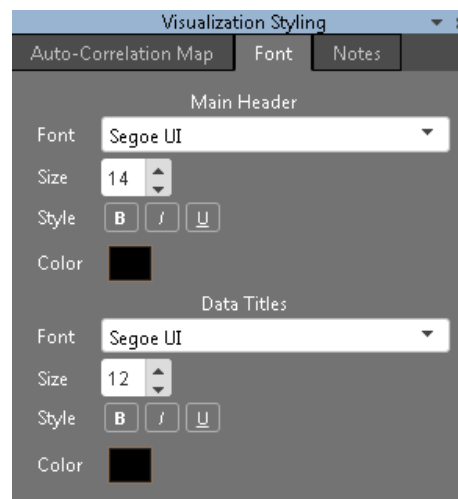
Results appear immediately:



The Font tab offers choices of Font, Size, Style and Color for each of the Main Header and Data Titles. Colors are chosen by clicking the color and choosing from the color palette, as described above.

While these Settings apply only to the current sheet, the default Color and Font control for Visualizations is found on the [Options](#) dialog, Colors tab.

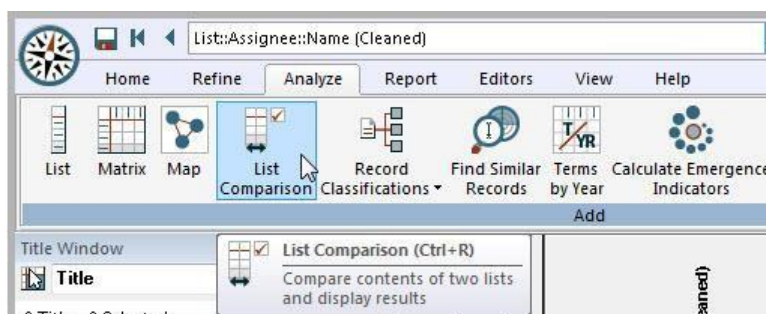
Close the Visualization Control by clicking the "x" in the upper right:



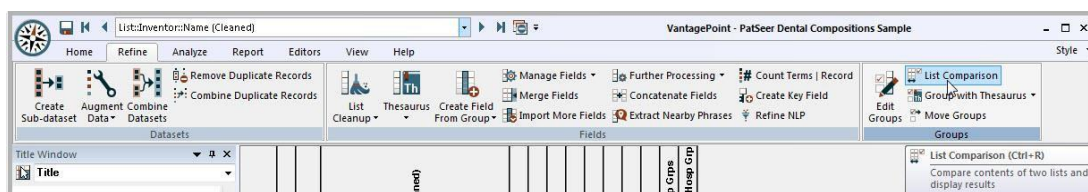
## List Comparison

List Comparison creates tags on the items in the first list that are either unique to the first list or shared in common with a second list.

1. To compare two lists, you first open the \*.vpt file(s) you want to compare.
2. Create (or open) a view of the first list.
3. From the Analyze ribbon, select **List Comparison**:

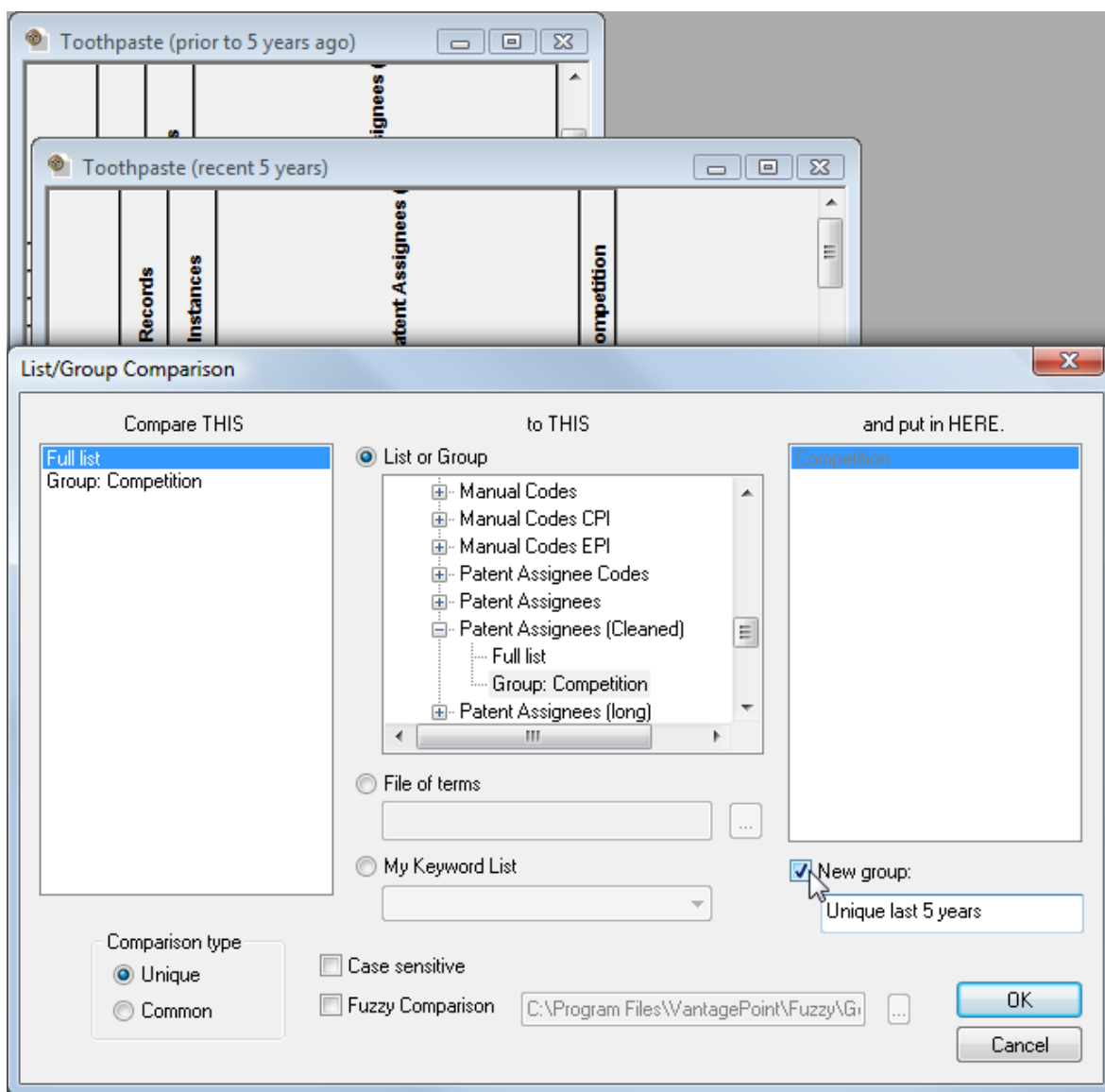


or, from the Refine ribbon, select **List Comparison**:



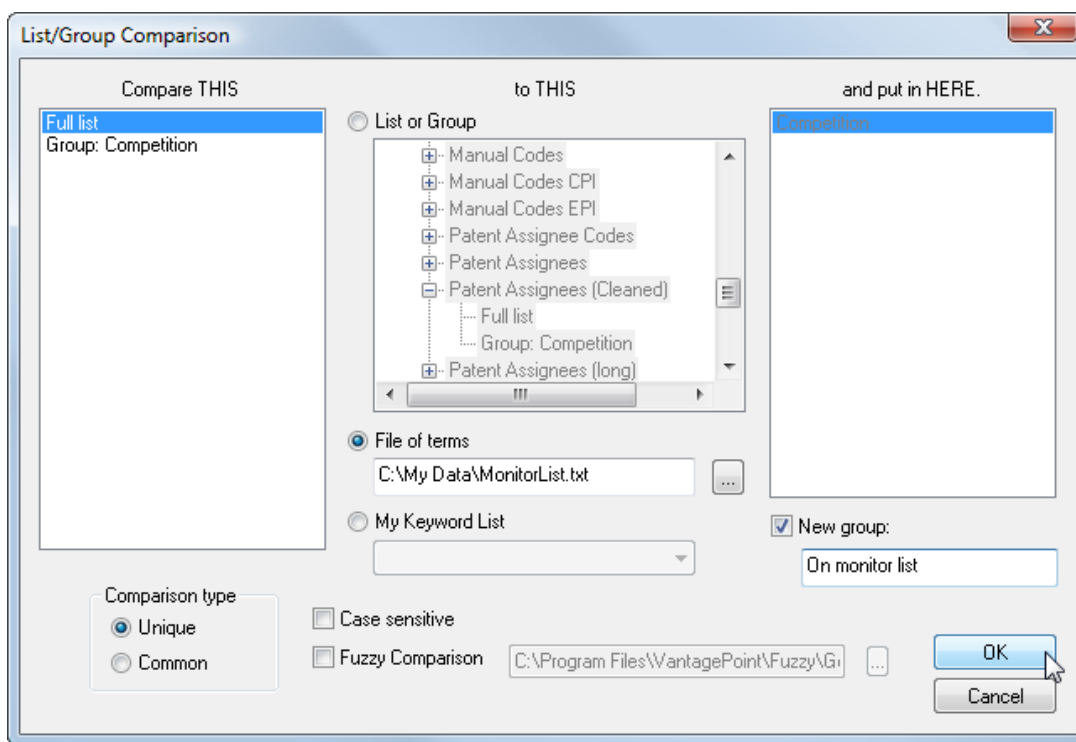
or press **Ctrl R** on the keyboard.

4. Click on the group name you want to compare ("Compare THIS"). If you want to use the whole list, click on "Full list."

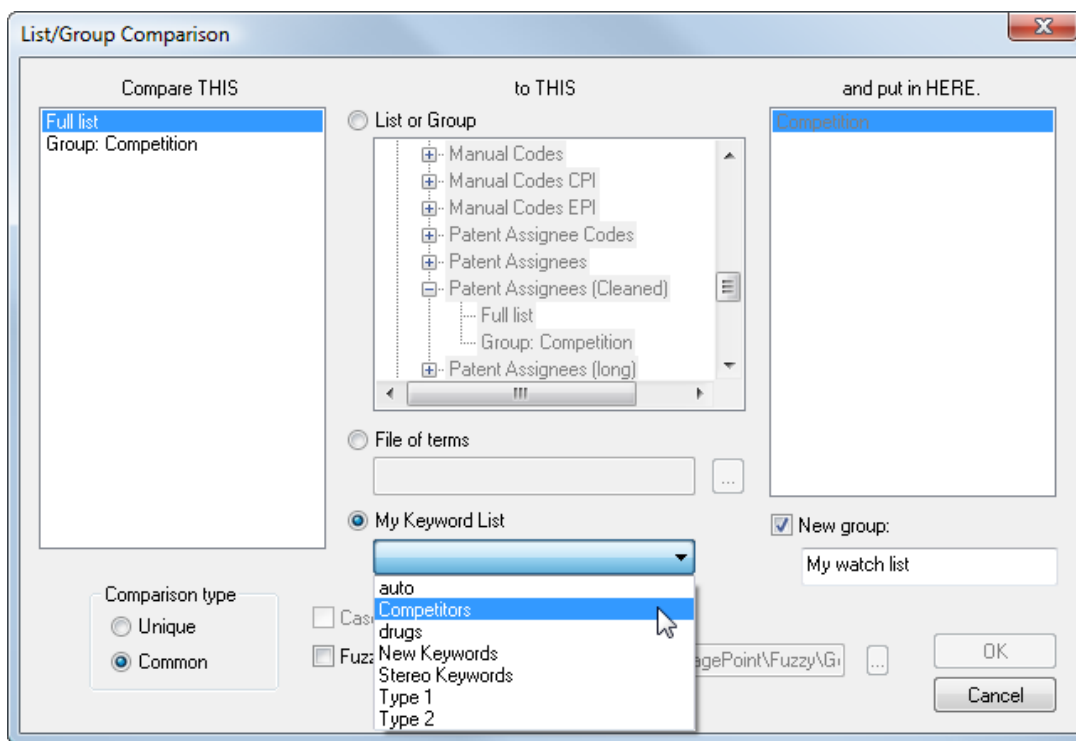


5. **List or Group** - If you want to compare to a List or Group, click on the list or group you want to compare with ("to THIS"). You may choose a list or group from the same dataset or from another open dataset.

**File of terms** - Alternatively, you may compare to a list of terms in a file by clicking on this radio button. The file must be a plain text file, with one term per line. The following illustration shows the user choosing to compare the list to a File of terms, and specifies the file "MonitorList.txt", which the user has created and stored in the "My Data" folder.



**My Keyword List** – You may compare to a Keyword List of terms you created in VantagePoint (“My Keywords”). The Keyword List is selected from the dropdown box, as shown here:



- Determine the group name to which you want to add the tags ("and put in HERE"). By default, the tags go into a new group. You may name this group in the text box beside the "New group" checkbox. If you prefer, you can add the tags to an existing group by un-checking the "New group" checkbox



and then clicking on the group name.

7. Indicate the type of comparison you want in the "Comparison type" box. If you choose "Unique", a checkmark will be added to the list items that occur in the first list and not in the second list. If you choose "Common", a checkmark will be added to the list items that occur in both the first and second lists.
8. Check the "Case sensitive" box if you want the comparison to be sensitive to upper and lower case. If this box is left unchecked, then comparisons are made without regard to upper- or lower-case characters.
9. If you want the comparisons to be made using the fuzzy matching module (The "Fuzzy" module specifies rules and parameters that guide the process of matching one term to another), check "Fuzzy Comparison". Then choose the fuzzy module to use (normally located in \Program Files\VantagePoint\Fuzzy) by clicking [...] next to the path location. Select the module from the **Choose Fuzzy Matching Configuration...** dialog box and click **Open**.
10. Click **OK** to perform the comparison.

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## Record Classification

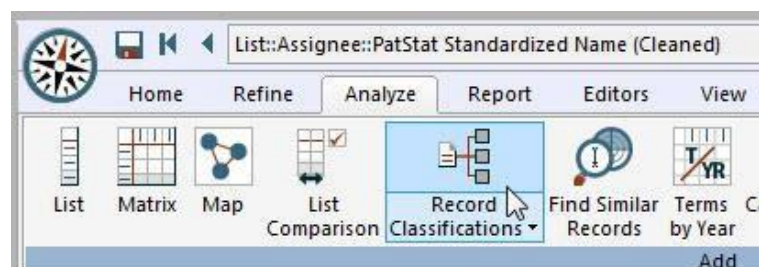
You can use Record Classifications to create, manage, and apply your own classification system to your data. When you add a new classification, a new field is created in your dataset. This field is a type of "key" field where each item in the field is a unique record key. Typically, there will be exactly one item per record unless you have records that are identical copies of each other (an unusual situation). Each category within a classification becomes a "group" in that field.

The overview for Record Classification is:

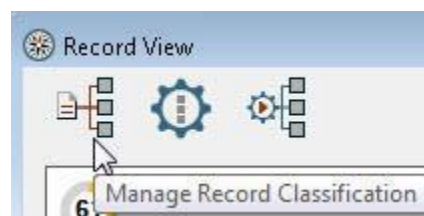
1. Create Classifications ("Manage Record Classification" from the Analyze ribbon or from the Record View)
2. Assign Classifications in the [Record View](#) or in the Title Window (see [Record Classifications](#) under Record View). Use [Smart Trainer](#) as a tool.
3. Start Auto-Classifying. (from the Record View, Manage Classifications, [Auto-Classifier Settings](#)).

### To Create Classifications:

Access the Manage Record Classifications dialog by selecting **Record Classifications** from the Analyze ribbon:



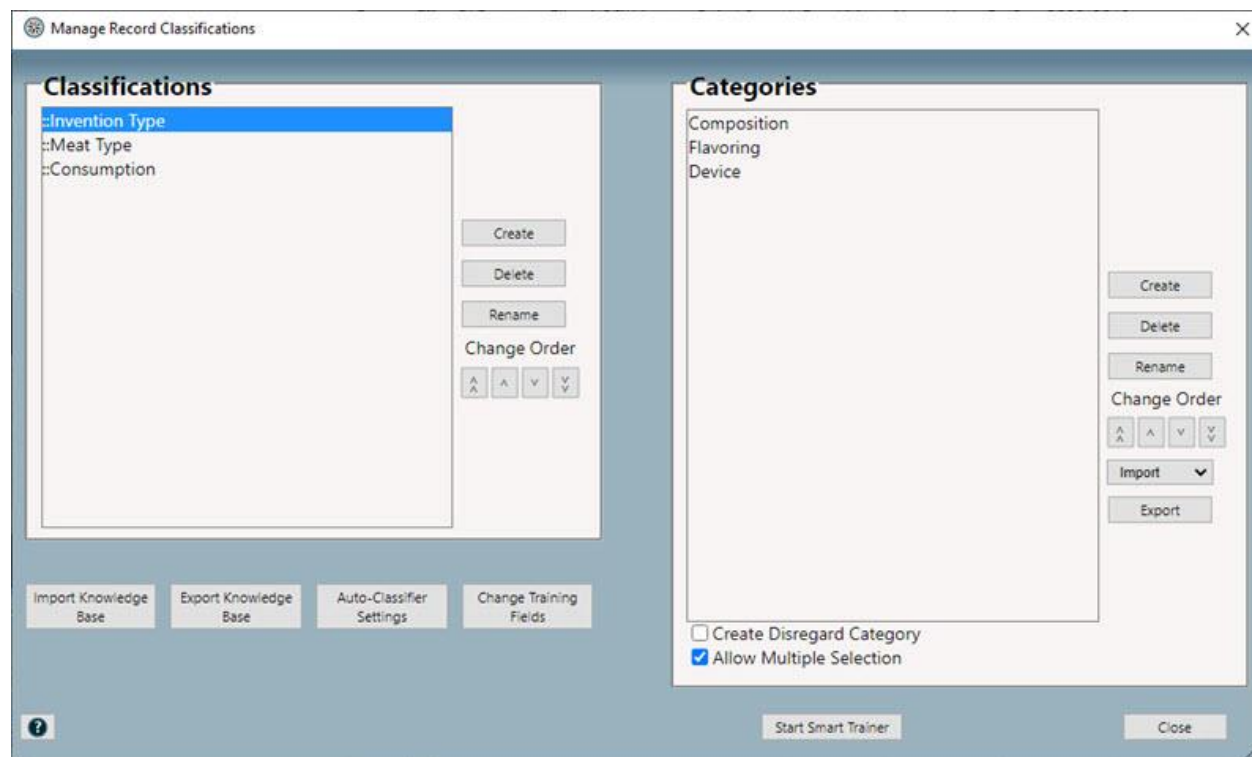
Or, from the Record View, click the **Manage Record Classification** icon.



### Overview of the Record Classification dialog:

The dialog is divided into two panels: **Classifications** and **Categories**.

In this illustration, the user has already added three Classifications: Invention Type, Meat Type, and Consumption. The corresponding Categories for each selected Classification are shown in the right panel. Here, the Classification "Invention Type" contains three Categories: Composition, Flavoring, and Device.



Buttons within the **Classifications** panel:

**Create** - Add a new classification (effectively also adds a new field to your dataset).

**Delete** - Delete the selected classification.

**Rename** - Rename the selected classification.

**Change Order** - Move the selected classification up or down in the list. (The double caret buttons move the selection either to the top or to the bottom.)

Buttons within the **Categories** panel:

**Create** - Add a new category.

**Delete** - Delete the selected category.

**Rename** - Rename the selected category.

**Change Order** - Move the selected classification up or down in the list. (The double caret buttons move the selection either to the top or to the bottom.)

**Import** - Import a list of categories from a text file or use an existing field. See the Import Categories topic for details.

**Export** - Export the list of categories to a text file.

**Change Order** - Move the selected category up or down in the list. (The double caret buttons move the selection either to the top or to the bottom.)

Checkboxes:

**Create Disregard Category** - if checked, creates a new category for assigning records that should not be classified and will be disregarded during Smart Training. (These might be records that do not "look" like anything else, or are irrelevant.)

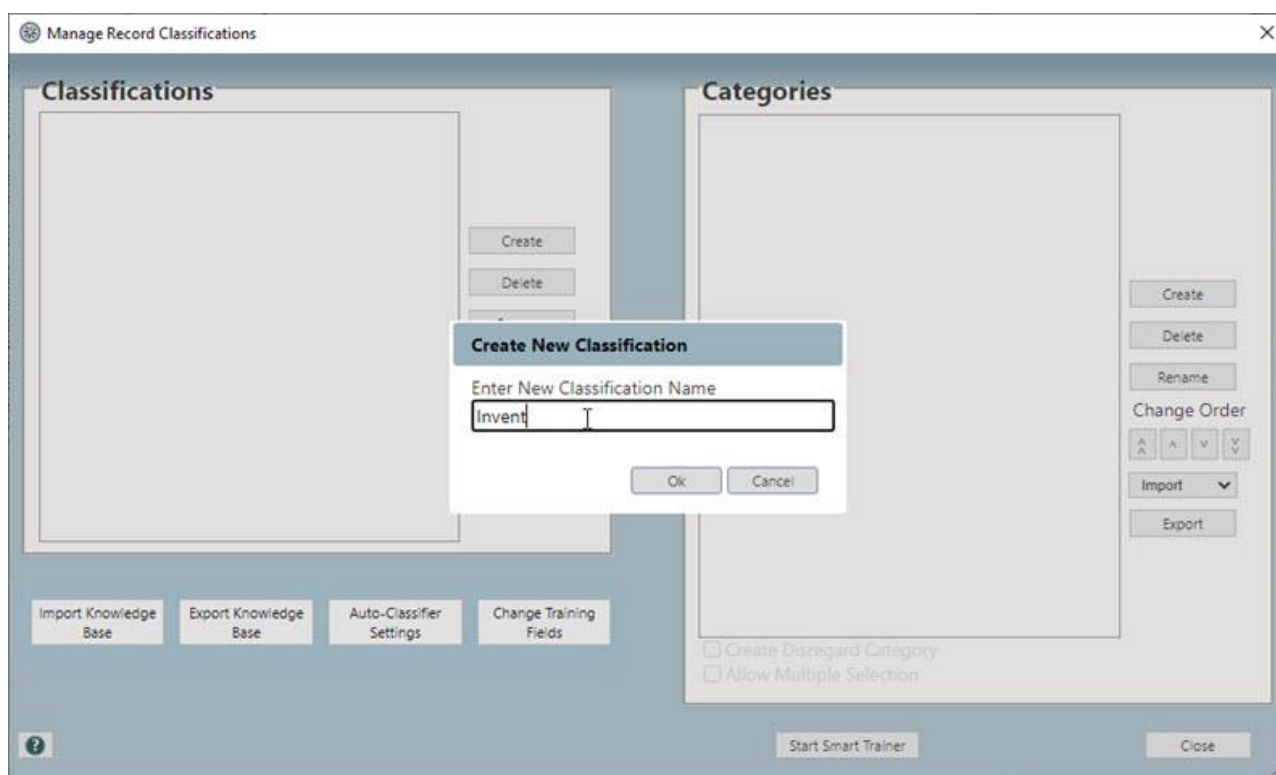
**Allow Multiple Selection** - if checked, a record may be assigned to more than one category. Otherwise, selecting a new category removes assignment of any other category. Note: The Auto-Classifier assigns a single selection only.

Buttons under the Classifications panel include:

- **Import Knowledge Base** - Import Classifications from a file. Populates the Classifications window in this panel with its content, and the name appears as a field name on the [Summary Sheet](#). The Data Type "Record Classification" is automatically assigned. See the [Knowledge Base](#) Topic for more details.
- **Export Knowledge Base** - Export Classifications to a .vpkb file. The file can then be imported for use on other compatible files.
- **Auto-Classifier Settings** - Brings up the [Auto-Classifier Settings](#) dialog.
- **Change Training Fields** - Brings up the [Change Training Fields](#) dialog.

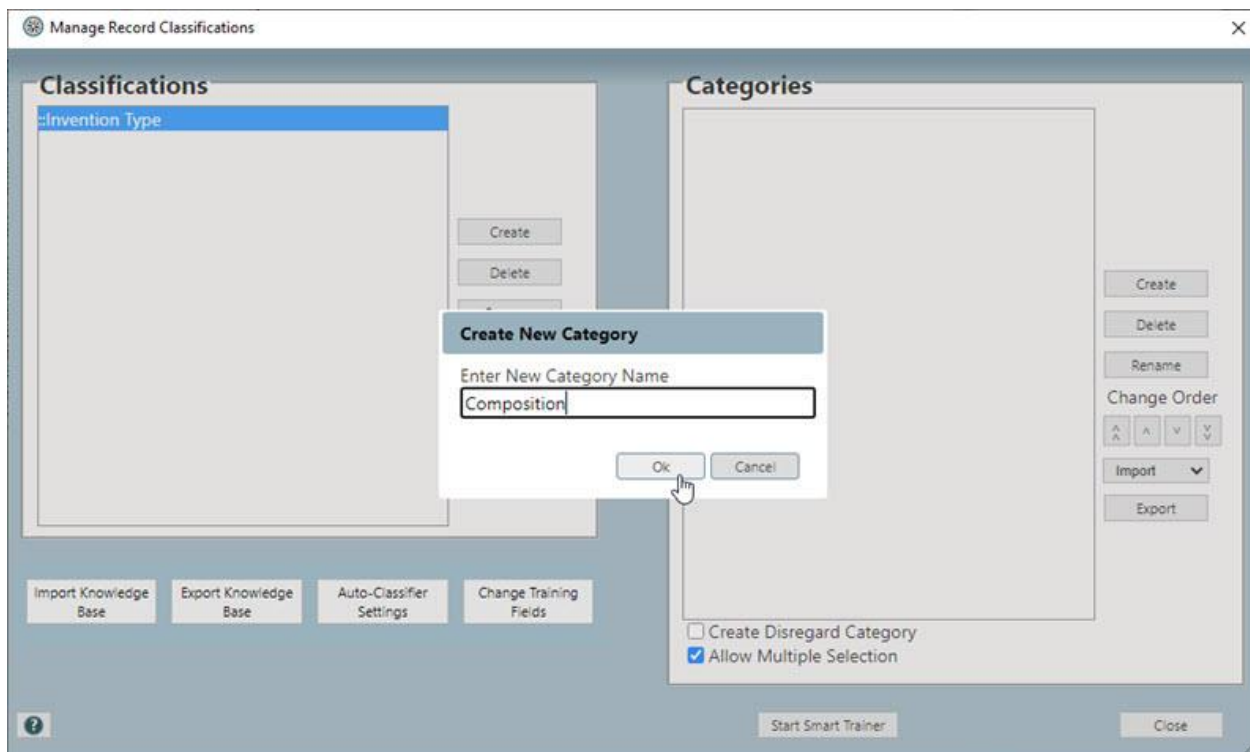
Create Classifications: - (Continued)

2. Under the Classifications panel, click the Create button to begin. The **Create New Classification** dialog is presented. Here, the user is adding the Classification Name "Invention Type". Click **Ok**.

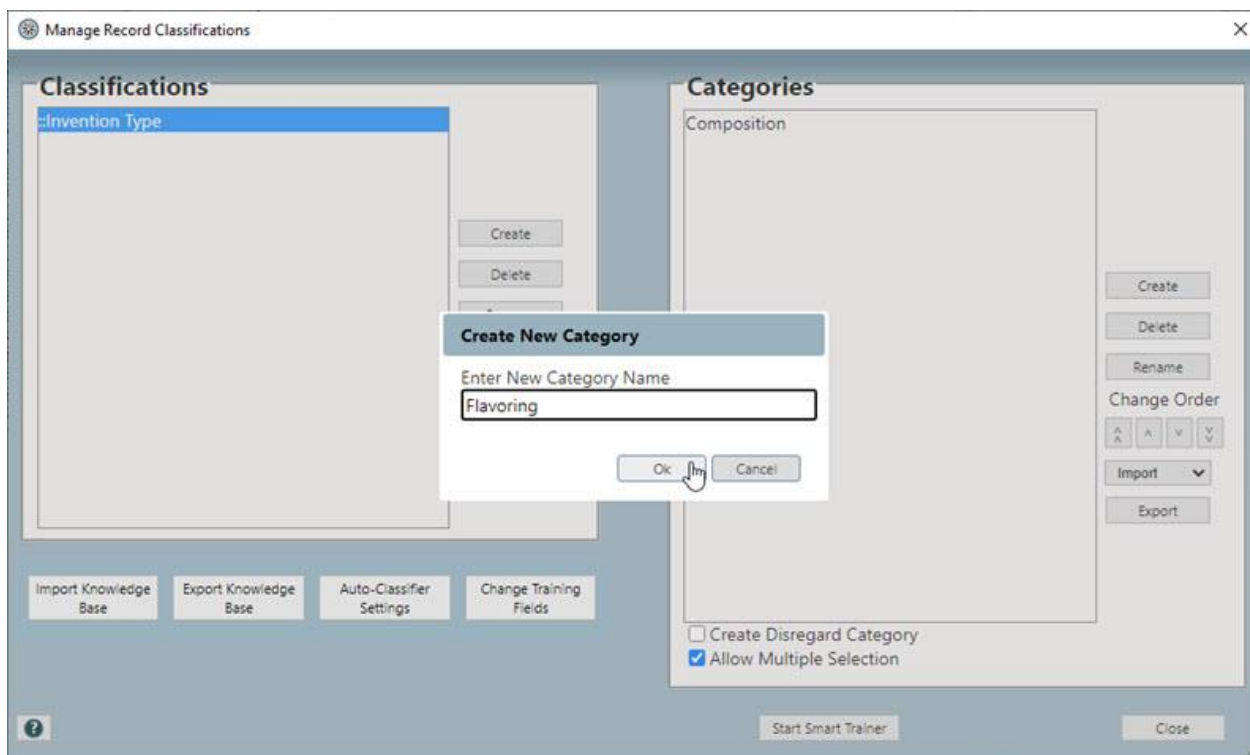


3. Next, enter the Categories for this Classification. Click on "Invention Type" in the Classifications panel to select it. Under the Categories panel, click the Create button. The **Create New Category** dialog is displayed, where you type the Category name. Click **Ok**.

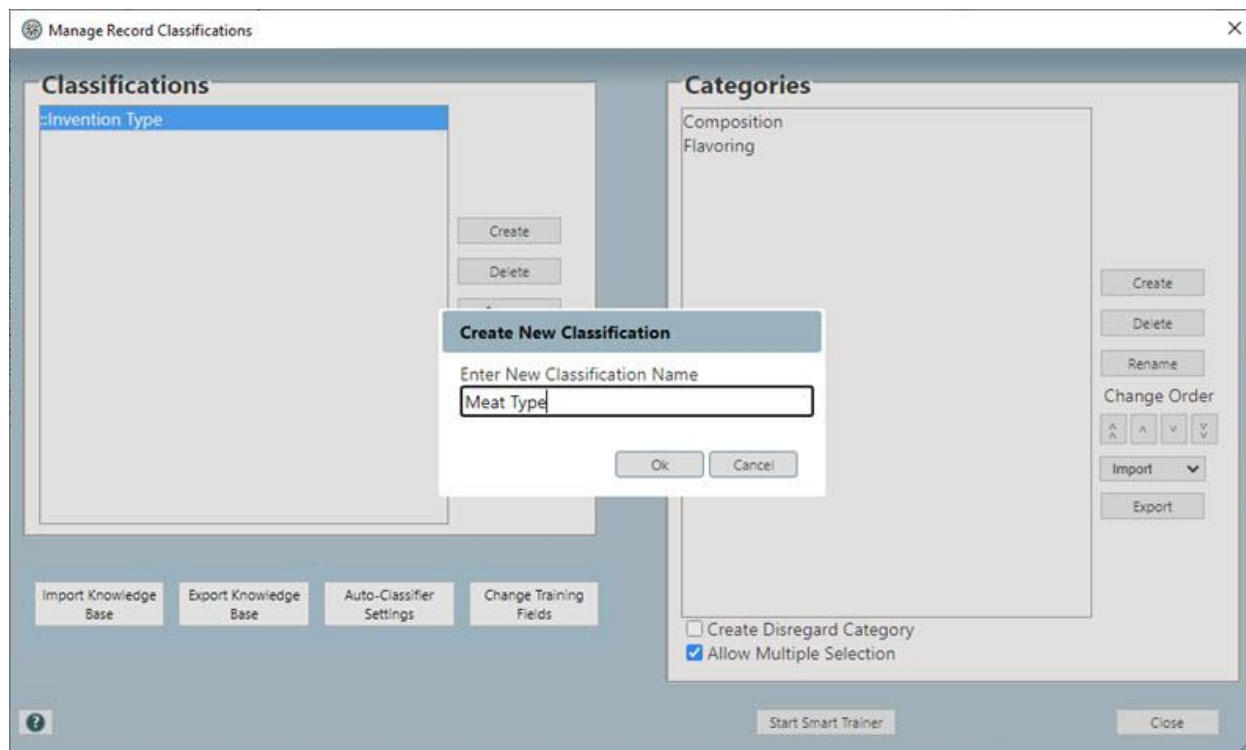
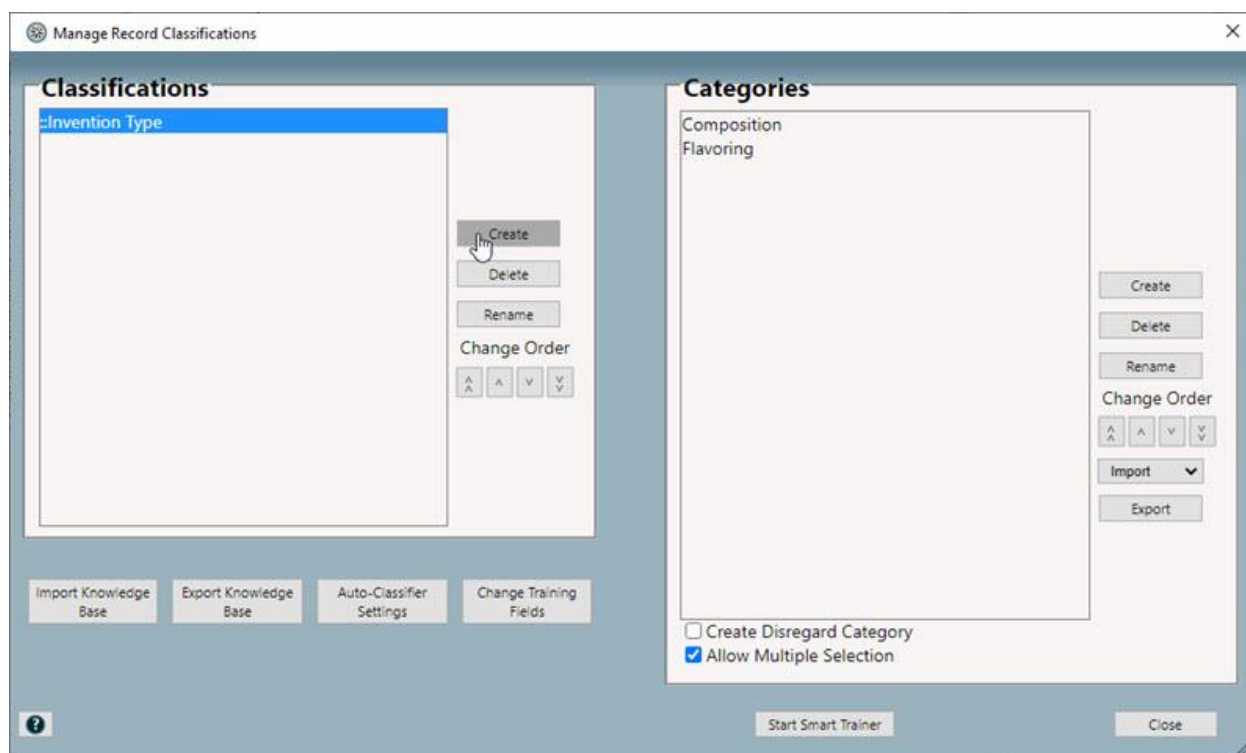
Categories for each Classification can be added individually, as shown here, or you can import text files or dataset fields to create your categories. See the [Import Categories](#) topic for detailed instructions.

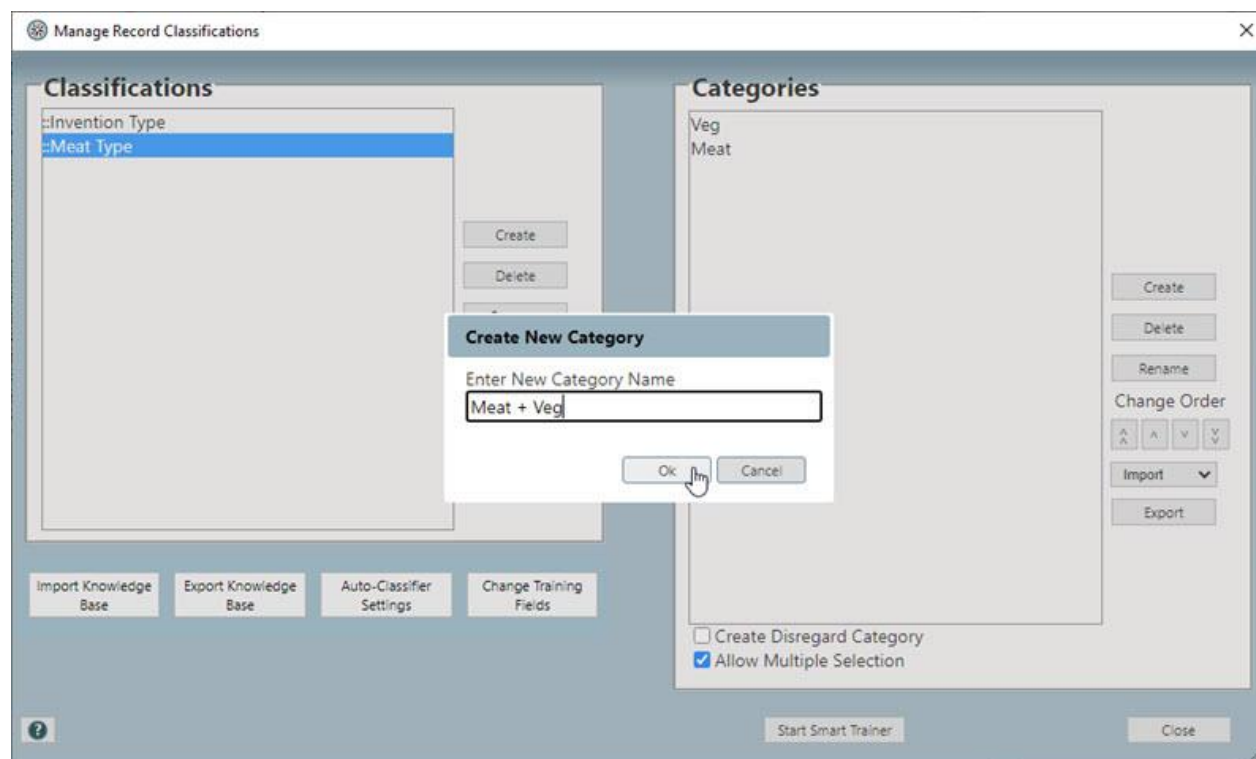


To add more Categories for the selected Classification name, click the **Create** button in the Categories panel for each addition.



4. Add more Classifications and their Categories as described above.





Arrange the order of Classifications and Categories by using the corresponding buttons (caret) under Change Order. Move up or down one space at a time using the single caret buttons, or move to the top/bottom by using the corresponding double caret buttons.

You can also **Delete** or **Rename** entries, and **Import** and **Export** Categories as Text files. Additionally, you can Import dataset Field Names/Groups as Categories. See [Import Categories](#) for details.

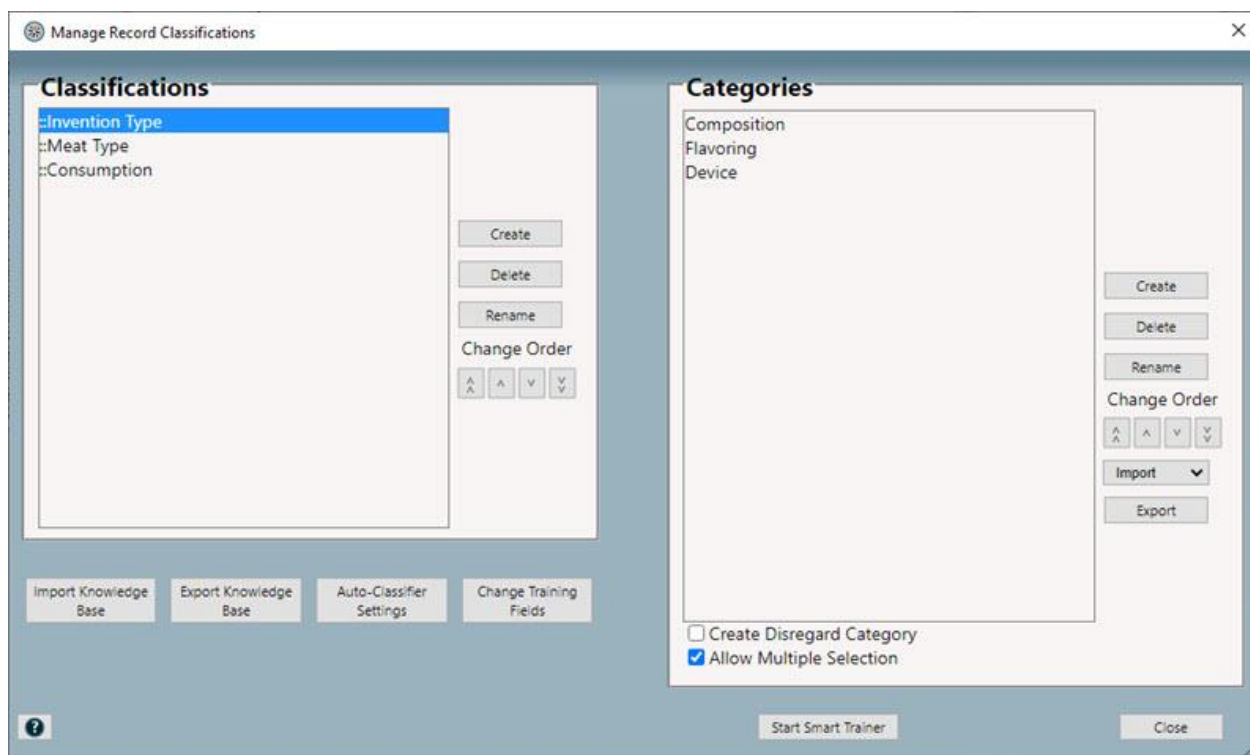
#### Checkboxes:

**Create Disregard Category** - if checked, creates a new category for assigning records that should not be classified and will be disregarded during Smart Training. (These might be records that do not "look" like anything else, or are irrelevant.)

**Allow Multiple Selection** - if checked, a record may be assigned to more than one Category. Otherwise, selecting a new Category removes assignment of any other Category. In the illustration below, the Classification "Invention Type" will allow assignment of any or all of the three Categories displayed. **Note:** The Auto-Classifier assigns a single selection only.

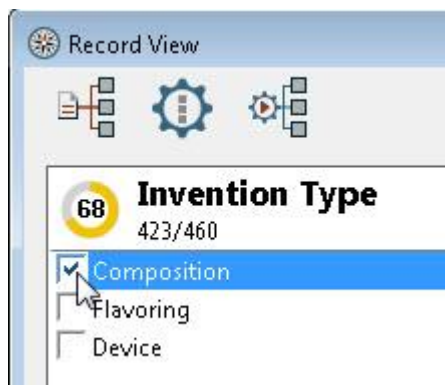
When you have finished creating the Classifications and their Categories, click **Close** to dismiss the dialog. Or, to begin Classification, continue with the next steps, below.






Now you are ready to assign Classifications. You can begin by clicking the **Start Smart Trainer** button at the bottom of the Categories panel.

Or, when viewing a Record in the [Record View](#) or ([Smart Trainer](#)), the Record Classification appears in the left panel. Assign membership by clicking the box for the appropriate classification.



Advance through each record using the "Next"  button on the Record View, and assign Classifications as you go.

See the [Find Similar Records](#) topic for details on using this helpful feature.

With each classification assigned, you are "teaching" VantagePoint, which is necessary for the [Auto Classifier](#) function. As more classifications are assigned, the confidence score (the circle next to the Classifications) will change. The value (0-100) indicates the amount of expected "accuracy" or confidence VantagePoint has to assign classification to similar records.

**Tip!** *If you start with difficult-to-partition records, you will get lower confidence, but if you start with easy-to-partition records, the classifier will be more confident. When classifying, the best practice is to use the best example of a given class in the early stages of training. This will make it easier for the classifier to assign records in the later stages and increase the classifier confidence. As a simple example, start by classifying records that are clearly "black" or "white", but not those that are "gray".*

See the [Auto Classifier](#) topic for the next steps.

A new field is created for each classification category, and added to the Summary Sheet. The field name is the classification category name preceded by two semi-colons ("::"), as shown in the following illustration.

| Summary Sheet  |                 |                  |            |                       |                |
|--|-----------------|------------------|------------|-----------------------|----------------|
| Number of Records: 460                               |                 |                  |            |                       | Column         |
| Field  | Number of Items | Number of Groups | % Coverage | Data Type             | Meta Tags      |
| (filters)  |                 |                  |            |                       |                |
| ::Consumption  | 460             | 5                | 100%       | Record Classification |                |
| ::Invention Type                                     | 460             | 3                | 91%        | Record Classification |                |
| ::Meat Type  | 460             | 3                | 97%        | Record Classification |                |
| Abstract   | 540             |                  | 99%        |                       | Training Field |
| Abstract (NLP) (Phrases)                             | 7,141           | 1                | 99%        |                       |                |
| Abstract (NLP) (Phrases) NLP Refined                 | 6,326           | 9                | 99%        |                       |                |
| Abstract (NLP) (Phrases) NLP Refined - My Categories | 8               |                  | 79%        |                       |                |

Each classification's category becomes a group name in the classification field:

|   | # Records | # Instances | ::Invention Type                        | Composition                         | Flavoring                | Device                   |
|---|-----------|-------------|---|-------------------------------------|--------------------------|--------------------------|
| 1 | 1         | 1           | 06d3x45q381s12s4l2u6c6ym5u6v2i6b6k5g    | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 2 | 1         | 1           | 0sq59603f393l6z2p582185m611f2mv6y71     | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 3 | 1         | 1           | 10623n4v4n294v173t5s58146e115s306775t4p | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 4 | 1         | 1           | 111t3l205s3b3p6y5u41491g1r1f1i273z3i3o  | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

The Auto-Classifier will automatically [Create Field from Group Names](#).

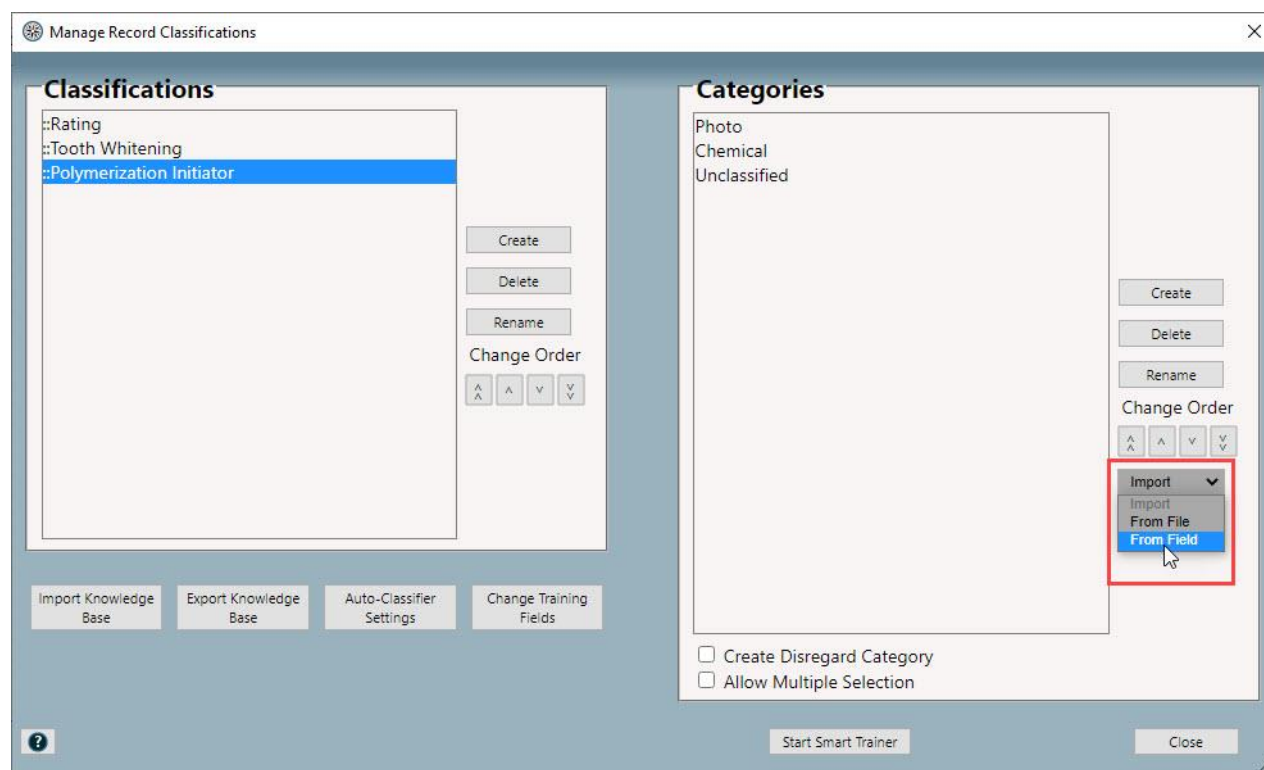
Select a category group within a list (in the illustration below, "Composition" is selected). The Title window will rank records according to how representative they are of their assigned group.

| Title Window |                                    |  |  |  |  |
|--------------|------------------------------------|--|--|--|--|
| Title        |                                    |  |  |  |  |
| Score        | 295 Titles, 0 Selected             |  |  |  |  |
| 0.44         | Bean curd vegetarian meat sa...    |  |  |  |  |
| 0.40         | Pure vegetarian dried meat sli...  |  |  |  |  |
| 0.38         | Vegetarian ham and preparati...    |  |  |  |  |
| 0.37         | Plant protein vegetarian sausa...  |  |  |  |  |
| 0.37         | Dried vegetarian pork slices an... |  |  |  |  |
| 0.34         | Edible mushroom nutrient veg...    |  |  |  |  |
| 0.34         | Islamic roast sausages made o...   |  |  |  |  |
| 0.33         | Baked yolk sausage product a...    |  |  |  |  |
| 0.33         | Bean curd vegetarian sausage ...   |  |  |  |  |
| 0.33         | Curry-flavored vegetarian saus...  |  |  |  |  |
| 0.32         | Vegetarian meat ball based on ...  |  |  |  |  |
| 0.32         | Spiced almond vegetarian chi...    |  |  |  |  |
| 0.31         | Vegetarian meat with coix see...   |  |  |  |  |

### Import Categories

Import a list of Categories from a text file or from an existing field.

First, select the Classification for which the Categories will be associated. Then click the Import button and from the dropdown choose From File or From Field.



**From File** - A File Explorer window will open, where you navigate to select the target file name.

**From Field** - A dialog will open, where you select the dataset. (The dataset containing the field name must be open.) Next, choose the field name. If a Field has Groups, they will be displayed in the window.

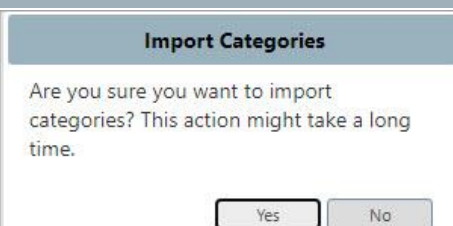
Choose whether to:

- Use All Items in the Field as Categories
- Use Items in Selected Groups as Categories (Select the desired Group Names from the window.)
- Use Group Names as Categories (Select the desired Group Names from the window, or click the **Select All** button.)



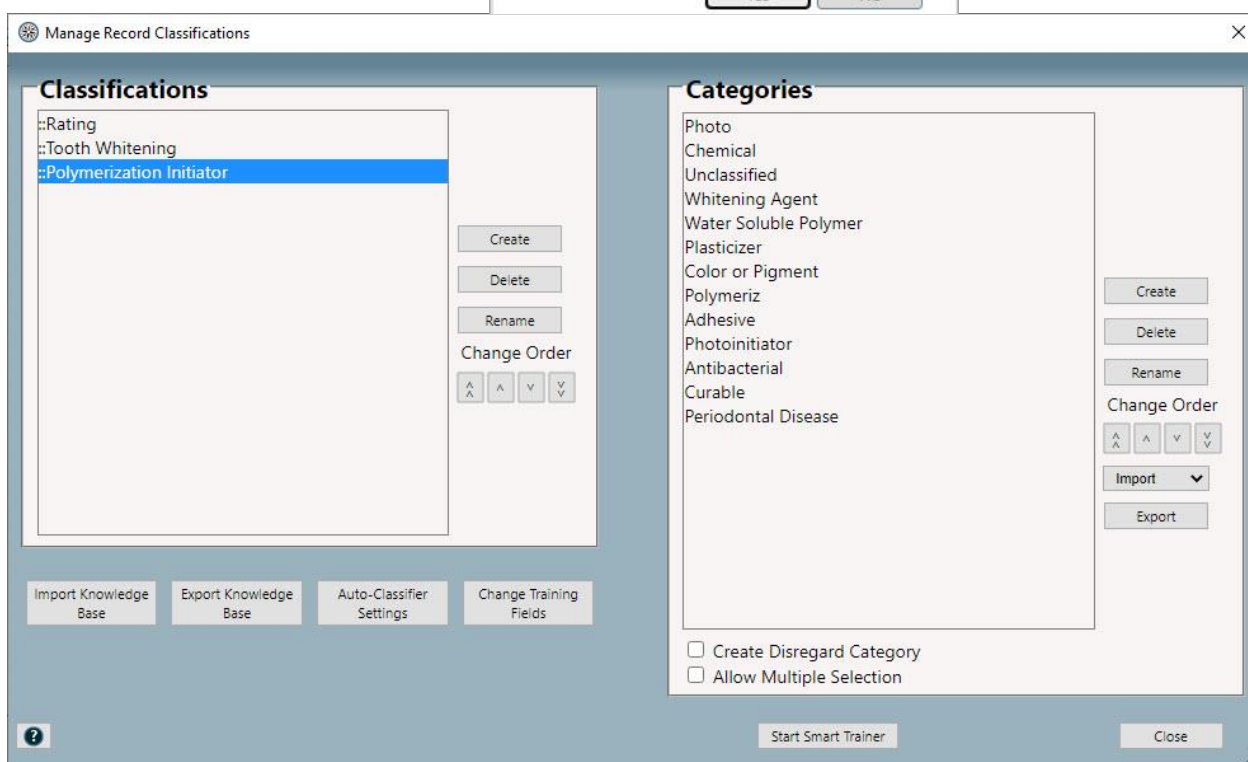
The 'Import Categories' dialog box is shown. It has a title bar 'Import Categories'. Inside, there are two dropdown menus: 'Which open dataset has the categories you want to import?' (set to 'PatSeer Dental Compositions Sample.vpt') and 'Which field has the categories?' (set to 'Abstract (NLP) (Phrases) NLP Refined'). Below these are three radio buttons: 'Use All Items in Field as Categories', 'Use Items in Selected Groups as Categories', and 'Use Group Names as Categories' (which is selected). Under the selected radio button, there is a list of categories with checkboxes: 'Multi Word Phrases' (unchecked), 'Whitening Agent' (checked), 'Water Soluble Polymer' (checked), 'Plasticizer' (checked), and 'Color or Pigment' (checked). At the bottom left are 'Select All' and 'Deselect All' buttons. At the bottom right are 'Import' and 'Cancel' buttons. A mouse cursor is pointing at the 'Import' button.

If you are importing a large number of categories, you will receive a warning:



A warning dialog box titled 'Import Categories' is shown. It contains the text: 'Are you sure you want to import categories? This action might take a long time.' At the bottom are 'Yes' and 'No' buttons.

Result:



The 'Manage Record Classifications' window is shown. It has a title bar 'Manage Record Classifications'. The window is divided into two main panels: 'Classifications' on the left and 'Categories' on the right. The 'Classifications' panel has a list of classifications: 'Rating', 'Tooth Whitening', and 'Polymerization Initiator' (which is selected and highlighted in blue). To the right of this list are buttons: 'Create', 'Delete', 'Rename', and 'Change Order' (with up and down arrow icons). The 'Categories' panel has a list of categories: 'Photo', 'Chemical', 'Unclassified', 'Whitening Agent', 'Water Soluble Polymer', 'Plasticizer', 'Color or Pigment', 'Polymeriz', 'Adhesive', 'Photoinitiator', 'Antibacterial', 'Curable', and 'Periodontal Disease'. To the right of this list are buttons: 'Create', 'Delete', 'Rename', 'Change Order' (with up and down arrow icons), 'Import' (with a dropdown arrow), and 'Export'. At the bottom of the 'Categories' panel are two checkboxes: 'Create Disregard Category' and 'Allow Multiple Selection'. At the bottom of the window are buttons: 'Import Knowledge Base', 'Export Knowledge Base', 'Auto-Classifier Settings', 'Change Training Fields', 'Start Smart Trainer', and 'Close'.

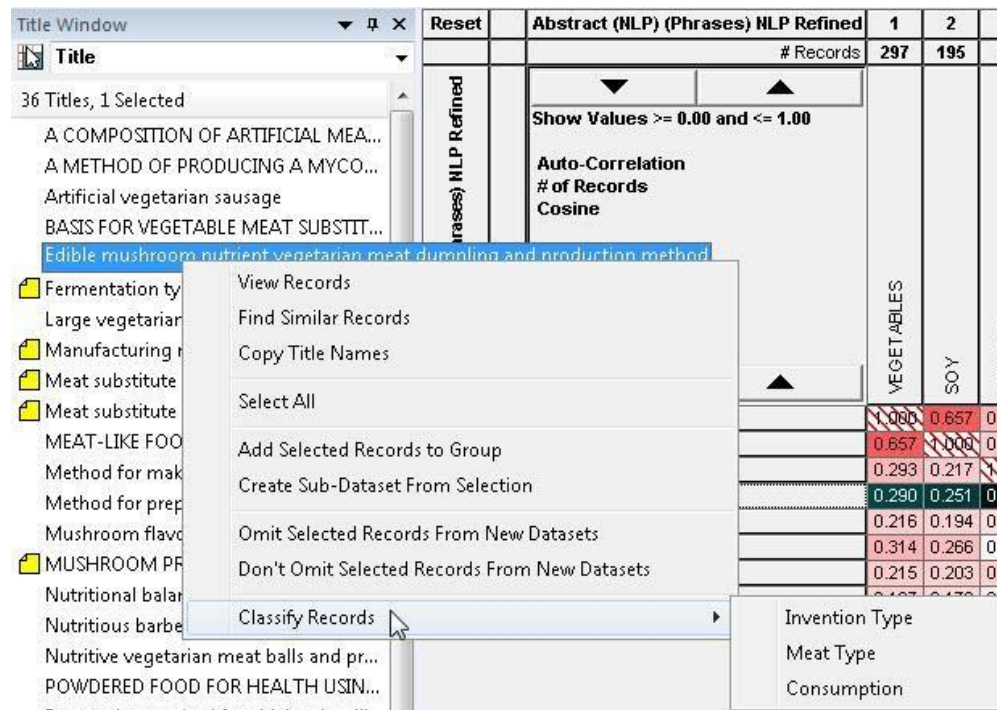
## Assign Records to Record Classifications Using the Title View

Note: You must configure at least one record classification to enable this option.

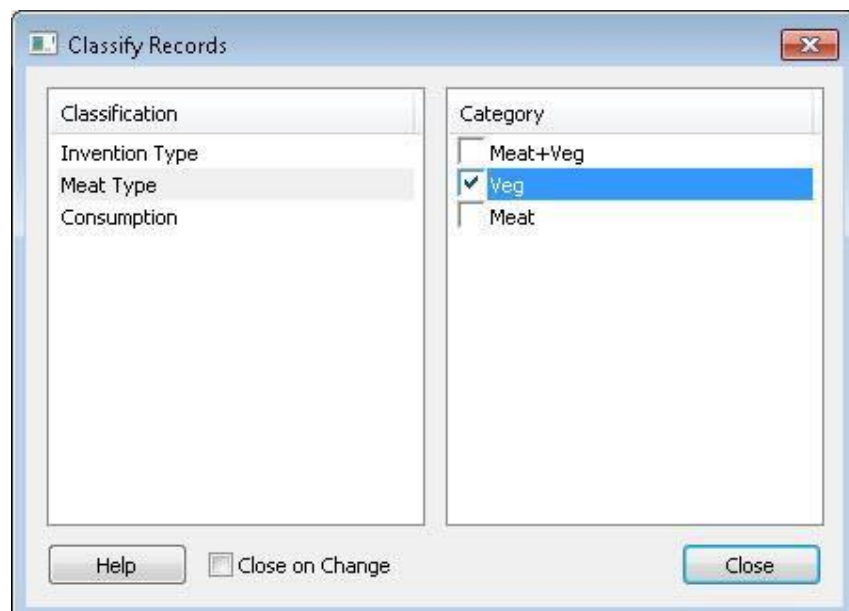
Records can also be assigned to a classification in the [Title Window](#). Select (or multi-select) records in the Title Window.

**Tip!** Use multi-select to classify a batch of records simultaneously, e.g., a group of patents from the same family.

Right-click on the selected records, and select **Classify Records** from the right-click menu. Select a Classification.



This dialog is presented for classification (sample Classifications and Categories appear below). Place a check in the box next to the desired Category.



If it isn't already checked, you can check the "Close on Change" box, then click Close. Then you won't have to click the Close button with each classification performed, as the box will close immediately upon Category selection.

See Also:

[Find Similar Records](#)

[Knowledge Base](#)

[Smart Trainer](#)

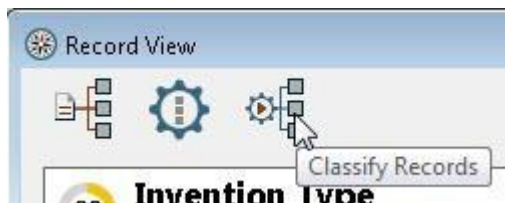


## Auto-Classifier

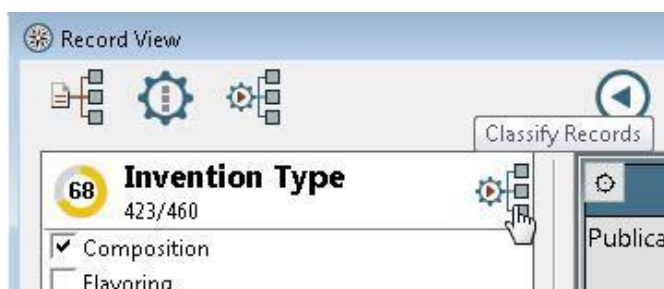
The Auto-Classifier learns from your classification assignments using Fields with the "Training Field" Meta Tag. Assignment of Training Fields can now be performed directly from this Auto-Classifier Settings dialog.

After a user has assigned Classifications to a sufficient number of records, VantagePoint can automatically assign Classifications to the remaining records.

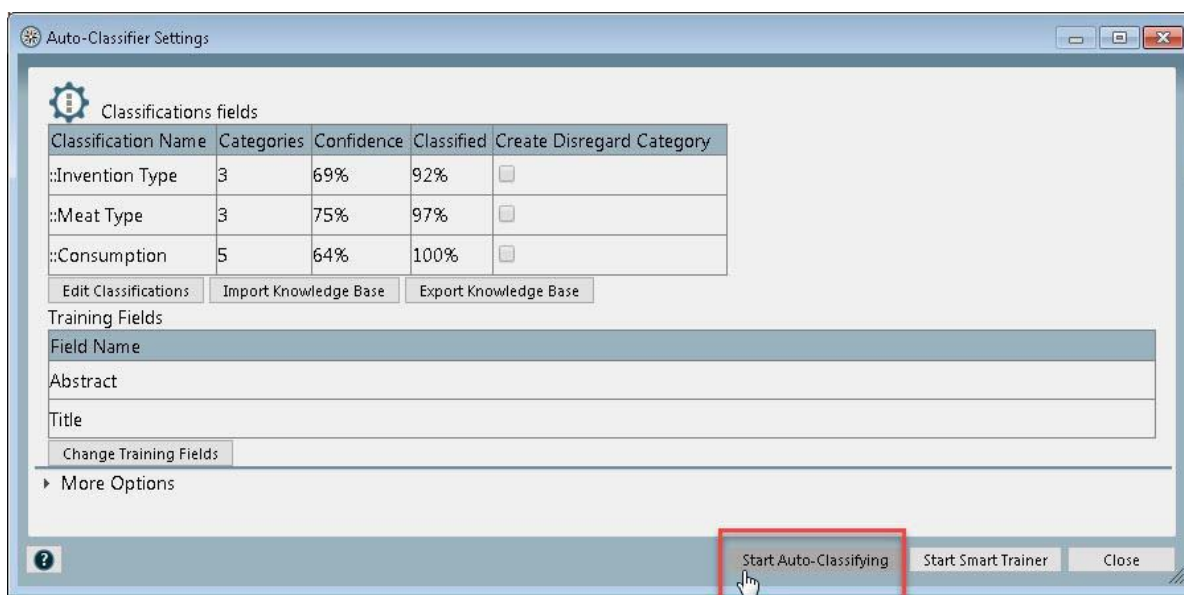
To begin, click the **Classify Records** icon in the Record View or Smart Trainer panel:



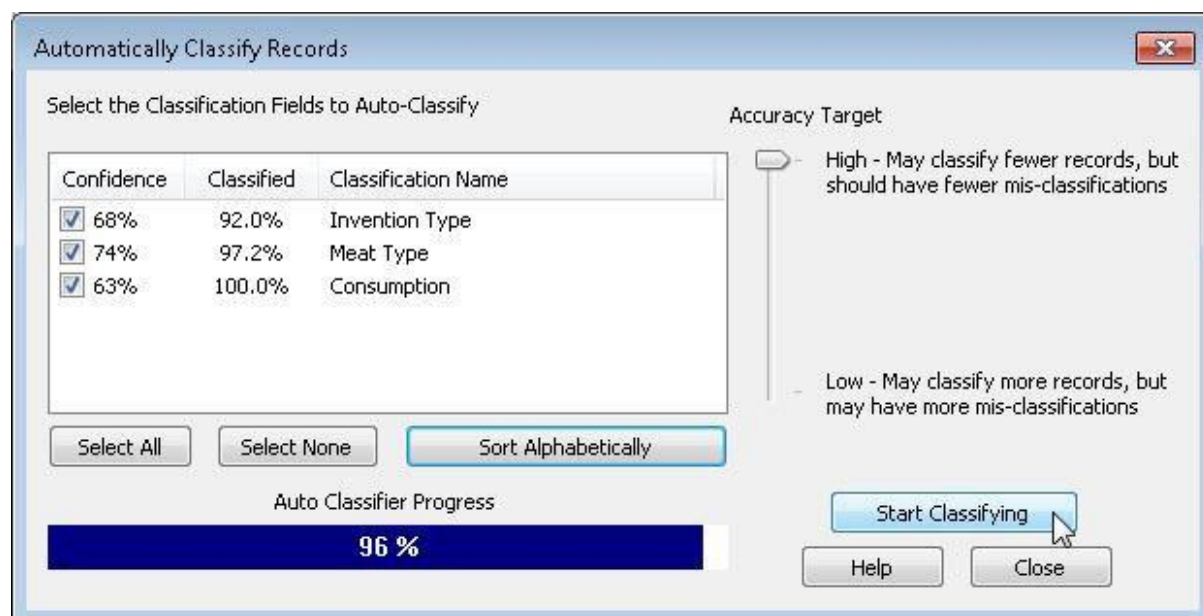
You can also choose to Classify only a selected Classification by clicking the **Classify Records** icon next to the Classification name:



You can also begin Auto-Classifying from the Auto-Classifier Settings dialog:

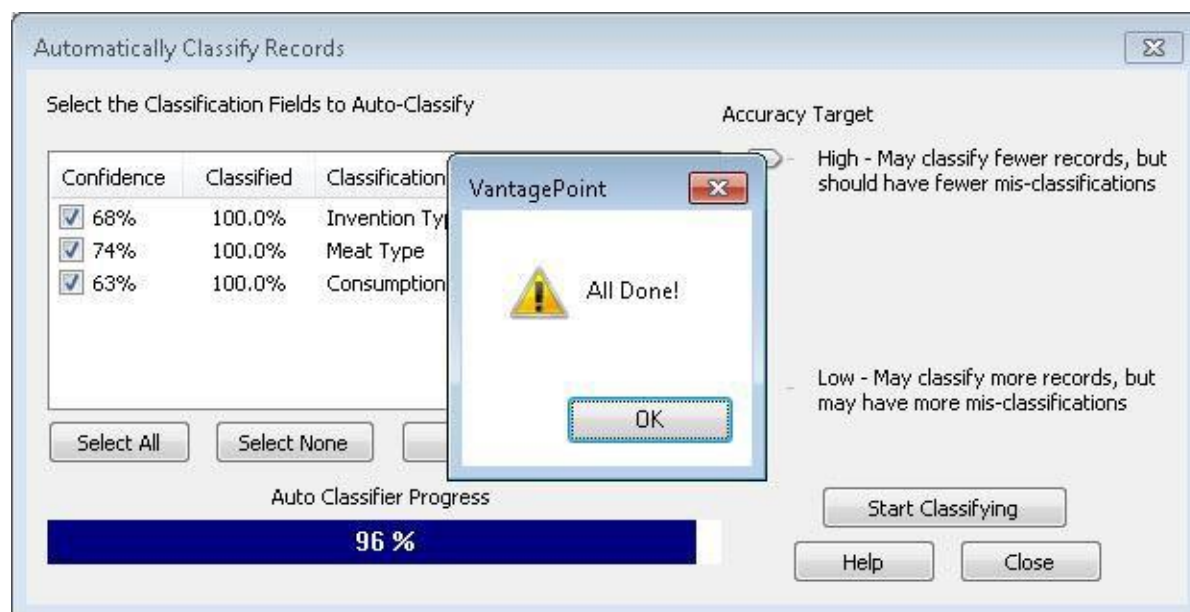


The **Automatically Classify Records** dialog is presented.



In this dialog, you can choose all or a selected Classification name to Auto-Classify. Click the **Sort Alphabetically** button if you prefer that sort to the Classification order. You may also adjust the Accuracy Target level, if desired.

Click **Start Classifying**.



Click **OK**, then click **Close** in the underlying dialog.

The result is a new Field name for each Classification. The Categories appear as Groups in the field. The new field names appear on the Summary Sheet, prefaced by double-colons "::". The Classification "Invention Type" (example used in the Record Classification topic) becomes Field name "::Invention Type" with Group names "Composition", "Flavoring", "Device", and "Unclassified".

VantagePoint automatically Creates Field from Groups for each Classification with "(Auto-Classified)"

appended to the Field name (see Advanced Options panel in the Auto-Classifier Settings). From the Summary View, locate the "[Classification name] (Auto-Classified)" field, and double-click to create a List.

Here is the result:

|   | # Records | # Instances | Invention Type (Auto-Classified) |
|---|-----------|-------------|----------------------------------|
| 1 | 322       | 322         | Composition                      |
| 2 | 78        | 78          | Flavoring                        |
| 3 | 54        | 54          | Device                           |
| 4 | 8         | 8           | Unclassified                     |

You can now view the Unclassified records and assign them to a Classification, if desired.

See Also:

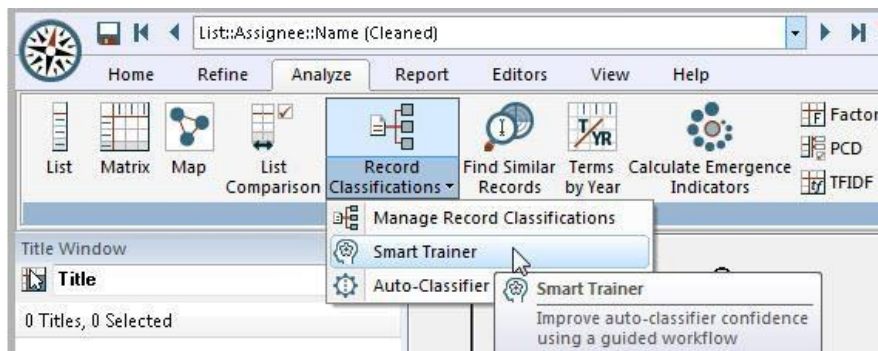
[Smart Trainer](#)

[Auto-Classifier Settings](#)

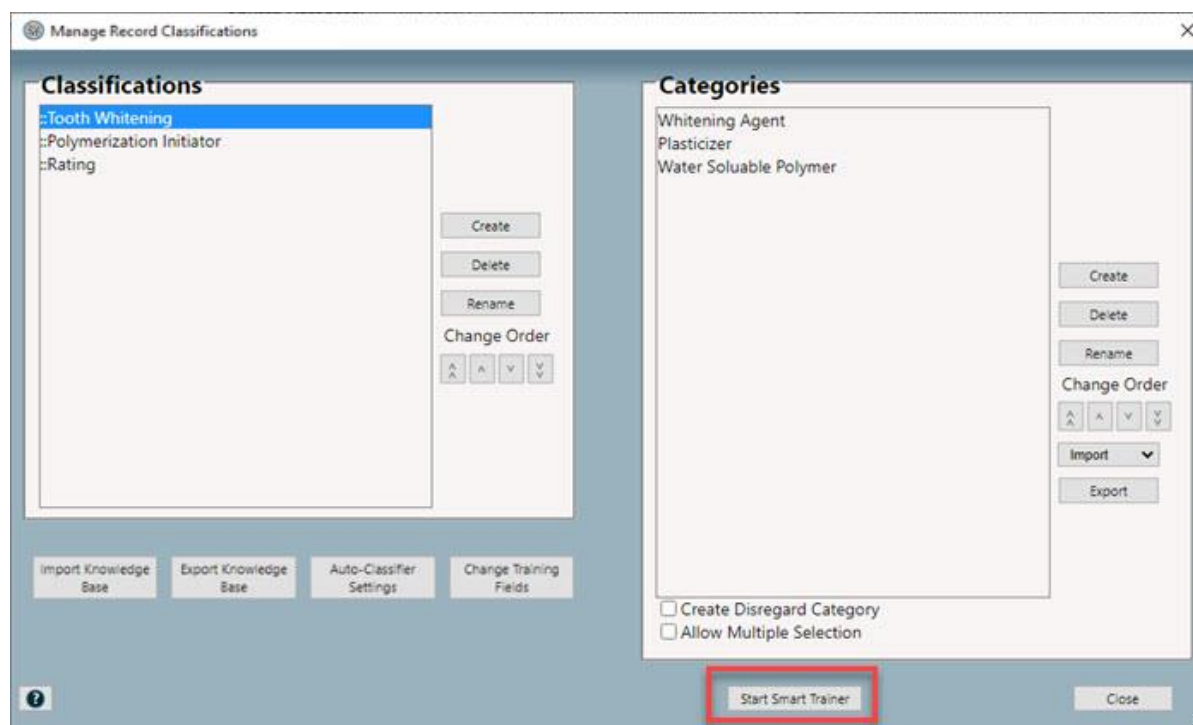
[Change Training Fields](#)

## Smart Trainer

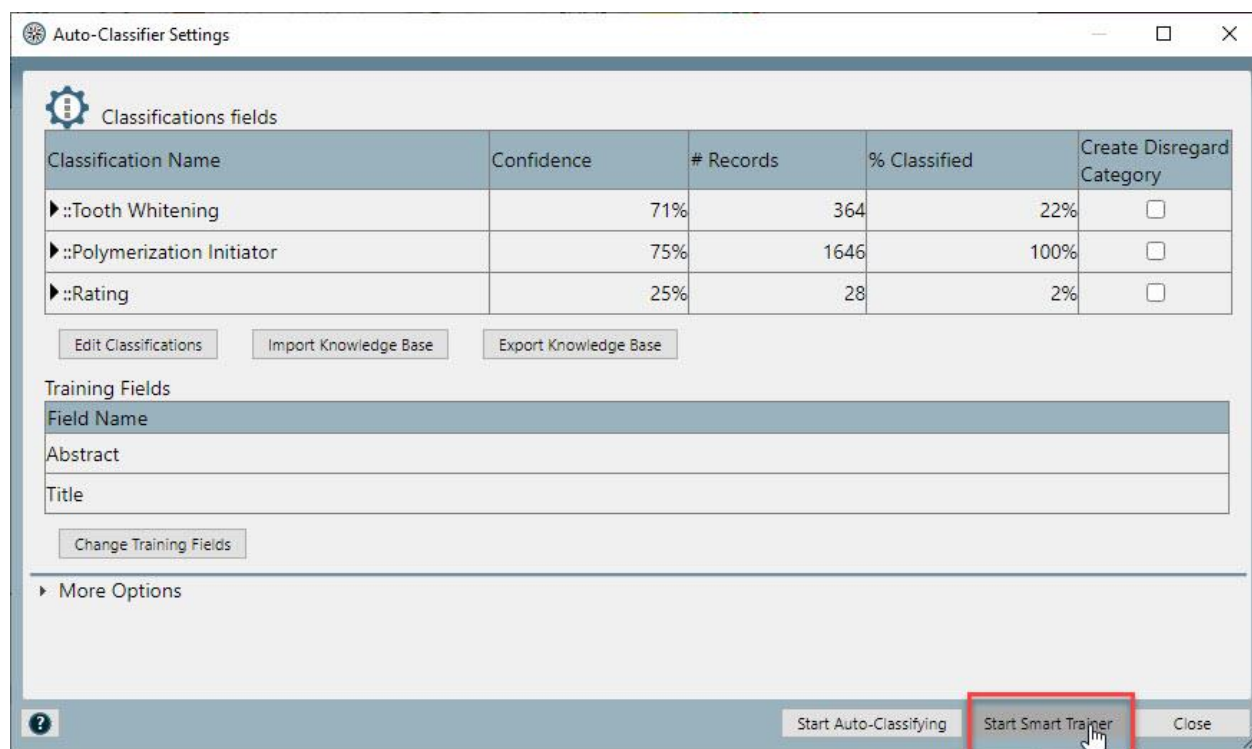
Use the Smart Trainer to train the Auto-Classifier. From the Analyze Ribbon, choose **Smart Trainer** from the Record Classifications dropdown.



It is also accessible via the Manage Record Classifications dialog or the Auto-Classifier Settings dialog:



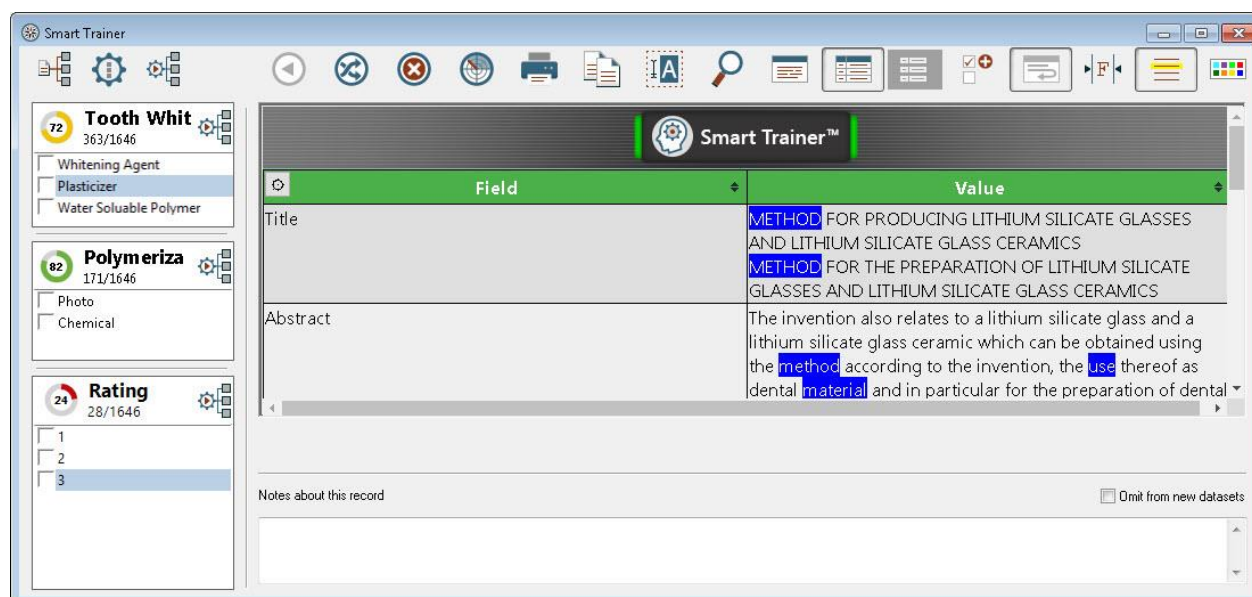
Or from the Auto-Classifier Settings dialog:



A record is presented in the Smart Trainer view, as shown below. Notice only the fields defined as [Training Fields](#) appear. From here, you can continue classification.

**Note:** If the user is unsure of classification, it's best to create a Disregard category. (This is done via the [Auto-Classifier Settings](#) or [Manage Record Classifications](#) dialog. VantagePoint creates a new category for assigning records that should not be classified and will be disregarded during Smart Training. These might be records that do not "look" like anything else, or are irrelevant.)

As you train, a suggested category will be highlighted in the Smart Trainer window once a high enough confidence threshold has been reached. (In this illustration, "Plasticizer" and "3" are suggested.)



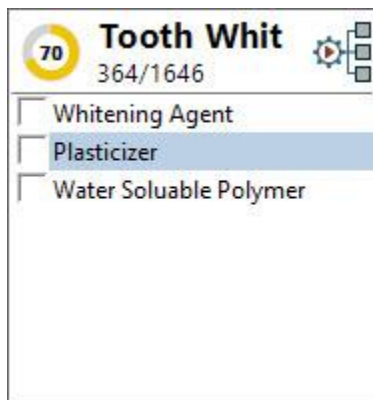
The View Next Record icon prompts VantagePoint to present the next record. For Smart Training, VantagePoint tries to pick a record as different as possible from the one currently viewed. This will get you to a point where you're classifying within each category faster than if you were going alphabetically through a list. The idea is to get as many early examples of each category as possible to boost the confidence score.

The View Next Record operation was improved to present “better” records first (i.e., within one standard deviation of the median number of terms within the training fields.)

Notice the View Next Record action can also be accomplished using the hotkeys **Ctrl >**.



**Suggest Categories:** As previously stated, once a high enough confidence threshold has been reached, a suggested category will be highlighted in the Smart Trainer window.



See Also:

[Auto-Classifer](#)

[Auto-Classifer Settings](#)

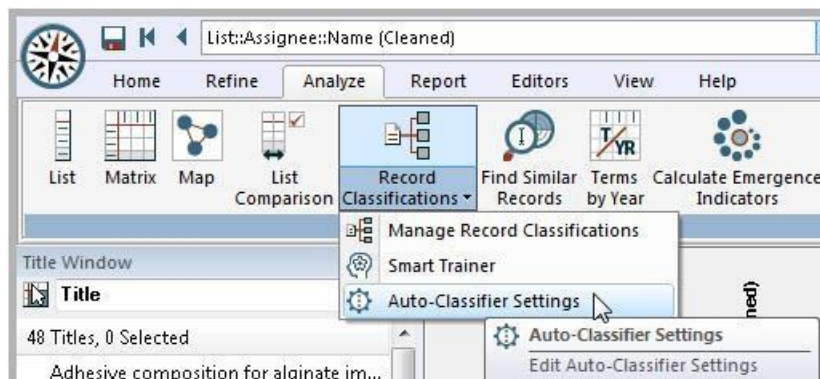
[Change Training Fields](#)



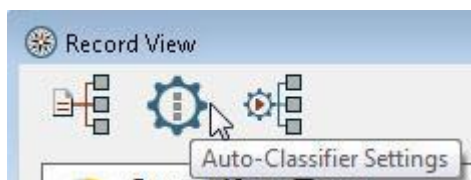
## Auto-Classifier Settings

After a user has assigned Classifications to a sufficient number of records, VantagePoint can automatically assign Classifications to the remaining records.

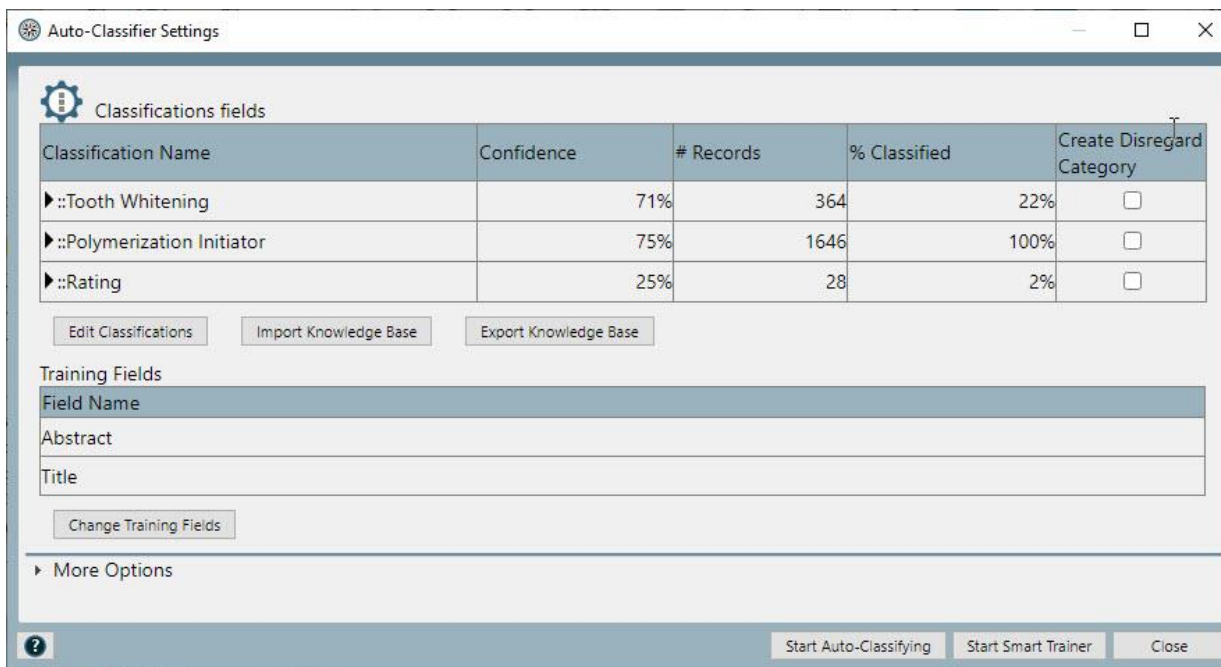
From the **Analyze** ribbon, click the Record Classifications dropdown and choose **Auto-Classifier Settings**:



Or, from the Record View, click the **Auto-Classifier** icon.



The Classification fields are displayed with these details: Number of Categories each contains, percentage of Confidence the Auto-Classifer has, percentage of records Classified, and whether a Disregard Category is created.



**Create Disregard Category** - if checked, creates a new category for assigning records that should not be

classified and will be disregarded during Smart Training. (These might be records that do not "look" like anything else, or are irrelevant.)

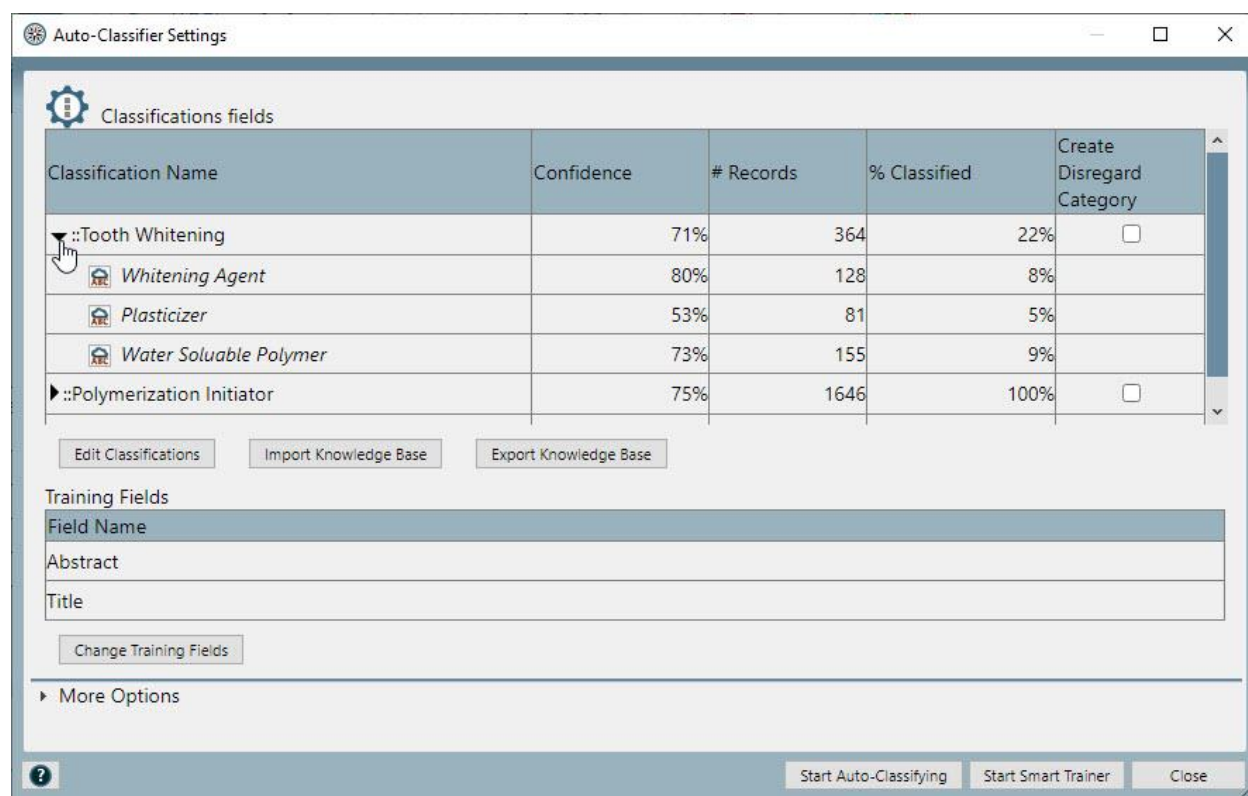
From this panel, you can immediately begin [Start Auto-Classifying](#) or [Start Smart Trainer](#) (by clicking the buttons at the bottom of the panel.)

The **Edit Classifications** button takes you back to the [Manage Record Classifications](#) dialog.

Clicking the **Import Knowledge Base** button imports Classifications from a file. It populates the Classifications window in this panel with its content, and the name appears as a field name on the [Summary Sheet](#). The Data Type "Record Classification" is automatically assigned. (See the [Knowledge Base](#) topic for details.)

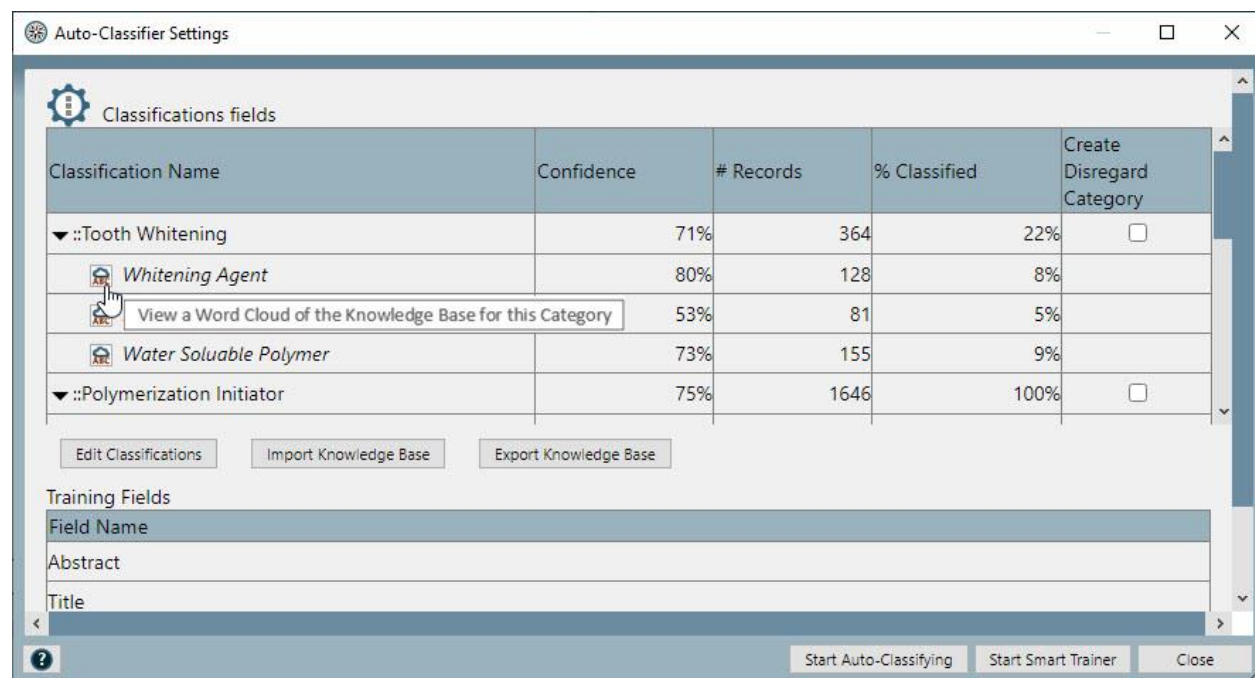
Click the **Export Knowledge Base** button to export Classifications to a .vpkb file. The file can then be imported for use on other compatible files.

Click on the arrow next to a Classification Name to reveal its Category details, as shown below: Category Names, Number of Records assigned to each Category, and the percentage of Confidence the Auto-Classifier has, based on those assignments.

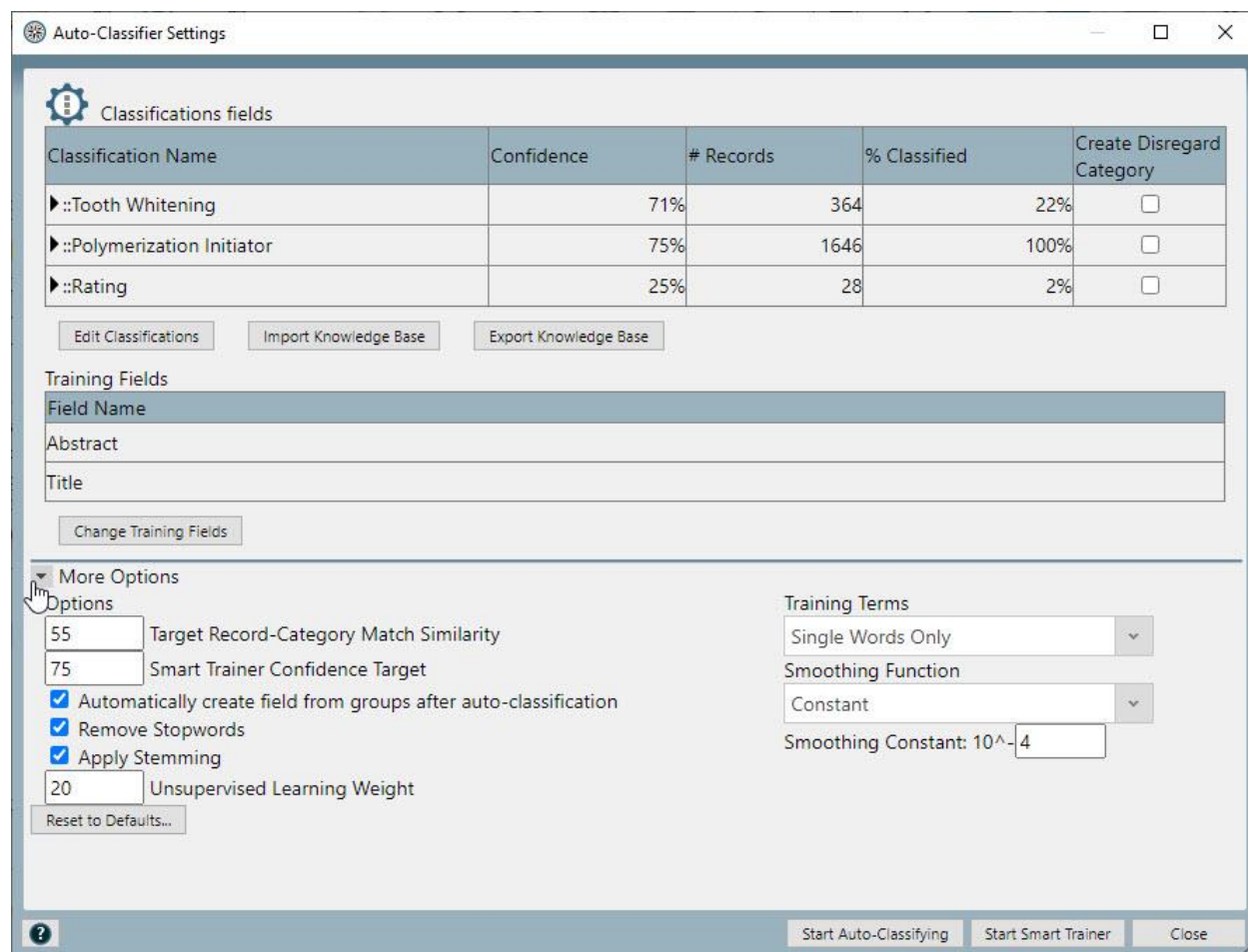


The Training Fields used for the Auto-Classifier are displayed in the panel above. "Abstract" and "Title" are the default Fields. To change, Add, or Remove Training fields, click the **Change Training Fields** button.

You can view a Word Cloud of the Knowledge Base for a given Category. This shows the Top 100 Stems that make up the knowledge base for that Category. Simply click the icon next to the desired Category. The Word Cloud will be displayed. See the [Knowledge Base Word Cloud](#) topic for illustrations.



The **More Options** dropdown reveals various settings used in the background. Changes can be made, if desired.



Click the **Start Auto-Classifying** or **Start Smart Trainer** button to proceed.

See Also:

## Auto-Classifier

## Smart Trainer

## Record Classification

## Change Training Fields

## Knowledge Base

## Knowledge Base Word Cloud

From the Auto-Classifer dialog, click the Word Cloud icon to display the top 100 Stems in the Knowledge Base for a given Category.

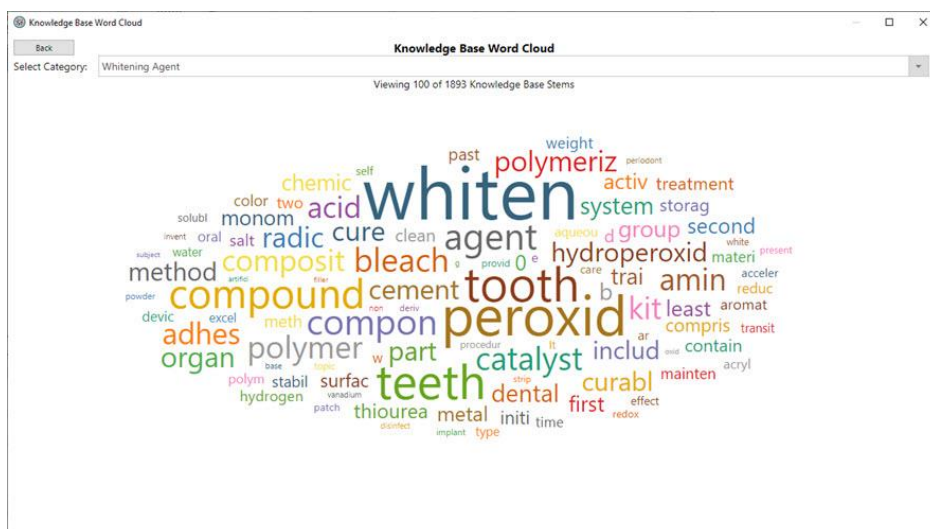
**Auto-Classification Settings**

**Classifications fields**

| Classification Name                                       | Confidence | # Records | % Classified | Create Disregard Category |
|---|------------|-----------|--------------|---------------------------|
| ▼ ::Tooth Whitening                                       | 71%        | 364       | 22%          | <input type="checkbox"/>  |
| Whitening Agent   | 80%        | 128       | 8%           |                           |
| View a Word Cloud of the Knowledge Base for this Category | 53%        | 81        | 5%           |                           |
| Water Soluble Polymer                                     | 73%        | 155       | 9%           |                           |
| ▼ ::Polymerization Initiator                              | 75%        | 1646      | 100%         | <input type="checkbox"/>  |

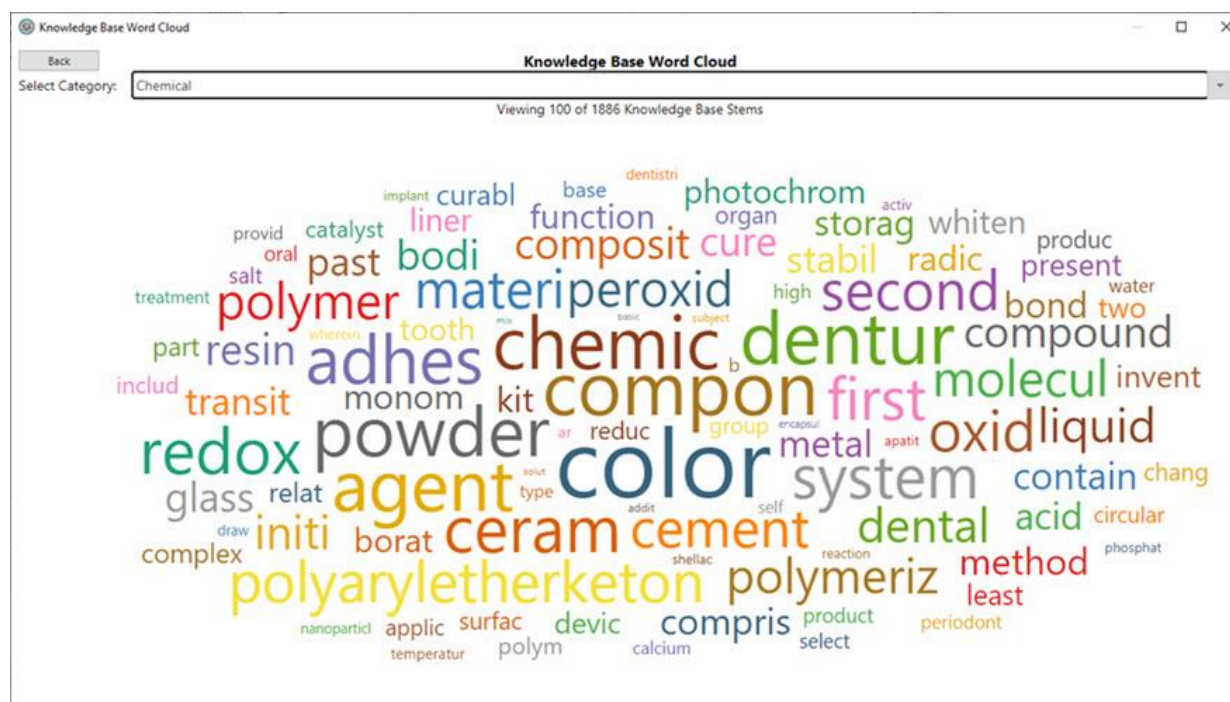
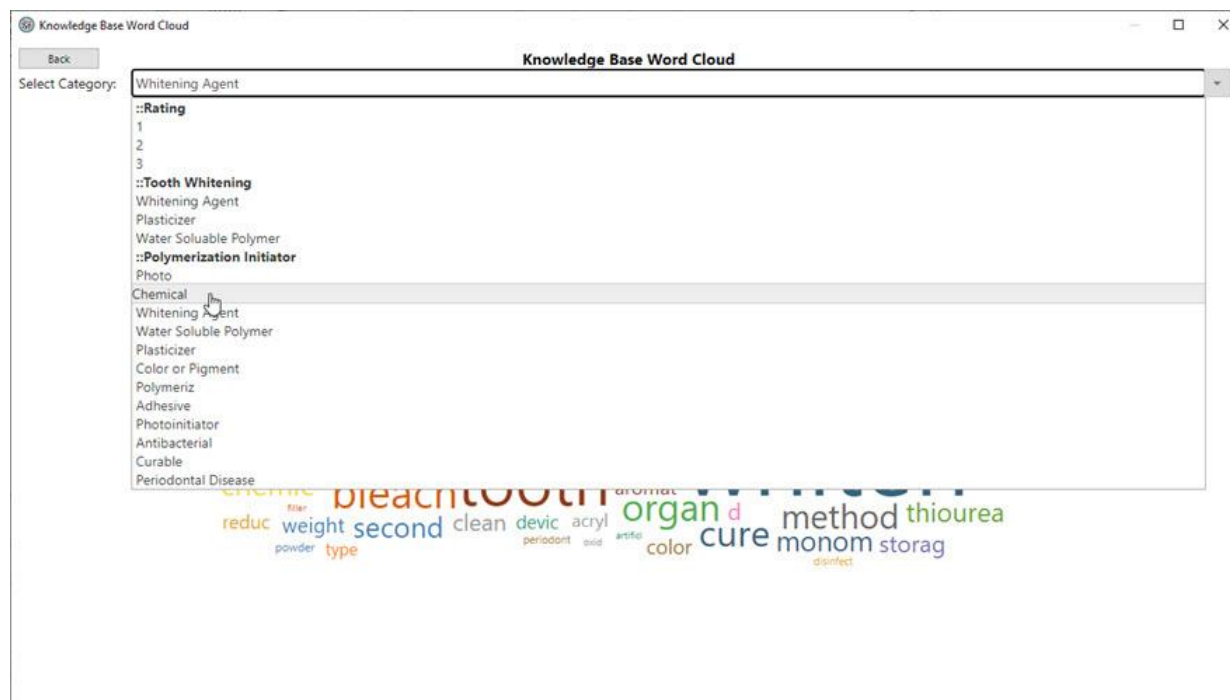
**Training Fields**

| Field Name |
|------------|
| Abstract   |
| Title      |



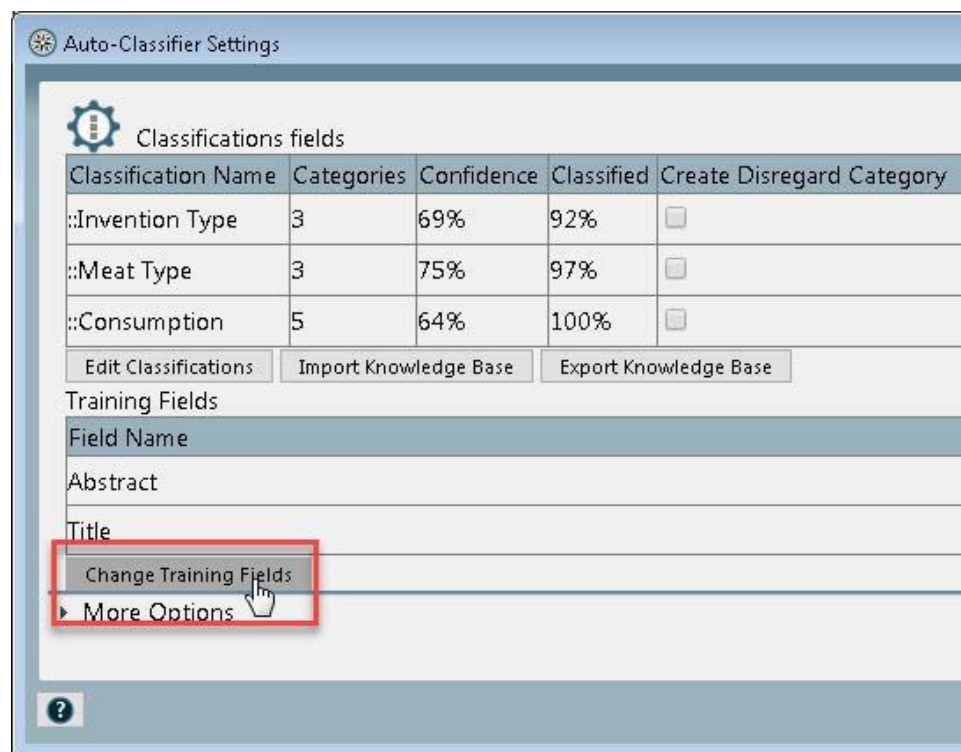


Once the Word Cloud is displayed, use the dropdown to easily select and display results for other available categories.

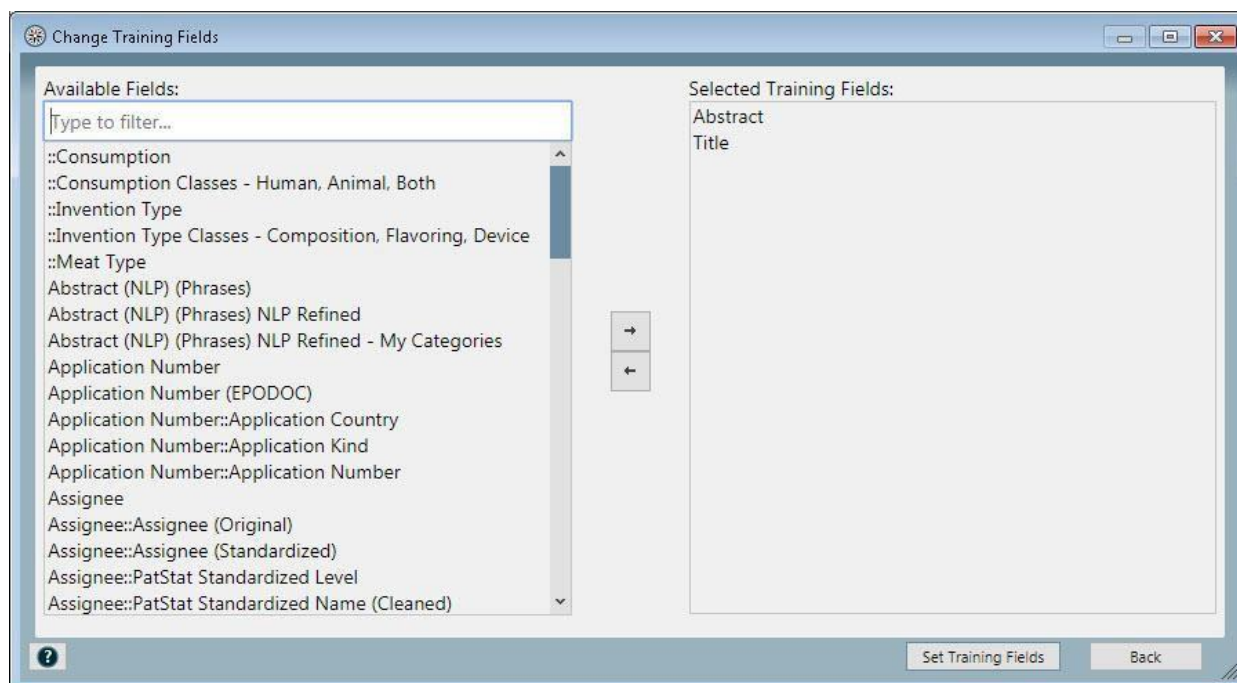


## Change Training Fields

The Training Fields used for the Auto-Classifier are displayed in the panel ("Abstract" and "Title"). To change, add, or remove Training fields, click the **Change Training Fields** button.



A dialog of Available Fields and Selected Training Fields is presented, where you can select/remove Fields using the arrows between the windows. When you have finished making changes, click the **Set Training Fields** button.





You can also assign a "Training Field" Meta Tag from the [Summary View](#), by Right-clicking on the Field name and choosing Set Meta Tags...then choose Training Field from the Available Meta Tags list. Click the **Add** button, and click **OK**.

See Also:

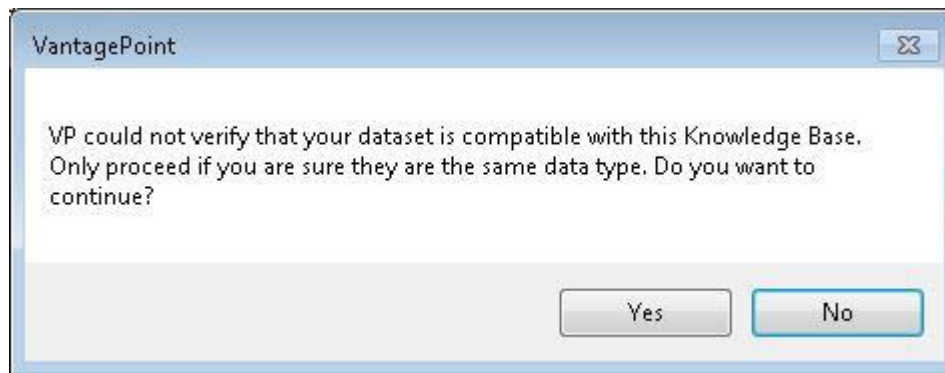
[Smart Trainer](#)

[Auto-Classifer Settings](#)

## Knowledge Base

The Knowledge Base is where the Auto-Classifer keeps track of the patterns it has learned from classified records. It is used to automatically categorize remaining records and can be exported for future use in datasets of a similar data type.

If VantagePoint determines the dataset is incompatible with the Knowledge Base, this warning is presented:

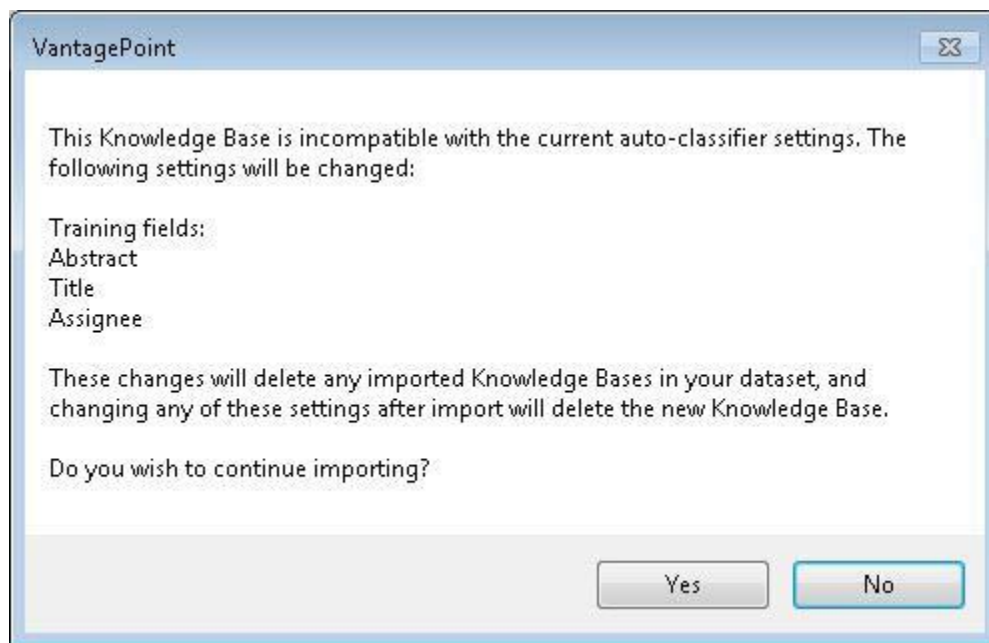


When Importing a Knowledge Base, VantagePoint checks to make sure the current dataset has the same Auto-Classifer settings stored in the Knowledge Base to be used, such as the field names used for Training Fields.

Import checks the following settings:

- n-grams
- apply stemming
- remove stop words
- Training fields

If any of these settings do not match the imported Knowledge Base, this warning is presented, listing the settings that will change:



To opt out and abort import, click **No**. If the user clicks **Yes**, the settings are changed automatically and import continues.

If any of these settings are changed after a successful import, a warning is presented, with a chance to opt out. If the user cancels (clicks **No**), nothing is changed. Otherwise, the setting changes and all imported Knowledge Bases are deleted.

Import will abort under the following conditions:

- The Knowledge Base and Dataset source databases do not match, and the user opts out (clicks **No**) when shown a warning.
- One or more of the Knowledge Base Training fields do not exist in the Dataset.
- The user opts out (clicks **No**) when shown the mismatched settings warning.
- The Knowledge Base or Dataset is corrupted.

See Also:

[Record Classification](#)

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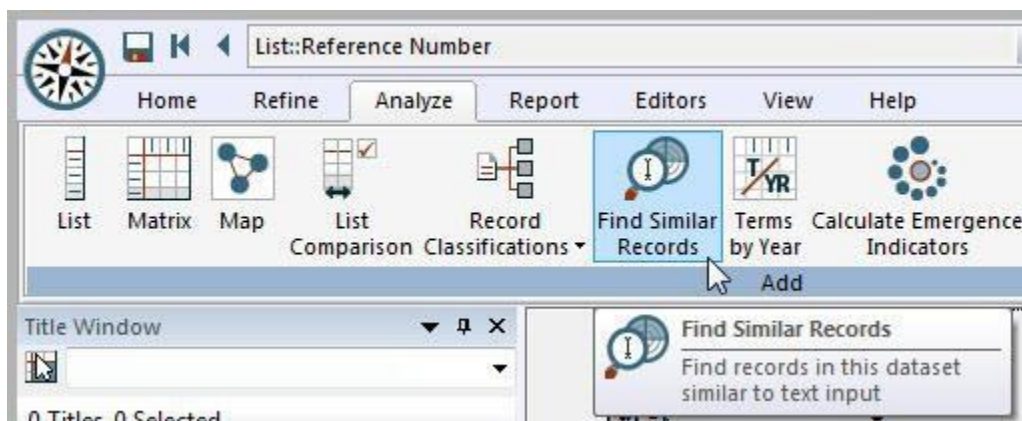
## Find Records Similar to Text

Find Records similar to the text which appears in the window. Users can copy and paste text into the search field.

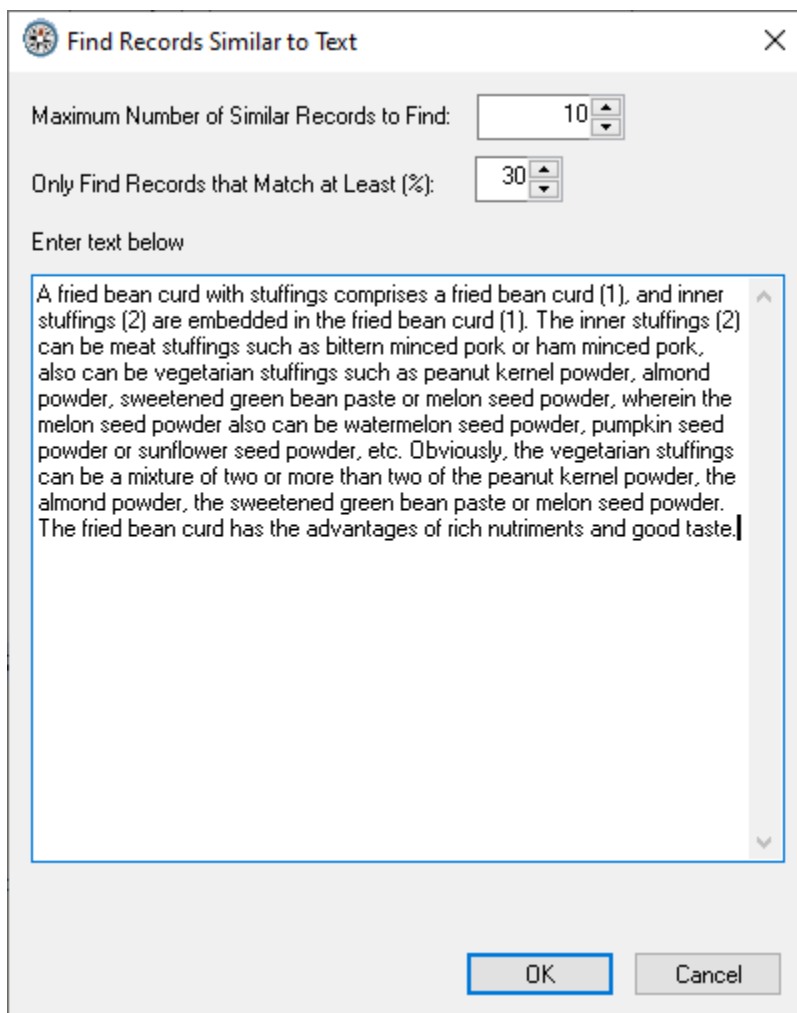
*Requirements:* Must have at least one Field assigned with "Training field" Meta Tag. (See the topic [Adding Meta Tags for Fields](#).)

VantagePoint will choose the field that is most similar to the input text, based on criteria such as punctuation, capital letters, spaces, etc. Then it will return a set of records that use similar words and phrases.

From the Analyze ribbon, click **Find Similar Records**.

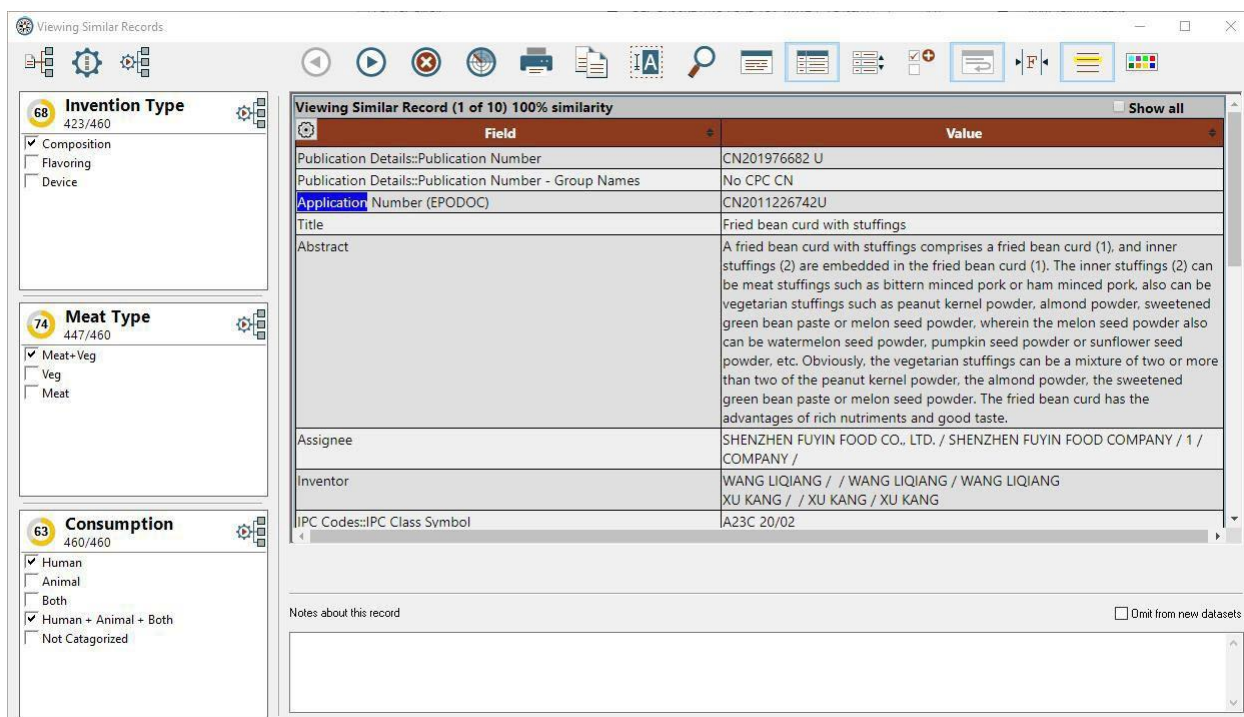


You can change the default settings for Number of Records to Find, and the percentage of matching. These settings will be retained until they are changed. Then enter a block of text in the text input box and click **OK**.



Records that are returned appear in the Record View.

From here, they can be classified or added to Groups. See [Add Records to Group](#).



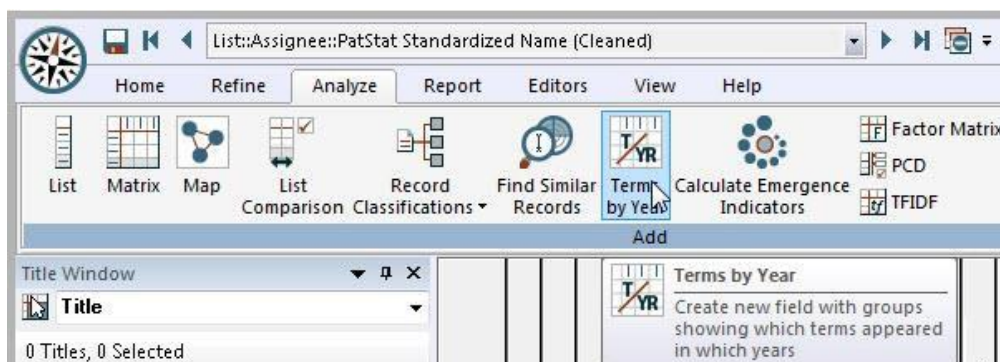
## Terms by Year

**Description:** Create new field with groups showing which terms appeared in which year (first, last, or all). Offers option to export results to an Excel table.

**Requirements:** There is a cleaned year field with at least two items.

**Usage:** This handy script groups terms by the year they appeared. Grouping by first year is a good way to find who or what only appeared in the dataset recently and what has been around for a while. Grouping by last year can show you which terms have depreciated and are no longer in use. In addition, if you export the Excel report, you can get a total of how many grouped terms appeared in each year. This can be used as an indicator of the maturity of the set (see the maturity section of the [Analyst Guide](#)).

From the Analyze ribbon, select **Terms by Year**.



**Terms By Year**

Pick a field to be sorted by year appearing:  
Assignee::PatStat Standardized Name

Pick the year field:  
Publication Details::Publication Year

Create groups

☒ by First Year  
☐ by Last Year  
☐ by All Years

☐ Summary report in Excel  
☐ Include terms for each Year

OK Cancel

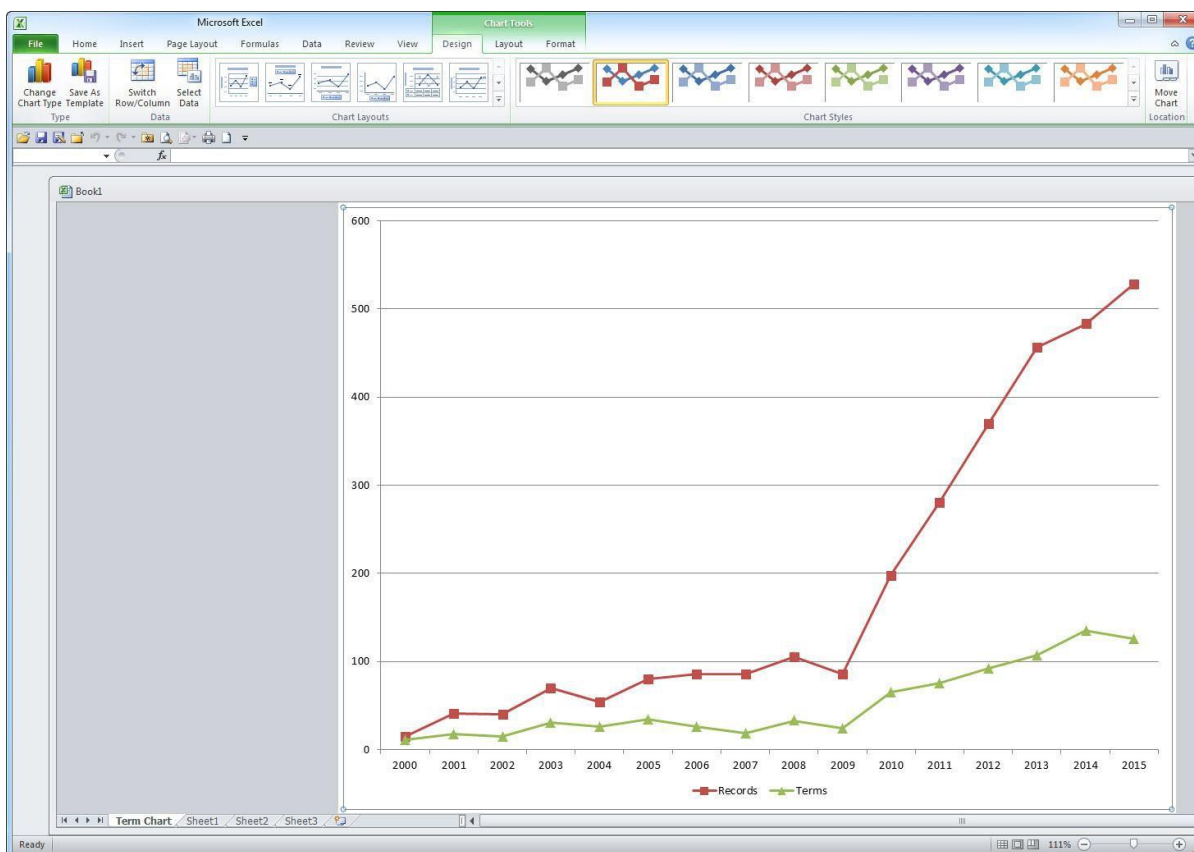
Result:

|    | # Records | # Instances | Assignee::PatStat Standardize      | New in 1993 | New in 1994 | New in 1995 | New in 1996 | New in 1997 | New in 1998 | New in 1999 | New in 2000 | New in 2001 | New in 2002 | New in 2003 | New in 2004 |
|----|-----------|-------------|------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| 1  | 2         | 2           | -NOT AVAILABLE-                    |             |             |             |             |             |             |             |             |             |             |             |             |
| 2  | 1         | 1           | 3GSOLAR PHOTOVOLTAICS              |             |             |             |             |             |             |             |             |             |             |             |             |
| 3  | 1         | 1           | 3M INNOVATIVE PROPERTIES COMPANY ( |             |             |             |             |             |             |             |             |             |             |             |             |
| 4  | 1         | 1           | ABL IP HOLDING                     |             |             |             |             |             |             |             |             |             |             |             |             |
| 5  | 7         | 7           | ABZYMIO BIOSCIENCES COMPANY        |             |             |             |             |             |             |             |             |             |             |             |             |
| 6  | 7         | 7           | ACADEMIA SINICA                    |             |             |             |             |             |             |             |             |             |             |             |             |
| 7  | 1         | 1           | ACER                               |             |             |             |             |             |             |             |             |             |             |             |             |
| 8  | 1         | 1           | ACREO                              |             |             |             |             |             |             |             |             |             |             |             |             |
| 9  | 1         | 1           | ACUSHNET COMPANY                   |             |             |             |             |             |             |             |             |             |             |             |             |
| 10 | 2         | 2           | ADVANCED OPTOELECTRONIC TECHNOL    |             |             |             |             |             |             |             |             |             |             |             |             |
| 11 | 1         | 1           | ADVANCED RESEARCH AND TECHNOLOG    |             |             |             |             |             |             |             |             |             |             |             |             |
| 12 | 1         | 1           | AERIS CAPITAL SUSTAINABLE IP       |             |             |             |             |             |             |             |             |             |             |             |             |
| 13 | 1         | 1           | AGENCY FOR DEFENSE DEVELOPMENT     |             |             |             |             |             |             |             |             |             |             |             |             |
| 14 | 1         | 1           | AGENCY FOR SCIENCE TECHNOLOGY A.   |             |             |             |             |             |             |             |             |             |             |             |             |
| 15 | 1         | 1           | AGENCY OF INDUSTRIAL SCIENCE AND T |             |             |             |             |             |             |             |             |             |             |             |             |
| 16 | 3         | 3           | AGENCY SCIENCE TECH & RES          |             |             |             |             |             |             |             |             |             |             |             |             |
| 17 | 1         | 1           | AGERE SYSTEMS                      |             |             |             |             |             |             |             |             |             |             |             |             |
| 18 | 2         | 2           | AGILENT TECHNOLOGIES               |             |             |             |             |             |             |             |             |             |             |             |             |
| 19 | 3         | 3           | AJOU UNIVERSITY                    |             |             |             |             |             |             |             |             |             |             |             |             |
| 20 | 2         | 2           | ALCATEL                            |             |             |             |             |             |             |             |             |             |             |             |             |
| 21 | 4         | 4           | ALCATEL LUCENT                     |             |             |             |             |             |             |             |             |             |             |             |             |
| 22 | 2         | 2           | ALCATEL-LUCENT USA                 |             |             |             |             |             |             |             |             |             |             |             |             |

List::Assignee::PatStat Standardized Name (by first year)



Output can also be in Excel as a Summary Chart:





## Factor Matrix

A Factor Matrix is the result of a statistical analysis that attempts to identify related list items in the dataset. The Factor Matrix View shows the items included in your analysis listed down the left column, and the factors across the columns. Two rows near the top of the matrix show the variance accounted for by each factor and the cumulative variance. The cells of the matrix contain the results of the analysis. Generally, in looking for "clusters" of list items, you should sort each column both ways (increasing and decreasing) and look for relatively large numbers (e.g., greater than 0.5 or less than -0.5) that are "close together". Within a column, numbers that are close together may indicate list items that are related in the dataset.

| Descriptors (Cleaned) |                              | 1     | 2     | 3     | 4     | 5     | 6     | 7     | 8     |
|-----------------------|------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|
| Cumulative Variance   |                              | 1.712 | 3.267 | 4.72  | 6.054 | 7.328 | 8.527 | 9.676 | 10.80 |
| Variance              |                              | 1.712 | 1.555 | 1.452 | 1.334 | 1.273 | 1.199 | 1.149 | 1.126 |
| Factor                |                              | 1     | 2     | 3     | 4     | 5     | 6     | 7     | 8     |
| 1                     | Fuzzy control                | -0.06 | 0.670 | 0.010 | -0.13 | -0.01 | 0.018 | 0.051 | 0.034 |
| 2                     | Membership functions         | -0.02 | 0.610 | 0.014 | -0.09 | -0.08 | 0.002 | 0.032 | 0.010 |
| 3                     | Fuzzy sets                   | -0.11 | 0.597 | 0.052 | -0.11 | 0.056 | -0.13 | 0.009 | 0.075 |
| 4                     | Computational linguistics    | -0.06 | 0.398 | 0.042 | 0.071 | 0.066 | -0.02 | -0.02 | -0.04 |
| 5                     | Knowledge based systems      | -0.07 | 0.396 | -0.00 | 0.031 | 0.007 | 0.005 | -0.09 | -0.15 |
| 6                     | Genetic algorithms           | -0.01 | 0.311 | -0.00 | -0.00 | -0.15 | 0.069 | 0.022 | 0.031 |
| 7                     | Learning systems             | -0.08 | 0.258 | 0.038 | 0.061 | -0.01 | 0.033 | 0.001 | -0.00 |
| 8                     | Neural networks              | -0.11 | 0.254 | -0.19 | -0.03 | -0.05 | -0.01 | 0.034 | 0.127 |
| 9                     | Hierarchical systems         | -0.13 | 0.234 | 0.004 | 0.111 | 0.086 | 0.109 | -0.16 | -0.09 |
| 10                    | System stability             | -0.02 | 0.219 | -0.01 | -0.05 | -0.11 | 0.006 | 0.124 | 0.071 |
| 11                    | Control equipment            | -0.07 | 0.189 | 0.027 | -0.44 | 0.005 | 0.030 | 0.057 | 0.076 |
| 12                    | Speed control                | -0.03 | 0.185 | -0.18 | -0.33 | 0.101 | -0.05 | -0.05 | 0.022 |
| 13                    | Robot learning               | -0.14 | 0.166 | 0.019 | 0.108 | -0.03 | -0.02 | -0.06 | 0.111 |
| 14                    | Optimization                 | 0.005 | 0.158 | 0.046 | -0.00 | -0.20 | -0.02 | 0.014 | -0.12 |
| 15                    | Statistical methods          | 0.008 | 0.148 | -0.00 | 0.028 | -0.39 | 0.015 | -0.12 | 0.004 |
| 16                    | Control system analysis      | -0.10 | 0.146 | -0.11 | -0.04 | 0.014 | 0.390 | 0.128 | 0.041 |
| 17                    | CONTROL SYSTEMS, ADAPTIVE    | -0.04 | 0.141 | -0.15 | 0.037 | -0.00 | 0.044 | 0.078 | 0.067 |
| 18                    | Servomechanisms              | 0.001 | 0.125 | 0.000 | -0.34 | -0.03 | 0.027 | -0.11 | 0.006 |
| 19                    | Motion planning              | -0.22 | 0.124 | 0.166 | 0.068 | 0.111 | 0.000 | 0.110 | -0.03 |
| 20                    | Mathematical transformations | 0.084 | 0.119 | 0.018 | 0.006 | 0.010 | -0.06 | 0.018 | -0.08 |
| 21                    | Optimal control systems      | -0.00 | 0.118 | -0.00 | -0.15 | -0.15 | 0.116 | 0.043 | 0.004 |
| 22                    | Intelligent control          | -0.07 | 0.114 | 0.037 | -0.01 | -0.04 | 0.334 | 0.067 | 0.022 |

A full description of the statistical process (Principal Components Analysis or PCA) underlying the creation of the Factor Matrix is beyond the scope of this manual.

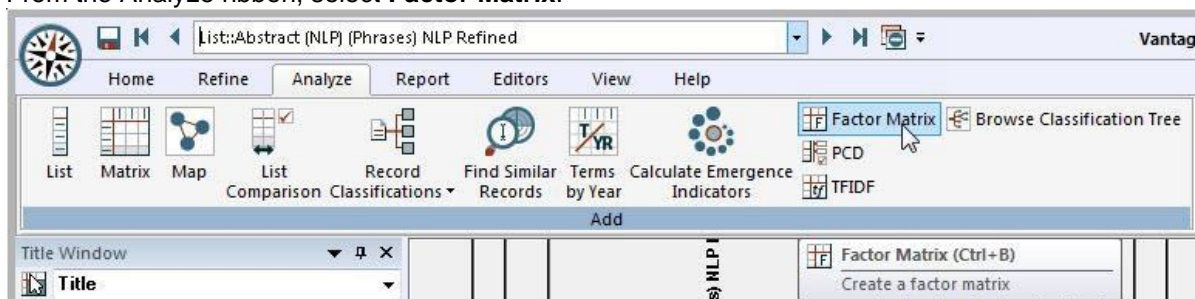
### Notes:

1. Only multi-valued fields are suitable for this type of analysis. For example, most bibliographic records have several keywords (or subject index terms or descriptors). Because this is an analysis of the relatedness of list items, items that have only one value per record (for example, dates) are not well suited for analysis.
2. Additionally, you should not include list items that occur in only one record in the dataset.

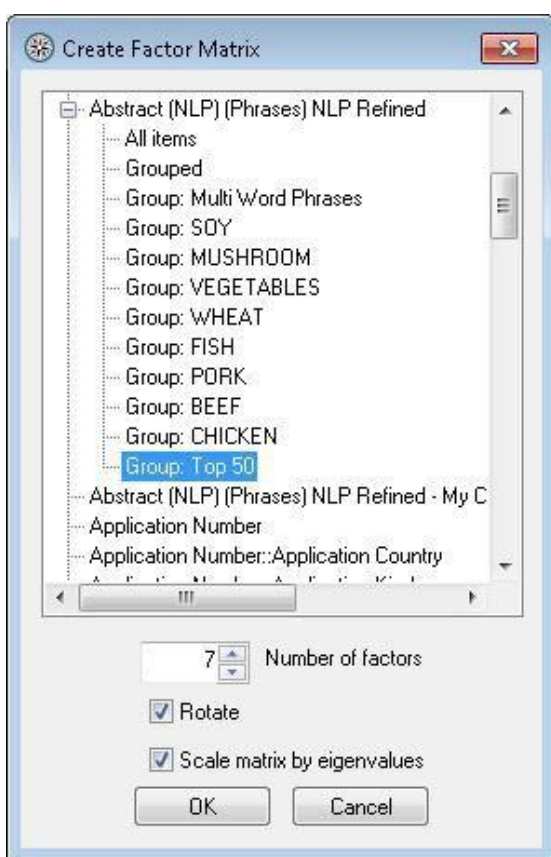
Within a Factor Matrix, you can: Zoom, Resize the Rows and Columns, Sort, Make Heat Map (or Remove Colors), Select multiple cells, or Find a string. See [Working with a Matrix](#) for details.

## Creating a factor matrix

1. From the Analyze ribbon, select **Factor Matrix**.



or press **Ctrl B** on the keyboard.



2. In the **Create Factor Matrix** dialog box, select the list items you want to analyze.

**Note:** Creating a Factor Matrix from a large number of list items is a computationally intensive task. We generally recommend that you begin with a moderate number of items (e.g., less than 100) to get a "feel" for the analysis. Therefore, you should create a group of list items from which to create the factor matrix. For example, in a list view create a group named "Top 50" and tag the top 50 occurring list items into that group. In the **Create Factor Matrix** dialog box, choose the "Top 50" group for your factor matrix.

3. Select the Number of factors you want to use. The default value shown when you open the **Create Factor Matrix** dialog box is the square root of the number of list terms in your analysis. The appropriate number of factors depends on the data and your purpose in the analysis. One beginning

rule of thumb is the square root of the number of list items included in the analysis. Another is half of the number of list items included in your analysis. Another rule of thumb seeks to achieve a certain threshold of cumulative variance accounted for.

4. Select whether to Rotate the factors or not. Rotating the factors seeks to improve the alignment of the factors with the data, making them easier to interpret.
5. Select whether to scale the factors by their eigenvalues or not. The default is to scale by eigenvalues.
6. Click **OK** to begin the analysis.

### **Selecting multiple cells in a factor matrix**

You can select multiple cells in a Factor Matrix by using the Shift or Control keys while you click on the cells.

**To add selections one at a time:** Press the Ctrl key as you click on the cell (Ctrl-Click). The cell you click on is added to the selections already made.

**To add a range of selections at one time:** Press the Shift key as you click on the cell (Shift-Click). All of the cells between the cell you Shift-Click on and the last selected cell are added to the selections already made.

*or*

Use a "click and drag" method to highlight multiple adjacent cells to be selected.

### **Sorting rows and columns in a factor matrix**

As with other views, you can sort the rows and columns of a Factor Matrix by double-clicking on the row or column numbers at the left or top of the matrix.

## Creating groups in a factor matrix

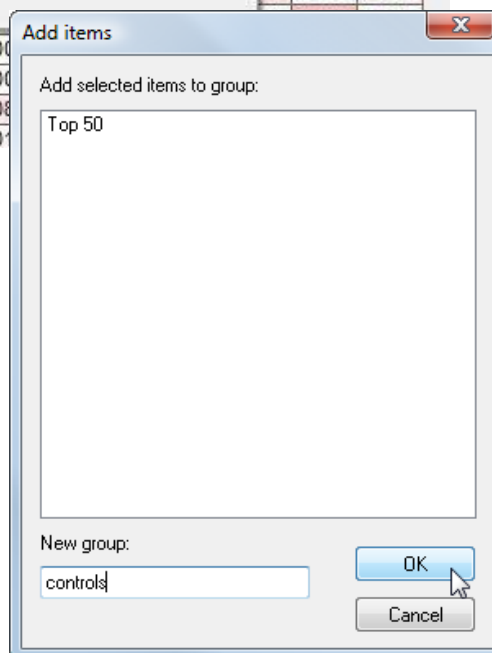
One of the purposes of creating a Factor Matrix is to find which list items tend to group together in the data. For this reason, you can also manually create groups of list items from the Factor Matrix.

1. In the Factor Matrix View, select the items to be included in the group.
2. Right-click and select **Add Row Selections to Group** (or **Add Column Selections to Group**, if offered).

|    | Descriptors (Cleaned)            | 1     | 2      | 3      | 4      | 5      | 6      | 7      | 8      | 9      | 10     |
|----|----------------------------------|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
|    | Cumulative Variance              | 3.003 | 5.604  | 8.195  | 10.64  | 13.01  | 15.27  | 17.31  | 19.14  | 20.95  | 22.76  |
|    | Variance                         | 3.003 | 2.6    | 2.591  | 2.447  | 2.376  | 2.251  | 2.048  | 1.824  | 1.815  | 1.801  |
|    | Factor                           | 1     | 2      | 3      | 4      | 5      | 6      | 7      | 8      | 9      | 10     |
| 1  | CONTROL SYSTEMS_ *Education      | 0.674 | 0.000  | 0.006  | 0.674  | -0.017 | -0.001 | 0.018  | -0.061 | 0.004  | 0.022  |
| 2  | CONTROL SYSTEMS_Theory           | 0.674 | 0.000  | 0.006  | 0.674  | -0.017 | -0.001 | 0.018  | -0.061 | 0.004  | 0.022  |
| 3  | Identification (control systems) | 0.481 | 0.017  | -0.031 | 0.467  | 0.048  | 0.012  | 0.071  | 0.003  | -0.001 | 0.150  |
| 4  | Self tuning control systems      | 0.083 | -0.023 | 0.075  | -0.041 | 0.055  | -0.051 | -0.586 | 0.059  | 0.019  | 0.049  |
| 5  | Velocity control                 | 0.082 | 0.040  | -0.110 | 0.055  | 0.224  | 0.027  | 0.121  | 0.204  | -0.022 | 0.323  |
| 6  | Programmable logic controllers   | 0.079 | -0.026 | 0.077  | -0.026 | 0.047  | -0.046 | -0.845 | 0.011  | 0.019  | 0.080  |
| 7  | Speed control                    | 0.069 | 0.026  | -0.042 | 0.040  | 0.042  | 0.018  | 0.067  | 0.188  | 0.001  | 0.229  |
| 8  | Nonlinear control systems        |       |        |        |        |        |        |        | 0.374  | 0.012  | 0.331  |
| 9  | CONTROL SYSTEMS, ADAPTIVE_S      |       |        |        |        |        |        |        | 0.12   | -0.001 | 0.052  |
| 10 | CONTROL SYSTEMS, NONLINEAR_      |       |        |        |        |        |        |        | 0.12   | -0.001 | 0.052  |
| 11 | Control equipment                |       |        |        |        |        |        |        | 0.77   | 0.010  | 0.510  |
| 12 | Position control                 |       |        |        |        |        |        |        | 0.91   | -0.008 | 0.242  |
| 13 | Control systems                  |       |        |        |        |        |        |        | 0.99   | 0.040  | 0.098  |
| 14 | Optimal control systems          |       |        |        |        |        |        |        | 0.98   | 0.021  | 0.308  |
| 15 | ELECTRIC CONTROL EQUIPMENT       |       |        |        |        |        |        |        | 0.78   | -0.019 | 0.161  |
| 16 | Fuzzy control                    |       |        |        |        |        |        |        | 0.137  | 0.033  | 0.466  |
| 17 | Acceleration control             |       |        |        |        |        |        |        | 0.10   | 0.004  | 0.122  |
| 18 | SUBMARINES_ *Control Systems     |       |        |        |        |        |        |        | 0.16   | -0.894 | 0.056  |
| 19 | ROBOTICS_ Remote Control         |       |        |        |        |        |        |        | 0.16   | -0.894 | 0.056  |
| 20 | CONTROL SYSTEMS_ Performance     |       |        |        |        |        |        |        | 0.38   | 0.156  | -0.025 |
| 21 | CONTROL SYSTEMS_ Mathematical    |       |        |        |        |        |        |        | 0.44   | 0.226  | -0.015 |
| 22 | Time varying control systems     |       |        |        |        |        |        |        | 0.09   | 0.002  | 0.045  |
| 23 | AUTOMOBILES_ Control Systems     |       |        |        |        |        |        |        |        |        |        |
| 24 | Weed control                     | 0.002 | 0.007  | -0.009 | -0.00  |        |        |        |        |        |        |
| 25 | Process control                  | 0.002 | 0.006  | 0.000  | -0.00  |        |        |        |        |        |        |
| 26 | Two term control systems         | 0.001 | 0.037  | 0.006  | -0.08  |        |        |        |        |        |        |
| 27 | Predictive control systems       | 0.001 | 0.010  | -0.015 | -0.01  |        |        |        |        |        |        |

3. In the **Add Items** dialog, enter a new group name or select an existing group where the items will be added.
4. Click **OK**.

The groups do not show up on the Factor Matrix View. However, a [List view](#) of the items in your analysis will show the groups.



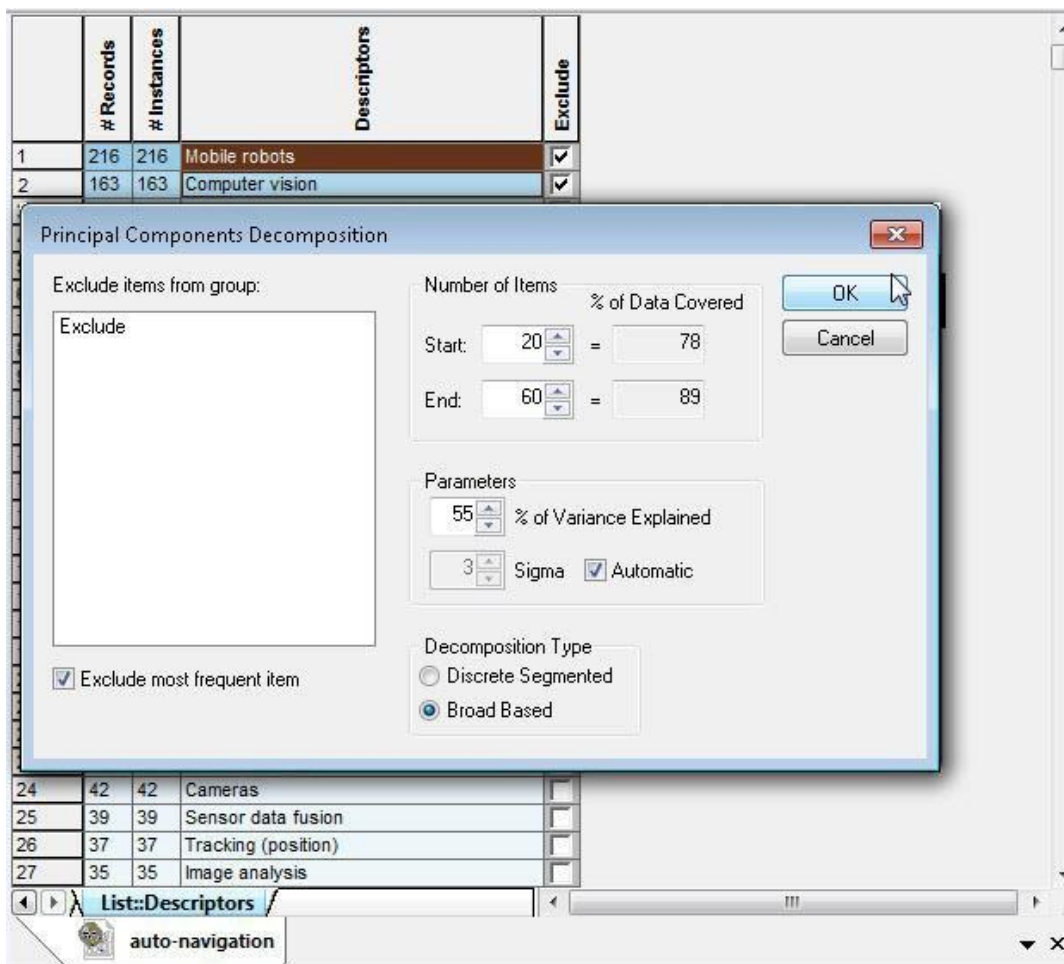
## Creating a Principal Components Decomposition

Principal Components Decomposition (PCD) is an iterative statistical technique that attempts to decompose a dataset into a set of discrete clusters. PCD performs successive Principal Components Analysis (PCA) on a set of list items and evaluates the resulting clusters on several dimensions including amount of the dataset covered and amount of overlap between the clusters. PCD then chooses the best set of clusters based on these metrics and creates list groups that correspond to the clusters.

**Note:** Since PCD performs successive PCA's, the process of creating a PCD can take quite a long time. The amount of time necessary to do a PCD depends on the number of records in your dataset, the initial number of list items you choose to include in the analysis, and the number of iterations you choose. Even if you are working with a moderate size dataset (500 to 1000 records), you should begin with a small number of initial terms and iterations (e.g., list items 20 to 30) to get a feel for the amount of time to do a more substantial PCD. You can delete the PCD-created groups and start over for a broader analysis.

PCD works from a [List View](#).

1. With a List View displayed: from the Analyze ribbon, select **PCD**.  
or press **Ctrl D** on the keyboard.



2. From the **Principal Components Decomposition** dialog box, you may choose to exclude groups of list items from the analysis. The groups for the displayed list are shown in the "Exclude items from group:" portion of the dialog box. Usually, you will want to exclude any list items that were the search



terms for the dataset.

- You may also **Exclude the most frequent item** using the checkbox in the lower left. If a list item spans more than half of the dataset, it is a good idea to exclude it. If the most frequent item is a member of an excluded group (see the prior step), then this is ignored.
- Choose the **Number of Items** to include in your analysis. The **Start:** entry indicates the minimum number of terms to use -- the starting point for the iterations. The **End:** entry is the maximum number of terms to use -- the ending point for the iterations. The number of iterations is End: minus Start: plus one.  
**Note:** It is important to limit the range of the iterations to stop before including list items that occur in only a few records (e.g., three or fewer).
- The **Parameters** determine how many PCA factors to use (**% of Variance Explained**) and how many list items to use in defining the clusters (**Sigma**). Currently these are primarily for developmental use.
- Choose the type of decomposition you want to perform. There are two types of decompositions: **Discrete Segmented** and **Broad Based**. Broad based decomposition results in a set of groups that balances the criteria of maximizing the coverage of the dataset and minimizing the overlap among the clusters. Discrete Segmented (DS) decomposition results in a set of groups that balances the criteria of maximizing the coverage with a large number of groups while maximizing the overlap among clusters. The DS algorithm then "splits off" some clusters into discrete segments of the dataset. These discrete segments sometimes reveal merging or emerging clusters.
- Click **OK** to begin the analysis.

When PCD is complete, PCD will create groups of list items in your list. Each group defines a cluster. The group labeled **PCD: \*OTHER\*** contains all records that are not included in one of the other groups.

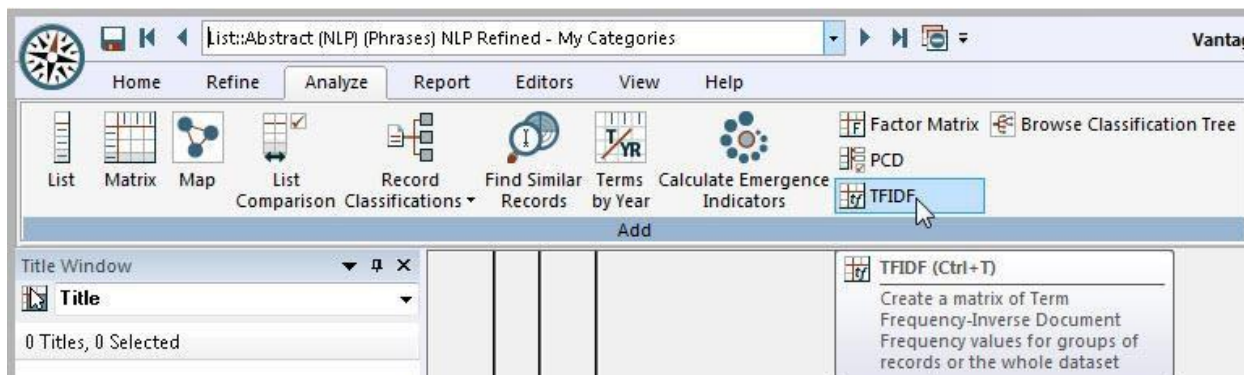
|    | # Records | # Instances | Descriptors                         | Exclude                             | PCD: *OTHER*                        | PCD: Mobile robots                  | PCD: Motion control                 | PCD: Robotics                       | PCD: Sensors                        | PCD: Neural networks                | PCD: Navigation                     | PCD: Computer simulation            | PCD: Artificial intelligence        | PCD: Computer vision                | PCD: Vehicles                       | PCD: Intelligent vehicle highway systems | PCD: Real time systems              |
|----|-----------|-------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|--|-------------------------------------|
| 1  | 216       | 216         | Mobile robots                       | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/>      | <input checked="" type="checkbox"/> |
| 2  | 163       | 163         | Computer vision                     | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/>      | <input checked="" type="checkbox"/> |
| 3  | 148       | 148         | Navigation                          | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/>      | <input checked="" type="checkbox"/> |
| 4  | 143       | 143         | Algorithms                          | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/>      | <input checked="" type="checkbox"/> |
| 5  | 119       | 119         | Sensors                             | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/>      | <input checked="" type="checkbox"/> |
| 6  | 91        | 91          | Robotics                            | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/>      | <input checked="" type="checkbox"/> |
| 7  | 86        | 86          | Computer simulation                 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/>      | <input checked="" type="checkbox"/> |
| 8  | 82        | 82          | Motion planning                     | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/>      | <input checked="" type="checkbox"/> |
| 9  | 81        | 81          | Motion control                      | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/>      | <input checked="" type="checkbox"/> |
| 10 | 79        | 79          | Navigation systems                  | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/>      | <input checked="" type="checkbox"/> |
| 11 | 77        | 77          | Collision avoidance                 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/>      | <input checked="" type="checkbox"/> |
| 12 | 77        | 77          | Vehicles                            | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/>      | <input checked="" type="checkbox"/> |
| 13 | 75        | 75          | Image processing                    | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/>      | <input checked="" type="checkbox"/> |
| 14 | 74        | 74          | Control systems                     | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/>      | <input checked="" type="checkbox"/> |
| 15 | 62        | 62          | Mathematical models                 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/>      | <input checked="" type="checkbox"/> |
| 16 | 59        | 59          | Real time systems                   | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/>      | <input checked="" type="checkbox"/> |
| 17 | 57        | 57          | Neural networks                     | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/>      | <input checked="" type="checkbox"/> |
| 18 | 52        | 52          | Automation                          | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/>      | <input checked="" type="checkbox"/> |
| 19 | 50        | 50          | Fuzzy sets                          | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/>      | <input checked="" type="checkbox"/> |
| 20 | 50        | 50          | Intelligent vehicle highway systems | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/>      | <input checked="" type="checkbox"/> |
| 21 | 48        | 48          | Pattern recognition                 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/>      | <input checked="" type="checkbox"/> |
| 22 | 45        | 45          | Artificial intelligence             | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/>      | <input checked="" type="checkbox"/> |



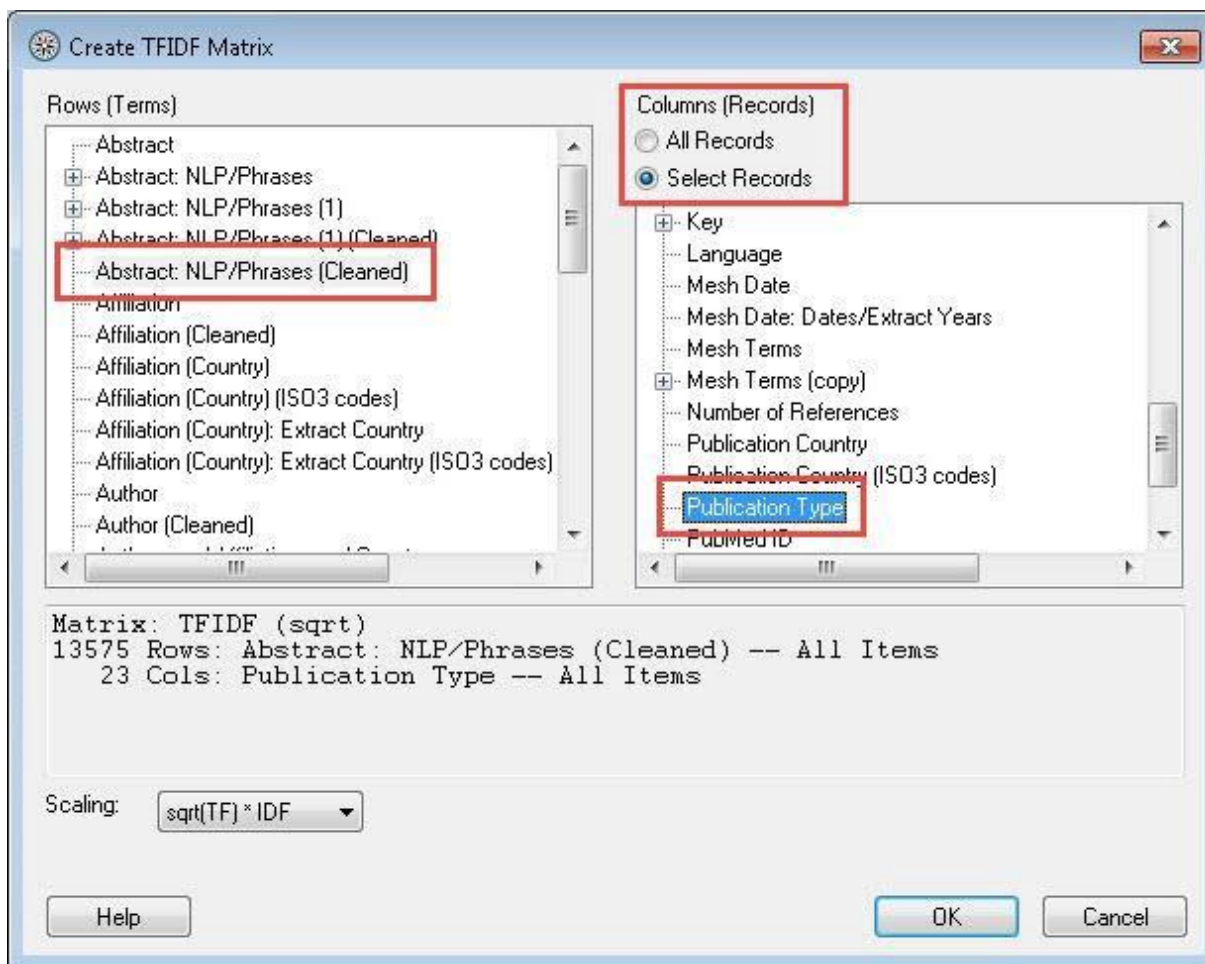
## TFIDF

TFIDF stands for "term frequency - inverse document frequency", which is a metric for the uniqueness of a term in a record set. This metric is frequently used to identify the "features" (e.g., terms) that have the greatest potential to differentiate among records.

The **CreateTFIDF Matrix** dialog is accessed by selecting **TFIDF** from the Analyze ribbon...



Or, by using the hot-key combination of **Ctrl T**:



Notice the “Scaling” selection box. You may choose among five calculations for your analysis. Each provides a different relative weight to term frequency (TF – the number of *instances* of the term in the record set or subset) and document frequency (DF – the number of *records* that contain the term in the record set or subset that contain the term):

- The picture below illustrates the calculations. The TFIDF matrix below was created using Publication Year as the columns.

14 = the number of records in 2014 that contain the term "extract" one or more times. Notice "14 titles" in the Title Window.

TF = 42 = the number of instances of "extract" in the records with Publication Year 2014. Notice in the inset in the illustration, the Instances Co-occurrence matrix shows 42 instances of "extract" in 2014.

1.  $TF \cdot IDF = 42 \cdot 0.98 = 41.20$
2.  $\log(TF) \cdot IDF = \log(42) \cdot 0.98 = 1.59$
3.  $\sqrt{TF} \cdot IDF = \sqrt{42} \cdot 0.98 = 6.36$  (see the illustration)

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The following illustration shows two examples of TFIDF matrices: One is the result of analyzing across “All Records”, and the other is an analysis within a field in the dataset:

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Reset Abstract: NLP/Phrases (Cleaned) 1 # Records 806

Show Values  $\geq 0.00$  and  $\leq 14.83$

TFIDF (sqrt)

| Key | # Records | TFIDF (sqrt)             |
|-----|-----------|--------------------------|
| 1   | 19        | vildagliptin 14.83       |
| 2   | 32        | exenatide 12.92          |
| 3   | 17        | sitagliptin 12.32        |
| 4   | 11        | insulin detemir 11.79    |
| 5   | 32        | placebo 11.55            |
| 6   | 53        | hypoglycemia 11.40       |
| 7   | 3         | taspoglutide 11.39       |
| 8   | 2         | pasireotide 11.36        |
| 9   | 61        | insulin sensitizer 11.21 |
| 10  | 33        | metformin 11.10          |
| 11  | 26        | insulin glargine 11.06   |
| 12  | 61        | obesity 10.93            |
| 13  | 137       | diabetes 10.88           |
| 14  | 82        | glucose 10.87            |
| 15  | 6         | cows 10.85               |
| 16  | 72        | insulin resistant 10.80  |
| 17  | 205       | insulin 10.69            |
| 18  | 16        | pioglitazone 10.49       |
| 19  | 61        | body weight 10.46        |
| 20  | 62        | vivo 10.45               |
| 21  | 67        | dose 10.42               |
| 22  | 27        | metabolic syndrome 10.32 |
| 23  | 18        | adipocytes 10.31         |

**Corporate Insulin Research PubMed.vpt**

Reset Abstract: NLP/Phrases (Cleaned) 1 2 3 4 5 6 7 8 # Records 805 312 96 88 79 48 37 11

Show Values  $\geq 0.00$  and  $\leq 14.82$

TFIDF (sqrt)

| Publication Type | # Records | JOURNAL ARTICLE          | Research Support, Non-U.S. | Review | Randomized Controlled Trial | Comparative Study | Research Support, N.I.H., Extramural | Multicenter Study | Evaluation Studies |
|------------------|-----------|--------------------------|----------------------------|--------|-----------------------------|-------------------|--------------------------------------|-------------------|--------------------|
| 1                | 19        | vildagliptin 14.83       | 8.08                       | 8.17   | 5.71                        | 4.52              | 0.00                                 | 3.35              | 0.0                |
| 2                | 32        | exenatide 12.91          | 9.19                       | 3.94   | 4.81                        | 5.47              | 0.00                                 | 2.72              | 1.2                |
| 3                | 17        | sitagliptin 12.31        | 8.57                       | 2.61   | 5.84                        | 4.62              | 0.00                                 | 3.14              | 0.0                |
| 4                | 11        | insulin detemir 11.79    | 7.73                       | 1.98   | 0.00                        | 4.49              | 0.00                                 | 3.84              | 1.0                |
| 5                | 32        | placebo 11.55            | 8.19                       | 1.98   | 4.00                        | 3.57              | 0.00                                 | 2.68              | 1.0                |
| 6                | 53        | hypoglycemia 11.39       | 7.64                       | 3.60   | 3.30                        | 4.15              | 3.76                                 | 2.23              | 1.0                |
| 7                | 3         | taspoglutide 11.39       | 8.21                       | 0.00   | 0.00                        | 0.00              | 0.00                                 | 0.00              | 0.0                |
| 8                | 2         | pasireotide 11.35        | 8.64                       | 5.24   | 0.00                        | 0.00              | 0.00                                 | 0.00              | 0.0                |
| 9                | 61        | insulin sensitizer 11.20 | 6.68                       | 3.24   | 4.03                        | 3.57              | 2.76                                 | 0.00              | 1.7                |
| 10               | 33        | metformin 11.10          | 7.18                       | 4.36   | 4.03                        | 3.71              | 2.38                                 | 2.73              | 0.0                |
| 11               | 26        | insulin glargine 11.06   | 7.91                       | 2.87   | 3.65                        | 3.85              | 0.00                                 | 1.57              | 1.0                |
| 12               | 61        | obesity 10.92            | 5.86                       | 3.72   | 2.32                        | 3.17              | 2.41                                 | 1.57              | 0.0                |
| 13               | 137       | diabetes 10.88           | 7.20                       | 3.45   | 3.50                        | 3.47              | 2.62                                 | 2.61              | 1.3                |
| 14               | 82        | glucose 10.87            | 6.53                       | 3.25   | 3.39                        | 2.77              | 2.77                                 | 2.16              | 0.0                |
| 15               | 6         | cows 10.85               | 8.25                       | 0.00   | 4.03                        | 1.90              | 0.00                                 | 0.00              | 0.0                |
| 16               | 72        | insulin resistant 10.79  | 5.88                       | 3.68   | 2.54                        | 3.18              | 2.72                                 | 1.79              | 0.0                |
| 17               | 205       | insulin 10.68            | 6.40                       | 3.79   | 2.99                        | 3.37              | 2.55                                 | 2.09              | 1.4                |
| 18               | 16        | pioglitazone 10.49       | 5.15                       | 3.01   | 4.87                        | 2.26              | 0.00                                 | 3.10              | 0.0                |
| 19               | 61        | body weight 10.45        | 7.03                       | 3.24   | 3.69                        | 3.17              | 1.68                                 | 2.16              | 0.0                |
| 20               | 62        | vivo 10.44               | 5.86                       | 2.38   | 1.94                        | 3.54              | 2.71                                 | 1.57              | 0.0                |

TFIDF:Abstract: NLP/Phrases (Cleaned) x Key(gg)

## Calculate Emergence Indicators

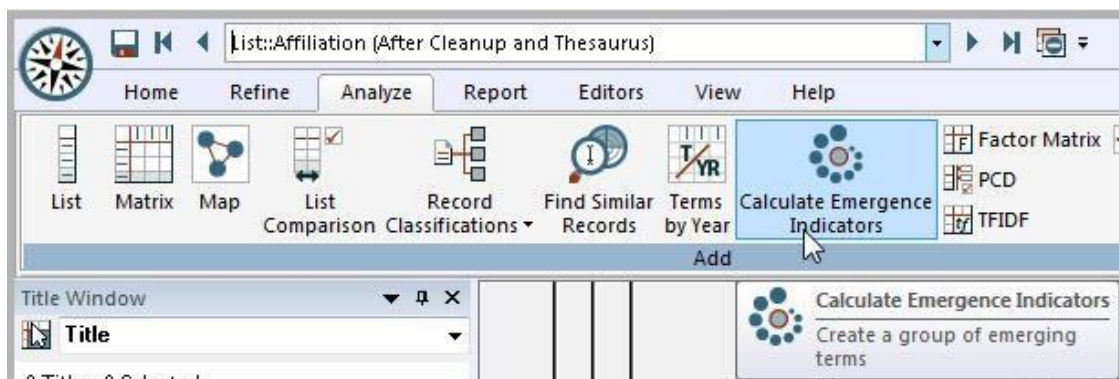
**Description:** Creates a group of emerging terms. User can choose to generate a scatter plot at the same time.

**Requirements:** Dataset must have at least 10 years of data. Emergence script needs fields for Terms, Years, Organizations, People, and Countries.

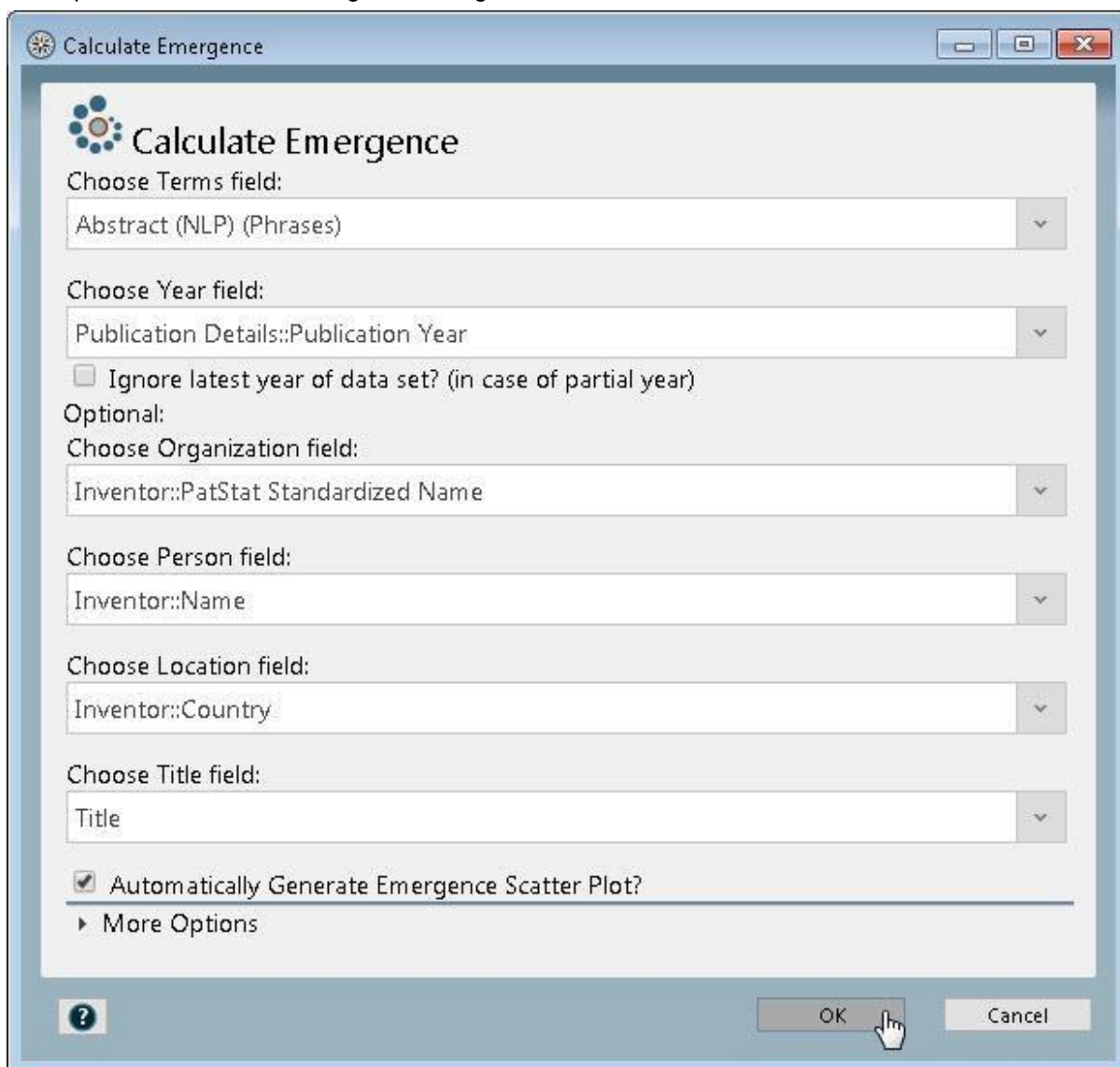
- Year Field must be set as Data Type “Year”;
- Organization field looks for Meta Tag: Organization
- Person field looks for Meta Tag: Person
- Location field looks for Meta Tag: Country or Country/Region
- Title field looks for Meta Tag: Record Title or a field name containing the word “Title”

**Note:** On subsequent runs of Calculate Emergence Scores, older versions of the Emergence Score fields will be renamed by appending a number to the end of the field name: i.e., “Emergence Scores (old)(2)”. The latest run of Emergence will always have the field name “Emergence Scores”.

From the Analyze ribbon, choose **Calculate Emergence Indicators**.



This opens the Calculate Emergence dialog:



Clicking **More Options** in the dialog reveals cleanup operations and criteria that you can change to customize your analysis:



▼ More Options

☐ Run General Cleanup on Terms Field?

Remove stopwords from Terms Field. Choose Stopwords File:

Select Thesaurus File

☐ Use Keyword List?  ☐ Use Fuzzy Match?

Set Emergence Criteria

Organization must have at least  % of records and  total records with emergent term.

Person must have at least  % of records and  total records with emergent term.

Country must have at least  % of records and  total records with emergent term.

☐ Group Top  Organization, Person, Country instead?

Calculate Emergence based on:

☐ Percentage ☐ Absolute Record Count ☒ Create Scores

Term must have at least:

Total Records

Years with at least 1 record

Ratio of Records in Recent Years to Baseline Years Records  :

Remove items occurring in more than  % of Baseline years records

Number of Baseline Years to use in dataset

**Annotations:**

- This first part deals with pre-treating terms, either with a cleanup or using a stopwords file to remove junk.
- The section "Set Emergence Criteria" are only used (and able to be changed) if the user selects the "Percentage" or "Absolute Record Count" option. Those options will create groups instead of scores.
- The section at the bottom starting with "Calculate Emergence Based On:" are prefilled with the defaults the script will use. They can be changed by the user.

When you click **OK**, a list of Emergence Scores (*Patent Pending*) will be generated for Terms, Organization, Person, and Location.

|    | # Records | # Instances | Emergence Scores    |        |
|----|-----------|-------------|---------------------|--------|
|    |           |             | Term                | Score  |
| 1  | 325       | 325         | preparation method  | 60.223 |
| 2  | 932       | 932         | invention           | 58.044 |
| 3  | 246       | 246         | simple              | 30.475 |
| 4  | 152       | 152         | utility model       | 24.289 |
| 5  | 124       | 124         | low                 | 21.335 |
| 6  | 140       | 140         | high                | 18.152 |
| 7  | 110       | 110         | technical field     | 15.707 |
| 8  | 62        | 62          | prior art           | 14.211 |
| 9  | 75        | 75          | cost                | 13.813 |
| 10 | 25        | 25          | carbon quantum dots | 12.825 |
| 11 | 57        | 57          | good                | 12.574 |

List: Emergence Scores

ISCPatStat Quantum Dot

If the box for "Automatically Generate Emergence Scatter Plot" is checked, the Scatter Plot is displayed. See the [Plot Emergence](#) topic for details.

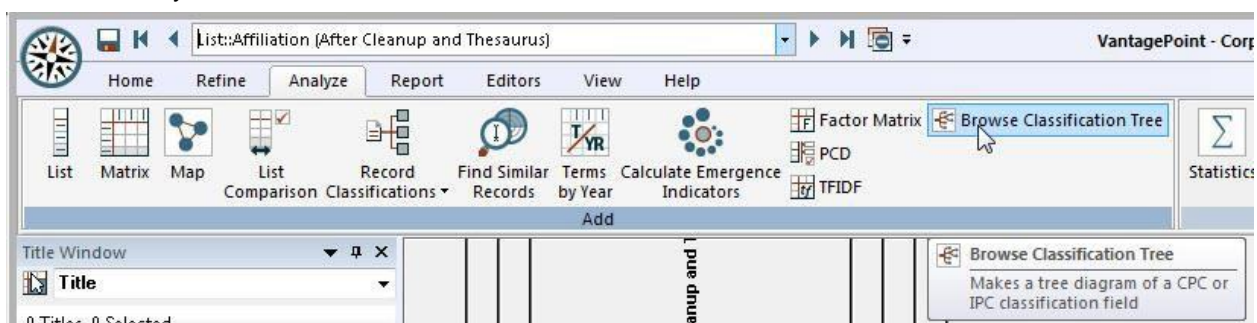


## Browse Classification Tree

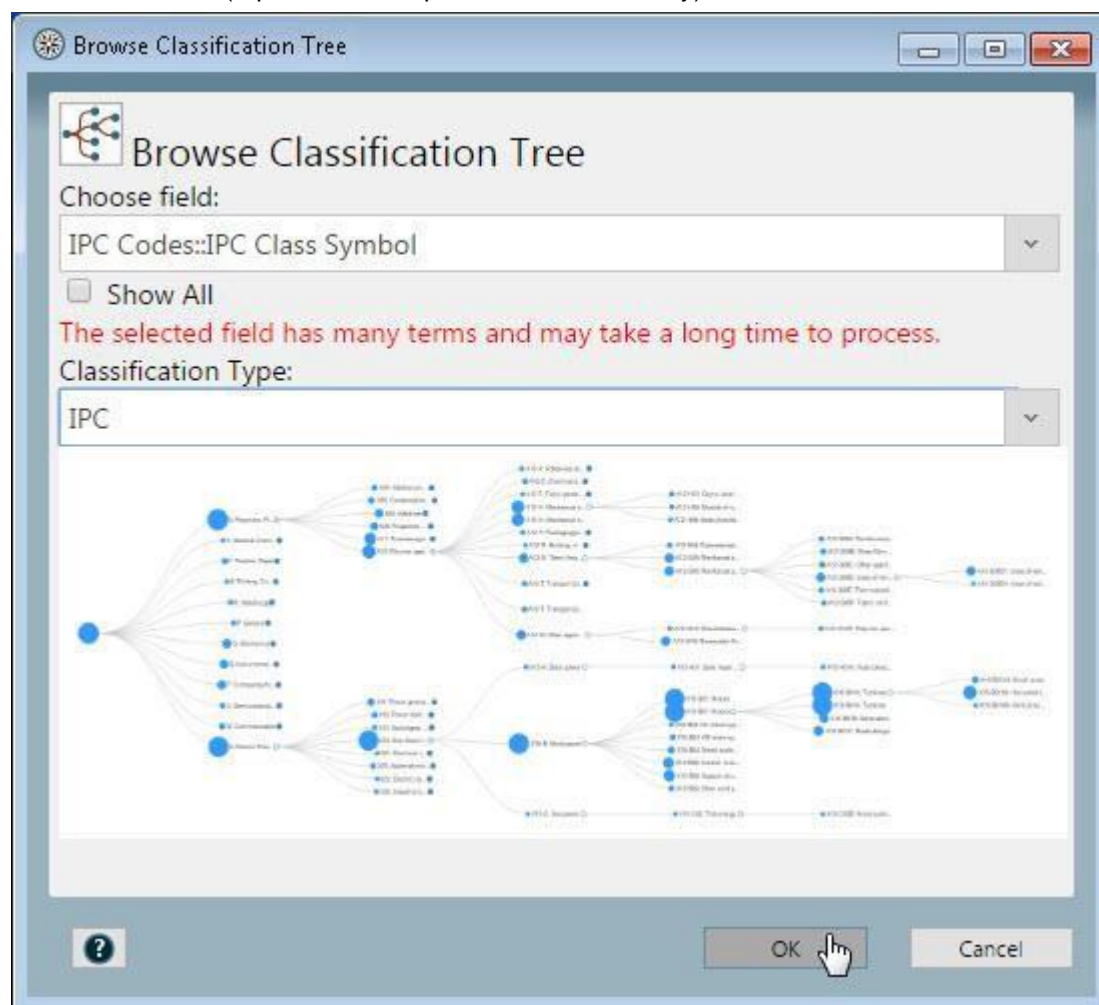
**Description:** Create a Tree Diagram of a CPC, IPC, or Derwent Classification code field.

**Requirements:** Classification field should have "Classification" metatag.

From the Analyze ribbon, choose **Browse Classification Tree**:



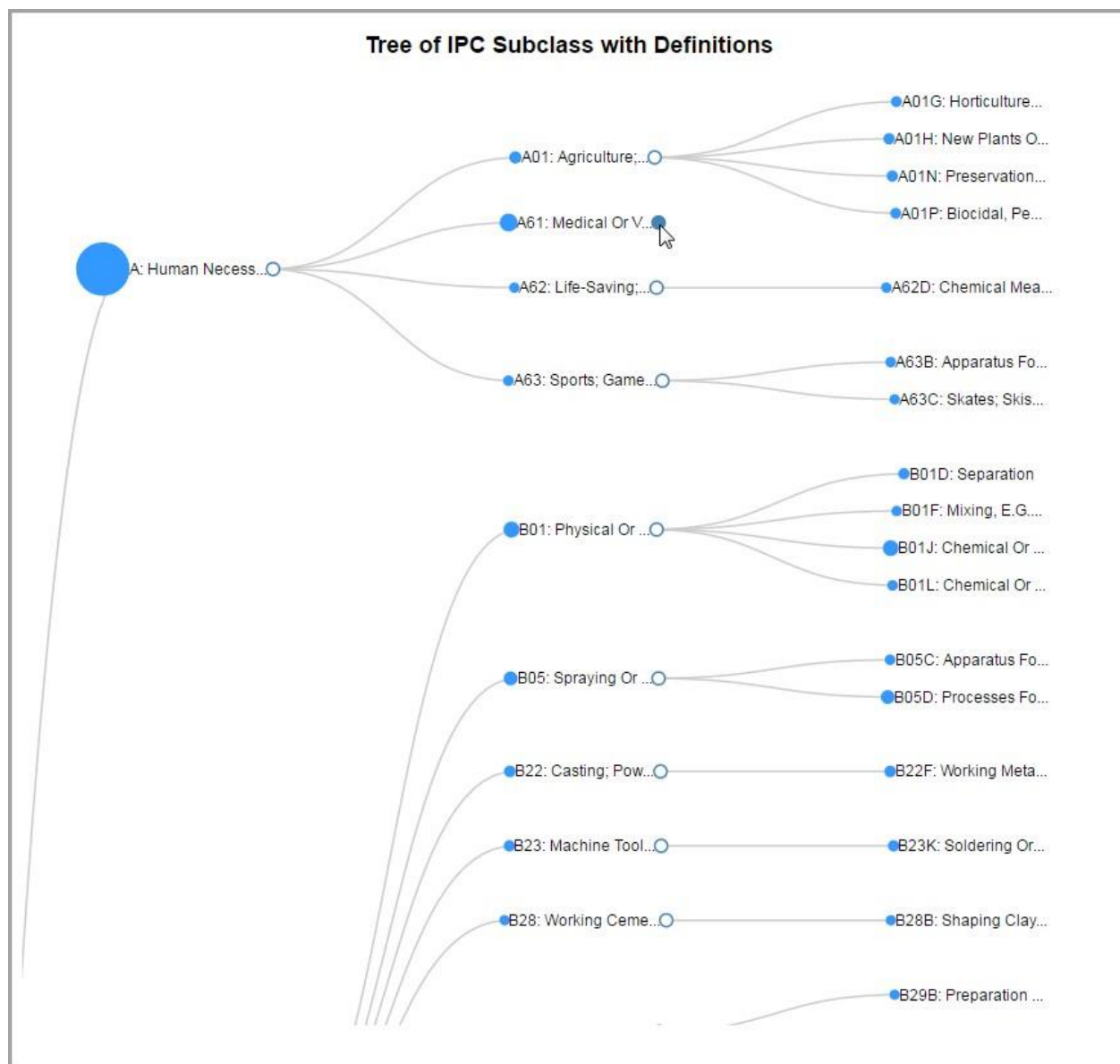
Choose the fields (report works on patent information only) and click **OK**.



The user can click and double-click nodes in the resulting report to show or hide details. In the following illustration, the user has clicked the node to the right of A61, hiding the details for that Subclass. Double-

click the "closed" node to reveal the details. Zoom in and out of the report using a mouse wheel. Click and drag the report to navigate the Tree.

As a node is clicked, the records associated with that node are displayed in the Title Window.



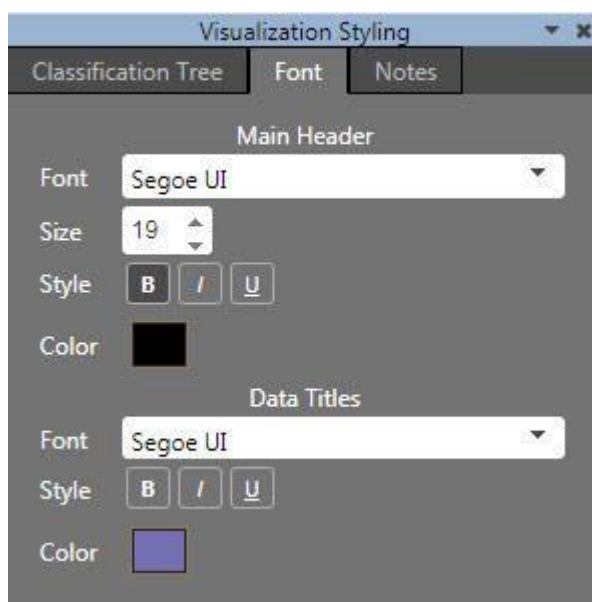
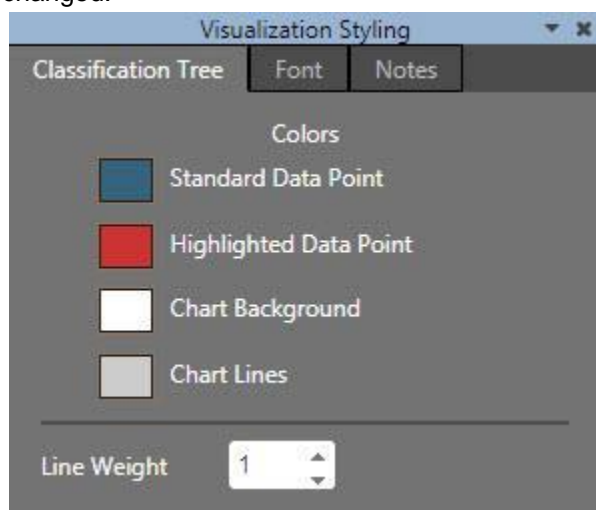
See the next topic, "Browse Classification Ctrls", for making stylistic changes.

## BrowseClassificationsCtrls

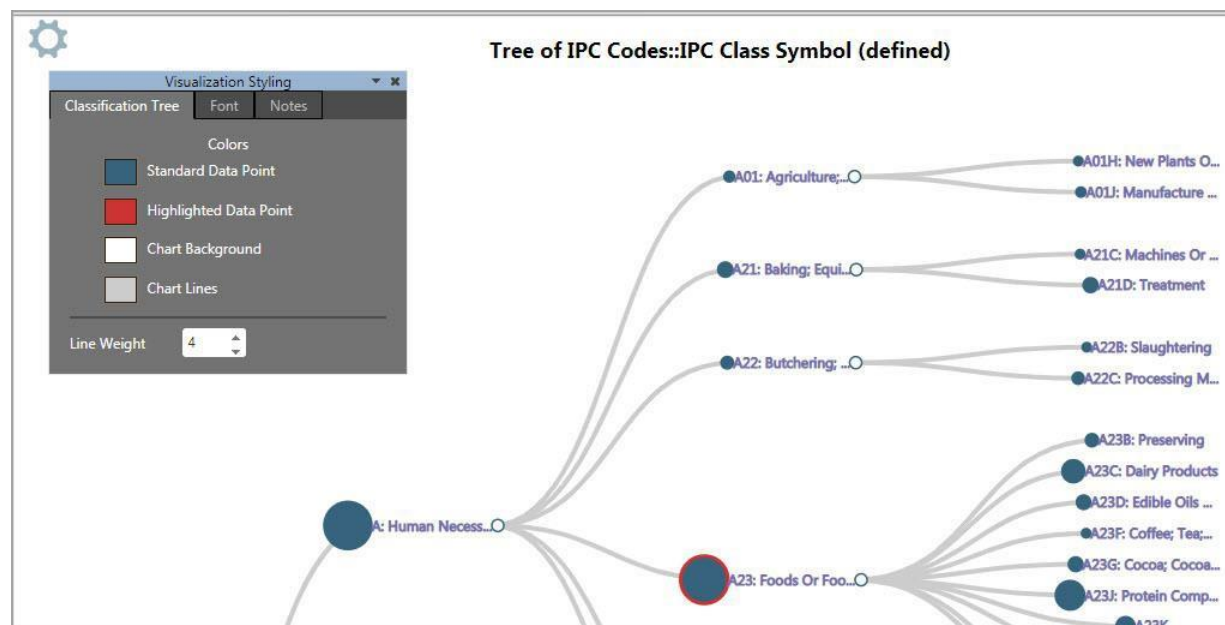
Click the gear icon in the upper left of the map.

In Browse Classification Tree Visualization, change the Colors as explained in [Visualization Controls](#) (click on the color box for the Standard/Highlighted Data Point or Chart Line/Background, and select the color of your choice.)

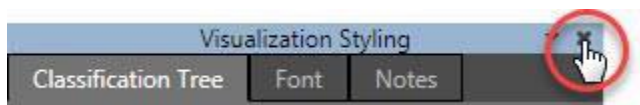
The font size for Data Titles (nodes) cannot be changed, but the Style, Color, and Font type can be changed.



The Line Weight can be changed in this Control, as the user has done here:



The Control dialog is dismissed by clicking the "x" in the upper right of the Control:



See Also:

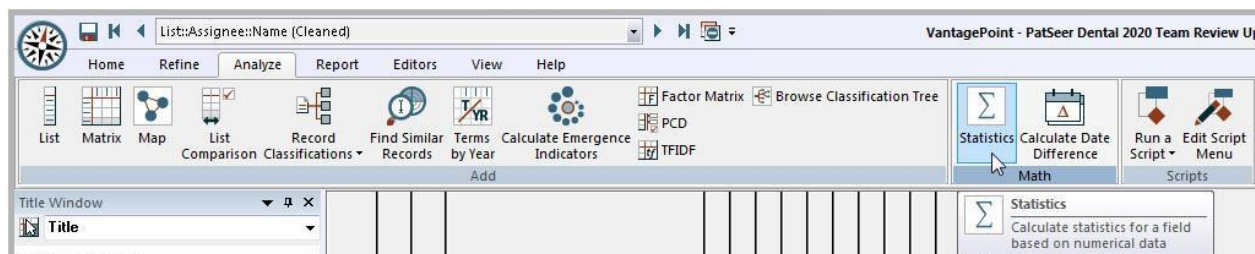
[Browse Classification Tree](#)  
[Sticky Notes](#)

## Statistics

This is a Math Script to calculate statistics of a field based on a number field. Calculates min, max, mean, median, mode, sum, and standard deviation. Similar to the Statistics for Numeric fields in Super Profile, but sortable and easy to group.

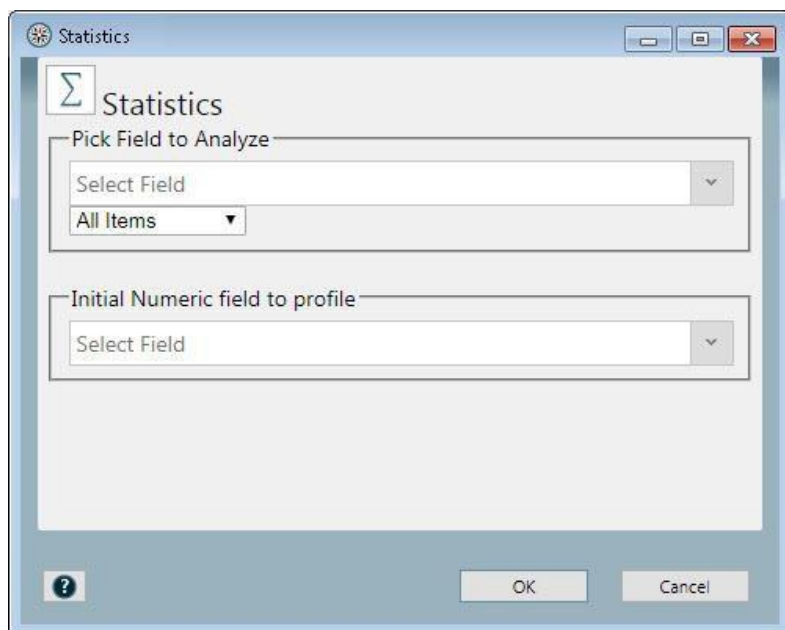
Results can be exported to MS Excel.

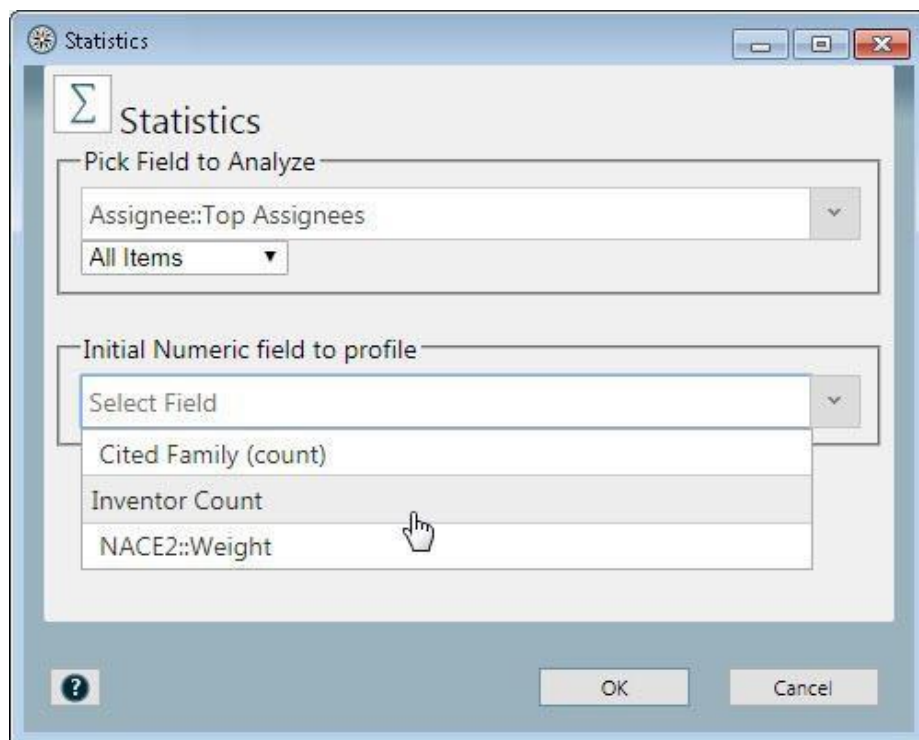
From the Analyze Ribbon, click the **Statistics** icon.



The **Statistics** dialog opens, from which you choose a field to Analyze. Use the dropdown box to make a selection, or type-to-filter to narrow the fields presented.

From the Numeric field dropdown list, choose the field to calculate statistics. This dropdown list will only show fields with Data Type set to Number.





Click **OK** to create the profile.

- Columns can be sorted in ascending/descending order.
- Clicking a row (or rows) will select the records associated with the item in the Name column and update Title and Detail windows.
- Multiple selections can be made via Ctrl Click.

Export the Statistics profile to MS Excel by clicking the icon (1).

Add Custom Indicator Column (2). See detailed instructions in the Custom Indicator topic.

Change the numeric field, as the as the user has done in this example, using the dropdown menu (3).

| Records | Items                          | Sum | Average | Min | Median | Max | St Dev |  |
|---------|--------------------------------|-----|---------|-----|--------|-----|--------|--|
| 8       | AJINOMOTO CO                   | 48  | 6       | 0   | 6      | 11  | 4      |  |
| 17      | FUJI OIL COMPANY               | 79  | 5       | 0   | 4      | 22  | 6      |  |
| 8       | GUIZHOU BEIZHEN FOOD IND CO    | 1   | 0       | 0   | 0      | 1   | 0      |  |
| 8       | HENAN JINGHUA FOOD SCI-TECH CO | 18  | 2       | 0   | 0      | 8   | 3      |  |
| 12      | IMPOSSIBLE FOODS               | 553 | 46      | 0   | 10     | 160 | 63     |  |
| 6       | JIASHAN JIAJIA BEAN            | 17  | 3       | 0   | 3      | 5   | 2      |  |

After creation, the primary Field ("Assignee" in this example) cannot be changed. A new profile must be created.



Further action can be taken using the Right-click menu: Add Selected Items to Group and Create Quartile Groups in Analysis Field.

### Assignee::Top Assignees



| Assignee::Top Assignees |                              | Cited Family (count) ▼ |         |     |        |     |        |  |
|-------------------------|------------------------------|------------------------|---------|-----|--------|-----|--------|--|
| Records                 | Items                        | Sum                    | Average | Min | Median | Max | St Dev |  |
| 8                       | AJINOMOTO CO                 | 48                     | 6       | 0   | 6      | 11  | 4      |  |
| 17                      | FUJI OIL COMPANY             | 22                     | 4       | 0   | 4      | 22  | 6      |  |
| 8                       | GUIZHOU BEIZHEN FD IND CO    | 1                      | 0       | 0   | 0      | 1   | 0      |  |
| 8                       | HENAN JINGHUA FD SCI-TECH CO | 18                     | 2       | 0   | 0      | 8   | 3      |  |
| 12                      | IMPOSSIBLE FOODS             | 553                    | 46      | 0   | 10     | 160 | 63     |  |
| 6                       | JIASHAN JIAJIA BEAN PROD CO  | 17                     | 3       | 0   | 3      | 5   | 2      |  |
| 9                       | MARS                         | 145                    | 16      | 7   | 15     | 32  | 7      |  |
| 17                      | NESTEC                       | 274                    | 16      | 6   | 12     | 35  | 10     |  |
| 7                       | SUZHOU JINJI FD CO           | 7                      | 1       | 0   | 0      | 4   | 2      |  |
| 92                      | Total                        | 1,142                  | 12      | 0   | 6      | 160 | 28     |  |

#### Add Selected Items to Group:

1. After selecting row(s) in the sheet, Right-click and select **Add Selected Items to Group**.
2. Add to an existing group in the Analysis Field ("Assignee::Top Assignees", in image above) or create a new group. If no groups exist, a group must first be created to add the selection to it. Click the **Create New Group in Analysis Field** button to create the new group.

Add to Group in Analysis Field

Available Groups

No Groups in Field. Add a group to assign membership

Create New Group in Analysis Field

Ok

Cancel

3. Enter a group name.

Create New Group

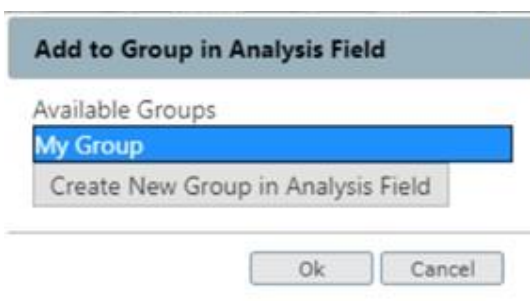
Enter New Group Name

My Group

Ok

Cancel

4. Select the group to add to and click **Ok**.



5. A list view of the Analysis field will open to reveal the items added to that group.

|   | # Records | # Instances | Assignee::Top Assignees      | My Group                            |
|---|-----------|-------------|------------------------------|-------------------------------------|
| 1 | 17        | 30          | FUJI OIL COMPANY             | <input type="checkbox"/>            |
| 2 | 17        | 81          | NESTEC                       | <input type="checkbox"/>            |
| 3 | 12        | 42          | IMPOSSIBLE FOODS             | <input type="checkbox"/>            |
| 4 | 9         | 18          | MARS                         | <input type="checkbox"/>            |
| 5 | 8         | 15          | AJINOMOTO CO                 | <input checked="" type="checkbox"/> |
| 6 | 8         | 11          | GUIZHOU BEIZHEN FD IND CO    | <input type="checkbox"/>            |
| 7 | 8         | 13          | HENAN JINGHUA FD SCI-TECH CO | <input type="checkbox"/>            |
| 8 | 7         | 7           | SUZHOU JINJI FD CO           | <input type="checkbox"/>            |
| 9 | 6         | 8           | JIASHAN JIAJIA BEAN PROD CO  | <input type="checkbox"/>            |

### Create Quartile Groups in Analysis Field:

This will create four groups in the Analysis field: Quartile 1, Quartile 2, Quartile 3, and Quartile 4. Then the items in the analysis field will be split into four equal groups and assigned to a quartile based on the average score of the selected number field.

For example, if there are 8 terms in the list, the bottom two scoring terms by average go in Quartile 1, the next two highest go in Quartile 2, and so on. Once completed, a list of the Analysis field will open up to show the group assignments.

|   | # Records | # Instances | Assignee::Top Assignees      | My Group                            | Quartile 1                          | Quartile 2                          | Quartile 3                          | Quartile 4                          |
|---|-----------|-------------|------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|
| 1 | 17        | 30          | FUJI OIL COMPANY             | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |
| 2 | 17        | 81          | NESTEC                       | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| 3 | 12        | 42          | IMPOSSIBLE FOODS             | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 4 | 9         | 18          | MARS                         | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 5 | 8         | 15          | AJINOMOTO CO                 | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| 6 | 8         | 11          | GUIZHOU BEIZHEN FD IND CO    | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/>            |
| 7 | 8         | 13          | HENAN JINGHUA FD SCI-TECH CO | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/>            |
| 8 | 7         | 7           | SUZHOU JINJI FD CO           | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/>            |
| 9 | 6         | 8           | JIASHAN JIAJIA BEAN PROD CO  | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |


See Also:

[Custom Indicator](#)

## Custom Indicator

Create a new column in the Statistics sheet with the new Custom Indicator Formula Builder. The enumerated steps are explained below.

**Abstract: NLP/Phrases NLP Refined - Group Names**


1

**Abstract: NLP/Phrases NLP Refined - Group Names**
Emergence Scores::Score
7

| Records | Items        | Sum        | Average | Min   | Median | Max   | St Dev |   | My Custom Indicator |
|---------|--------------|------------|---------|-------|--------|-------|--------|---|---------------------|
| 183     | Absorb       | 1,873.061  | 4.865   | 1.786 | 3.718  | 9.879 | 2.549  | H | 13.001              |
| 436     | Cancer       | 2,801.192  | 4.283   | 1.786 | 3.718  | 9.879 | 2.124  | H | 55.164              |
| 337     | Clinical     | 2,737.931  | 4.174   | 1.786 | 3.673  | 9.879 | 2.088  | H | 56.836              |
| 963     | Cytokine     | 4,891.040  | 4.138   | 1.786 | 3.790  | 9.879 | 1.892  | H | 77.683              |
| 1,667   | Inflammation | 8,758.063  | 4.161   | 1.786 | 3.718  | 9.879 | 2.027  | H | 269.577             |
| 158     | Nano-Related | 1,199.503  | 4.284   | 1.786 | 3.680  | 9.879 | 2.064  | H | 4.949               |
| 305     | Neurologic   | 1,679.319  | 4.126   | 1.786 | 3.591  | 9.879 | 2.138  | H | 10.562              |
| 219     | Vascular     | 1,767.937  | 4.952   | 1.786 | 3.998  | 9.879 | 2.721  | H | 12.93               |
| 4,268   | <b>Total</b> | 25,708.046 | 4.266   | 1.786 | 3.718  | 9.879 | 2.126  | H |                     |

**Custom Indicator Formula Builder**

Saved Indicators: My Custom Indicator

New Indicator Name: My Custom Indicator

2

**Real Time Calculation** 13.001

4

**Set Conditions**

| Component Type  | Field/Constant                                  | Normalized?              | Operator |     |
|---|---|--------------------------|----------|-----|
| <span style="background-color: red; color: white; border-radius: 50%; padding: 2px 5px;">3</span> A Sum | Emergence Scores - Affiliation (Cleaned)::Score | <input type="checkbox"/> | /        | - + |
| B Constant  | 100   | <input type="checkbox"/> | *        | - + |
| C Sum   | Emergence Scores - Author-Name (Cleaned)::Score | <input type="checkbox"/> | /        | - + |
| D Total Records   |   | <input type="checkbox"/> | +        | - + |

Order Of Operations: (((A / B) \* C) / D) 5

Save Template Reset Conditions

6
Calculate Indicator Cancel

1. Press the Add Custom Indicator Column icon in the Statistics sheet.
2. Load a previously saved indicator or start a new one by entering in a name.
3. Set the various Conditions to calculate your indicator (see Set Conditions options, below).
4. As you make changes see how it affects the score in real time. This will show you what the score will be in Row 1 of your table.
5. Edit the order of operations as needed. By default, operations will be evaluated from Left to Right as indicated by the parentheses.
6. Once you are satisfied with the results, you can **Save** as a Template to run later, or **Calculate** to generate the scores and append it to the table as a new column. You can also **Reset Conditions** back to the start or **Cancel** to close the dialog without any changes.
7. If you click **Calculate Indicator** you will see your new indicator column in the table. This column can now be sorted by the high or low scoring rows to the top.

Set Conditions options:
**Component Type****Records**

This component corresponds with first column in the table and does not require any additional field selection, as record counts are based on the Analysis field selected when creating the Statistics Sheet.

**Sum****Average****Median****Min****Max****ST Dev**

These components correspond to the columns in the table. Values are calculated based on the field you select in the corresponding Field dropdown, and are calculated the same as if that field was selected in the statistics table.

**Total Records**

This component corresponds with the last row in the first column of the table and does not require any additional field selection, as record counts are static.

**Total Sum****Total Average****Total Min****Total Max****Total ST Dev**

These components correspond to the Totals row within their columns in the table. Values are calculated based on the field you select in the corresponding Field dropdown, and are calculated the same as if that field was selected in the statistics table.

**Constant**

This component lets you enter in any number to a separate input box.

**Field/Constant**

Based on the component type selected you will need to either select a field or enter a constant value.

**Normalized?**

Checking this will convert the values on that component row to a range of 0 to 1.

**Operator**

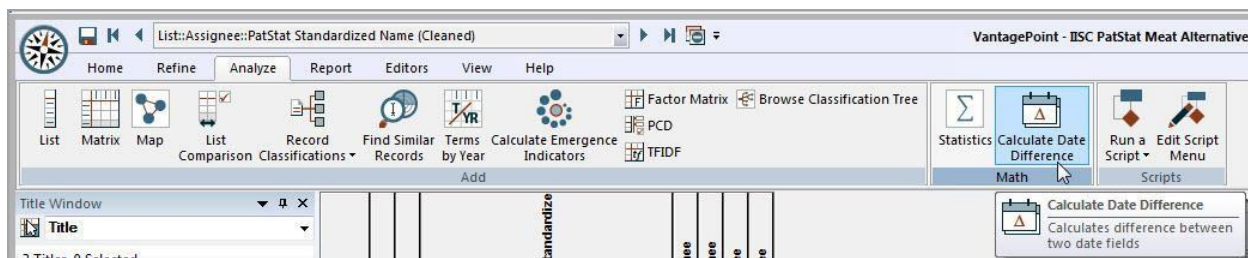
Select between Addition, Subtraction, Multiplication, and Division between the components. Note that the last operator is ignored, as there's nothing for it to apply to.



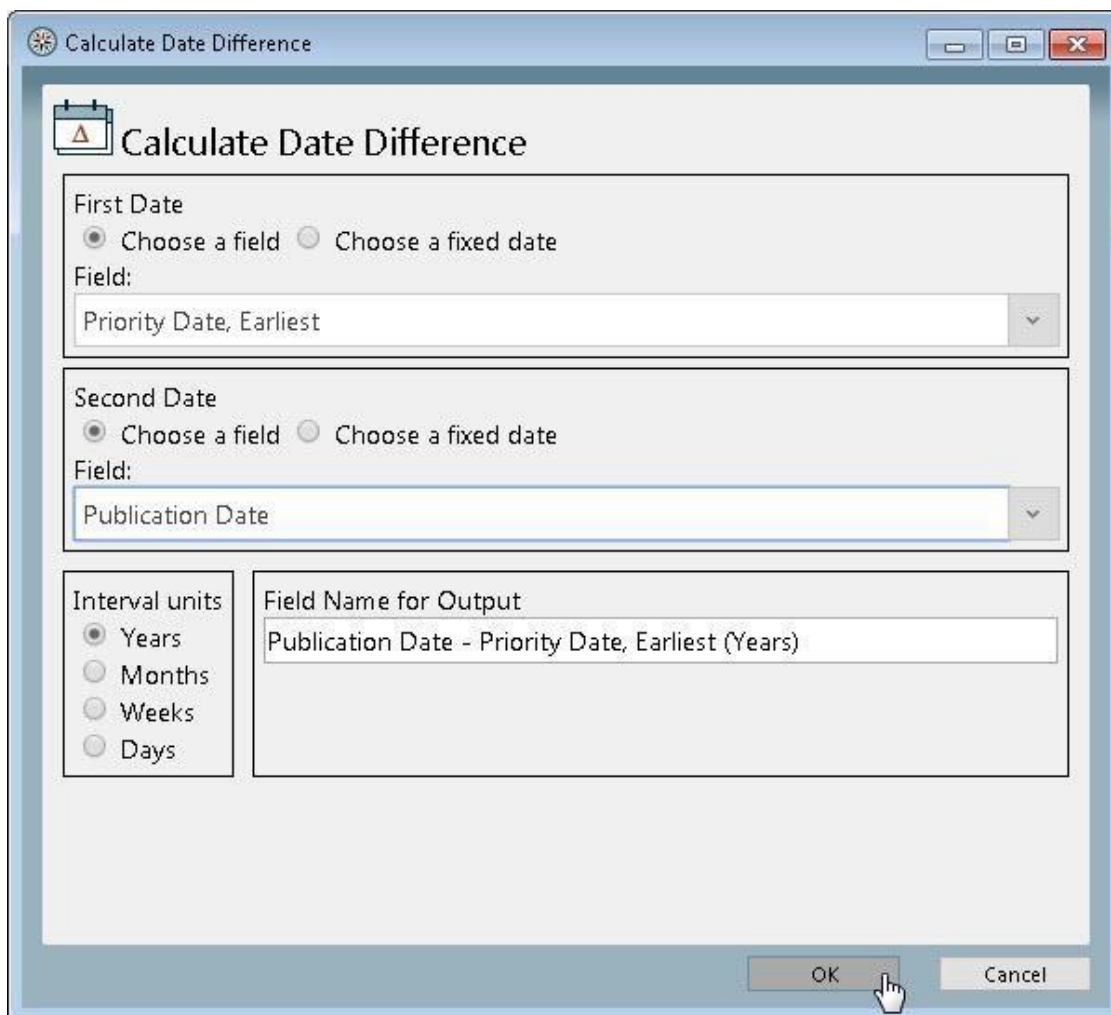
## Calculate Date Difference

For each record within the dataset, calculate the difference between two dates in days, weeks, months, or years. This is useful for calculating time to publication, expiration, launch, etc.

From the Analyze ribbon, select **Calculate Date Difference**.



Choose two date fields for the calculation, or choose a fixed date. Choose the interval units to be used in the calculation (Default is Years). Click **OK**.



VantagePoint runs the script, and returns the list. It creates a new Field (assigned in the Field Name for

Output box, above), which also appears on the Summary sheet.

|    | # Records | # Instances | Publication Date - Priority Date, Earliest (Yea |
|----|-----------|-------------|---|
| 1  | 455       | 455         | 2   |
| 2  | 417       | 417         | 1   |
| 3  | 164       | 164         | 3   |
| 4  | 105       | 105         | 0   |
| 5  | 95        | 95          | 6   |
| 6  | 91        | 91          | 4   |
| 7  | 73        | 73          | 7   |
| 8  | 69        | 69          | 8   |
| 9  | 55        | 55          | 5   |
| 10 | 42        | 42          | 9   |
| 11 | 30        | 30          | 10  |
| 12 | 28        | 28          | 11  |
| 13 | 9         | 9           | 12  |
| 14 | 5         | 5           | 13  |
| 15 | 3         | 3           | 15  |
| 16 | 3         | 3           | 16  |
| 17 | 1         | 1           | 14  |
| 18 | 1         | 1           | 17  |

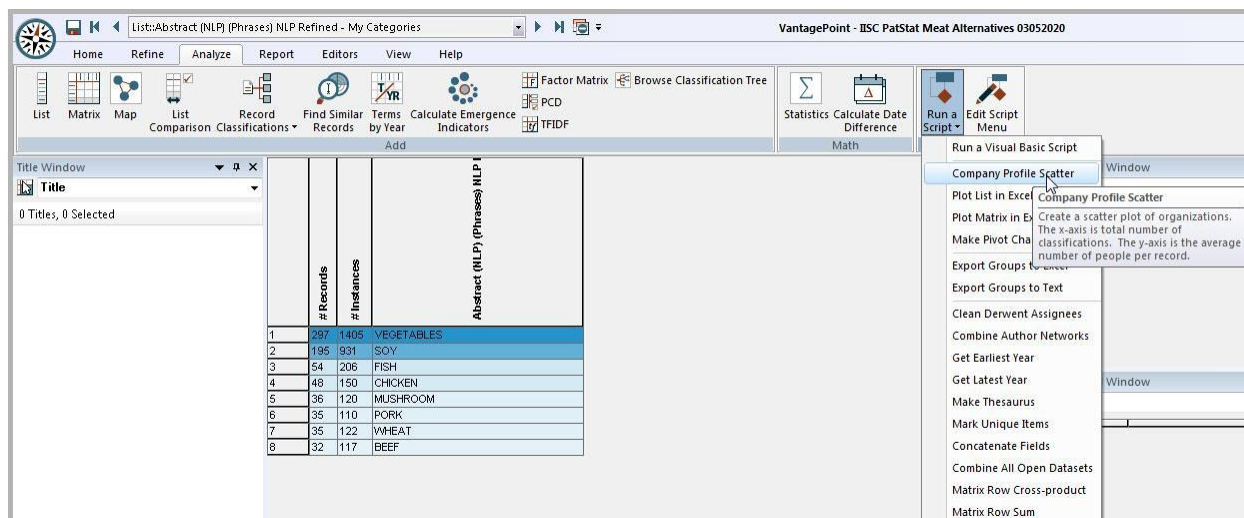
◀ ▶ ↗ List::Publication Date - Priority Date, Earliest (Years)

## Scripts

VantagePoint can run Visual Basic Scripts to automate repetitive functions. VantagePoint uses Visual Basic (Scripting Edition) from Microsoft Corporation.

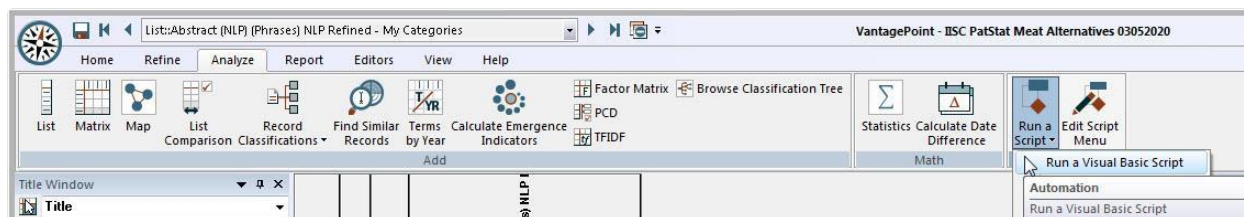
The VantagePoint installation includes the scripts shown in the dropdown menu. A description of each appears in the tooltip box when the mouse hovers over the script name.

From the Analyze ribbon, select **Run a Script** to display the scripts included in the VantagePoint Installation.

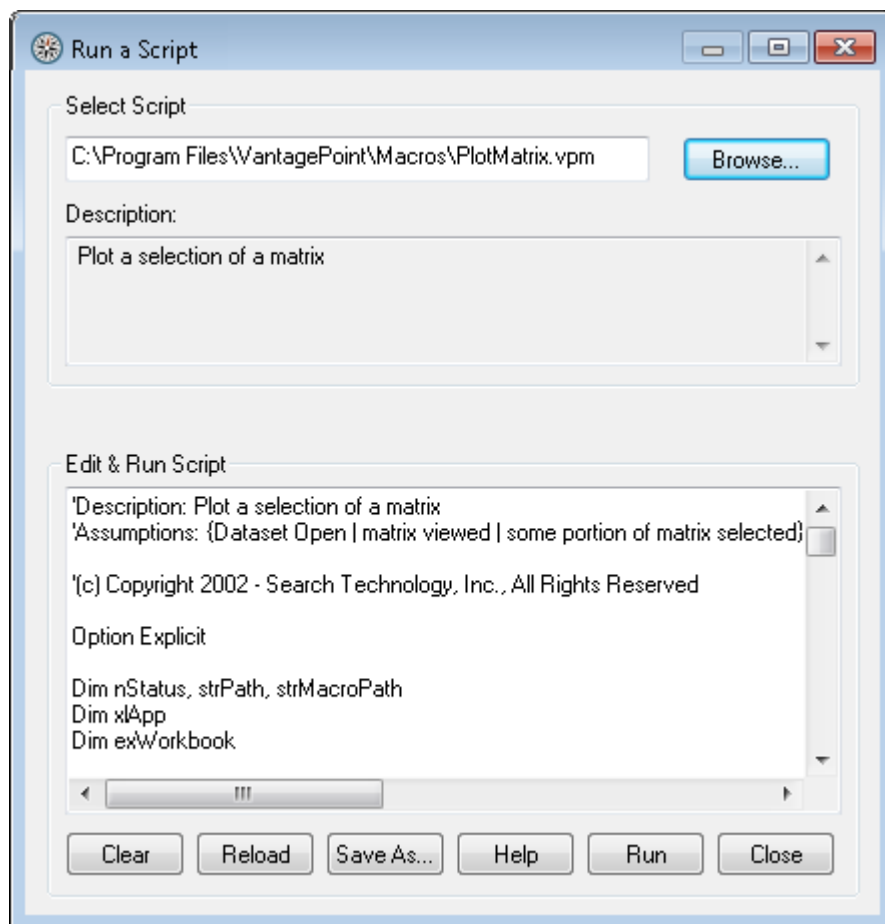


## Running scripts

The **Run a Script** dialog box is accessed from the Analyze ribbon. Click **Run a Script** and select **Run a Visual Basic Script**.



The **Run a Script** dialog box is displayed. The default installation location for scripts is:  
C:\Program Files (x86)\VantagePoint\Macros



**Select Script / Browse:** Use the **Browse** button to locate the script you want to run.

**Note:** The default file extension for VantagePoint scripts is \*.vpm. To view files with other extensions (for example \*.txt), select "All Files" in the Files of type: selection box.

**Edit & Run Script:** This window displays the script to run.

**Note:** You can use a simple text editor (for example, Microsoft's Notepad) to create and save scripts. The script must be saved as a simple text file.

**Clear:** Clears the "Edit & Run Script" window.

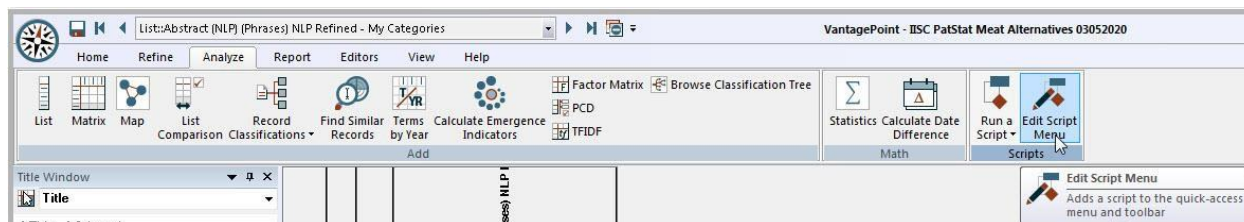
**Reload:** If you have edited and saved the selected script using a text editor outside of VantagePoint, you can load the updated script by simply clicking **Reload**. This is very useful when developing scripts.

**Save As ...:** Use this to save the script edits you've made in the VantagePoint text editor.

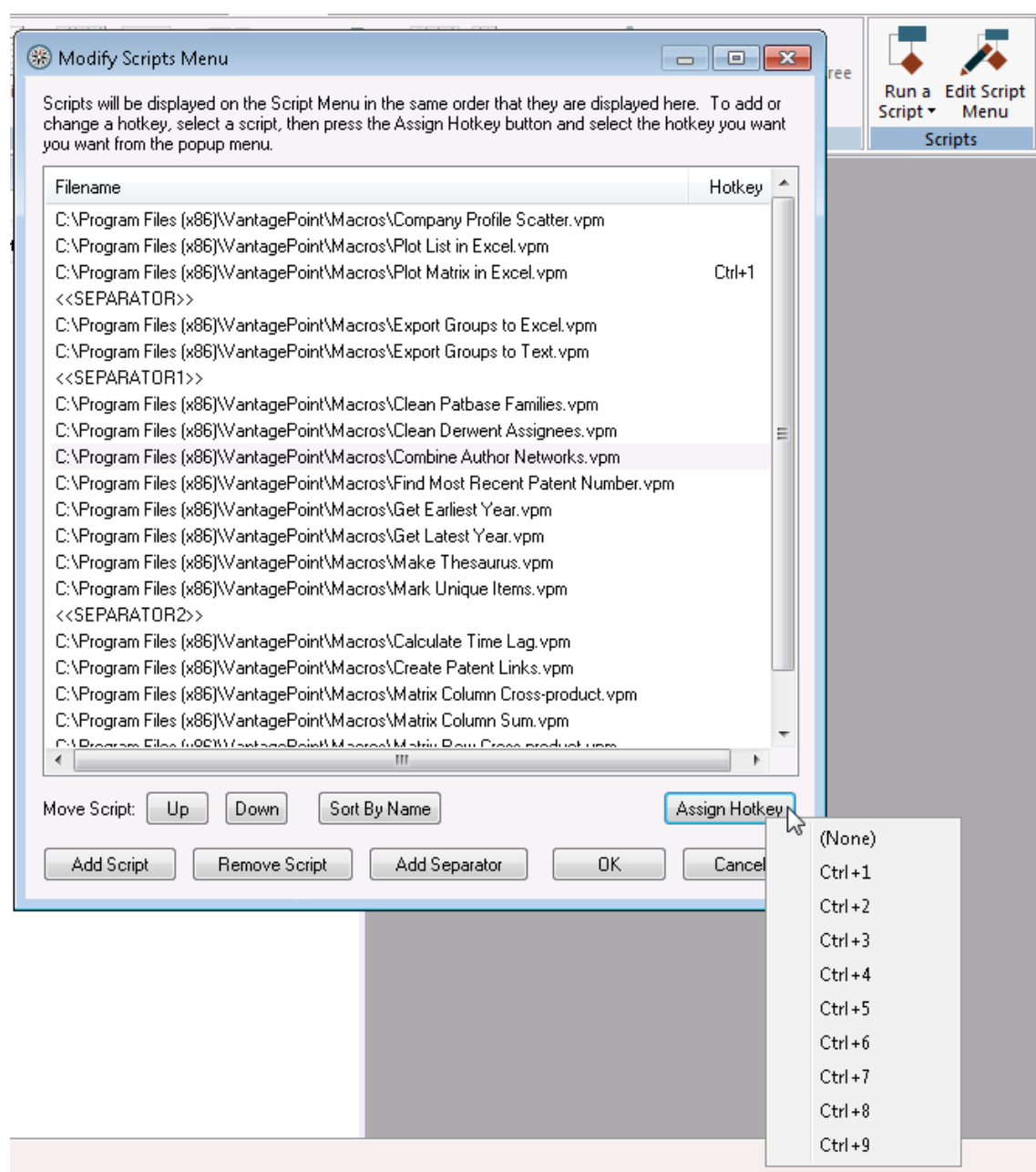
**Run:** Run the script. While the script is running this window is minimized and you can observe the operations in VantagePoint.

## Modify scripts menu

To access the **Modify Scripts Menu**, go to the Analyze ribbon and select **Edit Script Menu**.



This dialog is used to arrange scripts on the Scripts Menu and to assign "Hotkeys," which can be assigned to Ctrl-1 through Ctrl-9.





**Move Script: Up / Down** – These buttons allow you to arrange the script menu in any order you choose.

**Sort By Name** - Click this button to display the script names alphabetically.

**Add Script** – Clicking here leads to a file selection dialog where you can browse and find scripts to add to the menu. If you press and hold the Control key, the **Add Script** button changes to **Add All**, which leads to a folder selection dialog where you can add all scripts in a folder to the menu.

**Remove Script** – When a script is selected in the list, clicking here will remove the selected script from the menu (after a confirmation question). Pressing and holding the Control key changes this button to **Remove All** (Scripts). You will be required to confirm this action before all scripts are removed.

**Add Separator** - Visually enhances the display of the menu by adding a separator between menu items. See the respective “Before & After” screen shots below:

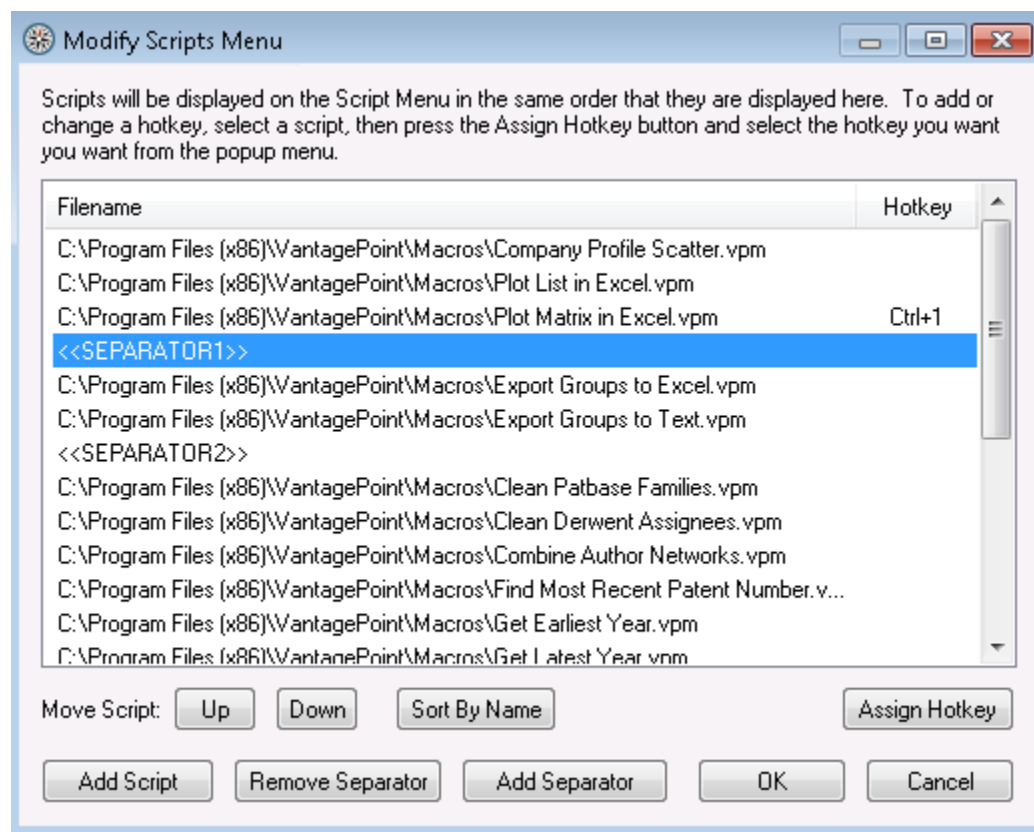
**Before**

| Run a Visual Basic Script      |        |
|--------------------------------|--------|
| Company Profile Scatter        |        |
| Plot List in Excel             |        |
| Plot Matrix in Excel           | Ctrl+1 |
| Export Groups to Excel         |        |
| Export Groups to Text          |        |
| Clean Patbase Families         |        |
| Clean Derwent Assignees        |        |
| Combine Author Networks        |        |
| Find Most Recent Patent Number |        |
| Get Earliest Year              |        |
| Get Latest Year                |        |
| Make Thesaurus                 |        |
| Mark Unique Items              |        |
| Calculate Time Lag             |        |
| Create Patent Links            |        |
| Matrix Column Cross-product    |        |
| Matrix Column Sum              |        |
| Matrix Row Cross-product       |        |
| Matrix Row Sum                 |        |

**After**

| Run a Visual Basic Script      |        |
|--------------------------------|--------|
| Company Profile Scatter        |        |
| Plot List in Excel             |        |
| Plot Matrix in Excel           | Ctrl+1 |
| Export Groups to Excel         |        |
| Export Groups to Text          |        |
| Clean Patbase Families         |        |
| Clean Derwent Assignees        |        |
| Combine Author Networks        |        |
| Find Most Recent Patent Number |        |
| Get Earliest Year              |        |
| Get Latest Year                |        |
| Make Thesaurus                 |        |
| Mark Unique Items              |        |
| Calculate Time Lag             |        |
| Create Patent Links            |        |
| Matrix Column Cross-product    |        |
| Matrix Column Sum              |        |
| Matrix Row Cross-product       |        |
| Matrix Row Sum                 |        |

When you click **Add Separator**, <<SEPARATOR>> appears at the bottom of the list in the "Filename" window. Click on <<SEPARATOR>> and use the **Up / Down** buttons to move the Separator to the desired location. (The **Remove Script** button changes to **Remove Separator** when a <<SEPARATOR>> is selected in the Filename list.)

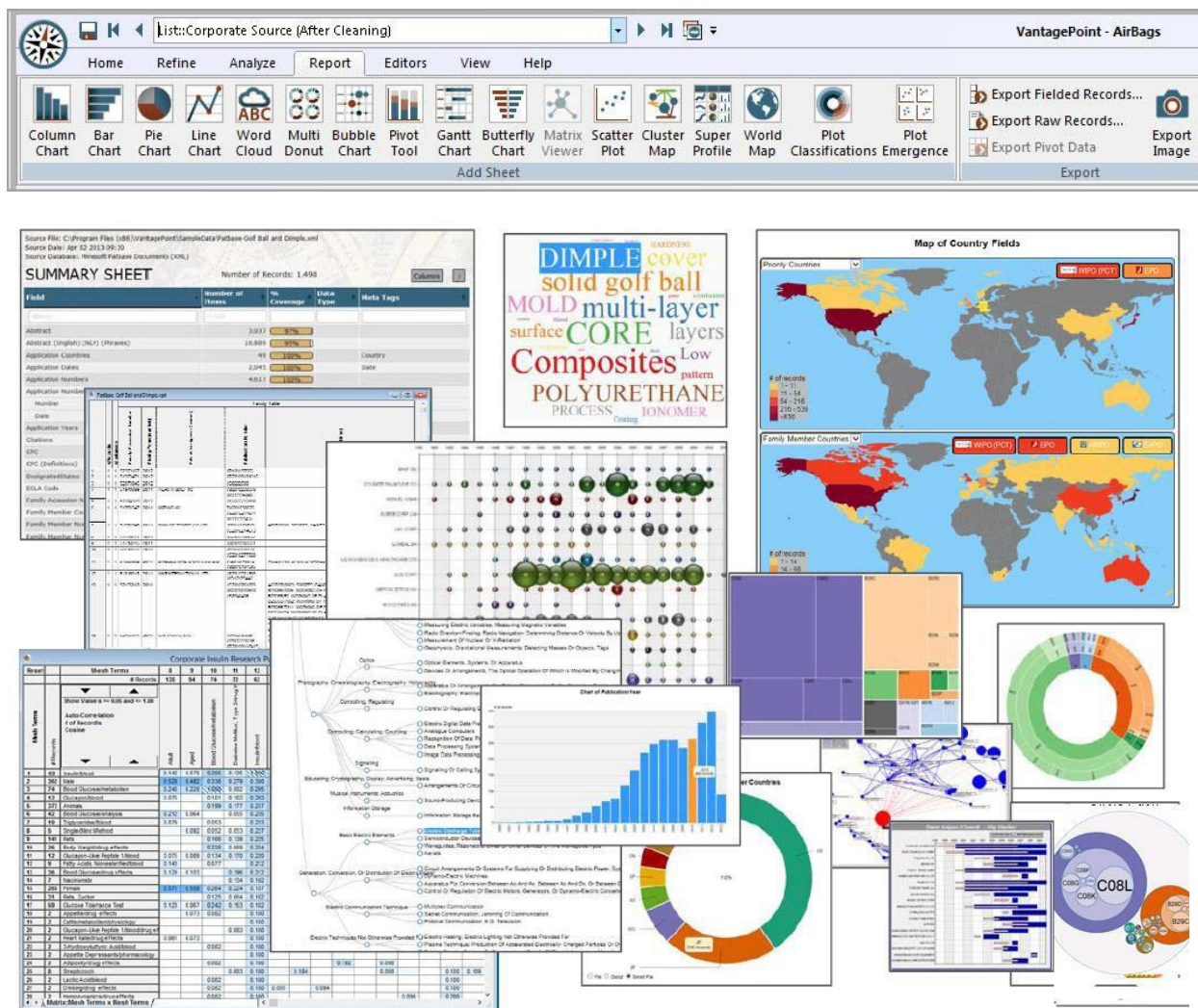


**Assign Hotkey** – Up to nine scripts can be assigned to run when a single "hot key" is pressed on the keyboard or toolbar. These can be assigned to Ctrl-1 through Ctrl-9. To assign a script to a "hot key," first select the script in the menu, and then click the **Assign Hotkey** button. Select the hot key you want to use from the drop-down list. The script will be annotated in the window and the associated button on the toolbar will enable.

Click **OK** to accept changes or click **Cancel** to dismiss all changes.

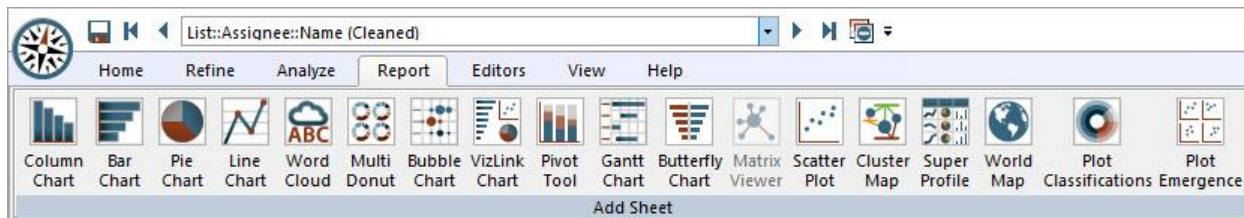
## Report

Create Visualizations in VantagePoint that can then be exported for use in other applications. See the Topics Report - Add Sheet and Export for details.



## Report - Add Sheet

The following Reports are available from the Report ribbon. Each is illustrated and described in a sub-topic.



One feature is the ability to insert Notes for newly-created visualizations. See the [Sticky Notes](#) topic for details.

Quick Links:

[Column Chart](#)

[Multi Donut](#)

[Butterfly Chart](#)

[World Map](#)

[Bar Chart](#)

[Bubble Chart](#)

[Matrix Viewer](#)

[Plot Classifications](#)

[Pie Chart](#)

[VizLink Chart](#)

[Scatter Plot](#)

[Plot Emergence](#)

[Line Chart](#)

[Pivot Tool](#)

[Cluster Map](#)

[Word Cloud](#)

[Gantt Chart](#)

[Super Profile](#)

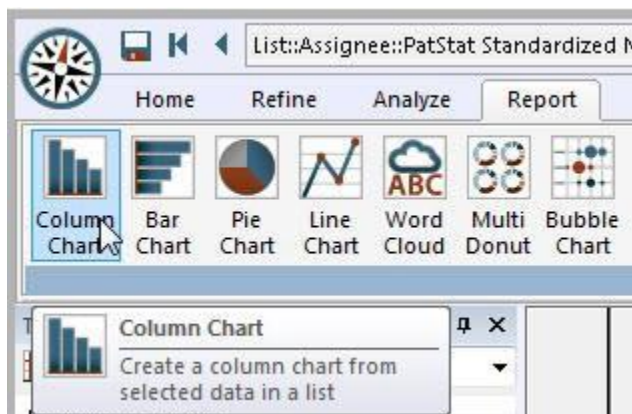
[Visualization Controls](#) (including [Sticky Notes](#))

### Column Chart

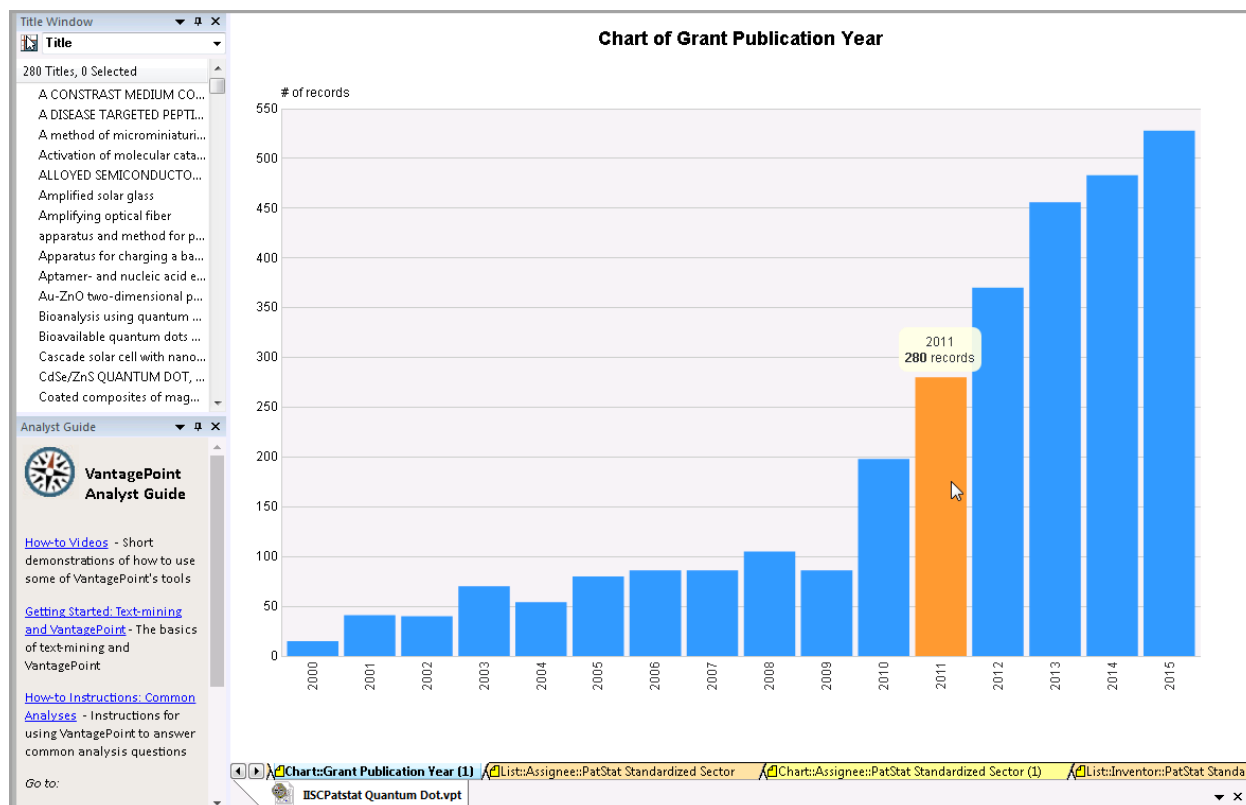
*Description:* Create a column chart from selected data in list.

*Requirements:* A dataset is open with the current view being a list. A set of cells must be selected.

From a List view, select **Column Chart** from the Report ribbon:

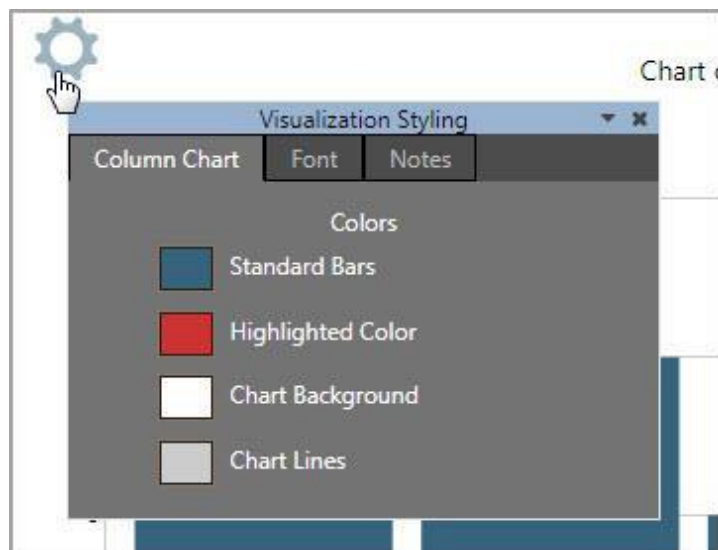


The result is displayed below. Clicking on the columns causes the Records for that selection to display in the Title Window.



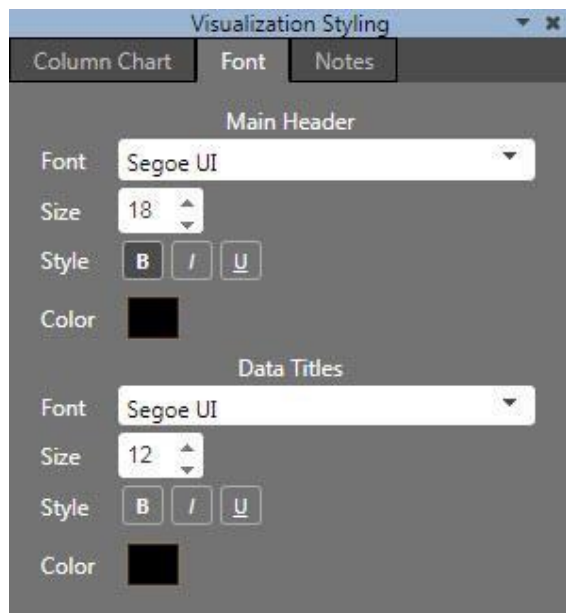
To display the Column Chart Controls, click the icon in the upper left of the Chart.

In Column Charts, change the Colors as explained in [Visualization Controls](#) (click on the color box for the Standard Bars/Highlighted Color or Chart Background/Chart Line, and select the color of your choice.)





Fonts, Font Size, Styles, and Colors for the Main Header (Chart Title) and Data Titles are set on the Font tab.



You can also add a Sticky Note to the Chart.  
The Control dialog is dismissed by clicking the "x" in the upper right of the Control dialog.

See Also:

[Sticky Notes](#)

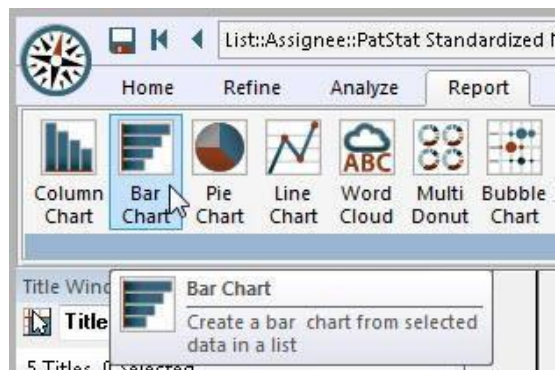
[Visualization Controls](#)

## Bar Chart

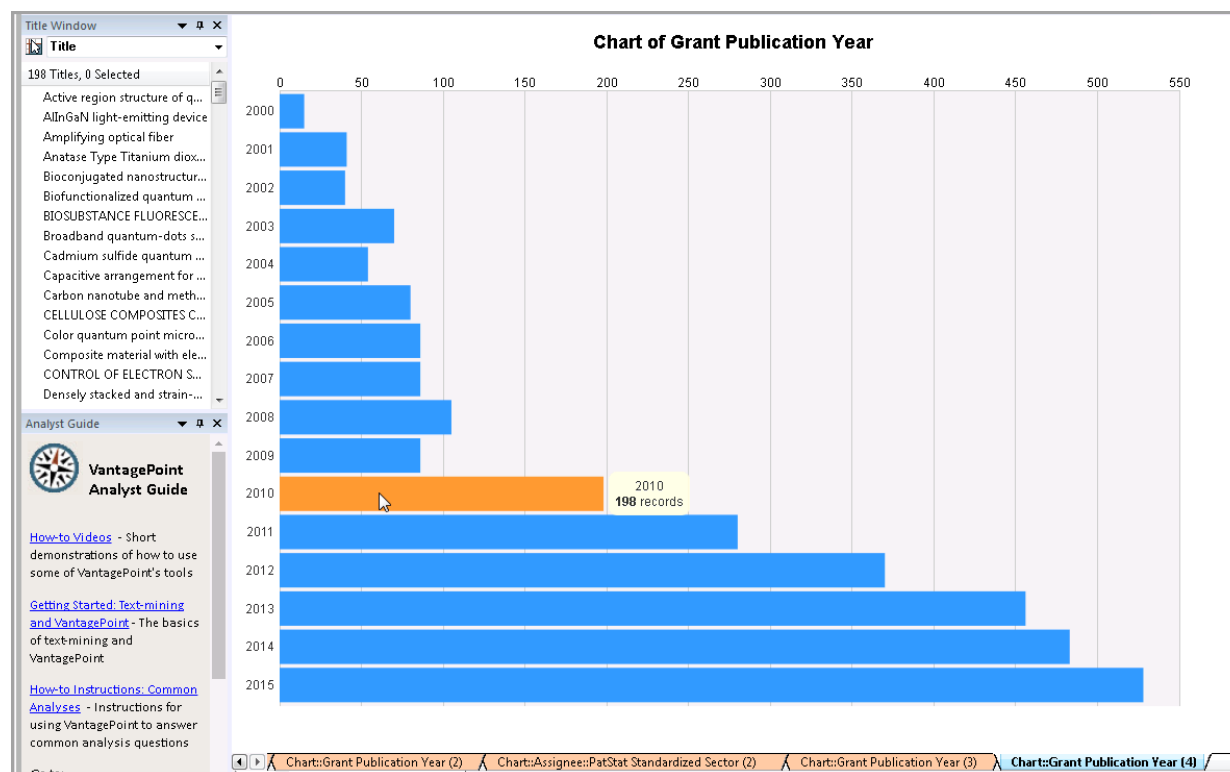
*Description:* Create a horizontal bar chart from selected data in list.

*Requirements:* A dataset is open with the current view being a list. A set of cells must be selected.

From a List view, select **Bar Chart** from the Report ribbon.

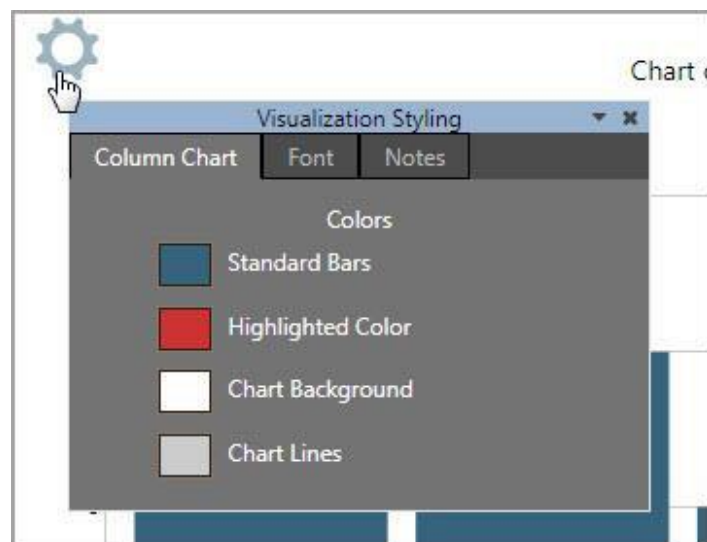


The result is displayed below. Clicking on the bars causes the Records for that selection to display in the Title Window.



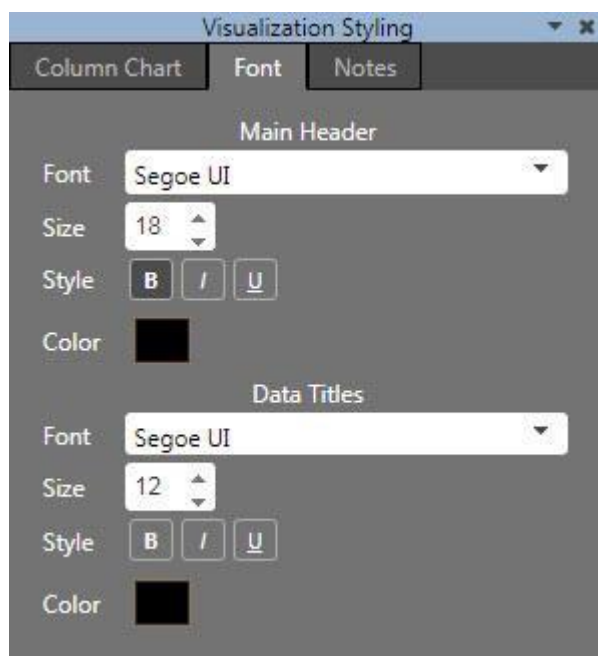
To display the Bar Chart Controls, click the icon in the upper left of the Chart.

In Column and Bar Charts, change the Colors as explained in [Visualization Controls](#) (click on the color box for the Standard Bars/Highlighted Color or Chart Background/Chart Line, and select the color of your choice.)



Fonts, Font Size, Styles, and Colors for the Main Header (Chart Title) and Data Titles are set on the Font

tab.



You can also add a Sticky Note to the Chart.  
The Control dialog is dismissed by clicking the "x" in the upper right of the Control dialog.

See Also:

[Sticky Notes](#)

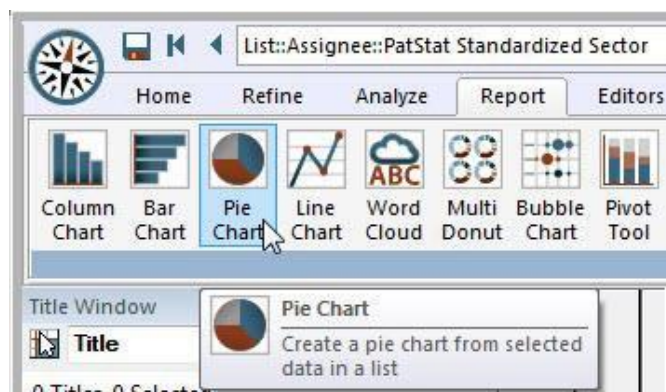
[Visualization Controls](#)

## **Pie Chart**

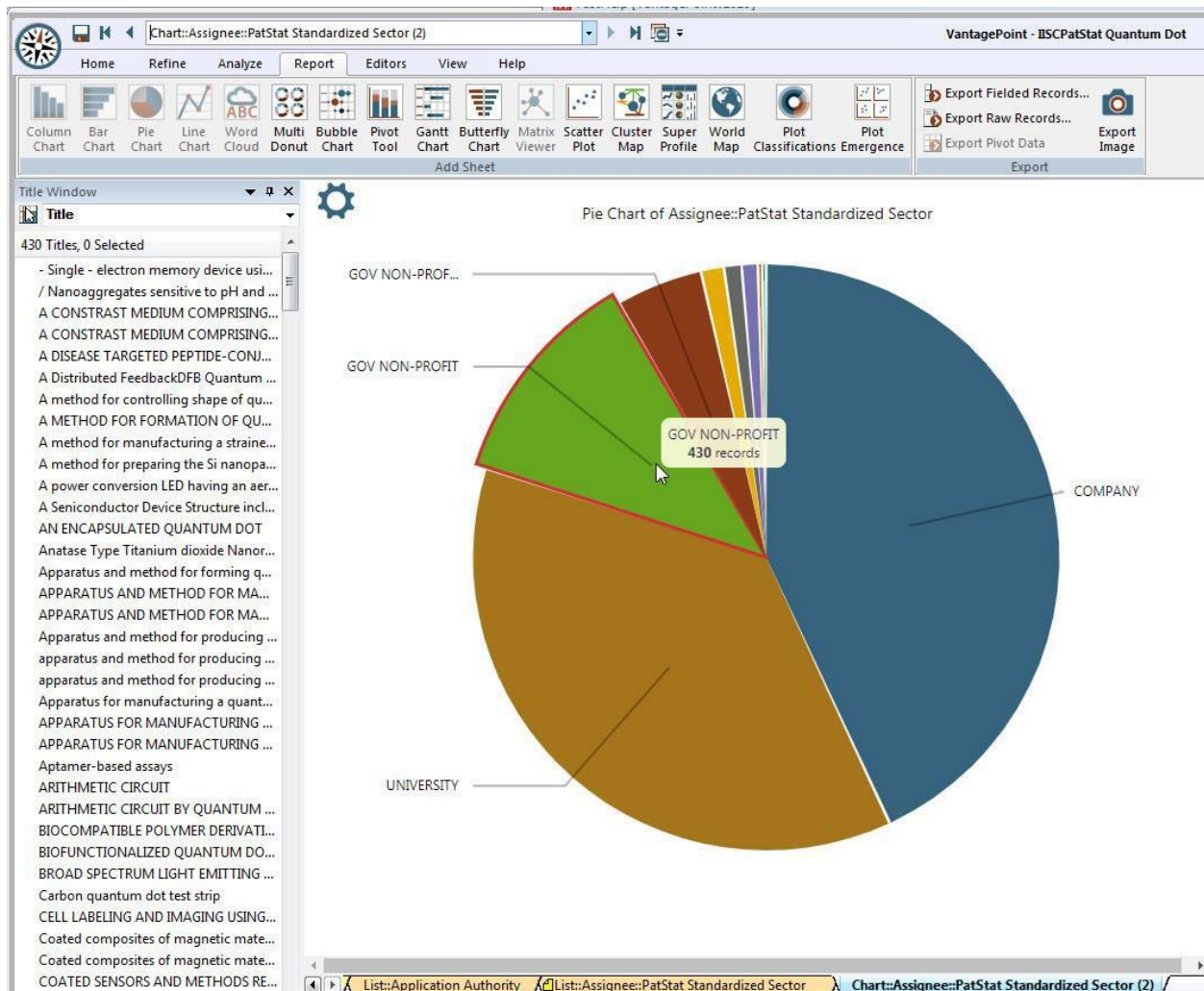
*Description:* Create a pie chart from selected data in list.

*Requirements:* A dataset is open with the current view being a list. A set of cells must be selected.  
The "Smart Pie" view shows the total percent overlap between the pie sections.

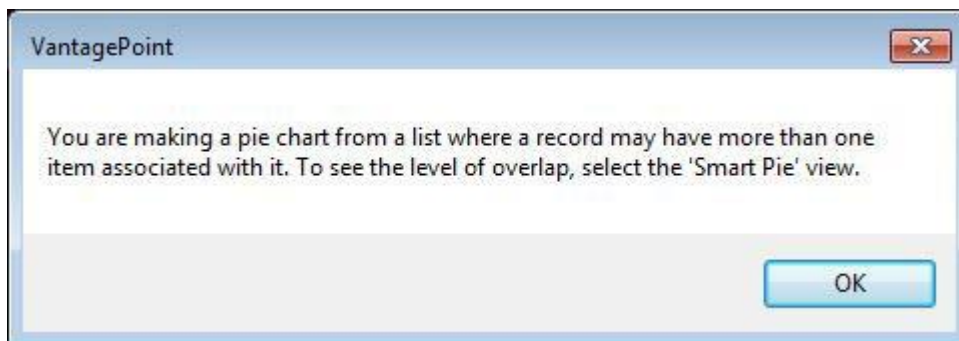
From a List view, select **Pie Chart** from the Report ribbon:



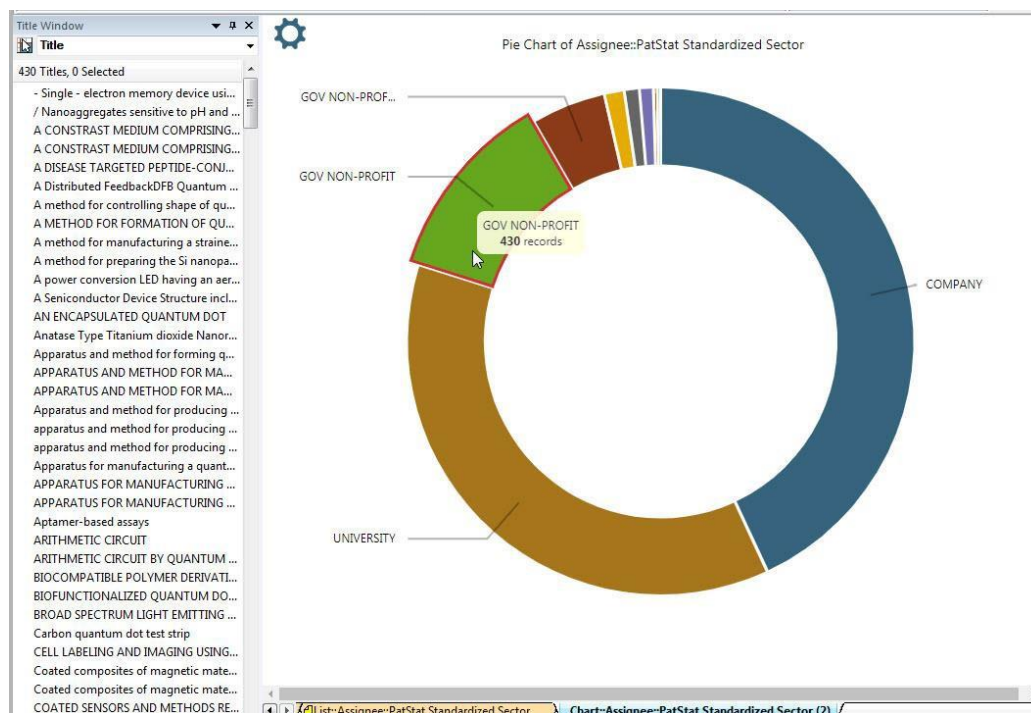
In the following picture, the user has selected a section in the Pie Chart. The 430 records associated with the selection appear in the Title view.



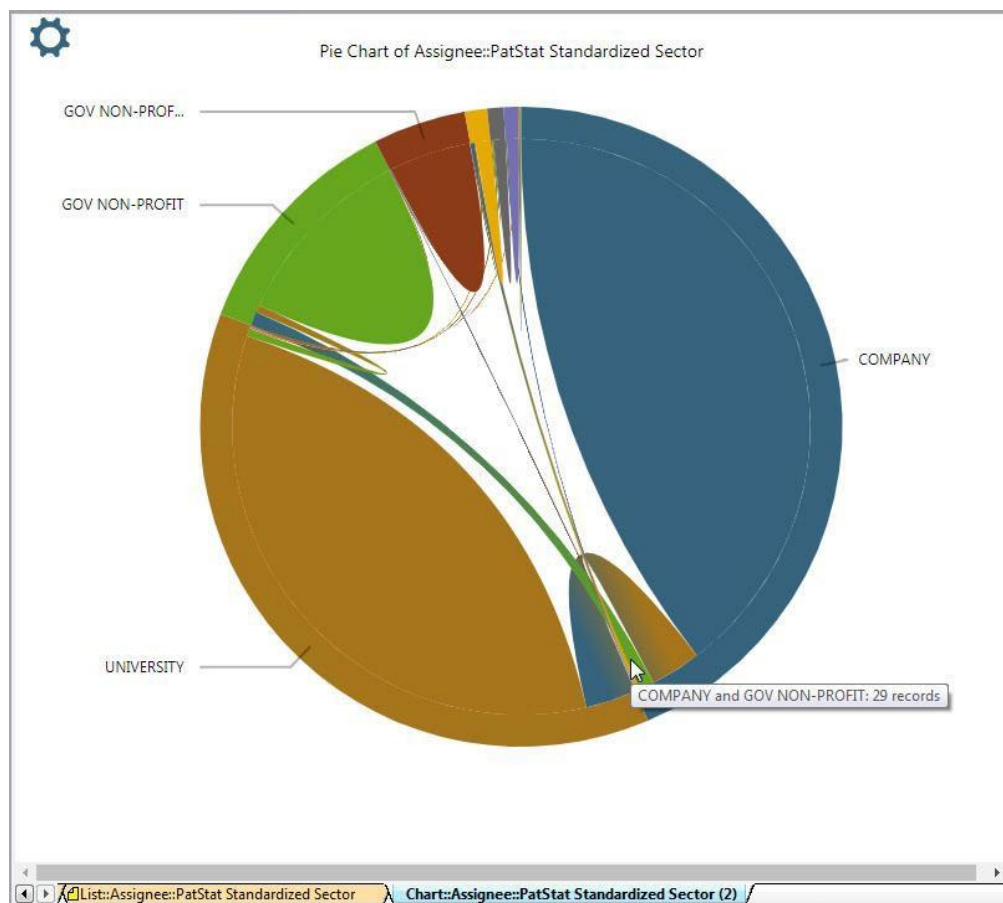
It is possible that this warning will appear:



The following pictures are examples of Donut and Smart Pie types. These selections are made in the Pie Chart Control (the gear" icon, in the upper left of the chart.)



The "Smart Pie" view below shows the overlap between the pie sections.





See the next topic, Pie Chart Controls, for additional visualization instructions.

See Also:

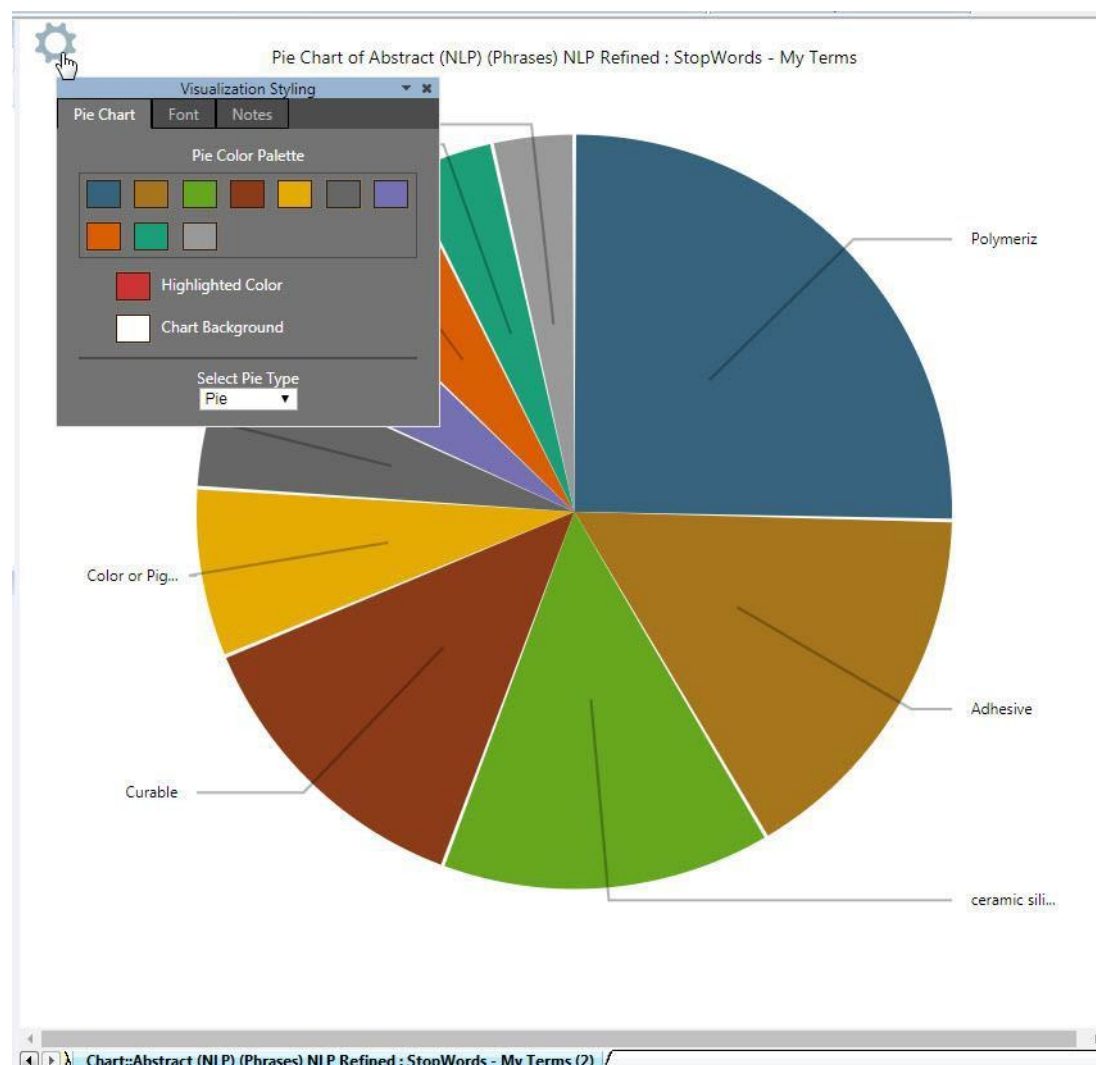
[Sticky Notes](#)

[Visualization Controls](#)

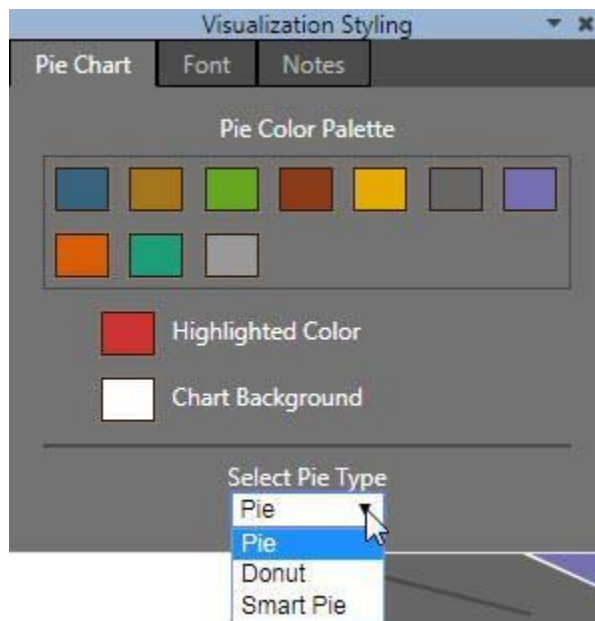
## PieChartCtrls

To display the Pie Chart Controls, click the icon in the upper left of the Pie Chart.

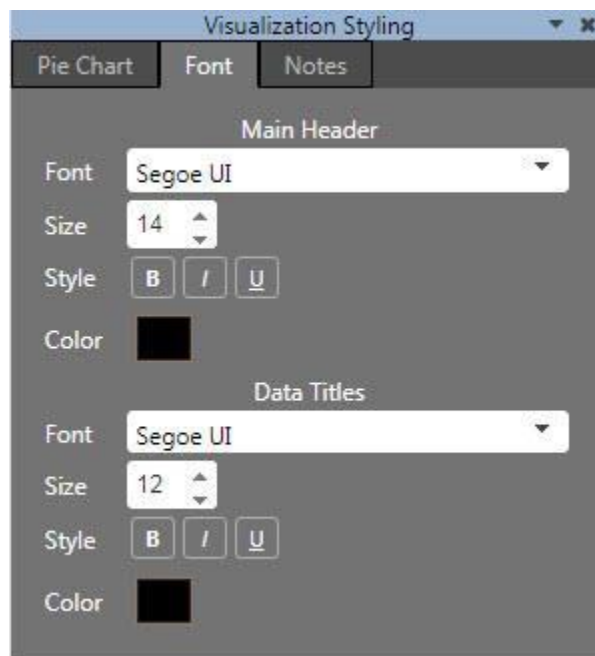
In Pie Charts, change the Colors as explained in [Visualization Controls](#) (click on the color box, and select the color of your choice.)



The Pie Type is selected from the dropdown list:



Fonts, Font Size, Styles, and Colors for the Main Header (Chart Title) and Data Titles are set on the Font tab.



The Control dialog is dismissed by clicking the "x" in the upper right of the Control dialog.

See Also:

[Pie Chart](#)

[Sticky Notes](#)

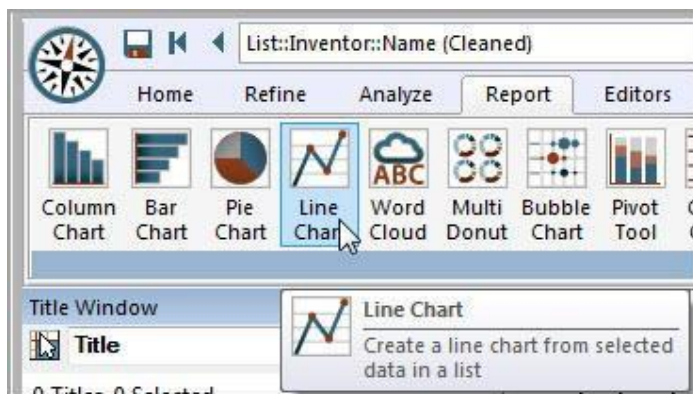
[Visualization Controls](#)

## Line Chart

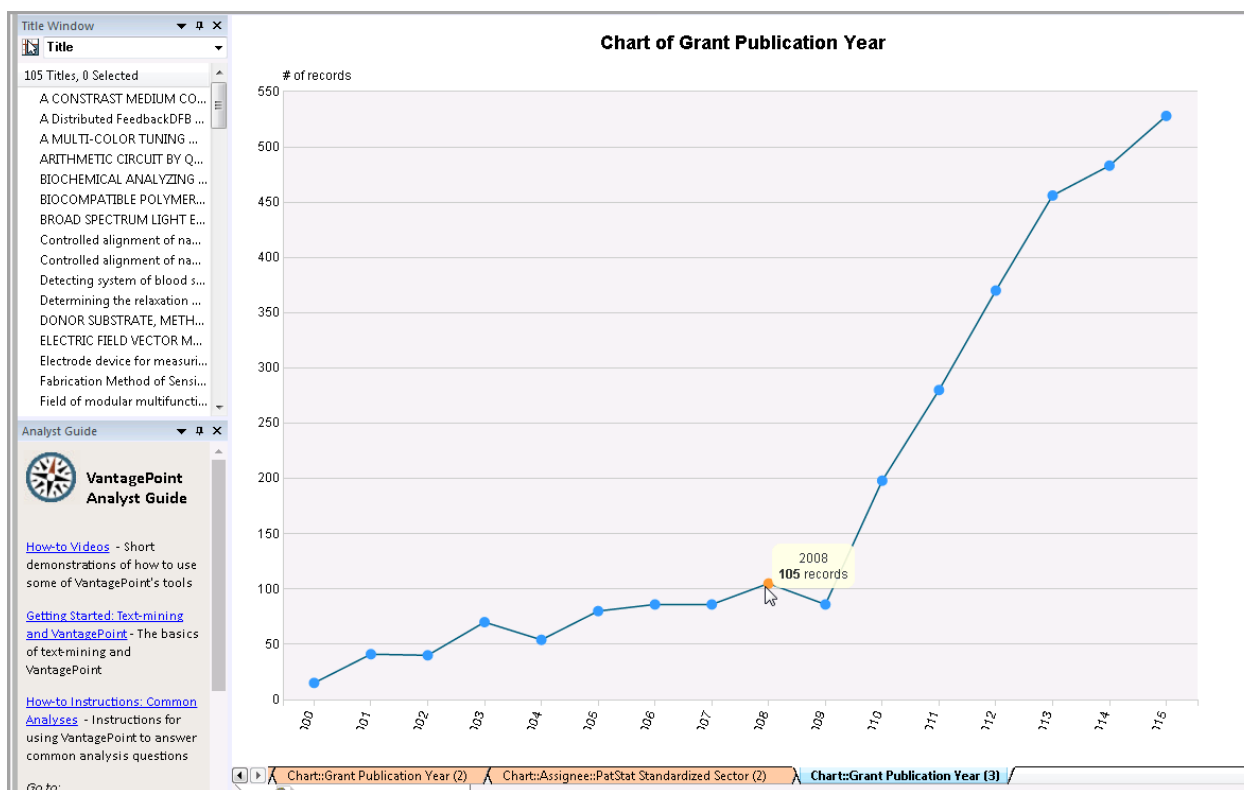
**Description:** Create a line chart from selected data in list.

**Requirements:** A dataset is open with the current view being a list. A set of cells must be selected.

From a List view, choose **Line Chart** from the Report ribbon.



Clicking on the data points in the Chart populates the Title Window with those records.



See the [Line Chart Controls](#) topic for details on customizing the Chart.

**See Also:**

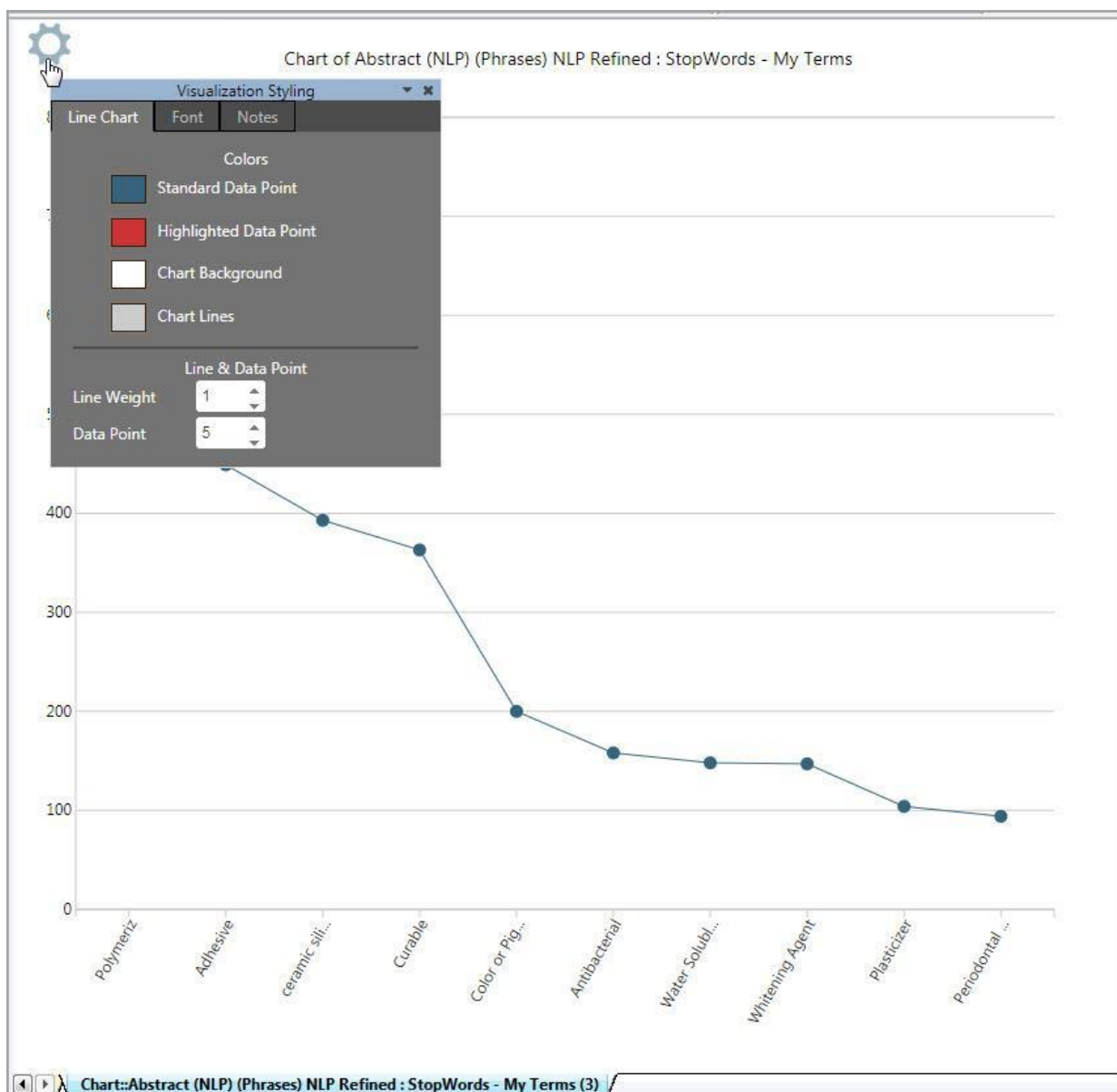
[Sticky Notes](#)

[Visualization Controls](#)

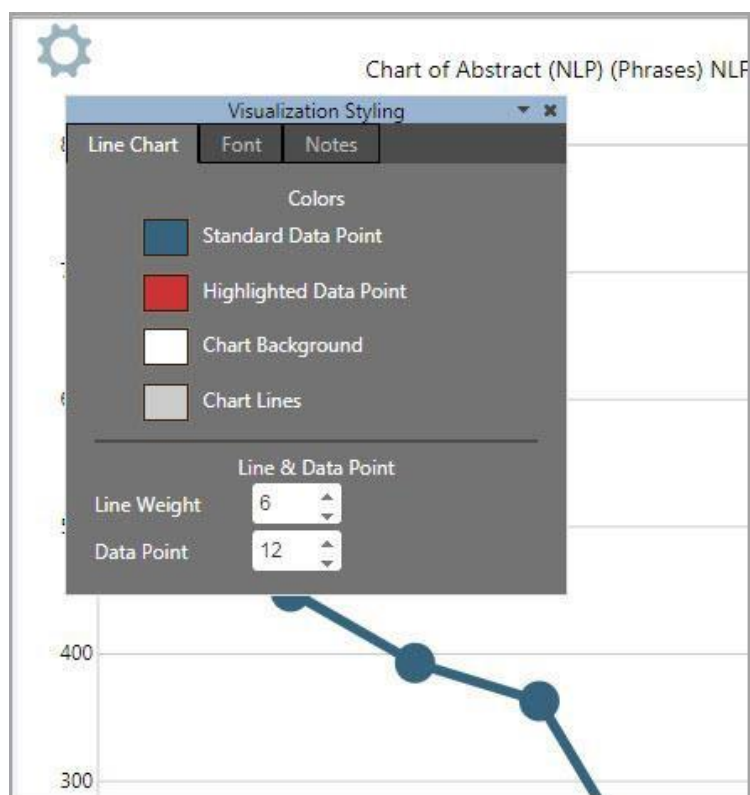
## LineChartCtrls

To display the Line Chart Controls, click the icon in the upper left of the Chart.

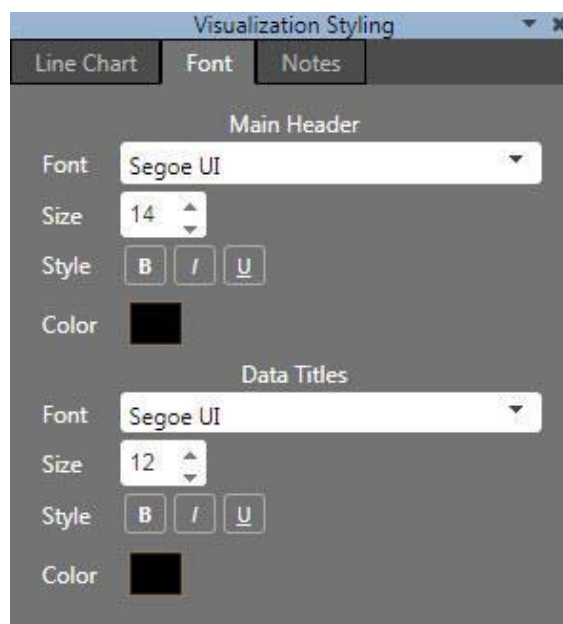
In Line Charts, change the Colors as explained in [Visualization Controls](#) (click on the color box, and select the color of your choice.)



Line weight and Data Point (node) size can be changed, as shown here:



Fonts, Font Size, Styles, and Colors for the Main Header (Chart Title) and Data Titles are set on the Font tab.



The Control dialog is dismissed by clicking the "x" in the upper right of the Control dialog.

See Also:

[Line Chart](#)

[Sticky Notes](#)

[Visualization Controls](#)

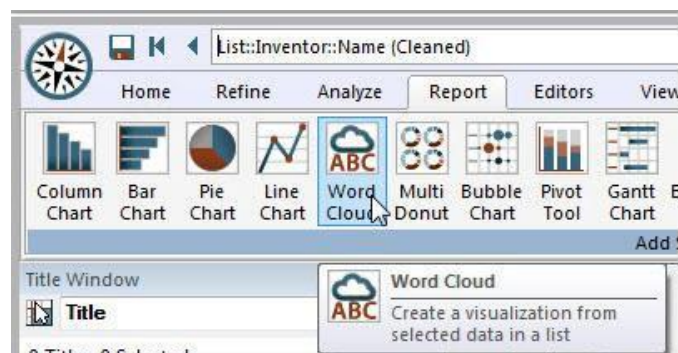


## Word Cloud

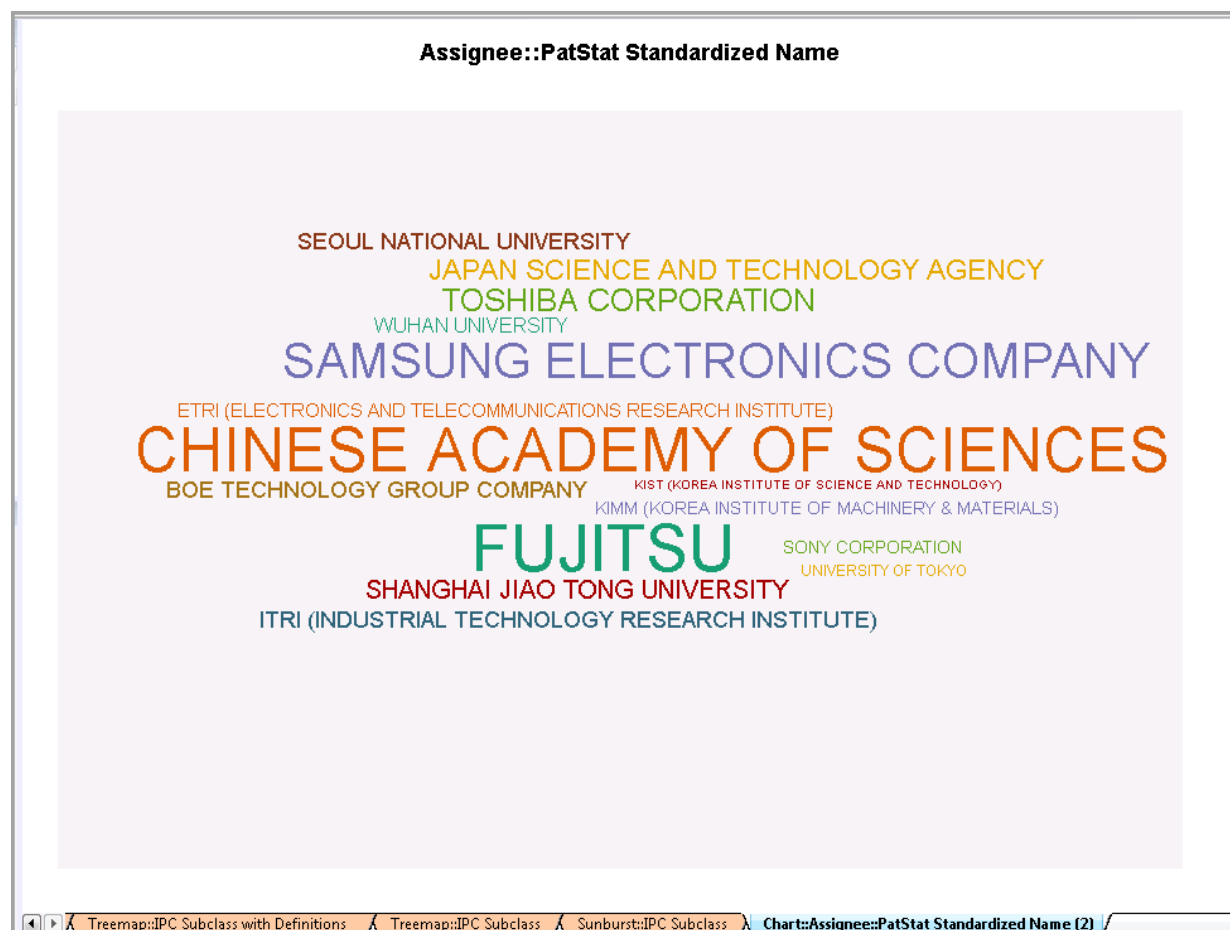
**Description:** Makes a Word Cloud of the selected list items.

**Requirements:** A dataset is open with the current view being a list. A set of cells must be selected.

Make a selection in a List and click **Word Cloud** on the Report ribbon.

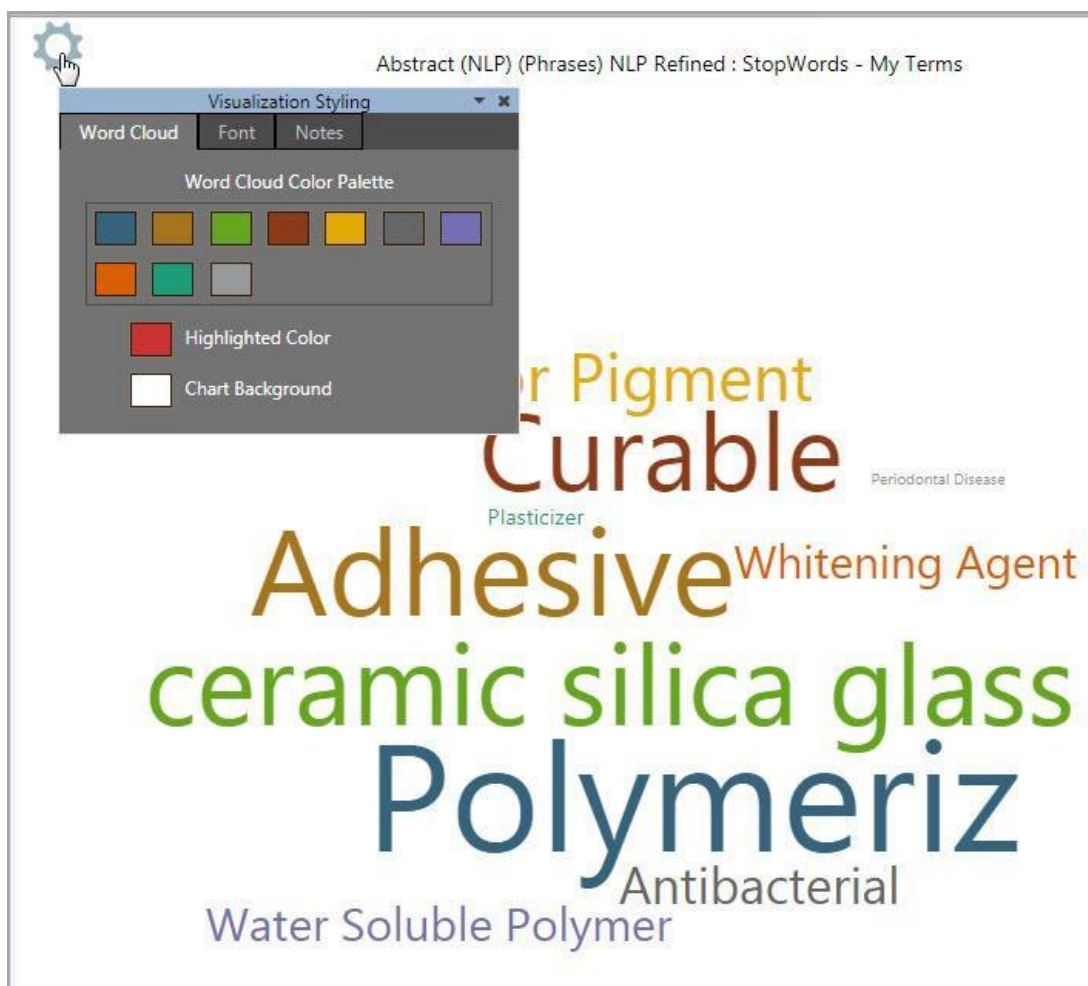


The following was created from a selected "Top 15" group in the Assignee:PatStat Standardized Name list. The print size of the Assignee name correlates to the number of records associated with that name. Fujitsu, with 165 records, is slightly larger than Chinese Academy of Sciences (149 records). By contrast, Seoul National University has 37 records. Clicking on the Assignee name causes the Records for that selection to display in the Title Window.



To display the Word Cloud Controls, click the icon in the upper left of the Visualization.

In Word Cloud Controls, change the Colors as explained in [Visualization Controls](#) (click on the color box for the Word Cloud Color Palette, Highlighted Color, or Chart Background, and select the color of your choice.)



Fonts, Font Size, Styles, and Colors for the Main Header (Chart Title) are set on the Font tab.

In this case, only the Font type for Data Titles can be changed.

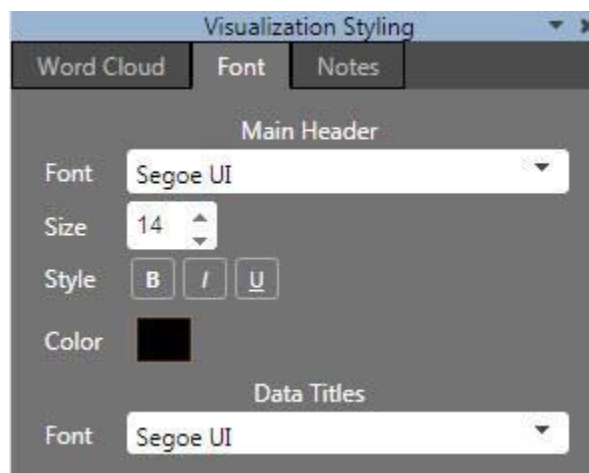
You can also add a Sticky Note to the Visualization.

The Control dialog is dismissed by clicking the "x" in the upper right of the Control dialog.

See Also:

[Sticky Notes](#)

[Visualization Controls](#)



## Multi Donut

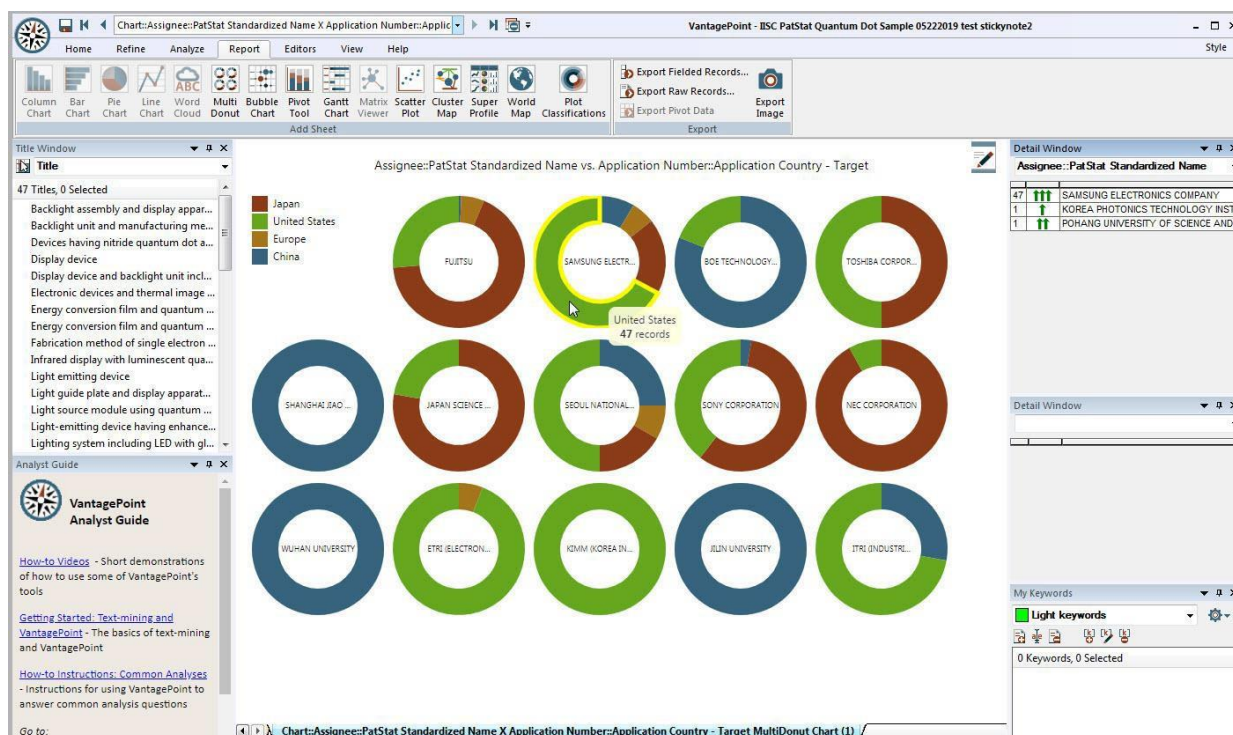
**Description:** Creates a multi donut chart with a set of categories.

**Requirements:** A dataset is open with fields with less than 8 items.

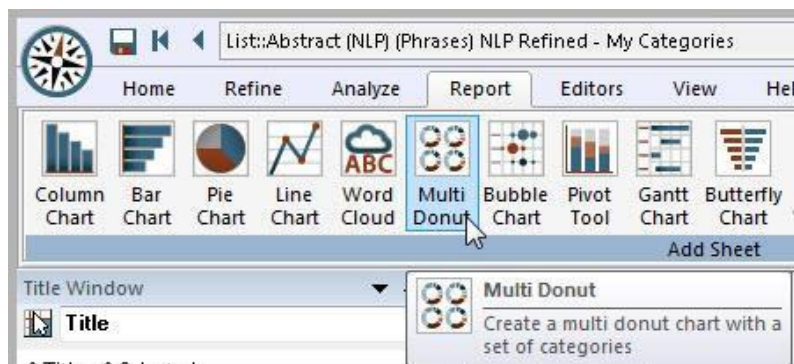
**Usage:** You can save and Load templates for common field selections.

Usage while viewing a Multi Donut Chart:

- Click on the title of the chart to edit it.
- Hover on a donut or donut section to see the number of records.
- Click on a donut or donut section to highlight it and update the Title and Detail windows for those records.



From the Report ribbon, choose **Multi Donut**.



These selections produced the Chart above:

MultiDonut Chart

## Multiple Donut Chart

Select a Template:

Select a Template

Step 1: Select a field to use for each donut chart

+ Assignee::PatStat Standardized Name

☒ Select a group
☐ All groups in field
☐ All items in field

Top 15

Step 2: Select Field for Categories

Application Number::Application Country - Target

\*Fields for Categories are limited to fields with 7 items or less

Step 3: Run / Save Template Template name:

?

Run

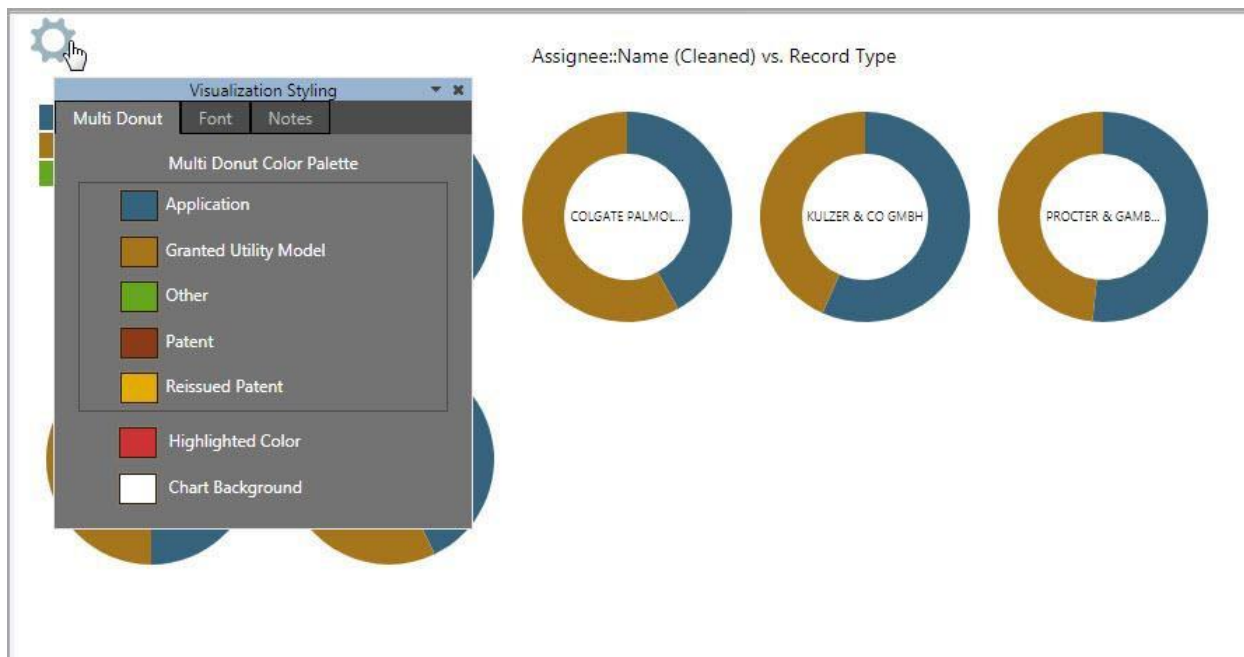
Save Template and Run

Save

Cancel

To display the Multi Donut Controls, click the icon in the upper left of the Visualization.

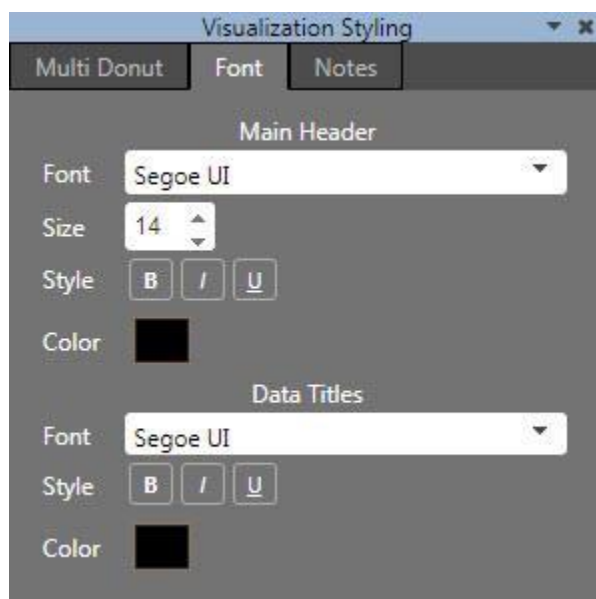
In Multi Donut Visualization, change the Colors as explained in [Visualization Controls](#) (click on the color box for the Multi Donut Color Palette, Highlighted Color, or Chart Background, and select the color of your choice.)



Fonts, Font Size, Styles, and Colors for the Main Header (Chart Title) and Data Titles are set on the Font tab. In this Visualization, the Font Size for Data Titles cannot be changed.

You can also add a Sticky Note to the Visualization.

The Control dialog is dismissed by clicking the "x" in the upper right of the Control dialog.



See Also:

[Sticky Notes](#)

[Visualization Controls](#)



## Bubble Chart

**Description:** Represents terms over time as bubbles along a string.

**Requirements:** A dataset is open with year fields

**Usage:** Can save and Load templates for common field selections.

Usage while viewing a Bubble Chart:

- Click on the title of the chart to edit it.
- Hover on a bubble to see the number of records. (The Setting to display the number of Records on the bubble is found on the Visualization controls dialog.)
- Click on a bubble to highlight it and update the Title and Detail windows for those records.
- Rearrange the x and y axes by clicking on the sort buttons “<>”. The order of sort switches from number of records (high to low), alphabetical (A to Z), and reverse alphabetical (Z to A).

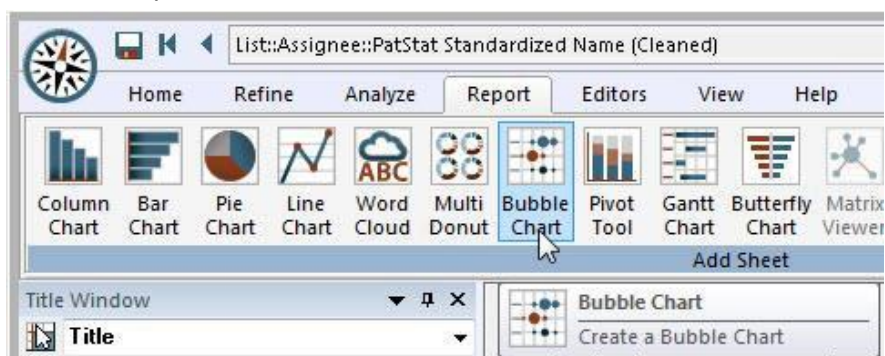


- Hover on the y-axis labels to see the total number of records in the dataset for that item.
- Click on the y-axis label to update the title and detail windows for the records represented in the bubble chart. This may be fewer records than the total if, as in the illustration below, the year field is a subset of years in the dataset.

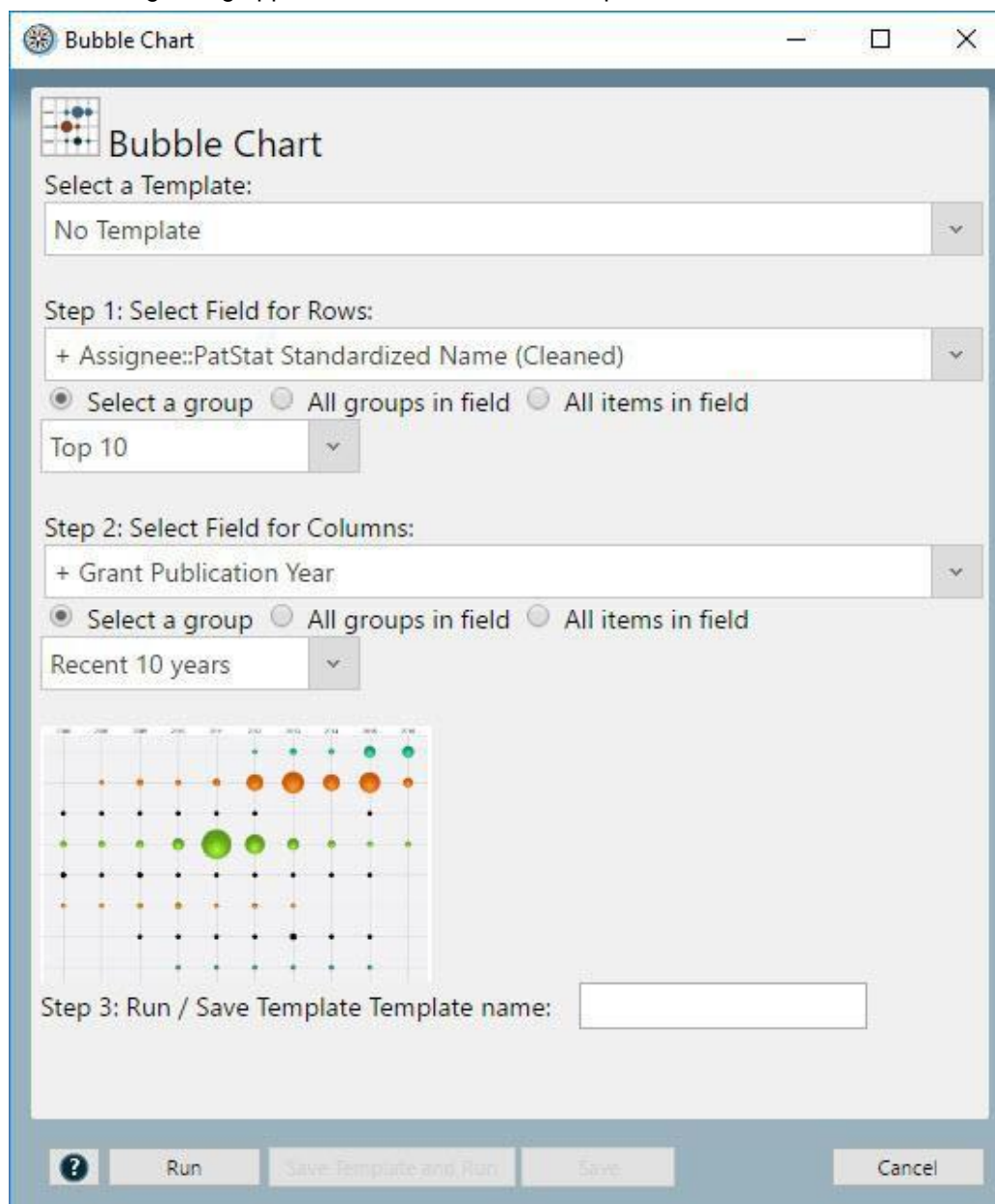




From the Report ribbon, select **Bubble Chart**.



The following dialog appears. Selections for the sample chart above are shown:



If you have previously run a Bubble Chart and saved a Template, select the desired template from the dropdown box. Otherwise, proceed to Step 1.

**Step 1: Select Field for Rows:**

In this case, the user selected an Assignee field name. This particular field contains groups, and the user chose the "Top 10" group name, but could have selected "All groups in the field" or "All items in the field".

**Step 2: Select Field for Columns:**

In this illustration, the user selected Grant Publication Year. You can type-to-filter in the field selection box to limit the field selection to, for example, only fields with "year" in the field name. The user also selected a group they created in that field "Recent 10 years".

**Step 3: Run / Save Template**

You can save your selections as a Template for easy retrieval when running this report in the future. If you do, enter a Template Name and click either **Save Template and Run** or **Save**.

When you are satisfied with your selections, click **Run**.

See the (next) Bubble Chart Controls topic for additional information on customizing the Chart.

See Also:

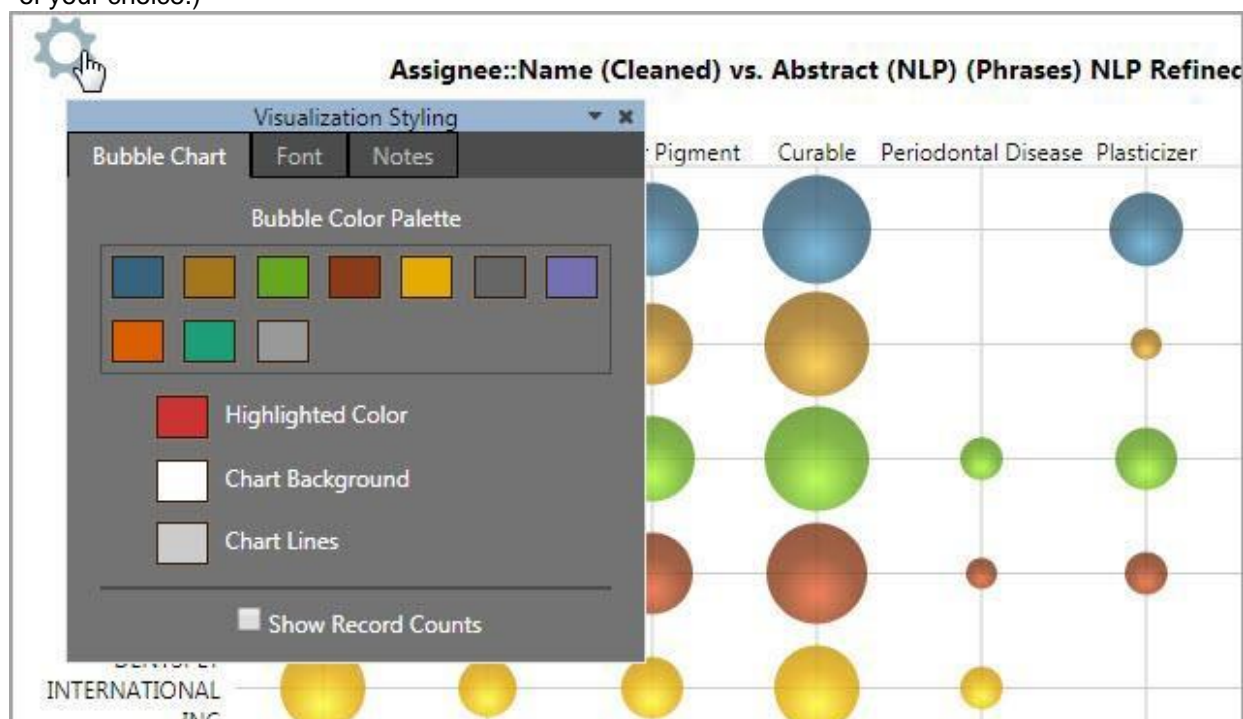
[Sticky Notes](#)

[Visualization Controls](#)

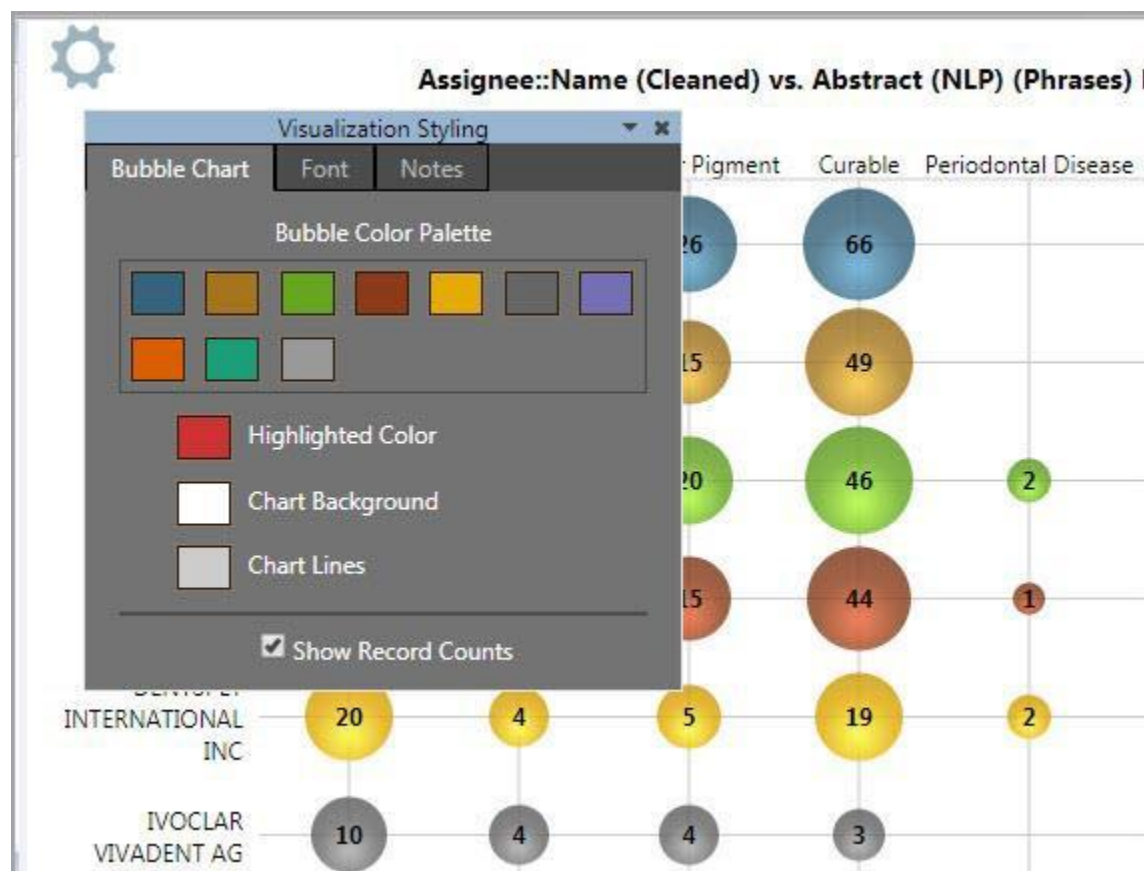
## BubbleChartCtrls

To display the Bubble Chart Controls, click the icon in the upper left of the Visualization.

In Bubble Chart Visualization, change the Colors as explained in [Visualization Controls](#) (click on the color box for the Bubble Color Palette, Highlighted Color, Chart Background, or Chart Lines and select the color of your choice.)



The option to Show Record Counts on the bubbles is found here:

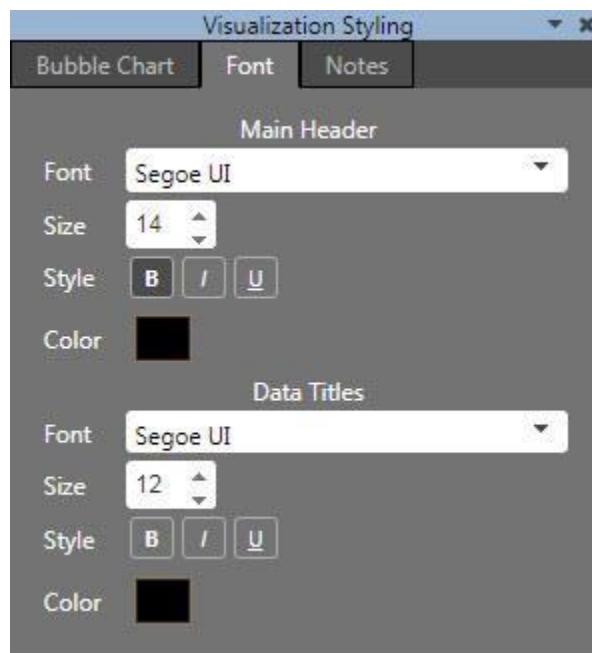


Fonts, Font Size, Styles, and Colors for the Main Header (Chart Title) and Data Titles are set on the Font tab.

The Control dialog is dismissed by clicking the "x" in the upper right of the Control dialog.

See Also:

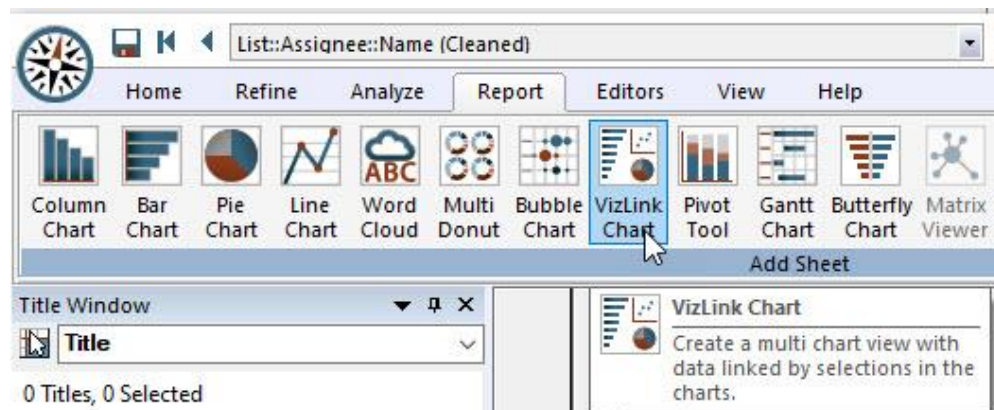
- [Bubble Chart](#)
- [Sticky Notes](#)
- [Visualization Controls](#)



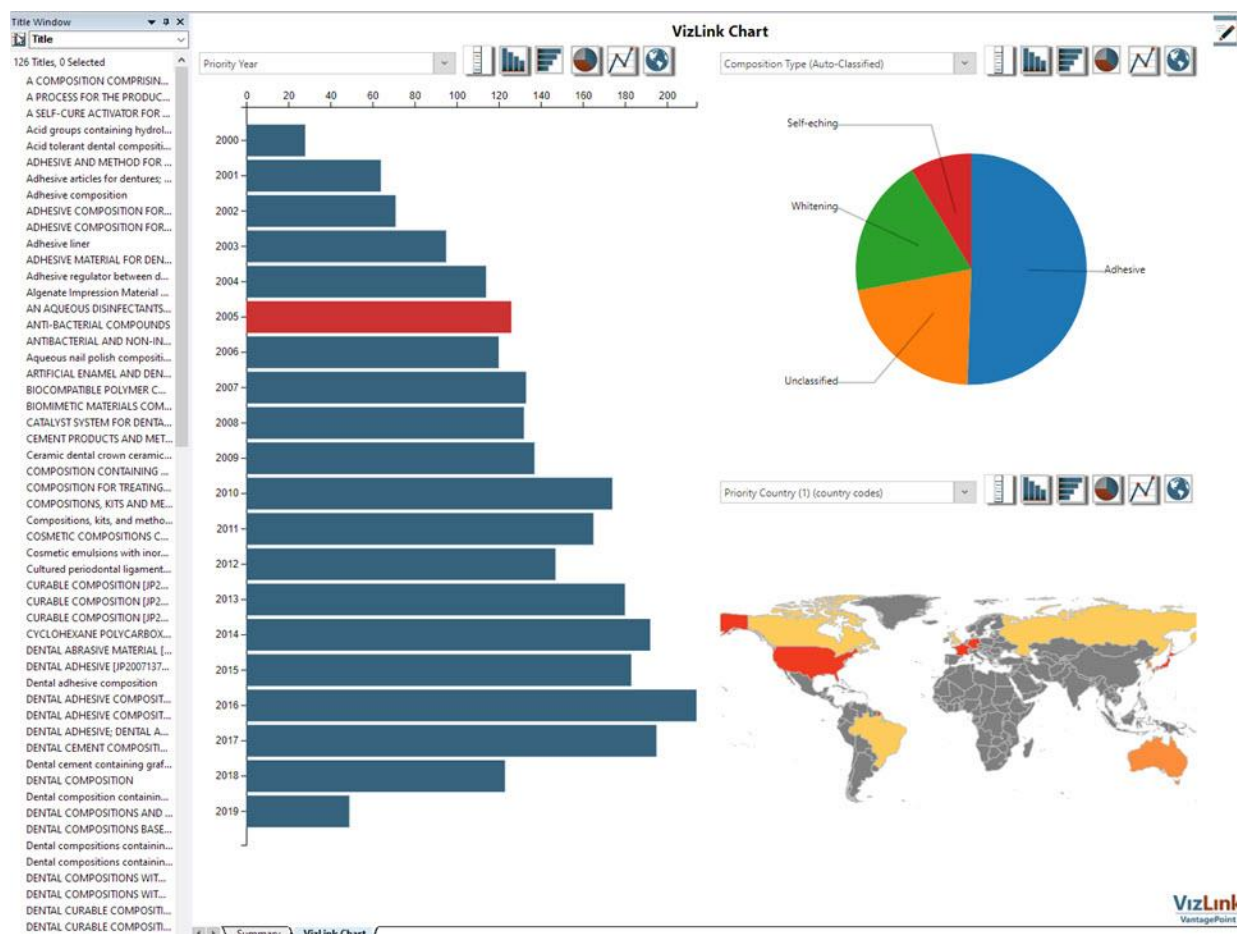
## VizLink Chart

VizLink Chart displays simultaneous views of three visualizations for various fields. Visualization choices include: Table, Column Chart, Bar Chart, Pie Chart, Line Chart, or World Map.

From the Reports Ribbon, choose **VizLink Chart**:



Select fields from each dropdown box and click on the icon for the type of chart to display:



Selection(s) made in Chart 1 (on the left) updates the data displayed in the charts on the right. In the example above, the user selected "EPO" in the Bar Chart. The 8 Titles associated with that selection appear in the Title View, and the Line Chart and Map for that selection are updated accordingly.



Selection(s) made in Chart 2 (upper right) filters Chart 3 (lower right) and updates the Title View and Detail Windows.

Selection(s) made in Chart 3 (lower right) updates only the Title View and Detail Windows.

Hovering over data points in each chart reveals the number of records associated with each.

Clicking the data points/countries in the charts on the right causes those records to show in the Title View. Click on a Country in the Map to "zoom in". Double-click on the map to zoom out.

The VizLink Chart offers [Sticky Notes](#), which allow the ability to record Notes with your Chart. To use this feature, click the Sticky Notes icon in the upper right.



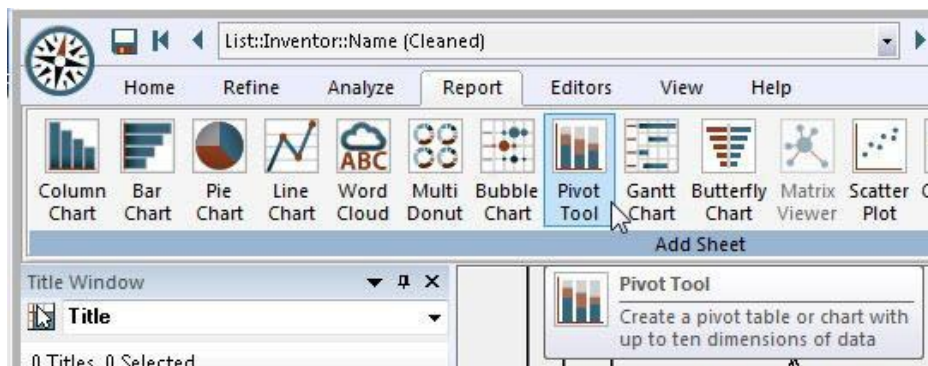
## **Pivot Tool**

*Description:* Create an editable Pivot Chart with up to ten fields.

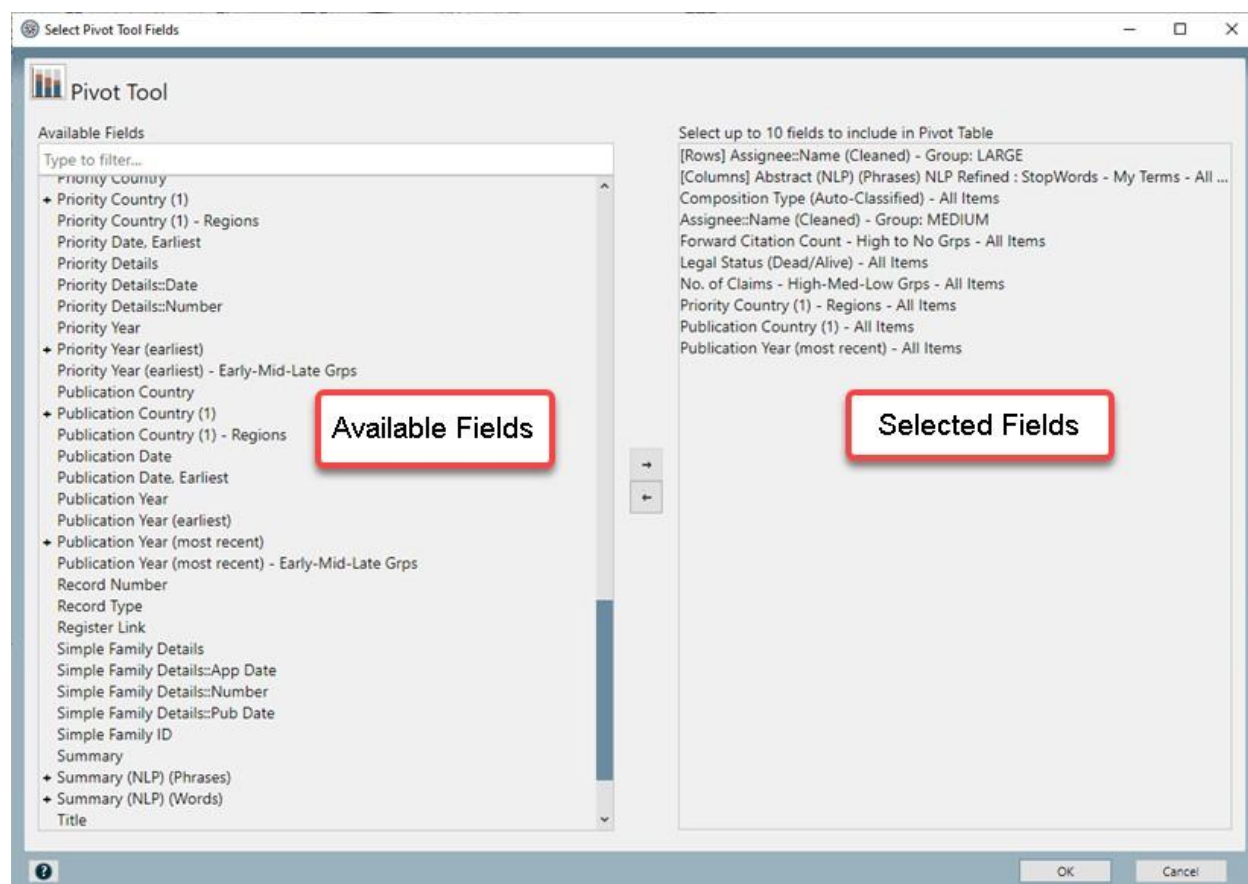
*Requirements:* A dataset is open.

The Pivot Tool offers a highly flexible environment to run analysis. With a selection of 8 types of visual output (3 tables and 5 graphs), users can work with as many as 10 fields to show a variety of graphical output.

From the Report ribbon, select **Pivot Tool**.



The Select Pivot Tool Fields dialog is presented, with two panels: Available Fields and Selected Fields.



Select Fields (or a group within a field) to use for the Pivot Table. "Type to filter" feature is available to narrow the Available Fields for quicker selection. Up to ten (10) fields can be selected. Fields with a "+" next to their name indicate a field with group(s). Fields can be added by double-clicking the field (or group) name or clicking and dragging the field name to the Selected Fields panel. Or, select the field name and use the arrows between the panels to add (or remove) fields.

The first field in the Selected Fields list is assigned to Rows; the second field in the list is assigned to Columns. This row/column combination is processed to give the first Pivot Tool output. You can rearrange the order of the selected fields by clicking and dragging the fields in the Selected Fields panel.

When you have finished selecting the fields, click **OK**.

VantagePoint processes the fields and presents the following working environment where the initial output is a table with rows and columns based on the values of the first two fields from the original field selection (see the illustration on the next page.) The remaining 8 fields are held in the "Parking Lot" (the diagonally striped area in the left panel). The user can drag those fields into the Row values or Column values area for inclusion in the Table.

The type of analysis is selected from the View Type dropdown. The analysis can be shown based on Record Count or Percentage of Total or Count Unique Values, Sum, Average, Median, or Maximum which will be based on the numeric field selected in the dropdown box that appears below this dropdown. Note that it **MUST** be a numeric field as the calculations are based on numeric data. Sorting on both columns and rows is possible using the arrows next to this dropdown. Sorting on both columns and rows is possible using the arrows next to this dropdown.

During the course of the analysis, the other 8 fields can be dragged from the "Parking Lot" and dropped into either the Row or Column areas.



**View Type**

**Column values**

**Sort columns and rows**

**Row values**

**"Parking Lot"**

| Table                                    | Record Count | Assignee:Name (Cleaned): LARGE (2) | 3M CO | DENTSPY | KURARAY | SHOFU INC | TOKUYAMA | Totals |
|--|--------------|------------------------------------|-------|---------|---------|-----------|----------|--------|
| Composition Type (Auto-Classified)       | (NO RECORDS) |                                    | 15    | 8       | 2       | 9         | 2        | 36     |
| Forward Citation Count - High to No Grps |              |                                    | 42    | 20      | 58      | 55        | 97       | 272    |
| Legal Status (Dead/Alive)                |              |                                    | 1     | 4       | 4       | 1         | 1        | 11     |
| No. of Claims - High-Med-Low Grps        |              |                                    | 15    | 5       | 15      | 20        | 26       | 81     |
| Priority Country (1) - Regions           |              |                                    | 49    | 19      | 44      | 48        | 66       | 225    |
| Publication Country (1)                  |              |                                    |       | 2       | 1       | 2         |          | 5      |
| Publication Year (most recent)           |              |                                    | 27    | 25      | 24      | 15        | 38       | 129    |
| Assignee:Name (Cleaned): MEDIUM (2)      |              |                                    | 1     |         | 2       | 5         | 9        | 17     |
|  |              |                                    | 61    | 70      | 101     | 85        | 142      | 458    |
|  |              |                                    | 3     | 1       |         | 3         | 7        | 14     |
|  |              |                                    | 4     | 8       | 14      | 5         | 19       | 50     |
| Totals                                   |              |                                    | 145   | 96      | 114     | 128       | 174      | 656    |

Filtering in all fields is possible. Click the downward-pointing arrow next to the Field name. In the illustration below, the NO RECORDS values are filtered from the row values of the Assignee Cleaned field. The column fields offer a similar filtering feature where the (NO RECORDS) displayed in My Terms will also be filtered.

You could also use the "Filter values" box to filter content matching your entry; for example, for a Year field you could enter "<2010" and years 2010 and higher would be removed. Or, of the Terms displayed below, for example, you could enter filter value "poly", and only "Polymerize" and "Water Soluble Polymer" would be displayed.

Abstract (NLP) (Phrases) NLP Refined : StopWords : My Terms X Assignee:Name (Cleaned): LARGE (2): LARGE

**Assignee:Name (Cleaned): LARGE (2):**

Filter values

Select All Select None

(NO RECORDS) (8705)

3M CO (2348)

DENTSPY (1784)

KURARAY (1650)

SHOFU INC (749)

TOKUYAMA (1036)

Apply Cancel

| Table                                       | Record Count | Assignee:Name (Cleaned): LARGE (2) | 3M CO | DENTSPY | KURARAY | SHOFU INC | TOKUYAMA | Totals |
|---|--------------|------------------------------------|-------|---------|---------|-----------|----------|--------|
| Composition Type (Auto-Classified)          | (NO RECORDS) |                                    | 15    | 8       | 2       | 9         | 2        | 36     |
| Forward Citation Count - High to No Grps    |              |                                    | 42    | 20      | 58      | 55        | 97       | 272    |
| Legal Status (Dead/Alive)                   |              |                                    | 1     | 4       | 4       | 1         | 1        | 11     |
| No. of Claims - High-Med-Low Grps           |              |                                    | 15    | 5       | 15      | 20        | 26       | 81     |
| Priority Country (1) - Regions              |              |                                    | 49    | 19      | 44      | 48        | 66       | 225    |
| Publication Country (1)                     |              |                                    |       | 2       | 1       | 2         |          | 5      |
| Publication Year (most recent)              |              |                                    | 27    | 25      | 24      | 15        | 38       | 129    |
| Assignee:Name (Cleaned): MEDIUM (2): MEDIUM |              |                                    | 1     |         | 2       | 5         | 9        | 17     |
|   |              |                                    | 61    | 70      | 101     | 85        | 142      | 458    |
|   |              |                                    | 3     | 1       |         | 3         | 7        | 14     |
|   |              |                                    | 4     | 8       | 14      | 5         | 19       | 50     |
| Totals                                      |              |                                    | 145   | 96      | 114     | 128       | 174      | 656    |

**Note:** It is important to note that any field with a filter applied will affect further analysis using other fields.



In the image below, the user is in the process of adding the "Legal Status" field name to the display by clicking and dragging it from the "Parking Lot" to the Row values area.

Abstract (NLP) (Phrases) NLP Refined : StopWords - My Terms X Assignee:Name (Cleaned): LARGE (2): LARGE

| Table                                       | Record Count  | Assignee:Name (Cleaned): LARGE (2): LARGE |
|---|---|---|
| Composition Type (Auto-Classified)          | Abstract (NLP) (Phrases) NLP Refined : StopWords - My Terms | Assignee:Name (Cleaned)...                |
| Forward Citation Count - High to No Grps    | Legal Status (Dead/Alive)                                   | 3M CO DENTSPY KURARAY SHOFU INC TOKUYAMA  |
| No. of Claims - High-Med-Low Grps           |   | Adhesive 42 20 58 55 97                   |
| Publication Country (1)                     |   | Antibacterial 1 4 4 1 1                   |
| Assignee:Name (Cleaned): MEDIUM (2): MEDIUM |   | Color or Pigment 15 5 15 20 26            |
| Publication Year (most recent)              |   | Curable 49 19 44 48 66                    |
| Priority Country (1) - Regions              |   | Periodontal Disease 2 1 2                 |
|   |   | Photoinitiator 27 25 24 15 38             |
|   |   | Plasticizer 1 2 5 5                       |
|   |   | Polymerize 61 70 101 85 142               |
|   |   | Water Soluble Polymer 3 1 3 7             |
|   |   | Whitening Agent 4 8 14 5 19               |
|   |   | Totals 130 88 112 119 172                 |

Result:

Abstract (NLP) (Phrases) NLP Refined : StopWords - My Terms X Assignee:Name (Cleaned): LARGE (2): LARGE

| Table                                       | Record Count  | Assignee:Name (Cleaned): LARGE (2): LARGE              |
|---|---|--|
| Composition Type (Auto-Classified)          | Abstract (NLP) (Phrases) NLP Refined : StopWords - My Terms | Assignee:Name (Cleaned)...                             |
| Forward Citation Count - High to No Grps    | Legal Status (Dead/Alive)                                   | Abstract (NLP) (Phrases) ... Legal Status (Dead/Alive) |
| No. of Claims - High-Med-Low Grps           |   | Adhesive ALIVE 31 17                                   |
| Publication Country (1)                     |   | DEAD 26 13   |
| Assignee:Name (Cleaned): MEDIUM (2): MEDIUM |   | Antibacterial ALIVE 1 4                                |
| Publication Year (most recent)              |   | DEAD 3   |
| Priority Country (1) - Regions              |   | Color or Pigment ALIVE 12 5                            |
|   |   | DEAD 7 2   |
|   |   | Curable ALIVE 43 15                                    |
|   |   | DEAD 26 12   |
|   |   | Periodontal Disease ALIVE 2                            |
|   |   | DEAD   |

As you can see, the placement of the "Legal Status" field name in the Row values panel affects the table:

Abstract (NLP) (Phrases) NLP Refined : StopWords - My Terms X Assignee:Name (Cleaned): LARGE (2): LARGE

| Table                                       | Record Count  | Assignee:Name (Cleaned): LARGE (2): LARGE              |
|---|---|--|
| Composition Type (Auto-Classified)          | Legal Status (Dead/Alive)                                   | Assignee:Name (Cleaned)...                             |
| Forward Citation Count - High to No Grps    | Abstract (NLP) (Phrases) NLP Refined : StopWords - My Terms | Legal Status (Dead/Alive) Abstract (NLP) (Phrases) ... |
| No. of Claims - High-Med-Low Grps           |   | Adhesive 31 17   |
| Publication Country (1)                     |   | Antibacterial 1 4                                      |
| Assignee:Name (Cleaned): MEDIUM (2): MEDIUM |   | Color or Pigment 12 5                                  |
| Publication Year (most recent)              |   | Curable 43 15  |
| Priority Country (1) - Regions              |   | Periodontal Disease 2                                  |
|   |   | Photoinitiator 26 23                                   |
|   |   | Plasticizer  |
|   |   | Polymerize 56 64                                       |
|   |   | Water Soluble Polymer 3 1                              |
|   |   | Whitening Agent 3 6                                    |
|   |   | Adhesive 26 13   |
|   |   | Antibacterial 3  |
|   |   | Color or Pigment 7 2                                   |
|   |   | Curable 26 12  |
|   |   | Periodontal Disease                                    |
|   |   | Photoinitiator   |

## Pivot Tool Sample View Types

The Pivot Tool offers a highly flexible environment to run analysis. With a selection of 8 types of visual output (3 tables and 5 graphs), users can work with as many as 10 fields to show a variety of graphical output.

The following images give a comparison between the different View Types to allow an understanding of what they have to offer. We hope this helps in understanding what to consider emphasizing with an analysis.

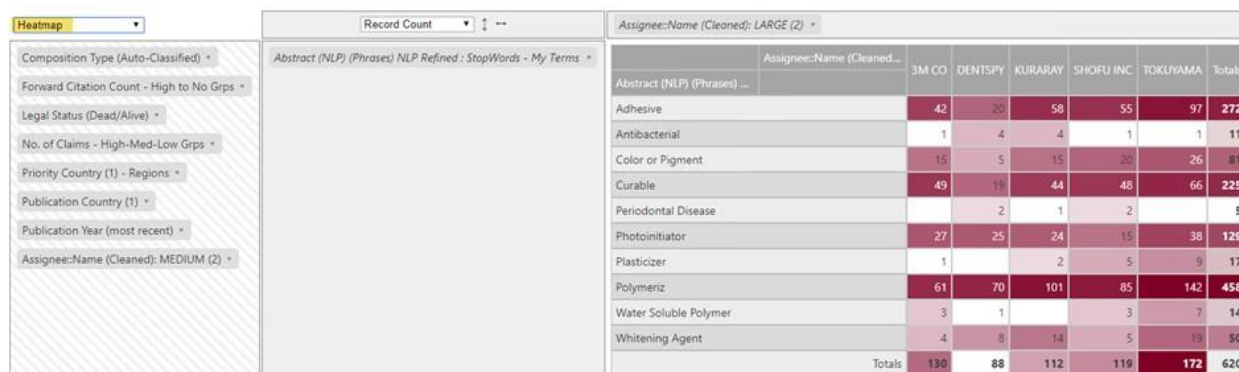
### Table

|  |   |   |
|--|---|---|
| Table                                    | Record Count  | Assignee:Name (Cleaned): LARGE (2)              |
| Composition Type (Auto-Classified)       | Abstract (NLP) (Phrases) NLP Refined : StopWords - My Terms | Assignee:Name (Cleaned)...                      |
| Forward Citation Count - High to No Grps |   | 3M CO DENTSPY KURARAY SHOFU INC TOKUYAMA Totals |
| Legal Status (Dead/Alive)                |   | Abstract (NLP) (Phrases) ...                    |
| No. of Claims - High-Med-Low Grps        |   | (NO RECORDS) 15 8 2 9 2 36                      |
| Priority Country (1) - Regions           |   | Adhesive 42 20 58 55 97 272                     |
| Publication Country (1)                  |   | Antibacterial 1 4 4 1 1 11                      |
| Publication Year (most recent)           |   | Color or Pigment 15 5 15 20 26 81               |
| Assignee:Name (Cleaned): MEDIUM (2)      |   | Curable 49 19 44 48 66 225                      |
|  |   | Periodontal Disease 2 1 2 5                     |
|  |   | Photoinitiator 27 25 24 15 38 129               |
|  |   | Plasticizer 1 2 5 9 17                          |
|  |   | Polymeriz 61 70 101 85 142 458                  |
|  |   | Water Soluble Polymer 3 1 3 7 14                |
|  |   | Whitening Agent 4 8 14 5 19 50                  |
|  |   | Totals 145 96 114 128 174 656                   |

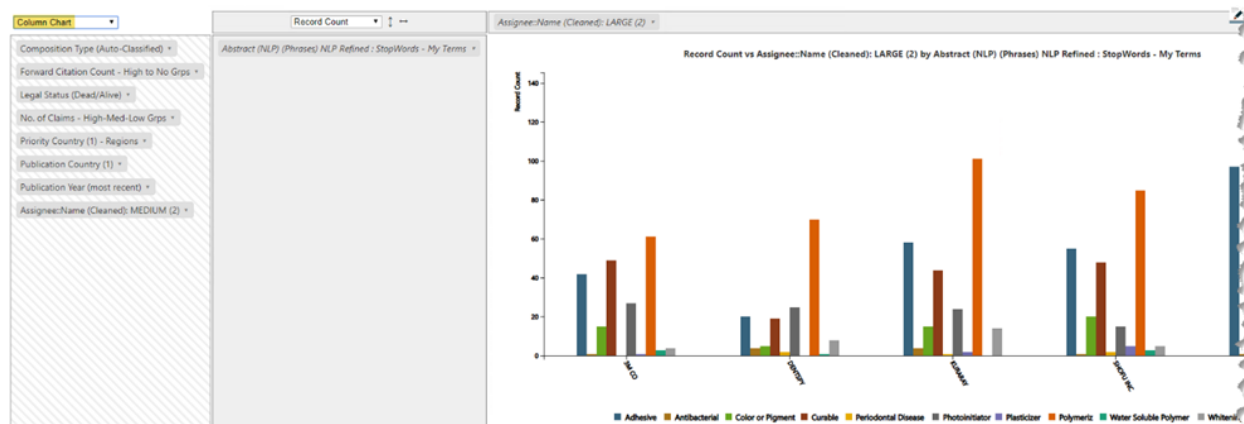
**Table Barchart** offers both a visual comparison and actual Counts (or Percentage of total) for accurate interpretation. The row field items ("My Terms", in this example) are listed down the table with their corresponding Record Count for each column field item (in this case Large Company), along with a Barchart to help visualize relative counts.

|  |   |   |
|--|---|---|
| Table Barchart                           | Record Count  | Assignee:Name (Cleaned): LARGE (2)              |
| Composition Type (Auto-Classified)       | Abstract (NLP) (Phrases) NLP Refined : StopWords - My Terms | Assignee:Name (Cleaned)...                      |
| Forward Citation Count - High to No Grps |   | 3M CO DENTSPY KURARAY SHOFU INC TOKUYAMA Totals |
| Legal Status (Dead/Alive)                |   | Abstract (NLP) (Phrases) ...                    |
| No. of Claims - High-Med-Low Grps        |   | Adhesive 42 20 58 55 97 272                     |
| Priority Country (1) - Regions           |   | Antibacterial 1 4 4 1 1 11                      |
| Publication Country (1)                  |   | Color or Pigment 15 5 15 20 26 81               |
| Publication Year (most recent)           |   | Curable 49 19 44 48 66 225                      |
| Assignee:Name (Cleaned): MEDIUM (2)      |   | Periodontal Disease 2 1 2 5                     |
|  |   | Photoinitiator 27 25 24 15 38 129               |
|  |   | Plasticizer 1 2 5 9 17                          |
|  |   | Polymeriz 61 70 101 85 142 458                  |
|  |   | Water Soluble Polymer 3 1 3 7 14                |
|  |   | Whitening Agent 4 8 14 5 19 50                  |
|  |   | Totals 130 88 112 119 172 620                   |

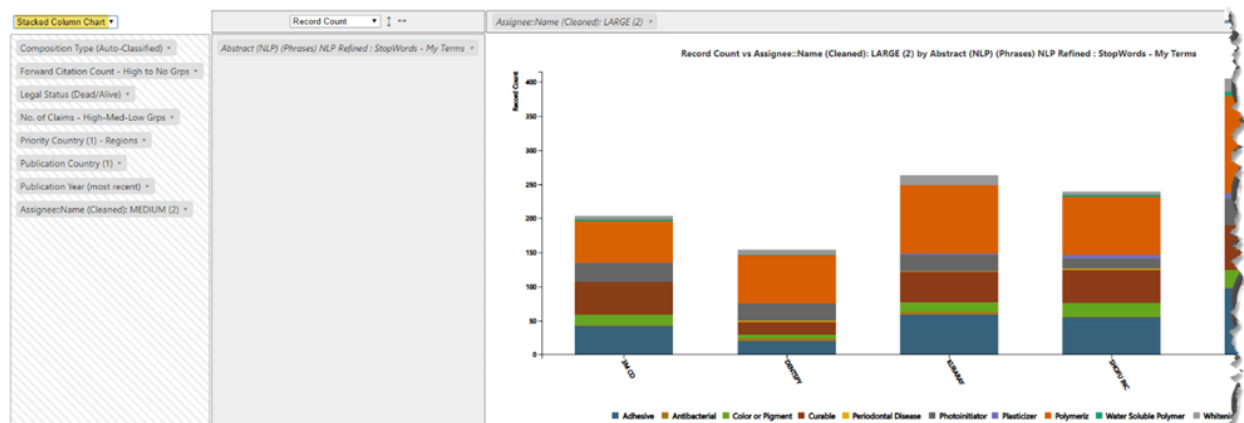
**Heatmap** can give a more dramatic effect along with actual counts.



**Column Charts** will identify the row field items as separate colored vertical columns ("My Terms", in this illustration), and group them based on labeled column field items (Large Company). As a result, in this case, for each company one can see what areas are being developed more than others.

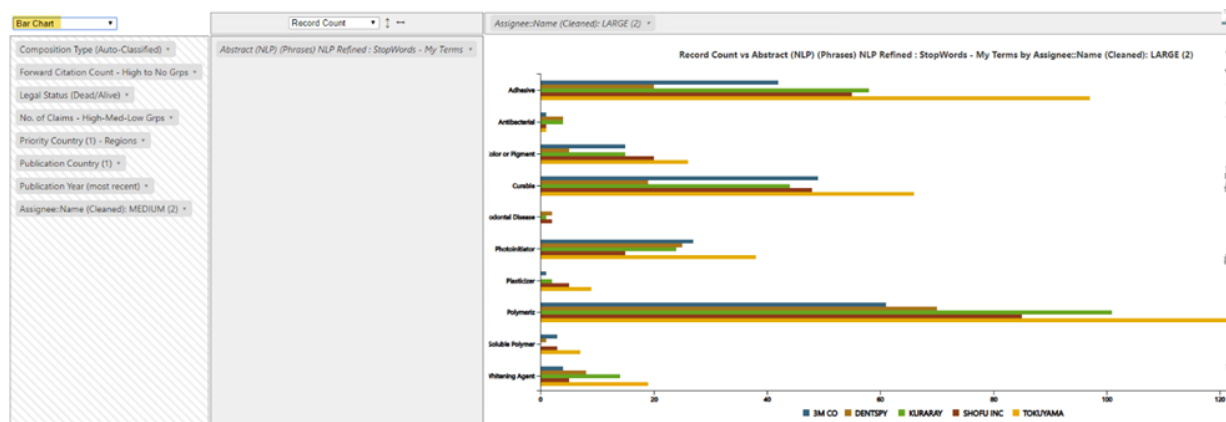


**Stacked Column Charts** stacks the row field items ("My Terms"). In this manner, along with seeing each company's technical focus, it is possible to see relative total counts between the four companies.

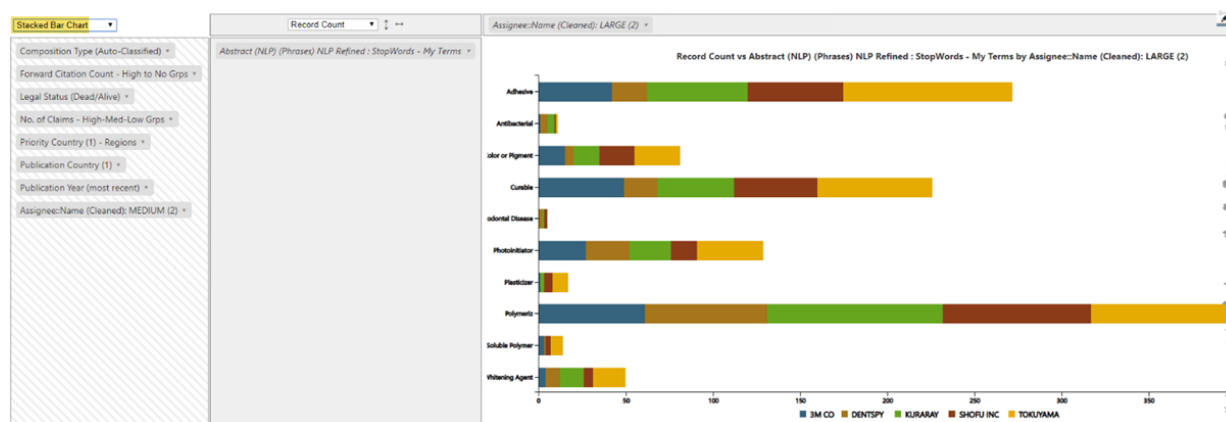




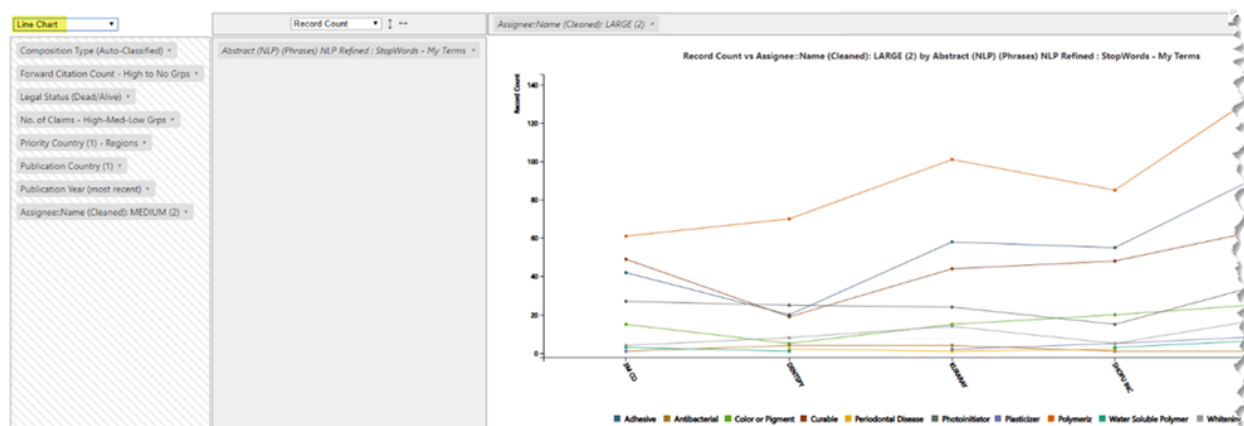
**Bar Charts** are different from the Column Charts in that the column field items, in this case Large Companies, are shown in separate color horizontal bars and grouped based on labeled row field items, in this case "My Terms". From this it shows the relative development of each technology category by the large companies.



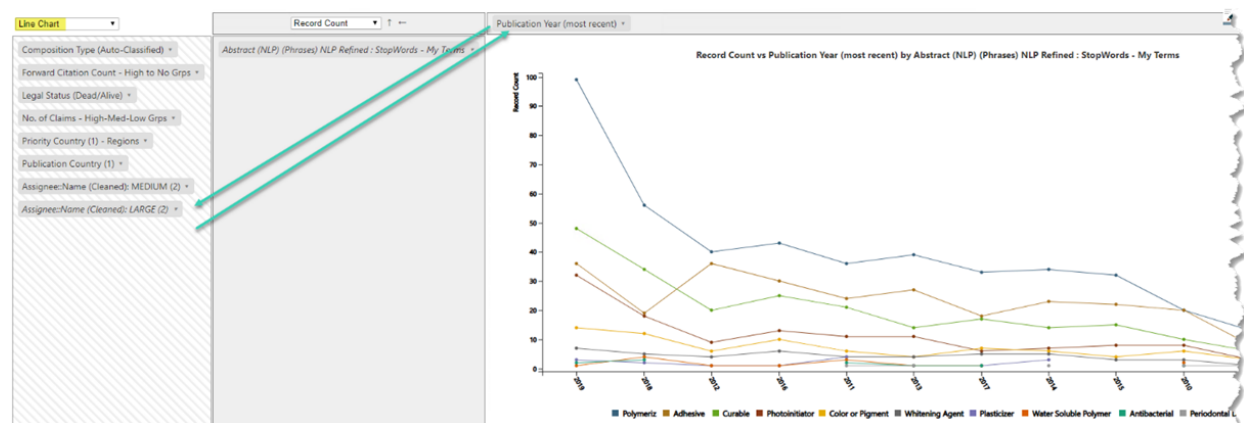
**Stacked Bar Chart** presents the Bar Chart data with each column field item (Large Company) assigned a color organized as a stacked horizontal bar and aligned with each labeled row field item (My Terms). In terms of this example, the graphic shows overall total relative numbers for the technologies and for each technology, the relative company focus. In other words, the two most active areas of technology are polymerizing agents and adhesives and within these areas, TOKUYAMA and SHOFU INC are most active.



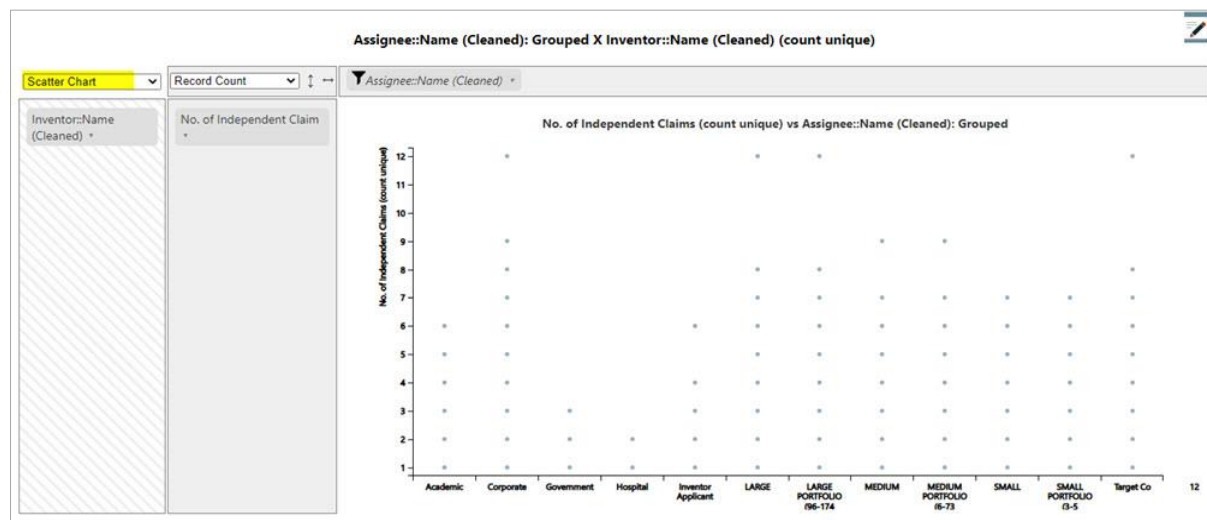
**Line Charts** are best with showing trends, i.e., changes over time. Even so, we thought it best to complete this discussion about the different View Types using the same data. Think in terms of a Stacked Chart where the stacks of row field items are replaced with individual data points with lines that intersect with each labeled column field item that runs the X axis.



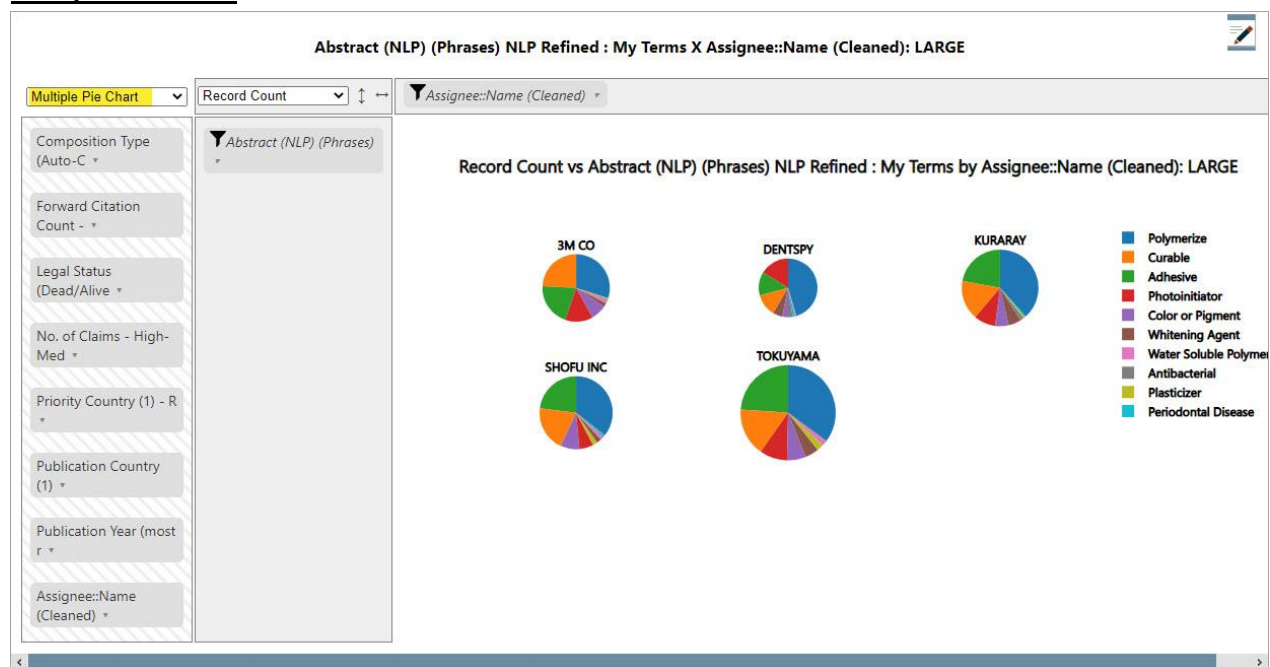
It makes more sense to replace the column field with a time-related field like Publication Year (most recent), which is available in the "Parking Lot". This way we can see the patent publication time trend for each row field item, that in this case are the 8 defined My Terms.



**Scatter Charts** show the distribution of counts for a particular category.



## Multiple Pie Chart



## Excel Export Format

The output for this report allows for easy Copy & Paste into Excel.

Abstract (NLP) (Phrases) NLP Refined : My Terms X Assignee::Name (Cleaned): LARGE

Excel Export Format | Record Count | Assignee::Name (Cleaned)

Composition Type (Auto-C) | Forward Citation Count - | Legal Status (Dead/Alive) | No. of Claims - High-Med | Publication Country (1) | Publication Country (1) | Publication Year (most r) | Assignee::Name (Cleaned)

Abstract (NLP) (Phrases)

| Abstract (NLP) (Phrases) NLP Refined : My Terms | 3M CO | DENTSPY | KURARAY | SHOFU INC | TOKUYAMA |
|---|-------|---------|---------|-----------|----------|
| Adhesive  | 42    | 20      | 58      | 55        | 97       |
| Antibacterial                                   | 1     | 4       | 4       | 1         | 1        |
| Color or Pigment                                | 15    | 5       | 15      | 20        | 26       |
| Curable   | 49    | 19      | 44      | 48        | 66       |
| Periodontal Disease                             |       |         | 2       | 1         | 2        |
| Photoinitiator                                  | 27    | 25      | 24      | 15        | 38       |
| Plasticizer                                     | 1     |         | 2       | 5         | 9        |
| Polymerize                                      | 61    | 70      | 101     | 85        | 142      |
| Water Soluble Polymer                           | 3     | 1       |         | 3         | 7        |
| Whitening Agent                                 | 4     | 8       | 14      | 5         | 19       |

See Also:

[Pivot Tool](#)

## Gantt Chart

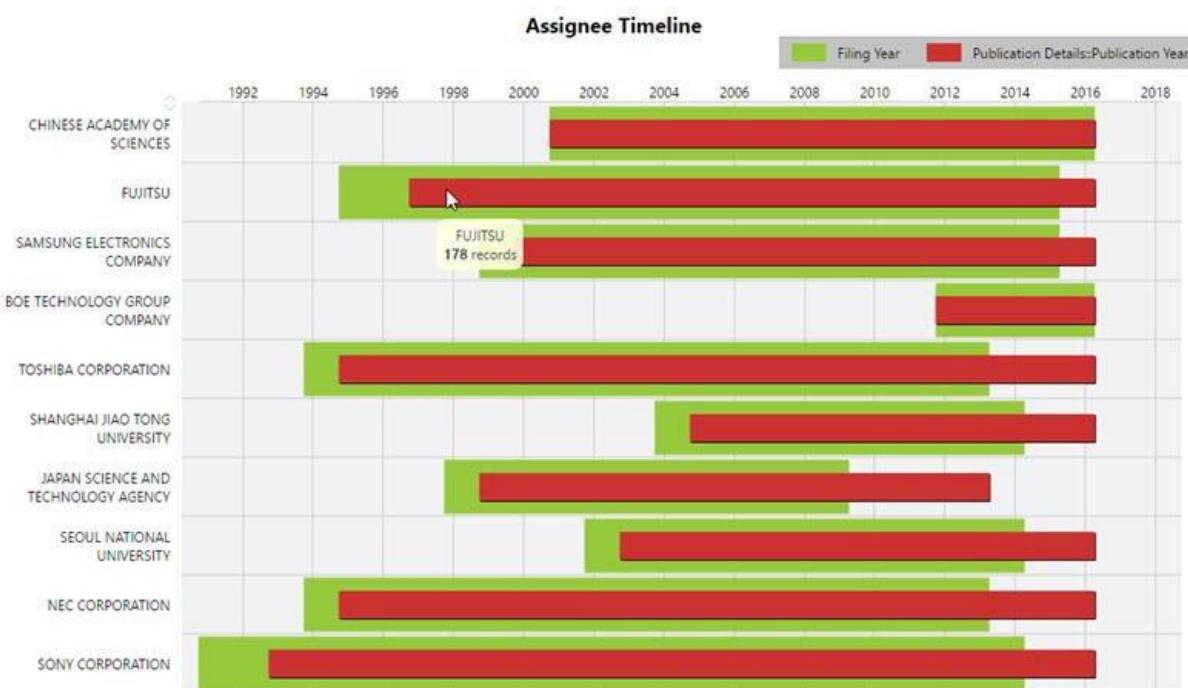
**Notes:** Create a Gantt chart of company's active years. Can plot two year fields (e.g., priority and publication).

**Requirements:** A saved dataset is open with organization and Data Type: Year fields.

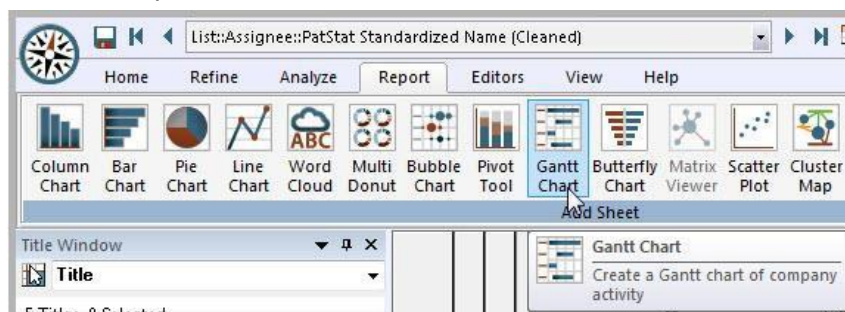
**Usage:** Quickly compare the range of active years across multiple organizations.

Viewing a Gantt Chart:

- Click on the Title of the chart to edit it.
- Hover on a timeline bar or the y-axis labels to see the number of records.
- Click on a timeline bar or y-axis label to update the Title and Detail windows for those records.
- Rearrange the y axis by clicking on the sort buttons (top left of the y axis).  
The order of sort switches from number of records (high to low), alphabetical (A to Z), and reverse alphabetical (Z to A).



From the Report ribbon, select **Gantt Chart**.



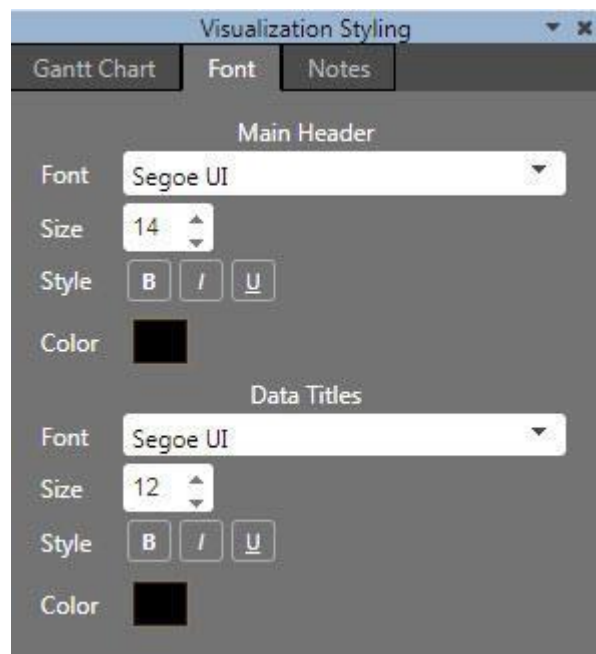
The report above (using two Year fields) was created using these selections:

To display the Gantt Chart Controls, click the icon in the upper left of the Chart.

In Bubble Chart Visualization, change the Colors as explained in [Visualization Controls](#) (click on the color box for the Chart Colors, Highlighted Color, Chart Background, or Chart Lines and select the color of your choice.)



Fonts, Font Size, Styles, and Colors for the Main Header (Chart Title) and Data Titles are set on the Font tab.



You can also add a Sticky Note to the Chart.  
The Control dialog is dismissed by clicking the "x" in the upper right of the Control dialog.

See Also:

[Sticky Notes](#)

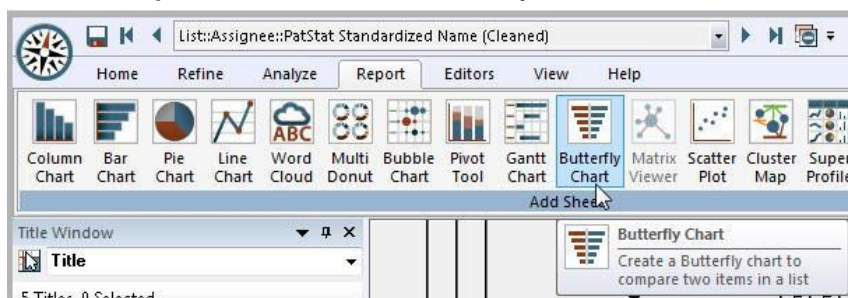
[Visualization Controls](#)

## Butterfly Chart

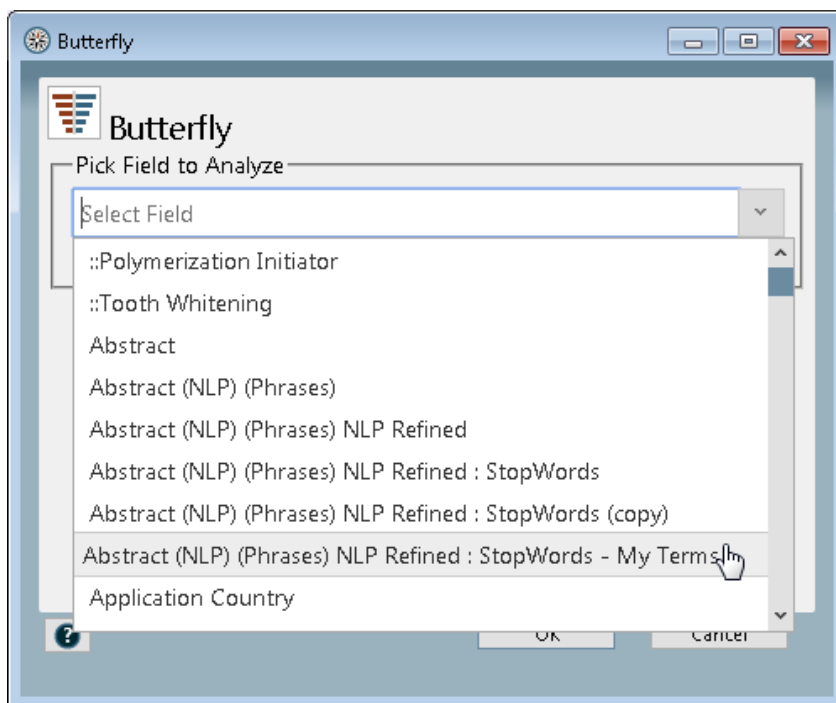
*Description:* Create a Butterfly Chart (horizontal bar charts) for comparing two items in a List.

*Requirement:* Must be viewing a List with two items selected.

1. In a List view, select two items for comparison.
2. From the **Report** ribbon, select the **Butterfly Chart** icon.



## 3. Choose a Field to Analyze.



Click **OK**.

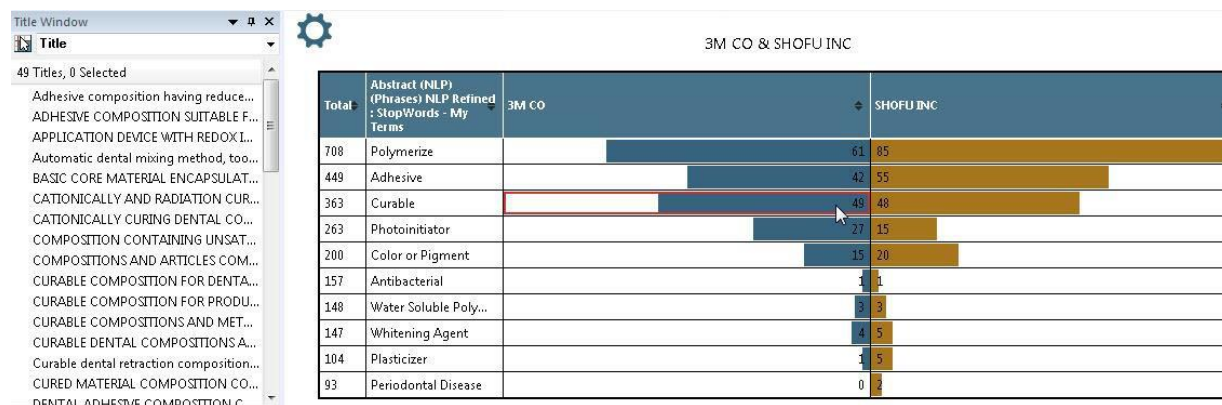
The resulting Chart shows the comparison of two selected items (3M CO and SHOFU INC) by the Field analyzed (Abstract [NLP Phrases] NLP Refined: StopWords - MyTerms).

The Total column represents the total records in each Term (Polymerize [708], Adhesive [449], Curable [363]...).

In this illustration, the user has chosen to Show Record Counts. The values in the center represent the number of records belonging to each Company: For example, for the Term "Polymerize", 3M CO has 61 records, and SHOFU INC has 85. (By default, the Record Counts in the center are hidden. The option to Show Record Counts is found in Visualization Control, explained below.)

When Record Counts are not displayed, a tool tip displaying the number of records will appear when you hover your cursor over the bar.

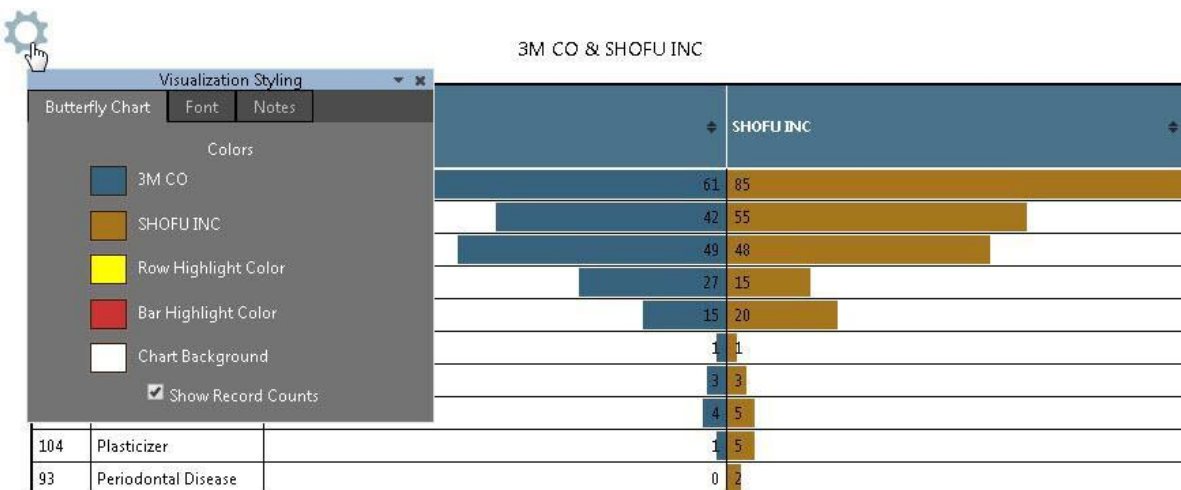
Clicking a bar in the Chart causes the records associated with that selection to be displayed in the Title Window, as shown below.



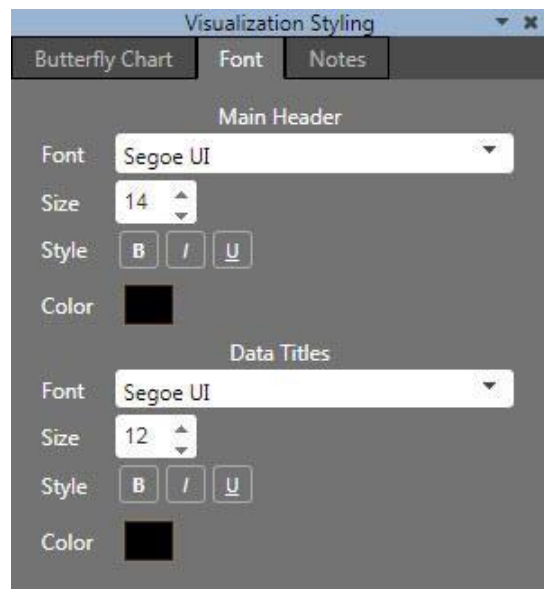
To display the Butterfly Chart Controls, click the icon in the upper left of the Chart.

In Butterfly Chart Visualization, change the Colors as explained in [Visualization Controls](#) (click on the color box for the Chart Colors, Highlighted Color, and Chart Background, and select the color of your choice.)

Check the Show Record Counts box, if desired.



Fonts, Font Size, Styles, and Colors for the Main Header (Chart Title) and Data Titles are set on the Font tab.



You can also add a Sticky Note to the Chart.

The Control dialog is dismissed by clicking the "x" in the upper right of the Control dialog.

See Also:

[Sticky Notes](#)

[Visualization Controls](#)

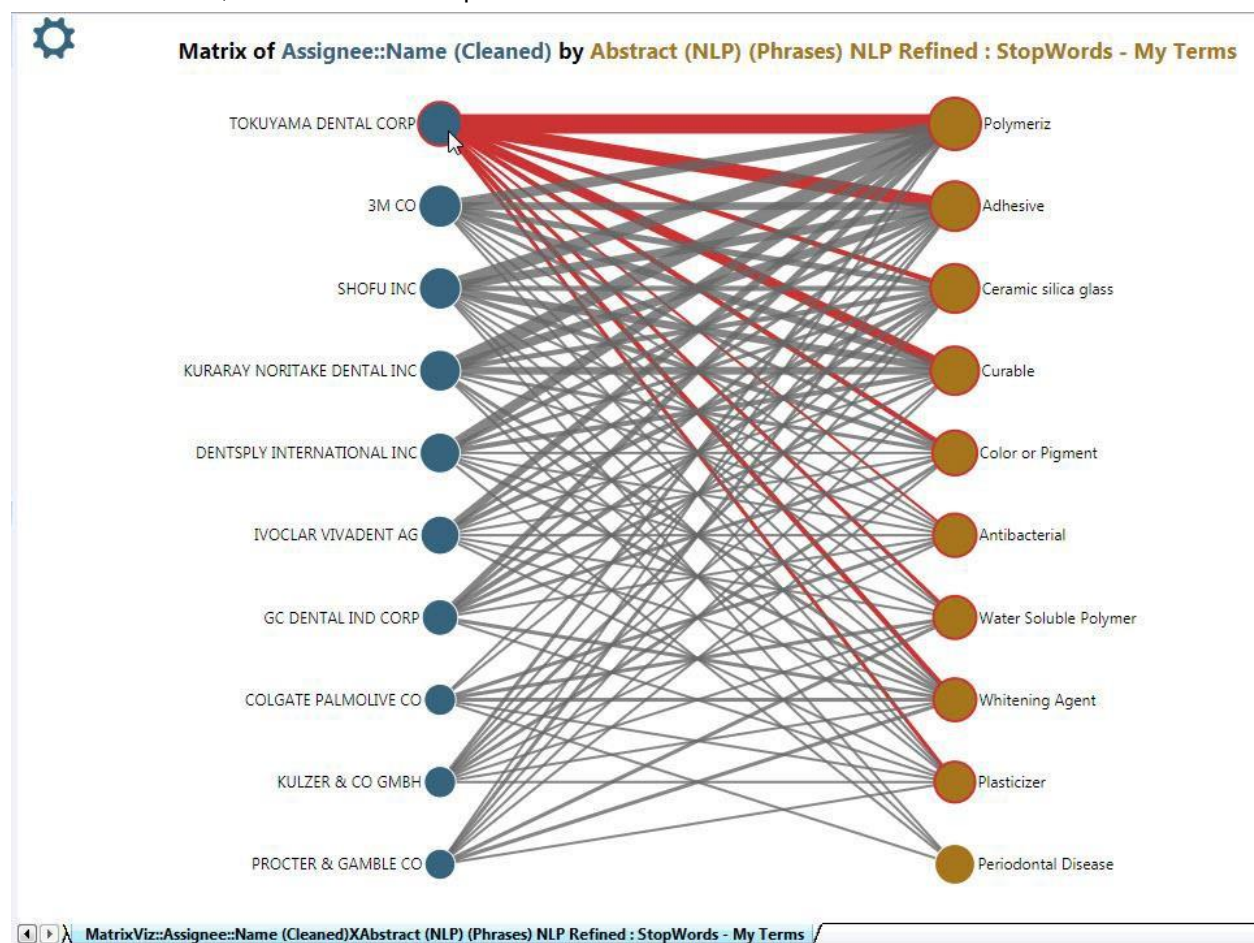
## Matrix Viewer

**Description:** View a node-edge representation of a matrix in a browser sheet.

**Requirements:** A matrix must be displayed.

**Usage:** Similar to VantagePoint's other maps, this script displays terms as nodes and shared records or correlations (depending on matrix type) as lines between them. If the matrix has different fields in its rows and columns, they will be represented with different color nodes. Different layouts can be selected from the Visualization Control dialog (the "gear" icon in the upper left corner). You can also set minimum "number of records" and/or "correlation" values for the displayed nodes and links.

This Report was created using the Co-occurrence Matrix shown below it. The blue nodes represent the rows of the matrix; the brown nodes represent the columns:

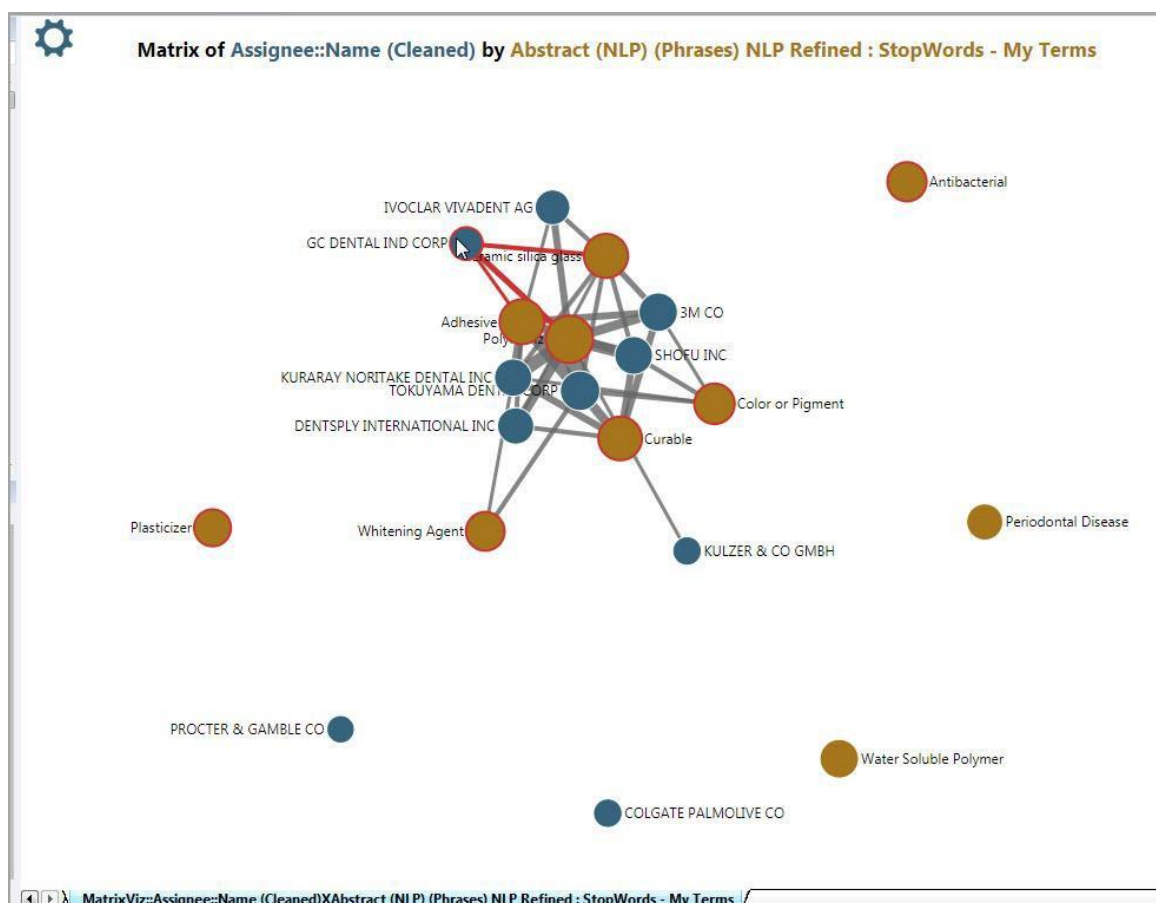


Clicking a node highlights the links and nodes with correlation. The records for the selection are displayed in the Title view.

Here is the Co-occurrence Matrix used to create the Matrix Viewer:

| Reset                                | Assignee::Name (Cleaned) |   | 1         | 2        | 3                    | 4       | 5                | 6             | 7                     | 8               | 9           | 10                  |                             |     |    |    |    |    |   |   |    |   |
|--------------------------------------|--------------------------|---|-----------|----------|----------------------|---------|------------------|---------------|-----------------------|-----------------|-------------|---------------------|-----------------------------|-----|----|----|----|----|---|---|----|---|
|                                      |                          | # Records   | 708       | 449      | 393                  | 363     | 200              | 158           | 148                   | 147             | 104         | 94                  |                             |     |    |    |    |    |   |   |    |   |
| LP (Phrases) NLP Refined : StopWords | # Records                | <div><div>▼▲</div><div>Show Values &gt;= 1 and &lt;= 142</div><div>Cooccurrence<br/># of Records</div><div>▼▲</div></div> | Polymeriz | Adhesive | Ceramic silica glass | Curable | Color or Pigment | Antibacterial | Water Soluble Polymer | Whitening Agent | Plasticizer | Periodontal Disease |                             |     |    |    |    |    |   |   |    |   |
|                                      |                          | 1174  |           |          |                      |         |                  |               |                       |                 |             |                     | TOKUYAMA DENTAL CORP        | 142 | 97 | 21 | 66 | 26 | 1 | 7 | 19 | 9 |
|                                      |                          | 2145  |           |          |                      |         |                  |               |                       |                 |             |                     | 3M CO                       | 61  | 42 | 30 | 49 | 15 | 1 | 3 | 4  | 1 |
|                                      |                          | 3125  |           |          |                      |         |                  |               |                       |                 |             |                     | SHOFU INC                   | 84  | 55 | 27 | 46 | 20 | 1 | 3 | 5  | 5 |
|                                      |                          | 4114  |           |          |                      |         |                  |               |                       |                 |             |                     | KURARAY NORITAKE DENTAL INC | 101 | 58 | 17 | 44 | 15 | 4 |   | 14 | 2 |
|                                      |                          | 595   |           |          |                      |         |                  |               |                       |                 |             |                     | DENTSPLY INTERNATIONAL INC  | 70  | 20 | 16 | 19 | 5  | 4 | 1 | 8  |   |
|                                      |                          | 673   |           |          |                      |         |                  |               |                       |                 |             |                     | IVOCLAR VIVADENT AG         | 47  | 10 | 25 | 3  | 4  | 4 | 1 | 2  | 2 |
|                                      |                          | 748   |           |          |                      |         |                  |               |                       |                 |             |                     | GC DENTAL IND CORP          | 28  | 11 | 20 | 6  | 7  | 3 |   | 7  | 2 |
|                                      |                          | 823   |           |          |                      |         |                  |               |                       |                 |             |                     | COLGATE PALMOLIVE CO        |     | 5  | 1  |    |    | 6 | 9 | 9  | 1 |
|                                      |                          | 923   |           |          |                      |         |                  |               |                       |                 |             |                     | KULZER & CO GMBH            | 15  | 4  | 9  | 2  | 6  | 1 | 3 | 2  | 1 |
|                                      |                          | 1019  |           |          |                      |         |                  |               |                       |                 |             |                     | PROCTER & GAMBLE CO         | 2   | 9  | 5  | 1  | 1  |   | 7 | 7  | 1 |
|                                      |                          | Matrix::Assignee::Name (Cleaned)(items) x Abstract (NLP) (Phrases) NLP Refined : Stop                                     |           |          |                      |         |                  |               |                       |                 |             |                     |                             |     |    |    |    |    |   |   |    |   |

Here is the Matrix Viewer in Force Directed Layout, with Node and Link filter adjustments for displaying a set minimum record threshold (see Matrix View Visualization Control).

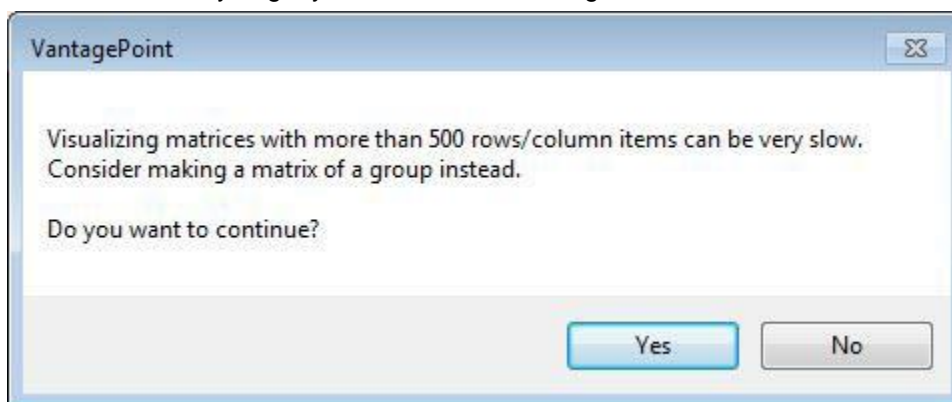




To create the Matrix Viewer, have a matrix in the current view. Select **Matrix Viewer** from the Report ribbon.



If the matrix is very large, you will see this warning:



See the [Matrix Viewer Controls](#) topic for details on making changes to the Matrix Viewer.

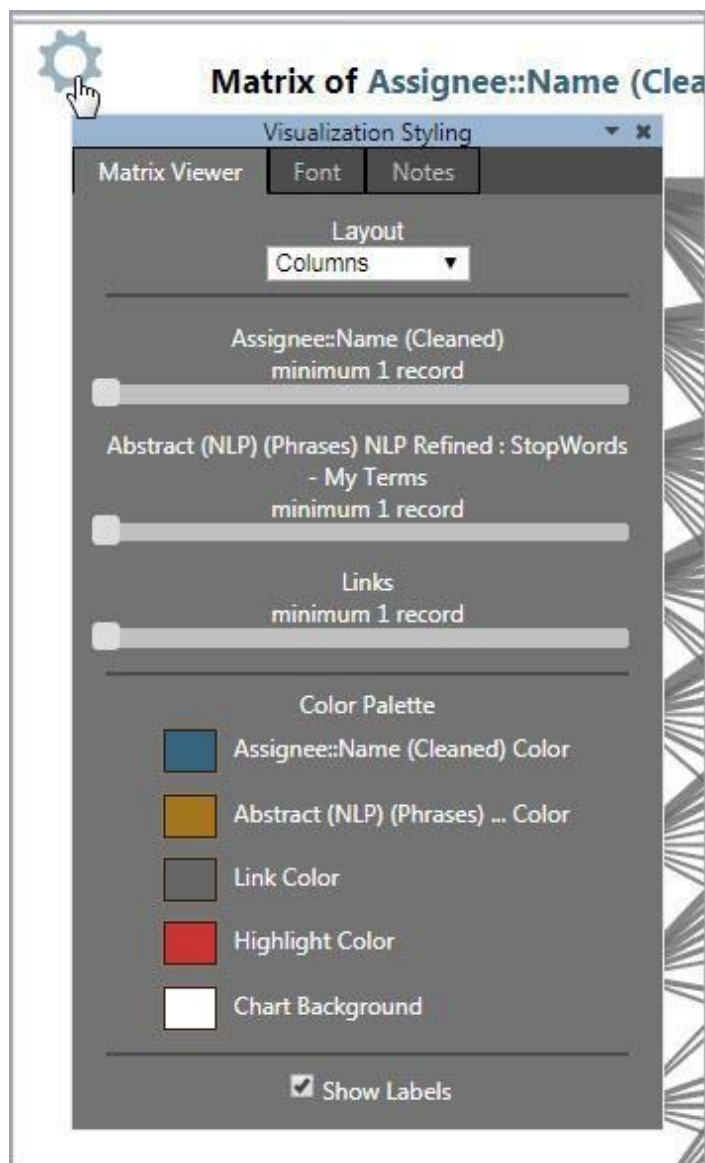
See Also:

[Sticky Notes](#)

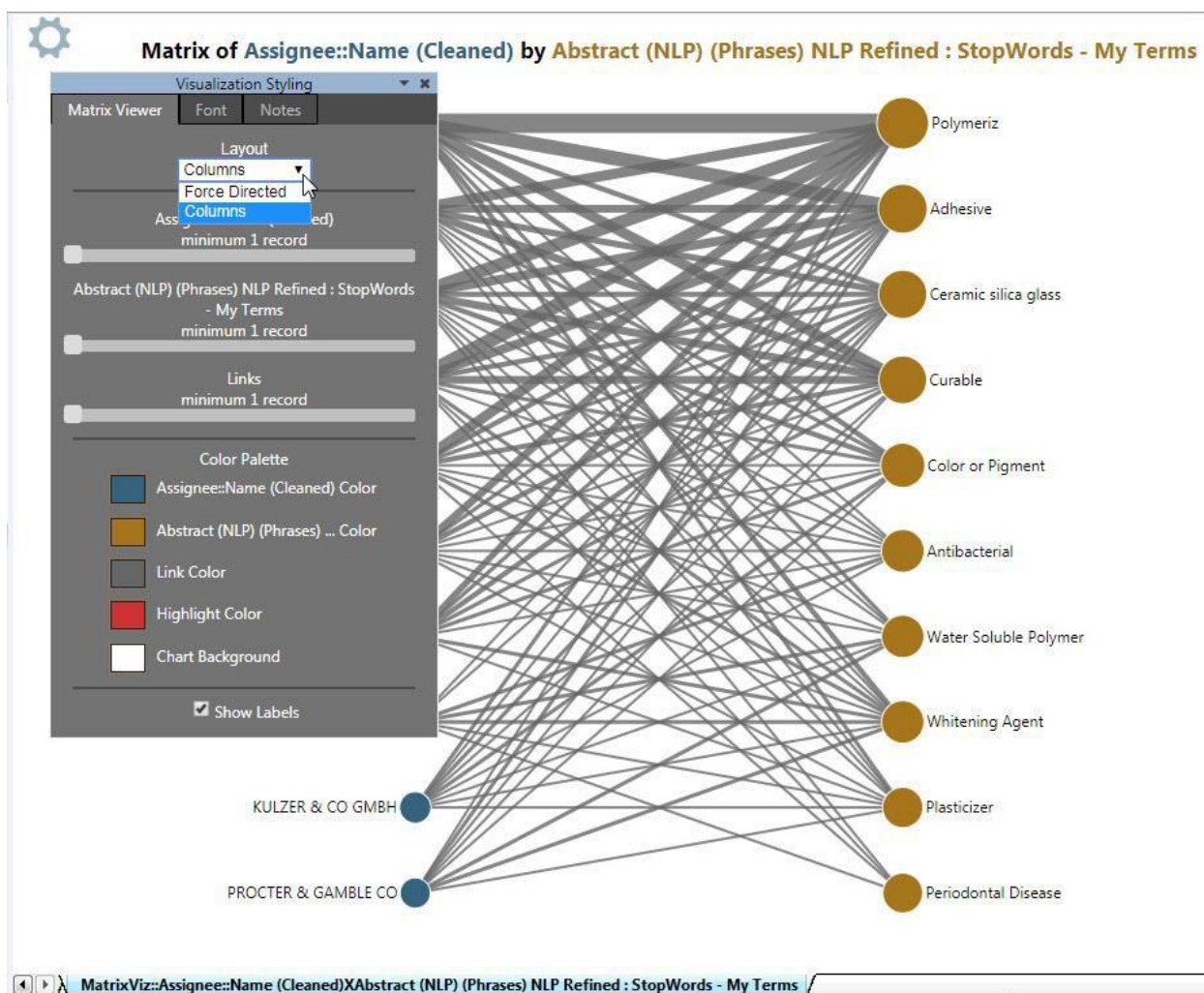
[Visualization Controls](#)

## MatrixViewerCtrls

To display the Matrix Viewer Controls, click the icon in the upper left of the Matrix Viewer.



Click the drop-down under "Layout" at the top of the dialog to choose from Columns or Force Directed.



In the above illustration, the blue nodes represent the rows of the matrix; the brown nodes represent the columns.

Use the sliders to set minimum "number of records" and/or "correlation" values for the displayed nodes and links.

Visualization Styling

Matrix Viewer Font Notes

Layout

Force Directed

Assignee::Name (Cleaned)

minimum 16 records

< Filters row items by number of records

Abstract (NLP) (Phrases) NLP Refined : StopWords - My Terms

minimum 15 records

< Filters column items by number of records

Links

minimum 10 records

< Filters number of Links (correlation value) shown

Color Palette

Assignee::Name (Cleaned) Color

Abstract (NLP) (Phrases) ... Color

Link Color

Highlight Color

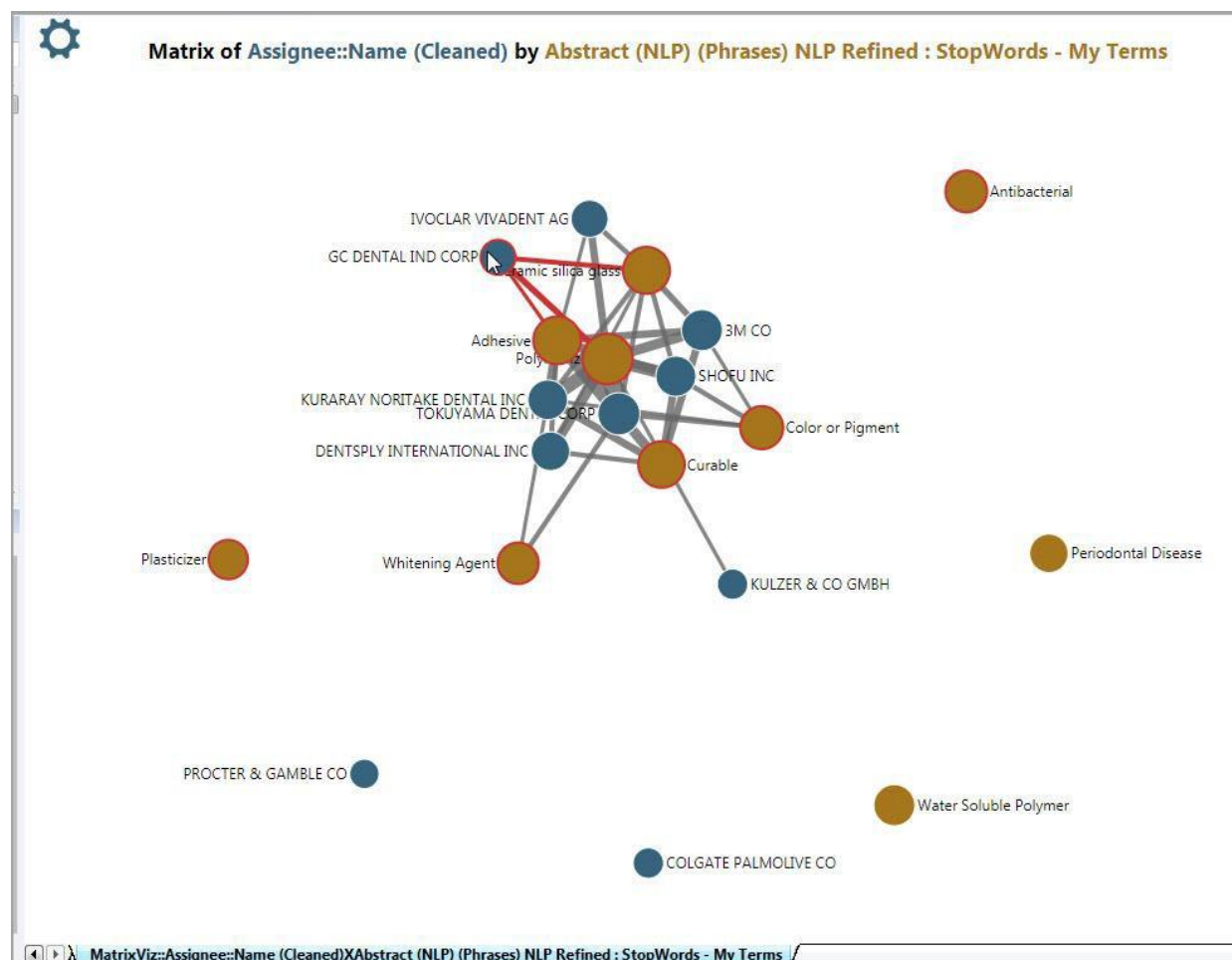
Chart Background

☒ Show Labels

< Show (or hide) the node Labels

Change the colors of the Nodes, Links, Highlight, and Chart Background by clicking on the colored boxes in the Color Palette, and selecting the color of your choice, as described in the [Visualization Controls](#) topic.

Warning: In Force Directed (animated) layout (shown below), map may continuously update and use processor power unless paused, even if you switch to another sheet.



Fonts, Font Size, Styles, and Colors for the Main Header (Chart Title) and Data Titles are set on the Font tab.

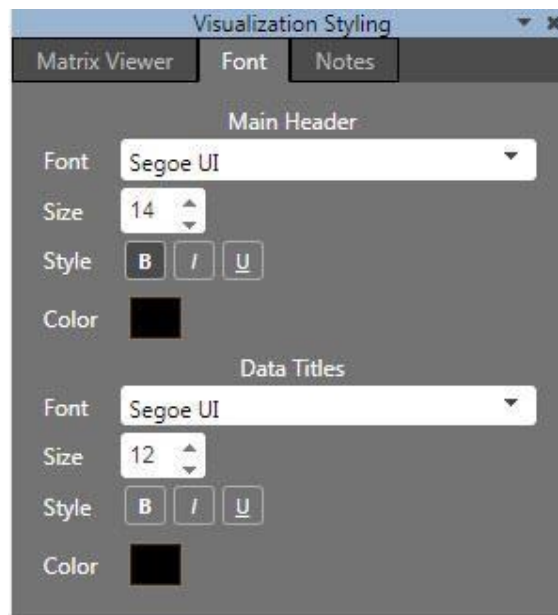
The Control dialog is dismissed by clicking the "x" in the upper right of the Control dialog.

See Also:

[Matrix Viewer](#)

[Sticky Notes](#)

[Visualization Controls](#)





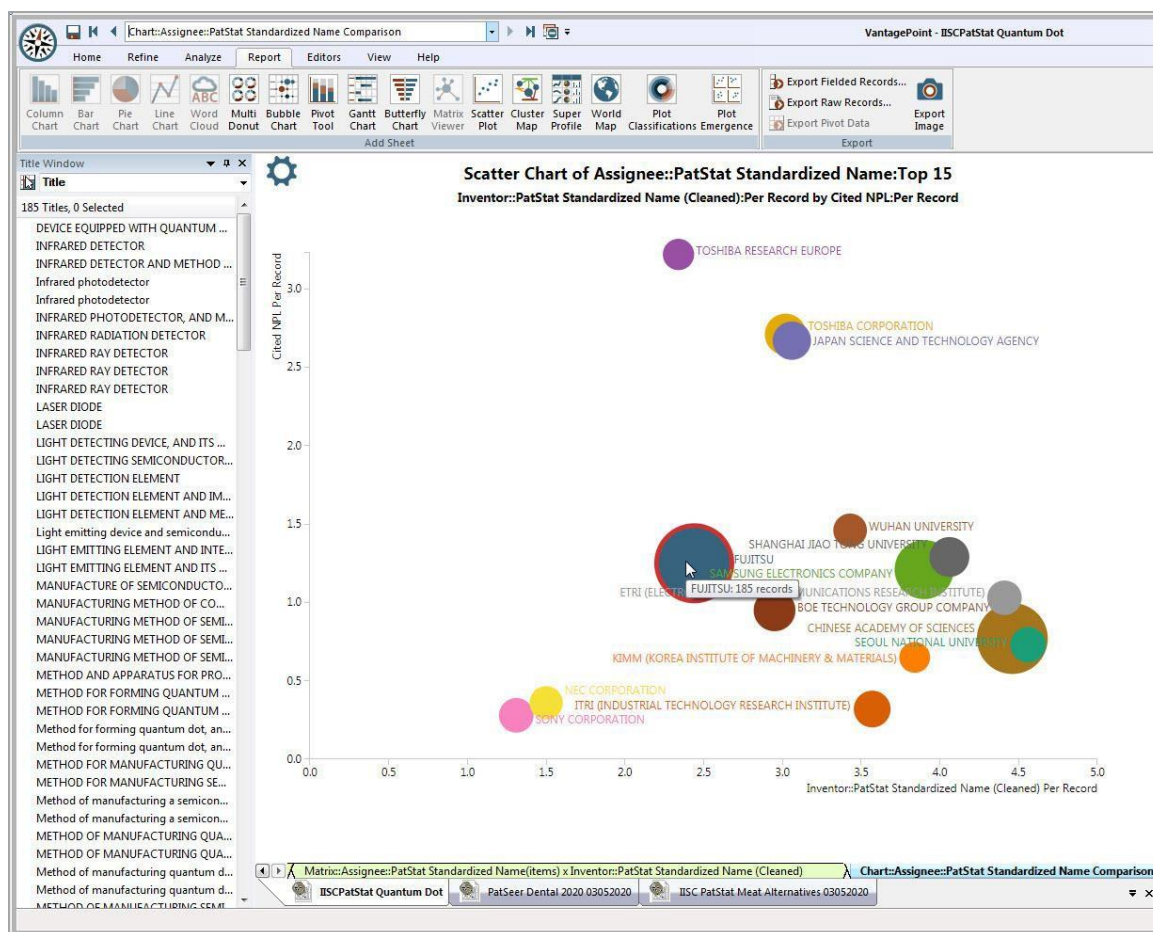
## Scatter Plot

**Description:** Creates a scatter plot with a time slider of items in one field plotted by counts of two other fields on the x and y axes as a total count of unique items or average unique items per record. The time slider counts the x and y values up to the selected year.

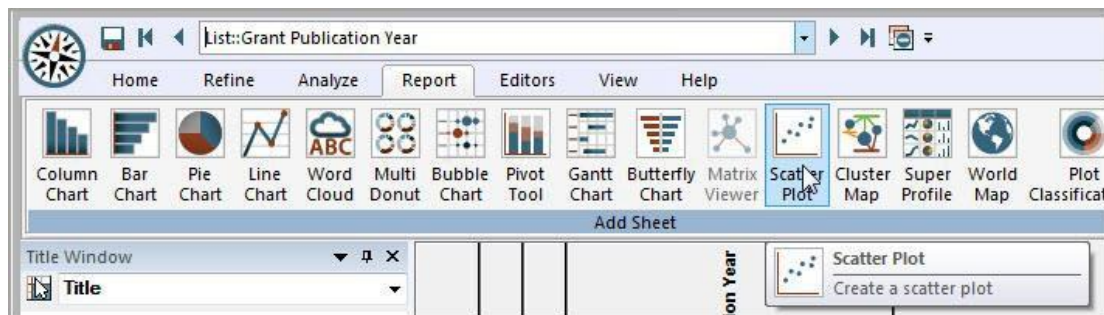
**Requirements:** A dataset is open with a year field.

Usage while viewing a Scatter Plot:

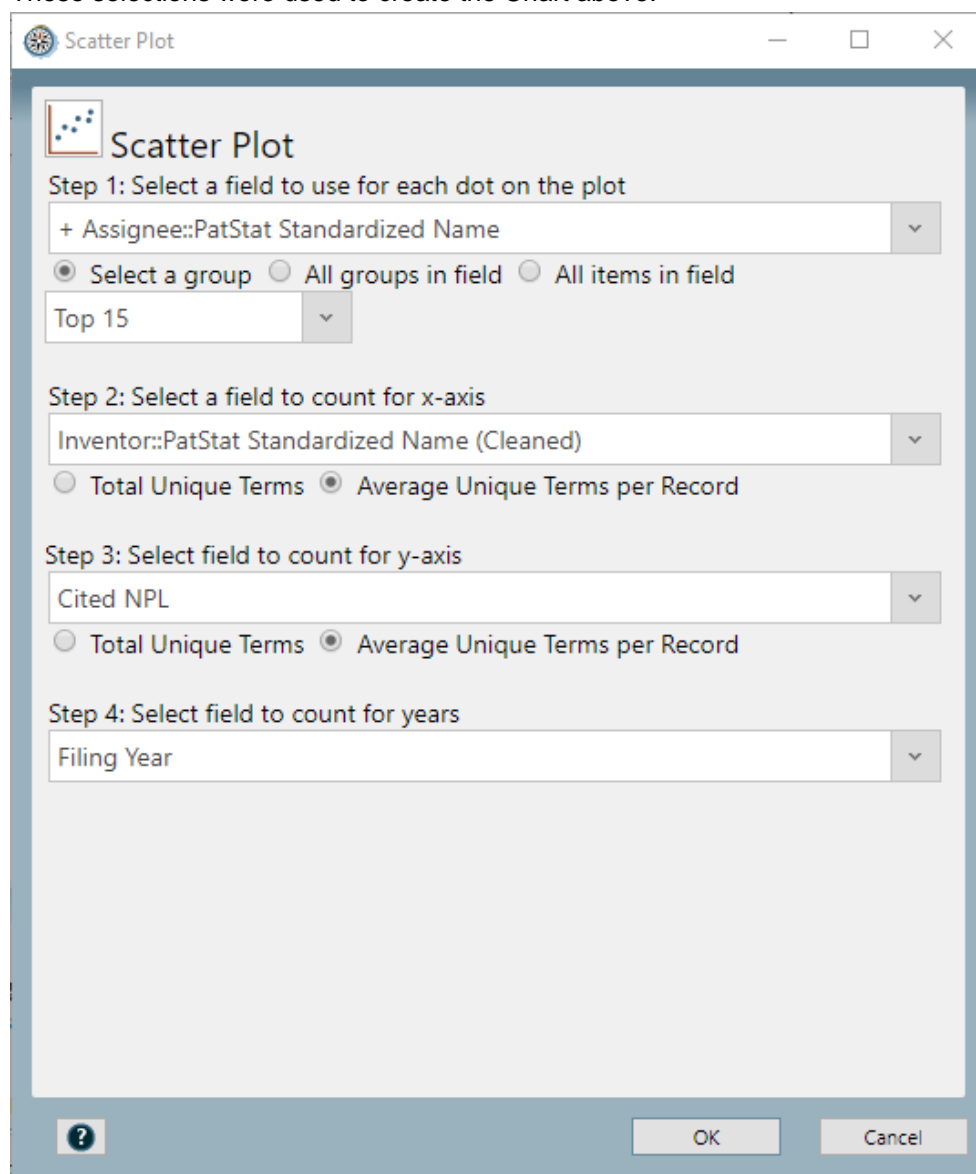
- Hover on a dot to see the number of records.
- Click on a dot to highlight it and update the Title and Detail windows for those records.
- Use the Year Slider bar (in the Scatter Plot Control dialog) to update x and y values and record counts for dots up to the selected year.



From the Report ribbon, select **Scatter Plot**:



These selections were used to create the Chart above:



The image shows a 'Scatter Plot' configuration dialog box. It has a title bar with a gear icon and the text 'Scatter Plot'. The dialog is divided into four steps:

- Step 1: Select a field to use for each dot on the plot**
  - Field: + Assignee::PatStat Standardized Name
  - Group: ☒ Select a group, ☐ All groups in field, ☐ All items in field
  - Top 15
- Step 2: Select a field to count for x-axis**
  - Field: Inventor::PatStat Standardized Name (Cleaned)
  - Count: ☐ Total Unique Terms, ☒ Average Unique Terms per Record
- Step 3: Select field to count for y-axis**
  - Field: Cited NPL
  - Count: ☐ Total Unique Terms, ☒ Average Unique Terms per Record
- Step 4: Select field to count for years**
  - Field: Filing Year

At the bottom, there is a help icon (question mark), and 'OK' and 'Cancel' buttons.

See the [Scatter Plot Controls](#) topic for details on making changes to the Chart.

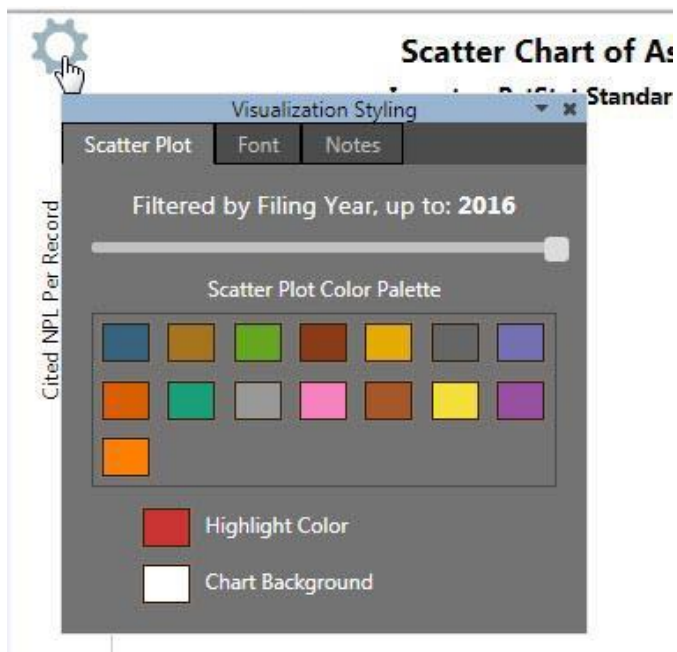
See Also:

[Sticky Notes](#)

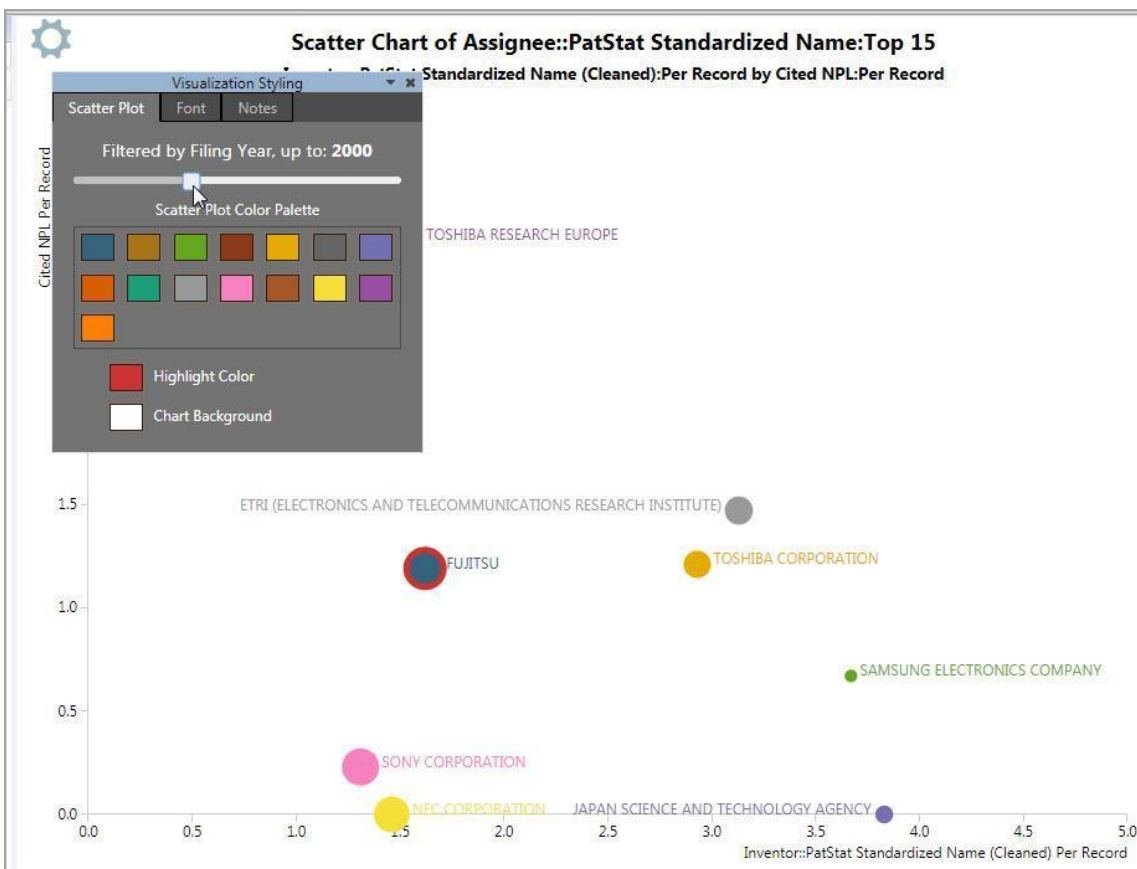
[Visualization Controls](#)

## ScatterPlotCtrls

To display the Scatter Plot Controls, click the icon in the upper left of the Scatter Chart.

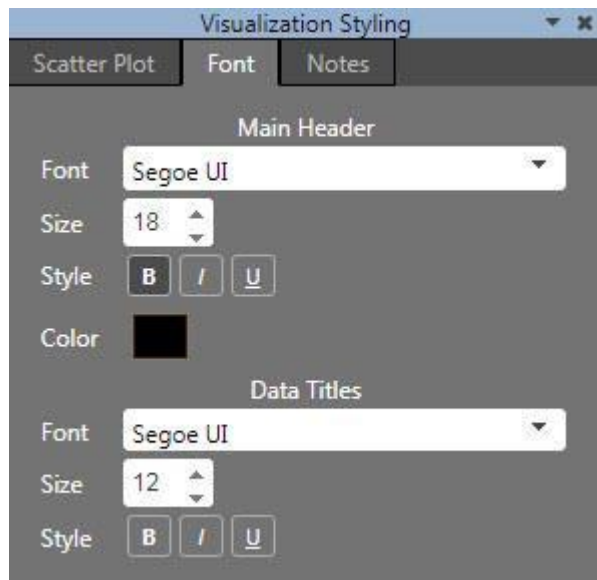


Use the Year Slider bar to update x and y values and record counts for dots up to the selected year.



Change the colors of the Nodes, Highlight Color, and Chart Background by clicking on the colored boxes in the Color Palette, and selecting the color of your choice, as described in the [Visualization Controls](#) topic.

Fonts, Font Size, Styles, and Colors for the Main Header (Chart Title) and Data Titles are set on the Font tab.



The Control dialog is dismissed by clicking the "x" in the upper right of the Control dialog.

See Also:

[Scatter Plot](#)

[Sticky Notes](#)

[Visualization Controls](#)

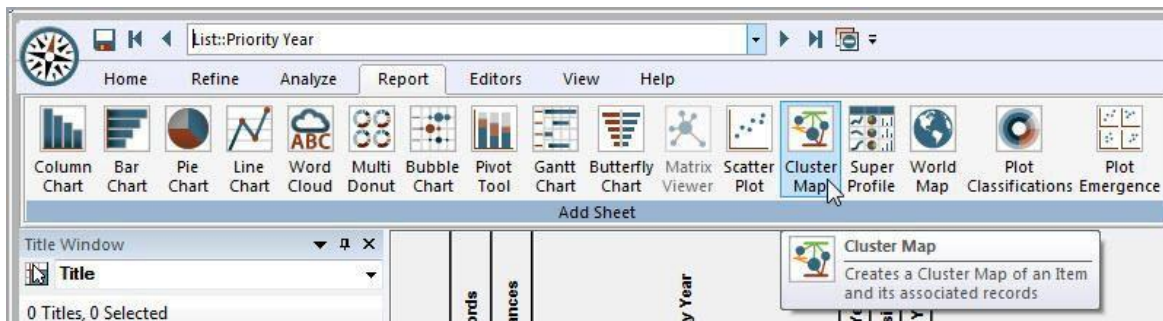
## Cluster Map

Creates an interactive cluster map of items and records.

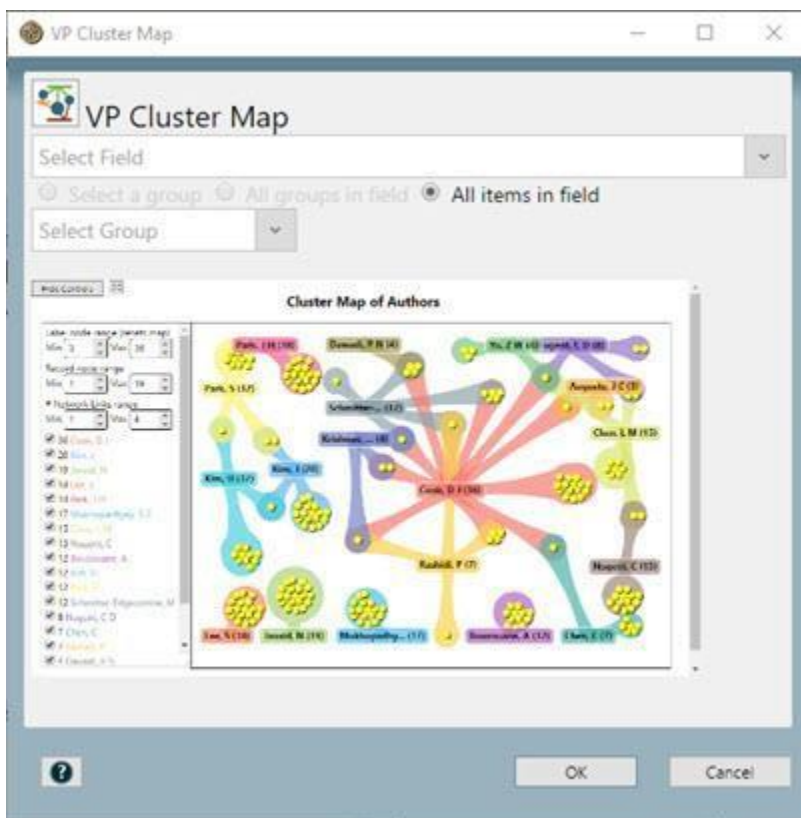
**Warning:** Maps with more than 100 clusters may appear over-crowded and be hard to use. Create a group of items to map before creating the map or use the filters within the map to produce a more usable image.

There are two ways to create a Cluster map:

1. Create a group of the items in the field of interest. Then from the Report ribbon, select **Cluster Map**.



In this dialog box select the field and group and click **OK**.



2. Alternatively, you can bypass this dialog by selecting the group or items of interest in a List view and then click **Cluster Map** in the Report ribbon.

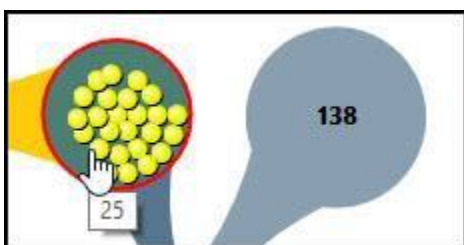


The Cluster Map consists of:

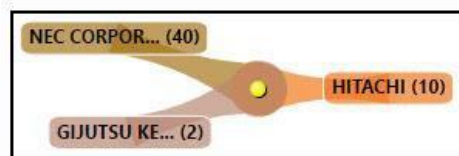
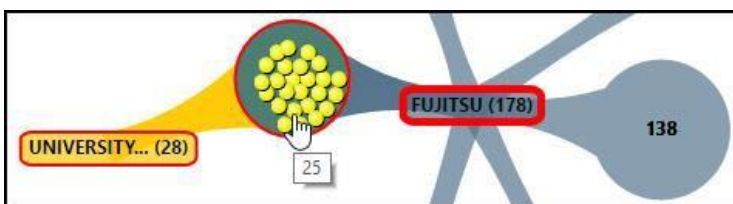
- Label nodes – these are the items you selected in the field of interest. These are the text objects in the map. The number of records for the item is shown in parentheses.



- Record nodes – these are circles with yellow dots inside. Each dot represents a record in the dataset. When you hover over a Record node, the number of records will show in a pop-up tooltip. If there are a lot of records in a node, you will see the number of records instead of yellow dots.



- Links between Label nodes and Record nodes indicate that the item associated with the Label node occurs in the records represented in the Record node. This provides a visual depiction of co-occurrence among any number of items - for example, in the illustration below on the right, one record is shared by 3 assignees. A second illustration below on the left shows 25 records have both Fujitsu and University (of Tokyo) as assignees. Fujitsu has a total of 178 records in the dataset, and University of Tokyo has a total of 28. Therefore, 25 of University of Tokyo's 28 records are shared with Fujitsu. Of Fujitsu's 178 records, 138 are not shared with any other assignee shown on this map. **Note:** Some of those 138 records may have assignees that were not selected when the cluster map was created. This can be explored by selecting the 138 node and viewing the assignees in a Detail Window.



There are several ways to interact with the Cluster Map:

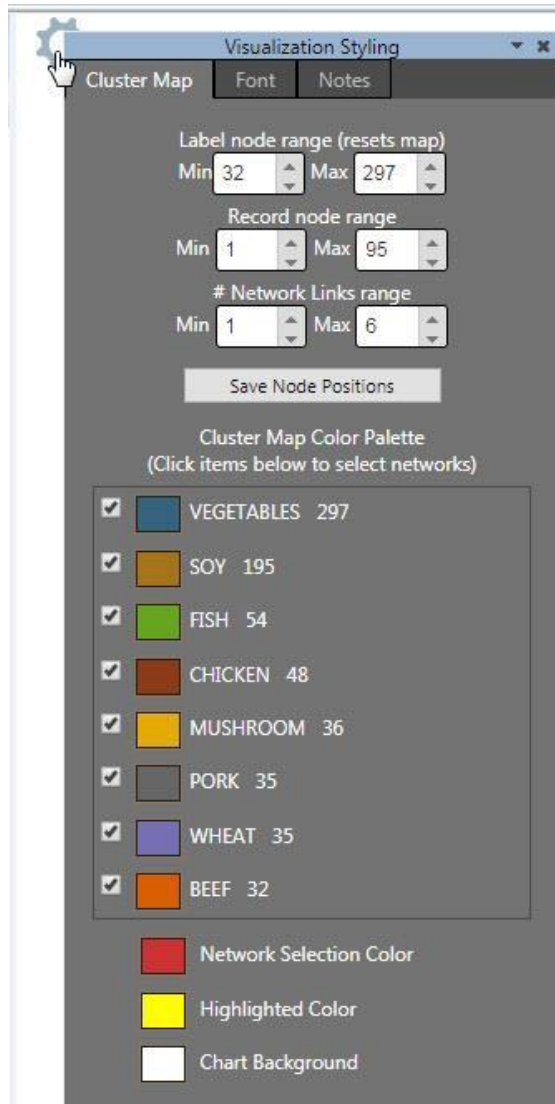
- Click and drag to rearrange the Record and Label nodes. (A **Save Node Positions** button is available in the Cluster Map Controls.)
- Hover and click on the map to highlight nodes and select records to update the Title and Detail windows.
- Click on a node and the records appear in the Title View. Ctrl+Click to multi-select nodes.
- Filter the content or change the colors/fonts using the Cluster Map Controls.

See Also:

[Cluster Map Controls](#)  
[Sticky Notes](#)  
[Visualization Controls](#)

## ClusterMapCtrls

To display the Cluster Map Controls, click the icon in the upper left of the Cluster Map.



Use this Control panel to set minimum and/or maximum limits for the nodes:

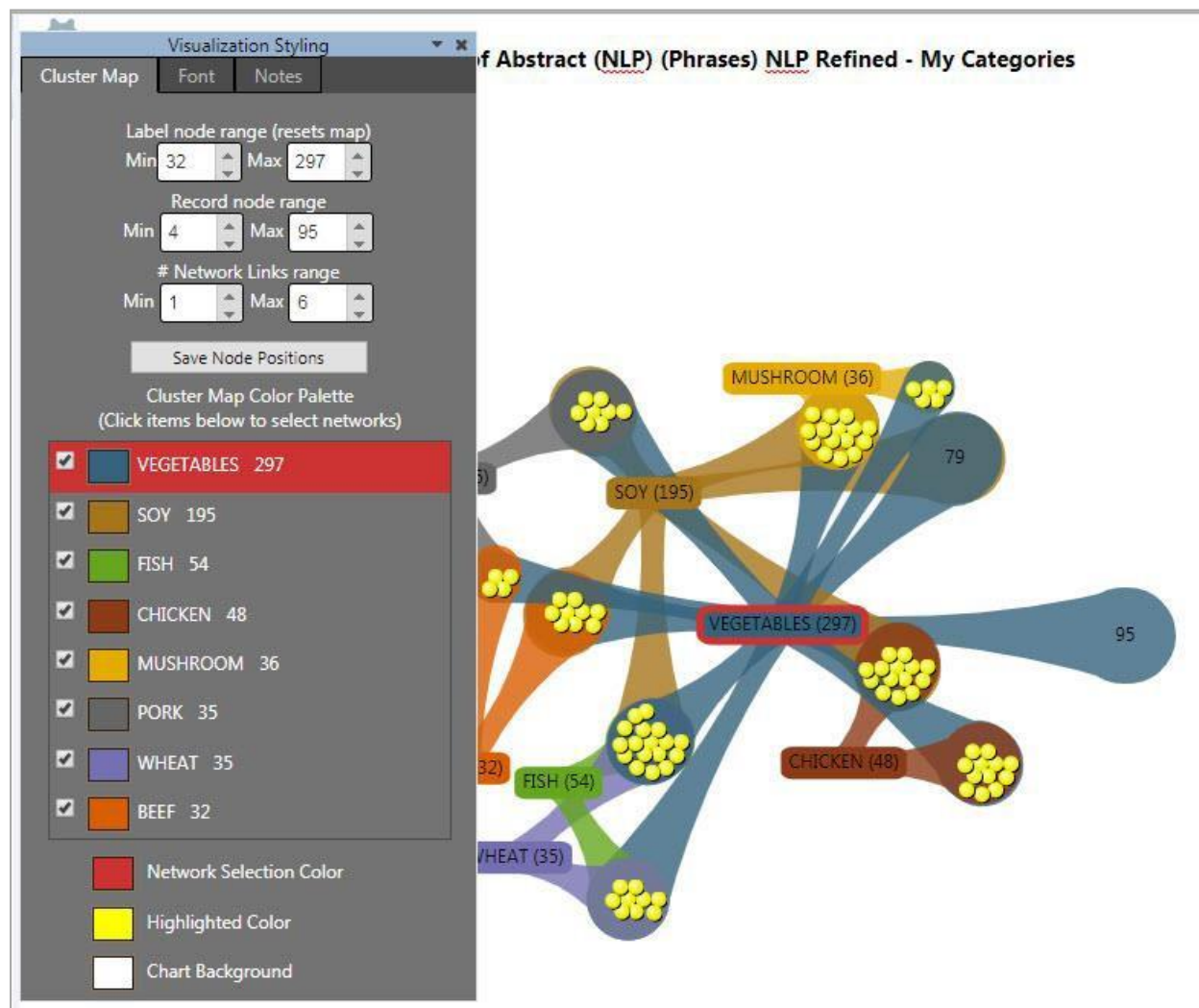
- **Label node range** – Sets the range of record counts for the items (labels) to show. The default min and max are determined by the data.  
**Note:** Changing the Label node range resets the map, recalculating the Record node range, the # Network Links range, and the item checkboxes.
- **Record node range** – Sets the range of record counts for the record nodes. Record nodes are the nodes with the yellow dots, each representing a record. If there are too many records to show using dots, the number is shown instead.
- **# Network Links range** – Sets the range of the number of links shown. For example, setting the minimum to 2 reduces the map to record nodes that have co-occurrence between 2 or more label nodes – hiding record nodes that link to only one label.

**Save Node Positions** button: Nodes can be rearranged by clicking and dragging. Click this button to lock all visible nodes in their current positions. This prevents rearrangement of the nodes if using the export function.

- Check/Uncheck the boxes to show or hide individual label nodes.
- Network Selection is made by clicking one (or more) of the items in this list. For example, click on "VEGETABLES", and the underlying map displays just that selection and its links. Click it again to deselect. Use Ctrl+Click to select more than one Network.

Color selections are made as described in the [Visualization Controls](#) topic.

Below is an example of a selected Network in the panel and the effect on the underlying map:

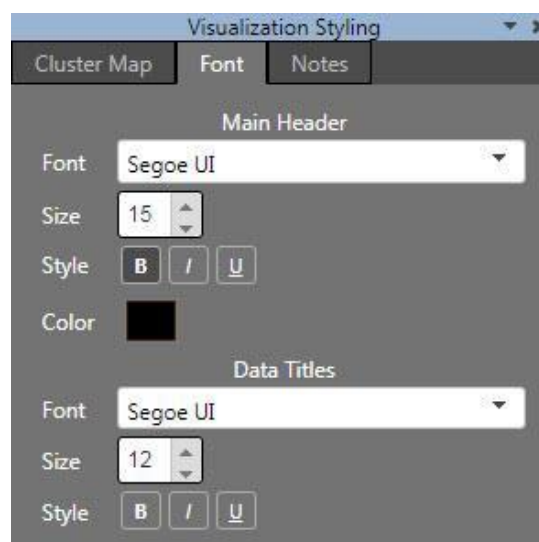


Fonts, Font Size, Styles, and Colors for the Main Header (Chart Title) and Data Titles are set on the Font tab.

The Control dialog is dismissed by clicking the "x" in the upper right of the Control dialog.

See Also:

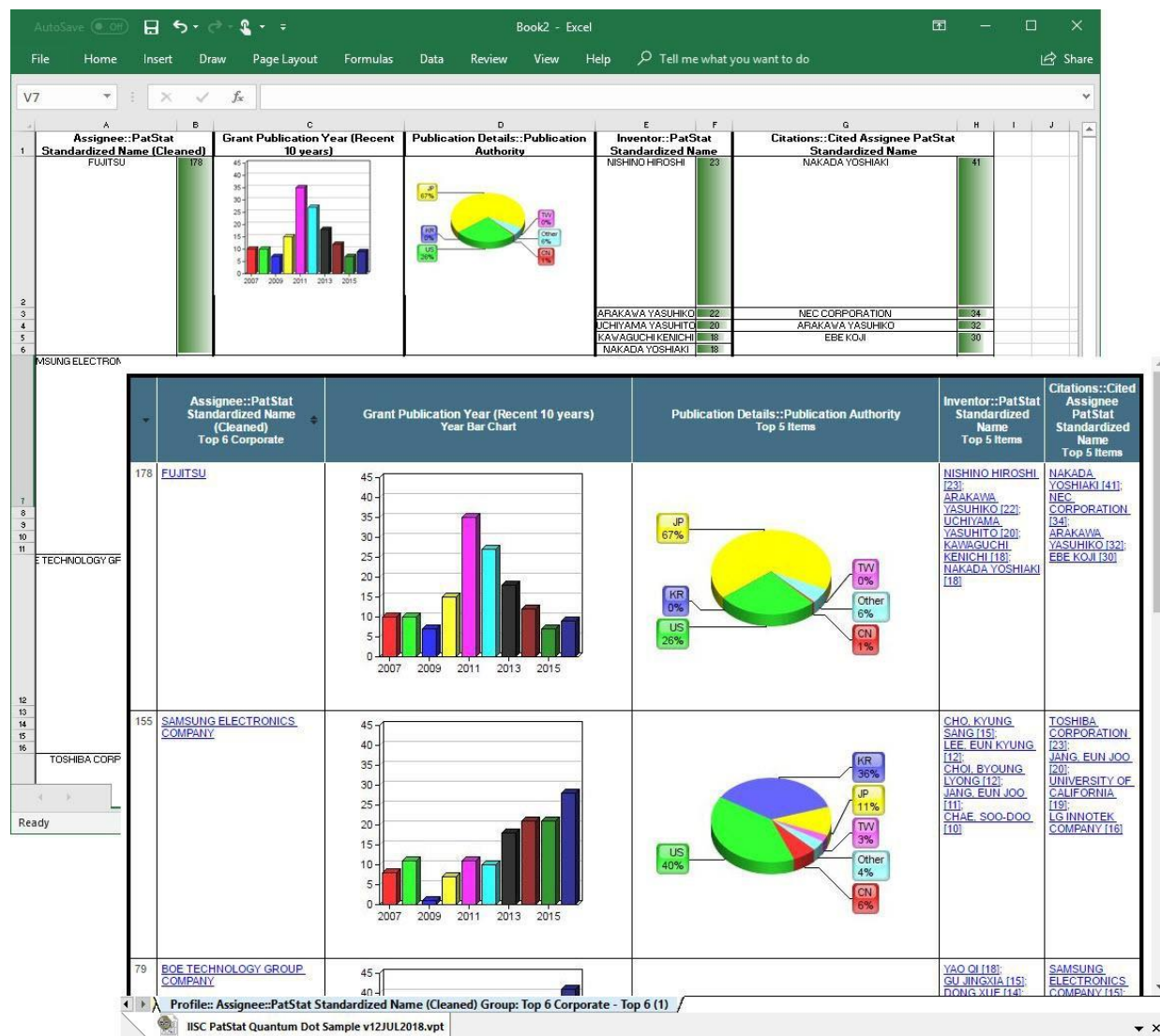
- [Cluster Map](#)
- [Sticky Notes](#)
- [Visualization Controls](#)



## Super Profile

**Description:** Create a profile table of a group of items in a field. The output can be both a new VantagePoint sheet and an Excel file with one operation.

**Usage:** This script opens a form where you build your profile. The first column will always be the items from the group you selected. In subsequent columns, you will first pick an analysis type for the column, then pick a field as the basis for the column, and finally specify how many items for each cell in the column.



Here is an illustration of the Super Profile as it is being built. In Step 1, the user chooses the output type. In Step 2, the user has identified the Field (and, in this case, further selected a group within the field) to Profile, and in Step 3 has added 4 columns thus far, by clicking “Add Column to Profile” after each selection. Notice the columns can be edited, deleted, and moved up or down using the icons shown under “Edit Column”.

**Super Profile**

Load a Template (optional)  
Select a Template

**Step 1: Set the output type**  
☐ Excel ☒ VantagePoint Sheet

**Step 2: Define Field to Profile**  
 + Assignee::PatStat Standardized Name (Cleaned)
   
☒ Select a group Top 6 Corporate ☐ Set # Items to Profile 10

**Step 3: Define Columns for Profile**  
 + Publication Details::Publication Authority
   
 Select a Group (optional) Select Group
   
 Select Column Type Top Items
   
 About how many ranked wedges do you want to see in your pie chart? 5

**Selected Columns:**

| # | Edit Column | Field   | Column Type                  | Group | Option |
|---|-------------|---|------------------------------|-------|--------|
| 1 |             | Grant Publication Year                              | Vertical Bar (Year)          |       | N/A    |
| 2 |             | Publication Details::Publication Authority          | Top Items                    |       | 5      |
| 3 |             | IPC Subclass  | Pie Chart (top N in dataset) |       | 5      |
| 4 |             | Citations::Cited Assignee PatStat Standardized Name | Top Items                    |       | 5      |
| 5 |             | Inventor::PatStat Standardized Name (Cleaned)       | Average Terms per Record     |       | N/A    |

**Preview Table**

| # | Assignee::PatStat Standardized Name (Cleaned) |
|---|---|
| 1 |   |

**Step 4: Run / Save Template**

Template Name: my template

In Step 4, you can choose to Save your selections as a Template and Run the Report.

Descriptions of the Column Types are below. 'n' is the number entered in the third column.

**Top** - list the top 'n' items for each profile item

**Limit** - list all the terms with more than 'n' records for each profile term

**Groups** - list the top 'n' groups from the selected field for each profile term

**Range** - MUST be year fields, returns a range of years from the earliest year in the selected field to



the most recent year in the 'n' year field

**Unique** - returns terms that appear with the profile term and not with any of the other profile terms

**Percent Recent-Dataset** - MUST be a year field, returns the percent of the profile term's records from the most recent 'n' years in the dataset

**Percent Recent-Calendar** - MUST be a year field, returns the percent of the profile term's records from the most recent 'n' years from the current year

**Recent Items-Dataset** - prompts for a year field, then returns the terms for each profile item that only appeared in the most recent 'n' years in the dataset

**Recent Items-Calendar** - prompts for a year field, then returns the terms for each profile item that only appeared in the most recent 'n' years from the current year

**Unexpected** - Uses the expectancy arrows from detail windows to identify terms that appear unexpectedly frequently or infrequently with the profile term.

**Statistics** - Returns basic statistics (MAX, MIN, MEAN, etc.) for a field with the NUMERIC data type.

**Average Terms per Record** - Returns the average number of terms per record for each profile term

**Charts** - Returns a small chart (Pie, Column, or Line) of the top terms for each profile term. The items can be

*Year* - Shows a small trend chart based on selected Year field.

*Dataset* - Finds the top 'n' terms in the entire dataset and shows their frequency for that profile term

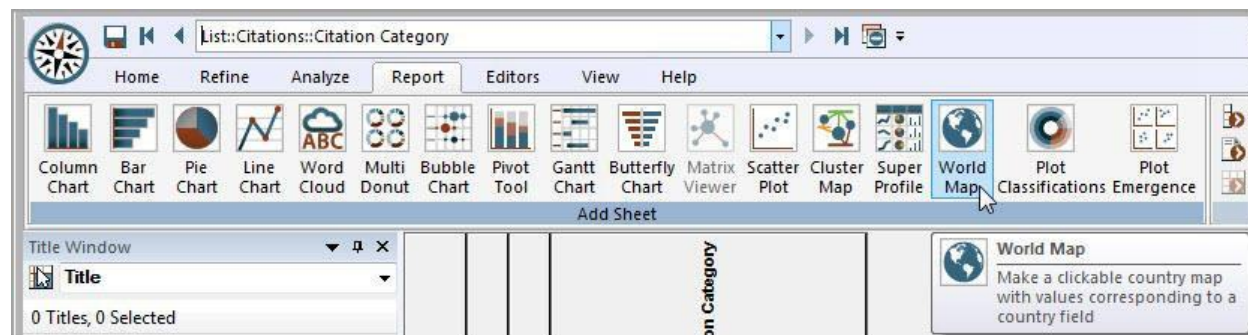
*Row* - Finds the top 'n' terms for each profile term.

## World Map

*Description:* Make a browser sheet with a clickable country map(s) with values corresponding to a country field.

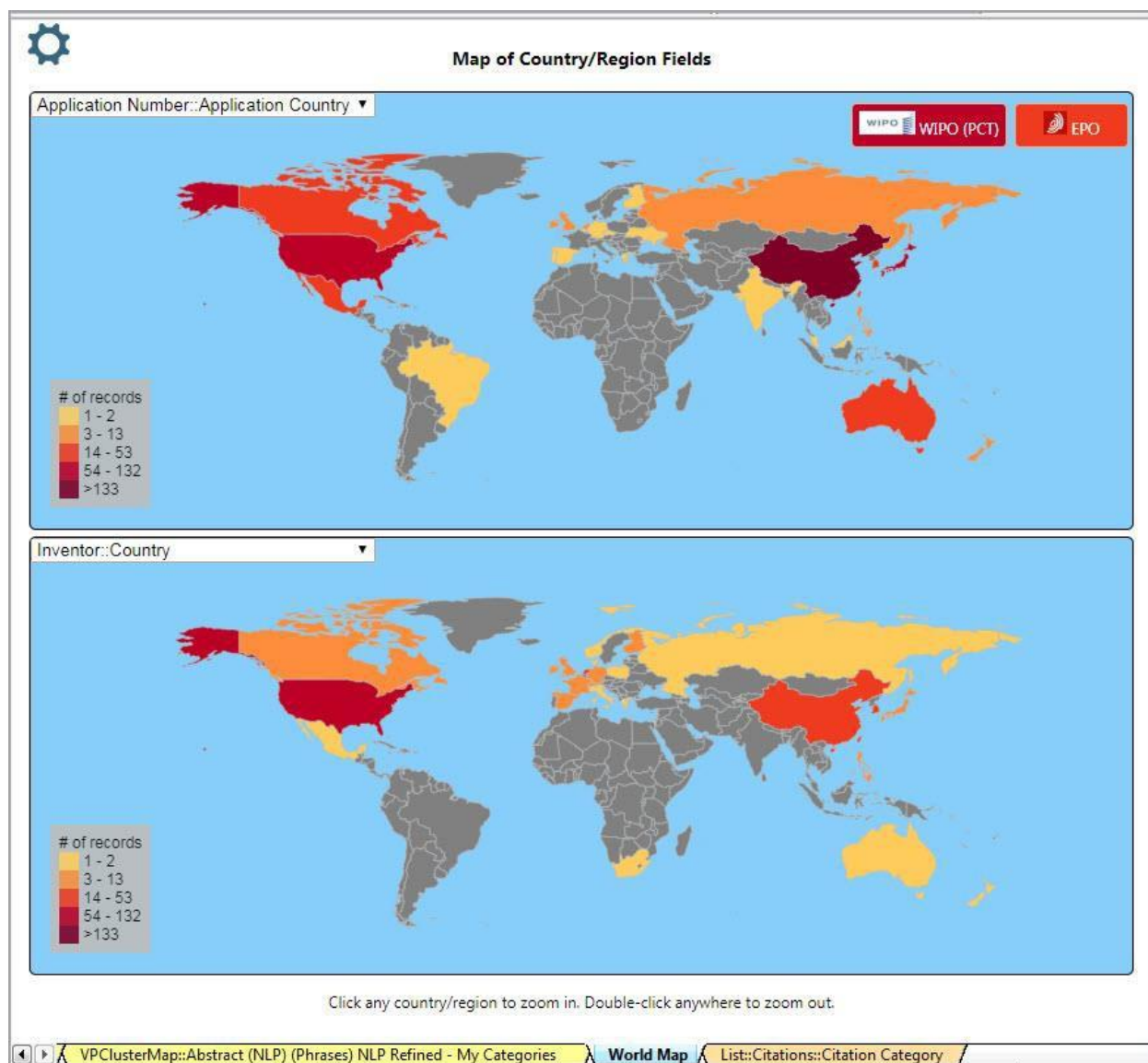
*Requirements:* At least one field must have a Country or Country/Region meta tag.

From the Report ribbon, select World Map.



The World Map is displayed. (Two maps using different fields can be displayed simultaneously, as shown below.)

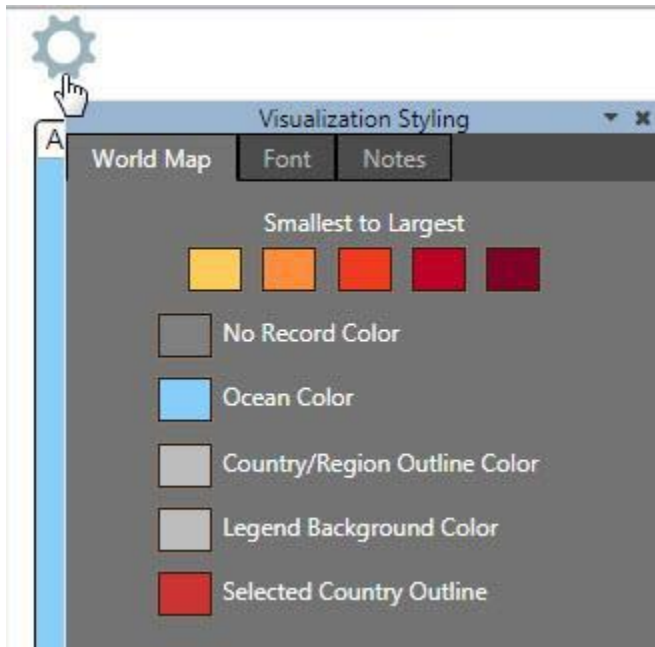
Clicking on the countries within the Map populates the Title Window with the records for the selection.



A screenshot of the map(s) can be exported in different formats (jpg, png, pdf, html) to another application by clicking the **Export Image** icon.

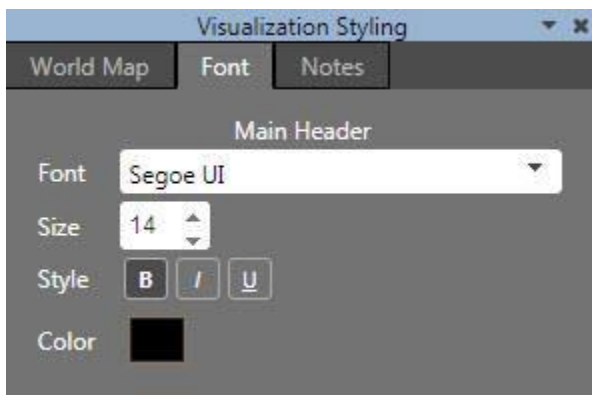


Visualization Control for World Maps is accessed using the "gear" icon in the upper left of the Map:



Colors are changed as described in the [Visualization Controls](#) topic.

Fonts, Font Size, Style, and Color for the Main Header (Chart Title) are set on the Font tab.



You can also add a Sticky Note to the Visualization.

The Control dialog is dismissed by clicking the "x" in the upper right of the Control dialog.

See Also:

[Sticky Notes](#)

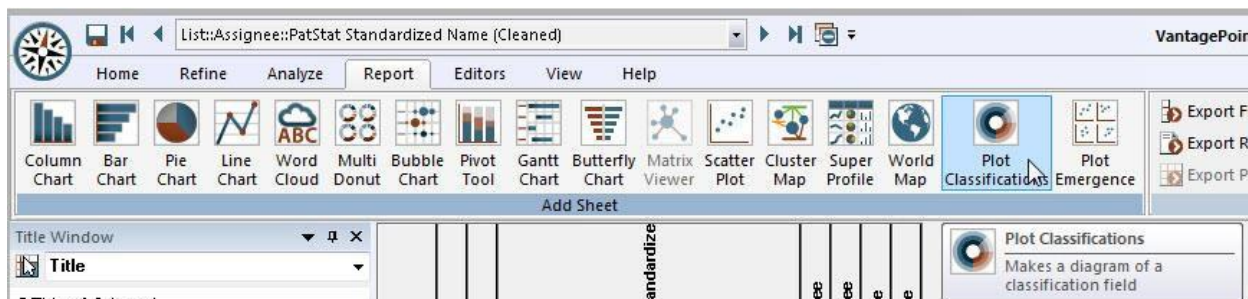
[Visualization Controls](#)

## Plot Classifications

*Description:* Plot a classification field (CPC, IPC, or Derwent) in one of three multi-level layouts: Circle Pack, Treemap, or Sunburst

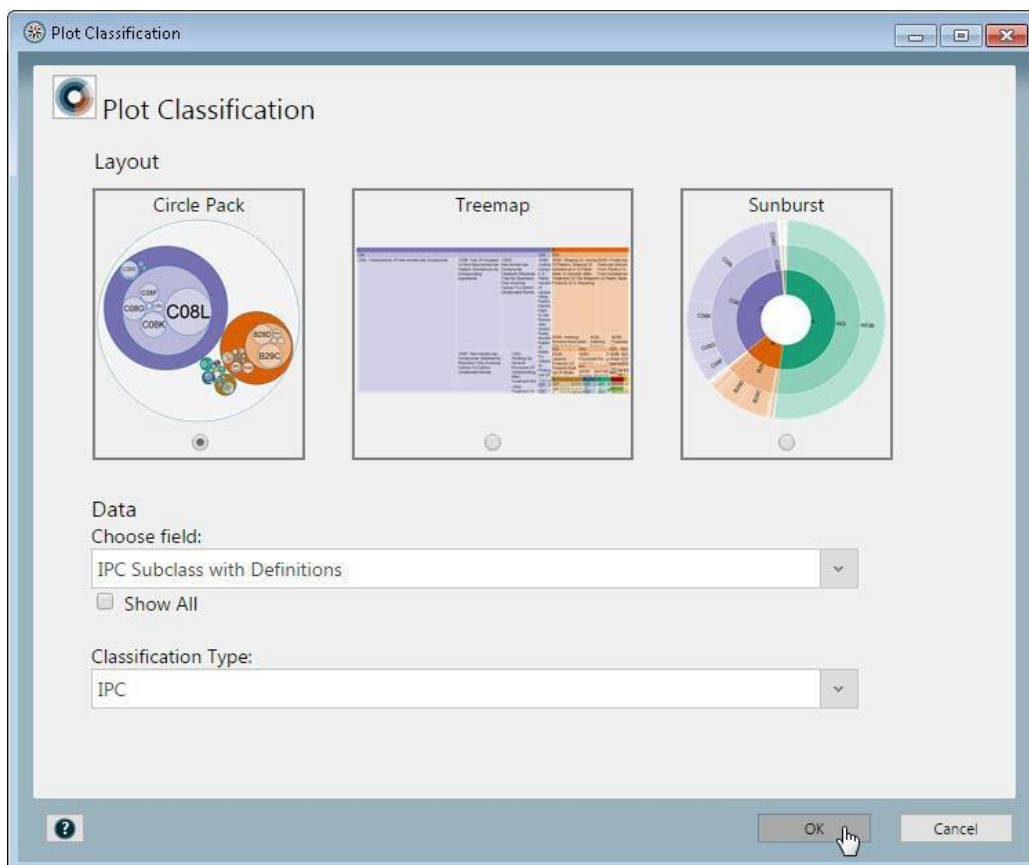
*Requirements:* Classification field should have "Classification" metatag. If not defined, the Data field cannot be selected.

From the Report ribbon, choose **Plot Classifications**.



Next, choose the Layout by clicking the radio button below the desired selection: Circle Pack, Treemap, or Sunburst.

Then Choose the Data field and Classification Type. This Report uses Classification fields and Meta Tags. Click **OK** to create the Report.

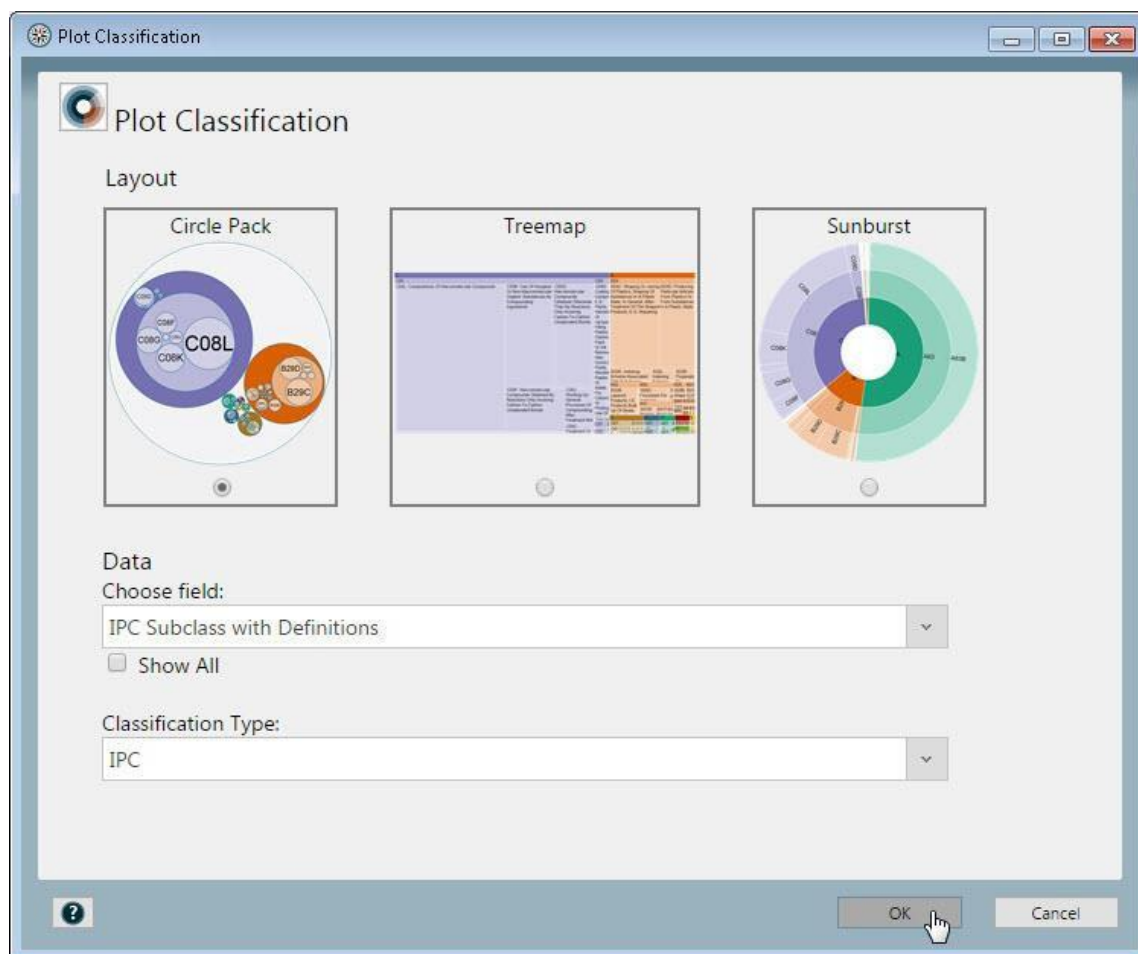


See the detailed Help topics for each: [Circle Pack](#), [Treemap](#), and [Sunburst](#).

## Circle Pack

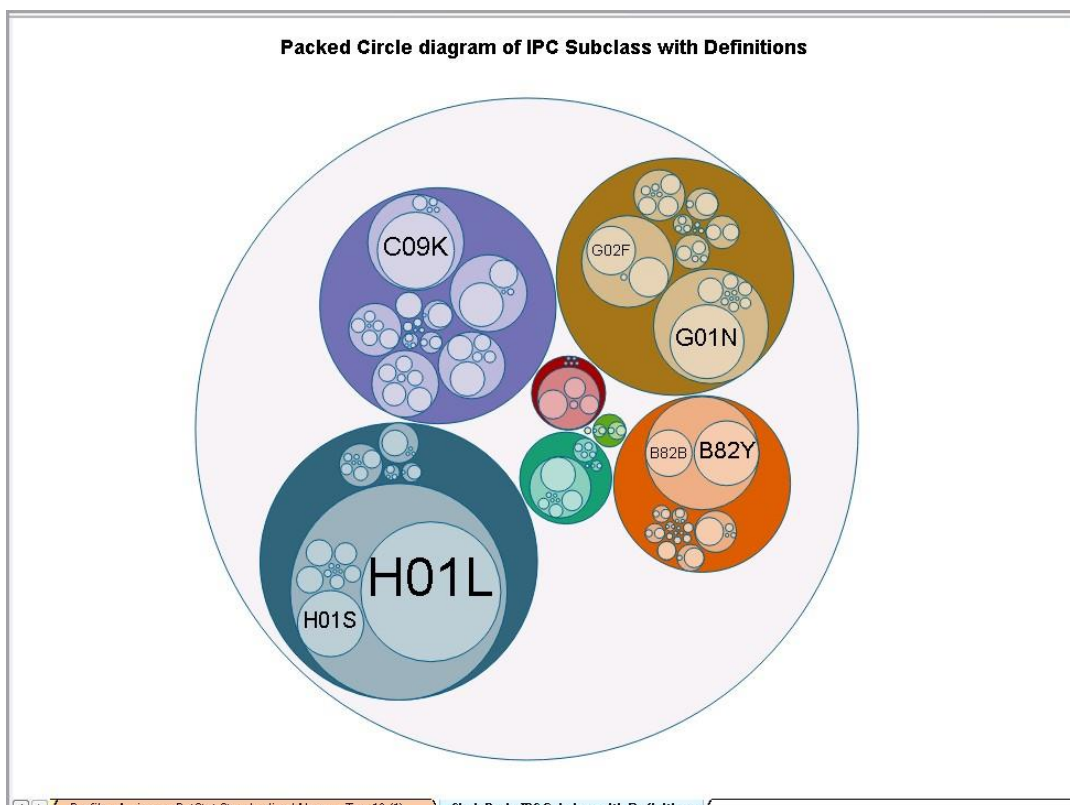
1. Choose the Layout by clicking the radio button below the desired selection: Circle Pack.

Then Choose the Data field and Classification Type. Click **OK** to create the Report.



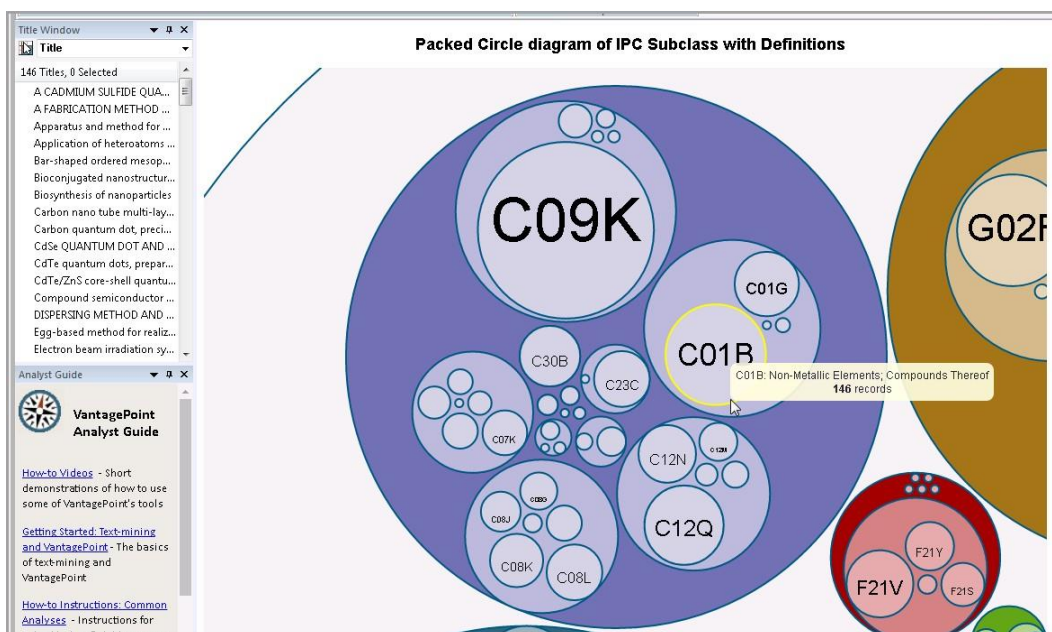


## 2. Resulting Interactive Circle Pack Report:



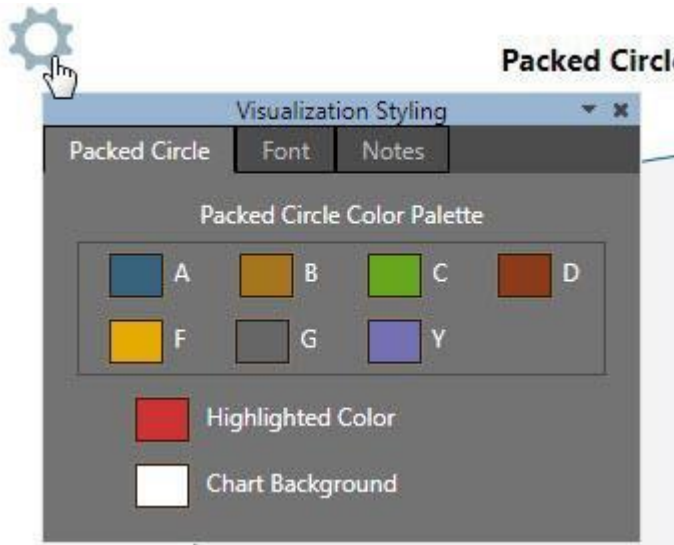
- Clicking and Double-clicking within the circles allows you to "drill down" into the detail. The items within each circle are displayed in the Title Window as selections are made.

In the illustration below, the user has clicked Circle C01B. The Title Window displays the Titles of 146 records in that IPC Subclass. Hovering the cursor over the circle, the tooltip reveals the IPC Subclass Definition and number of records with that IPC Subclass.



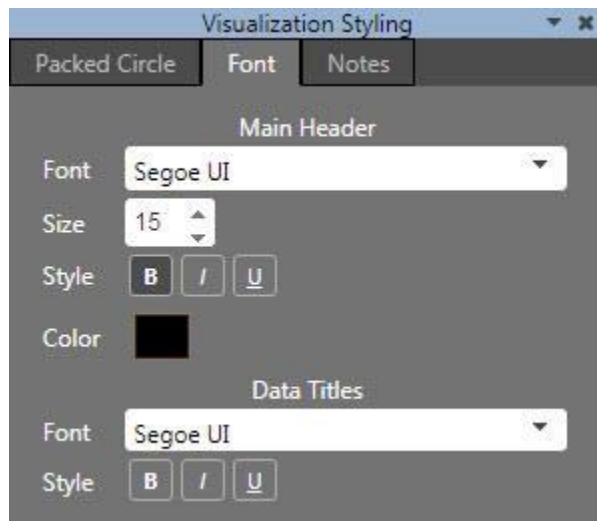
4. Double-clicking outside the largest circles "zooms out" to restore the original view.

Visualization Control for Packed Circle diagram is accessed using the "gear" icon in the upper left of the chart.



Colors are changed as described in the [Visualization Controls](#) topic.

Fonts, Font Size, Style, and Color for the Main Header (Chart Title) are set on the Font tab. In this case, only the Font type and Style for Data Titles can be changed.



You can also add a Sticky Note to the Visualization.

The Control dialog is dismissed by clicking the "x" in the upper right of the Control dialog.

See Also:

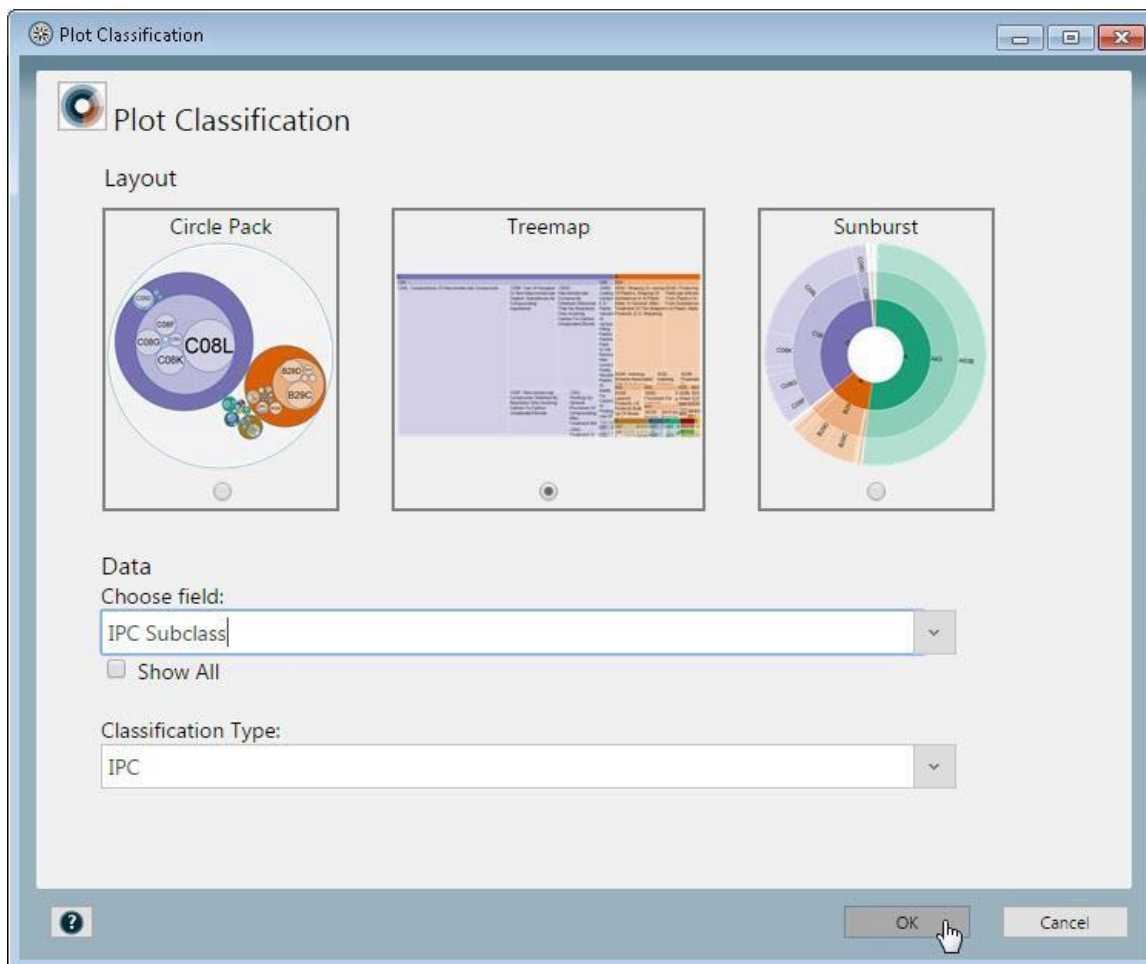
[Sticky Notes](#)

[Visualization Controls](#)

## Treemap

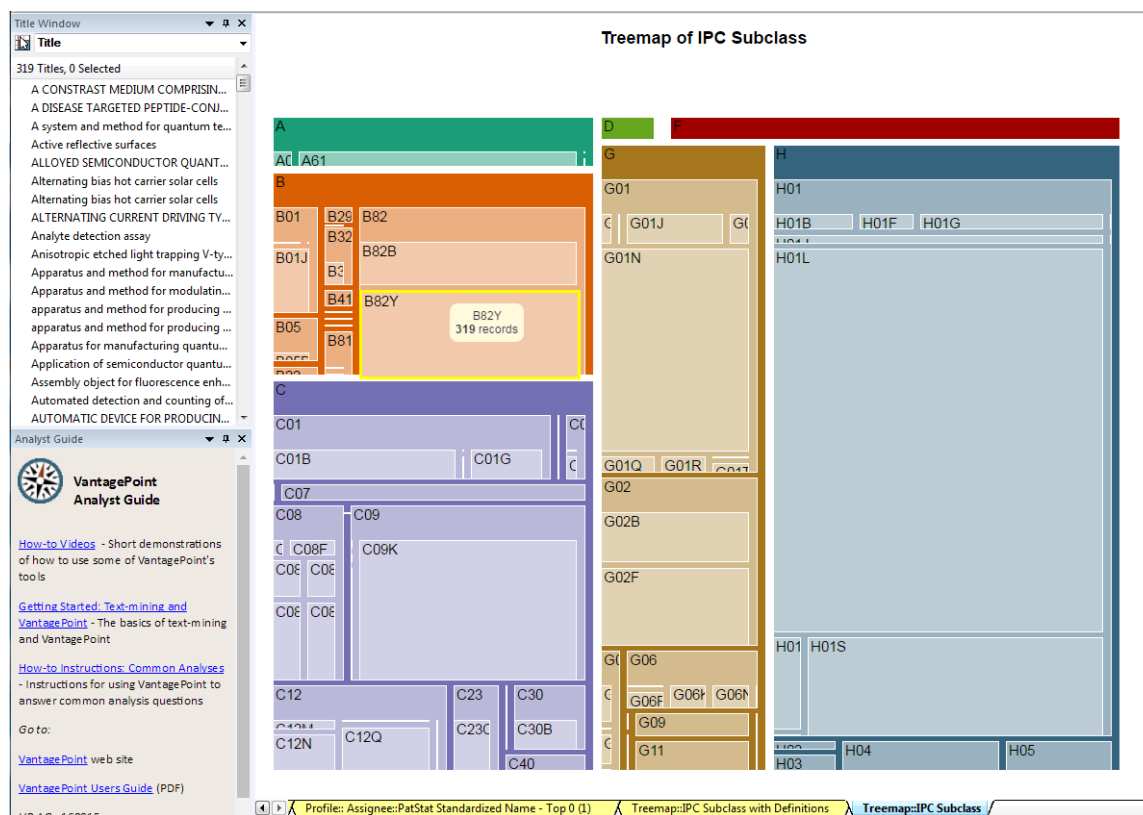
Choose the Layout by clicking the radio button below the desired selection: Treemap.

Then Choose the Data field and Classification Type. Click **OK** to create the Report.

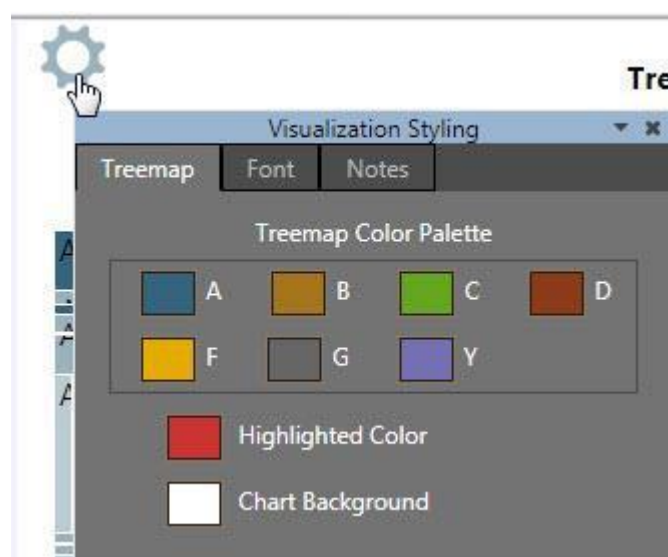


Results are illustrated below.

The user has clicked IPC Subclass B82Y. The 319 records in that Subclass appear in the Title Window.

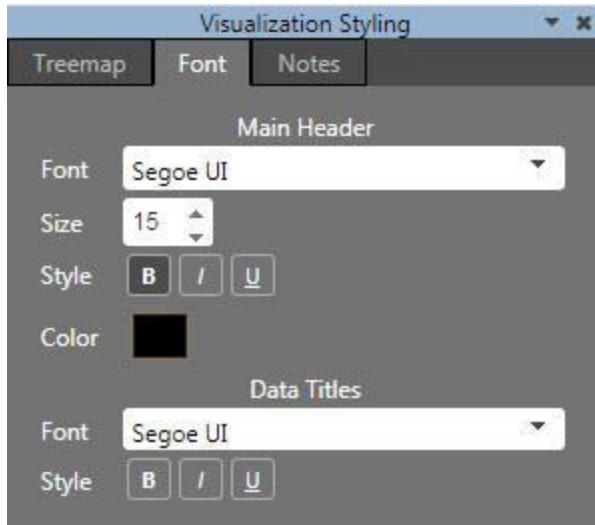


Visualization Control for Treemap is accessed using the "gear" icon in the upper left of the chart.



Colors are changed as described in the [Visualization Controls](#) topic.

Fonts, Font Size, Style, and Color for the Main Header (Chart Title) are set on the Font tab. In this case, only the Font type and Style for Data Titles can be changed.



You can also add a Sticky Note to the Visualization.  
The Control dialog is dismissed by clicking the "x" in the upper right of the Control dialog.

See Also:

[Sticky Notes](#)

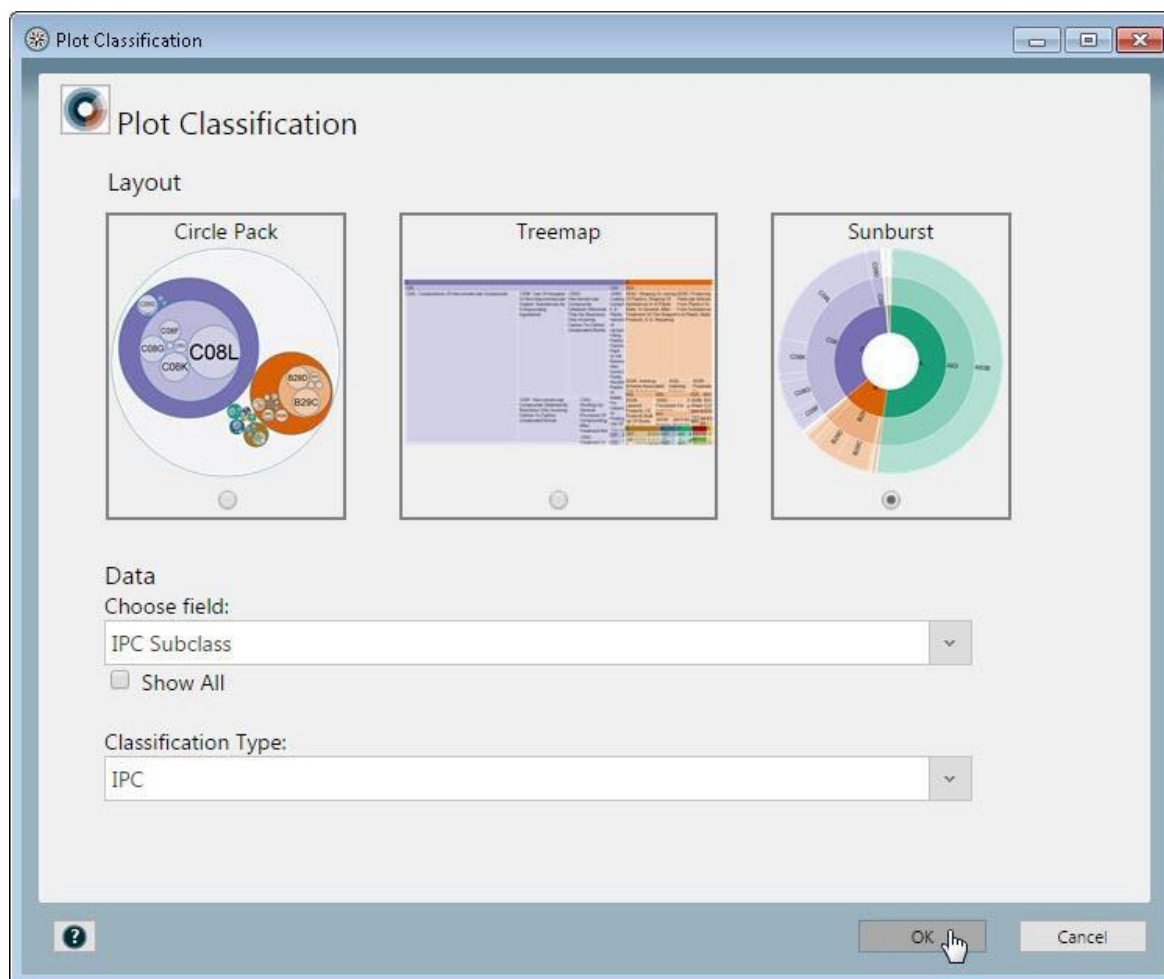
[Visualization Controls](#)



## Sunburst

1. Choose the Layout by clicking the radio button below the desired selection: Sunburst.

Then Choose the Data field and Classification Type. Click **OK** to create the Report.

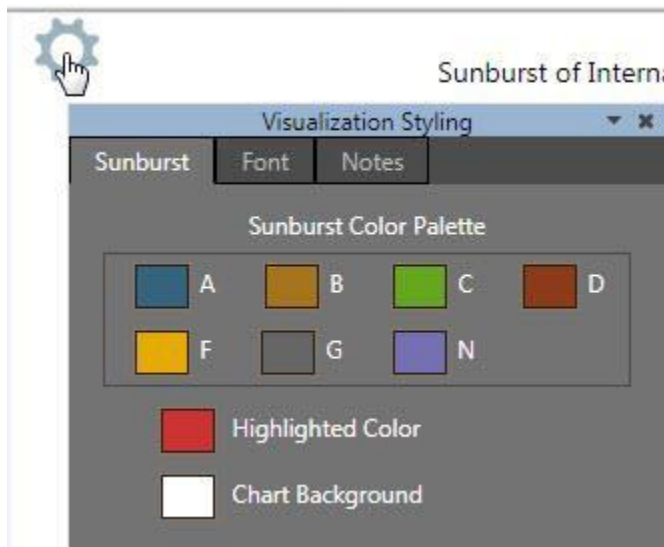


2. In the Sunburst, the innermost segments (in this illustration, H, A, B, C, etc.) represent the top level, with bands of increasing detail extending to the outermost segments. Clicking and Double-clicking within the segments allows you to "drill down" into the detail. The items within each segment are displayed in the Title Window as selections are made.



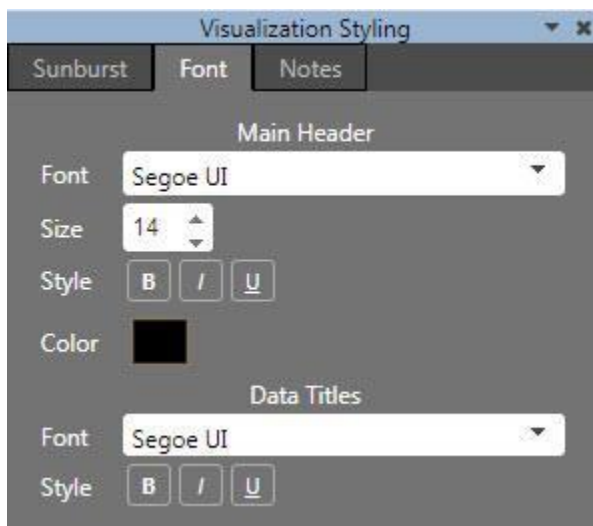
Double-click in the center circle to "zoom out" (in stages, depending on how far you've gone into the detail) until you return to the original view.

Visualization Control for Sunburst is accessed using the "gear" icon in the upper left of the chart.



Colors are changed as described in the [Visualization Controls](#) topic.

Fonts, Font Size, Styles, and Colors for the Main Header (Chart Title) and Data Titles are set on the Font tab.



You can also add a Sticky Note to the Visualization.

The Control dialog is dismissed by clicking the "x" in the upper right of the Control dialog.

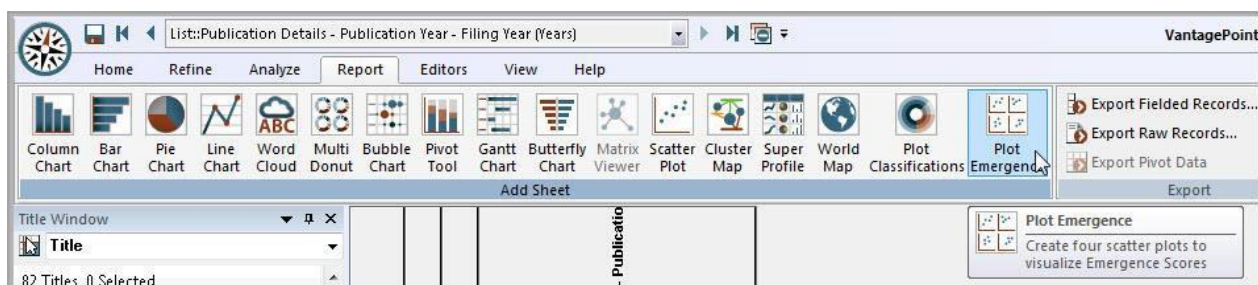
See Also:

[Sticky Notes](#)

[Visualization Controls](#)

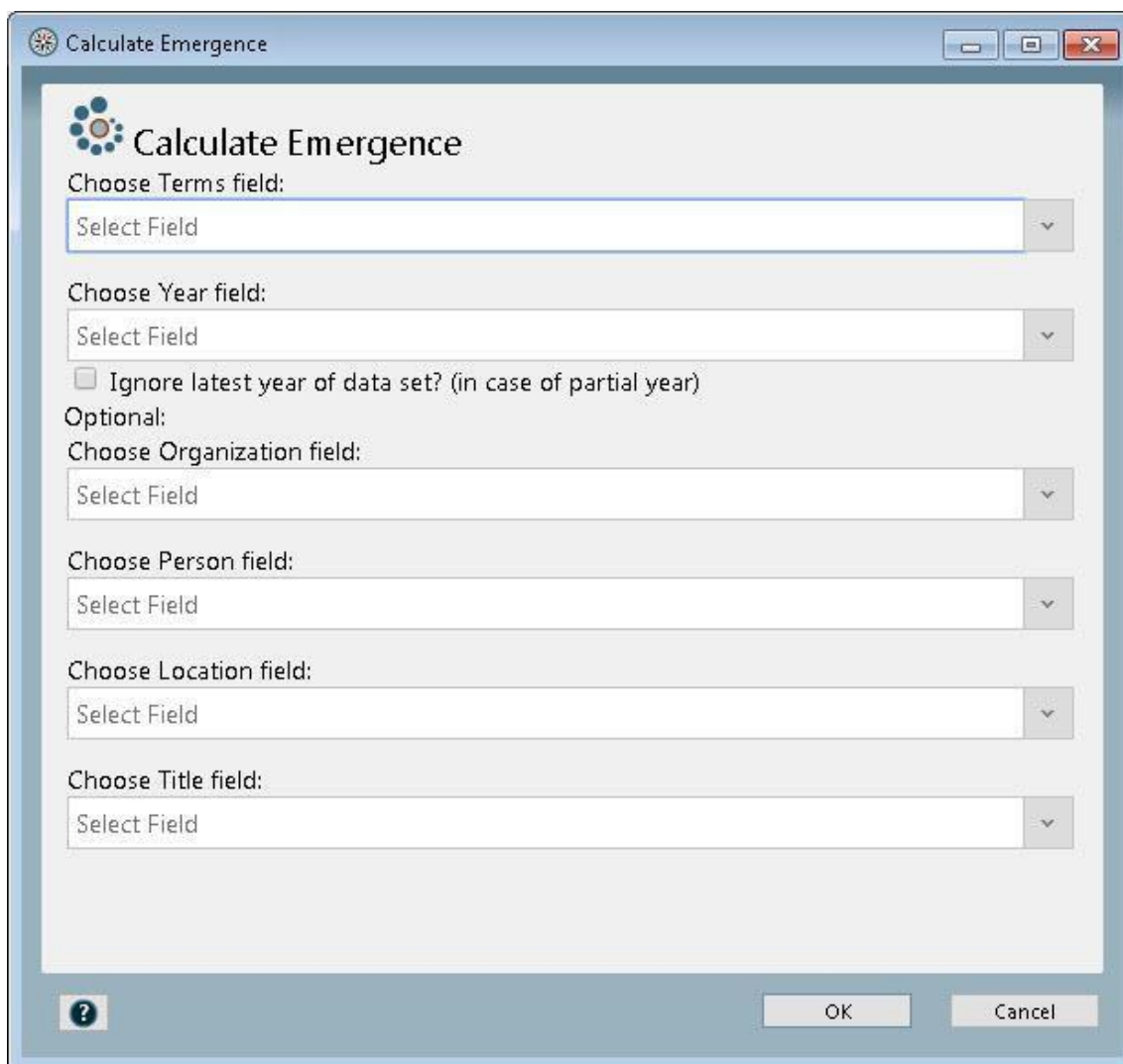
## Plot Emergence

From the **Report** ribbon, select **Plot Emergence**:



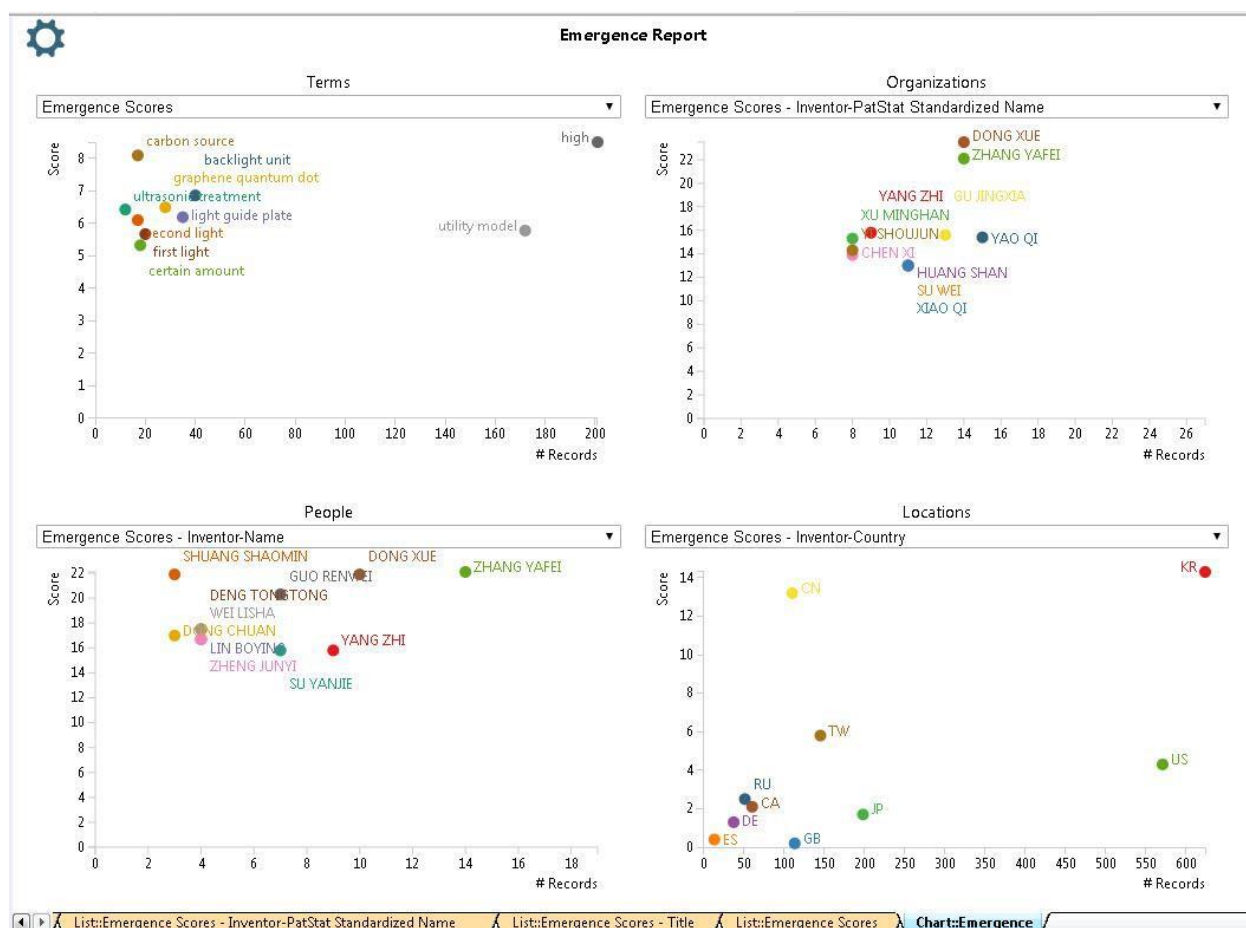
If you have already run the Calculate Emergence Indicators script on the dataset, the Plot Emergence visualization should appear.

If you have not already run Emergence, you will see the Calculate Emergence dialog. (See the Calculate Emergence Indicators topic for details on its operation.)



For each selected field in the Terms, Organization, Person and Location boxes, there will be a corresponding scatter plot in the visualization. By default, each chart shows the top 10 nodes, by score. Adjustments can be made using the filters in the Plot Emergence Controls.

The following Chart is an example:



See the [Plot Emergence Controls](#) topic for details on customizing the Chart.

See Also:

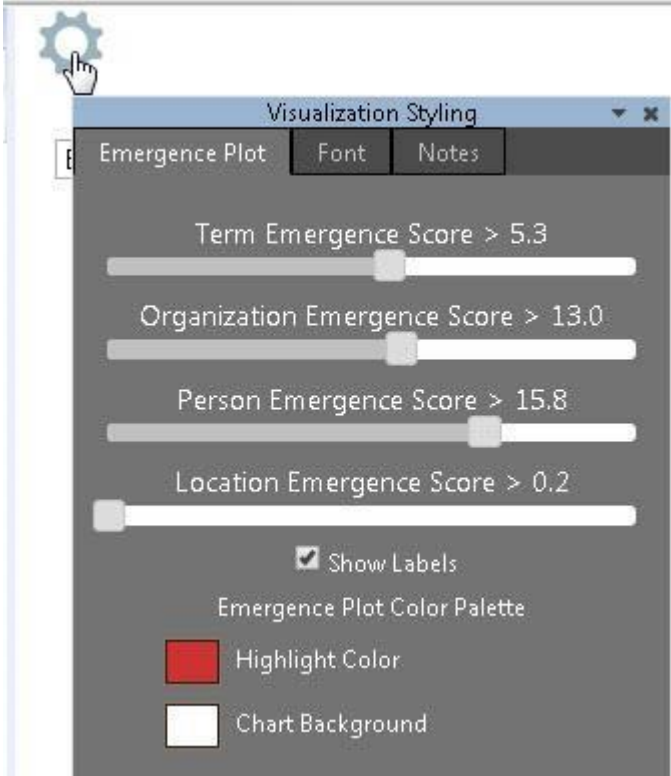
[Sticky Notes](#)

[Visualization Controls](#)



## PlotEmergenceCtrls

To display the Plot Emergence Controls, click the icon in the upper left of the Chart.



< Move these four sliders to affect the data displayed on the underlying charts.

< Show (or hide) the node labels

Color selections for Highlight Color and Chart Background are made as described in the [Visualization Controls](#) topic.

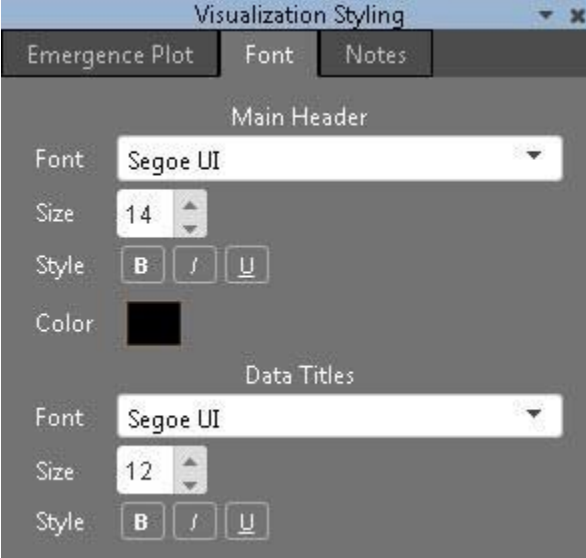
Fonts, Font Size, Styles, and Color for the Main Header (Chart Title) is set on the Font tab.

In this case, only the Font type, Size and Style for Data Titles can be changed.

The Control dialog is dismissed by clicking the "x" in the upper right of the Control dialog.

See Also:

[Plot Emergence Sticky Notes](#)  
[Visualization Controls](#)



## Visualization Controls

VantagePoint now allows real-time changes to colors and fonts used in most Visualizations (Charts and Reports).

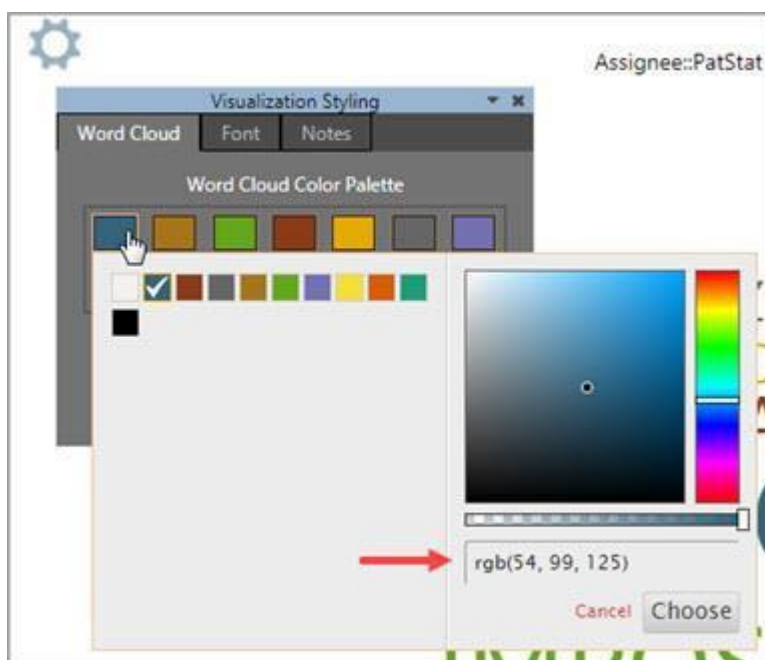
A gear-type "Settings" icon is displayed on each eligible Visualization which, when clicked, displays the tabbed controls for customizing colors, fonts, and certain settings for that particular sheet.

- The first tab identifies the type of visualization ("Word Cloud") and displays the colors and controls, if applicable, for that particular sheet.
- The second tab reflects Font settings for Data Titles and the Main Header (Title) for the visualization, and
- The third tab gives the option to display [Sticky Notes](#).

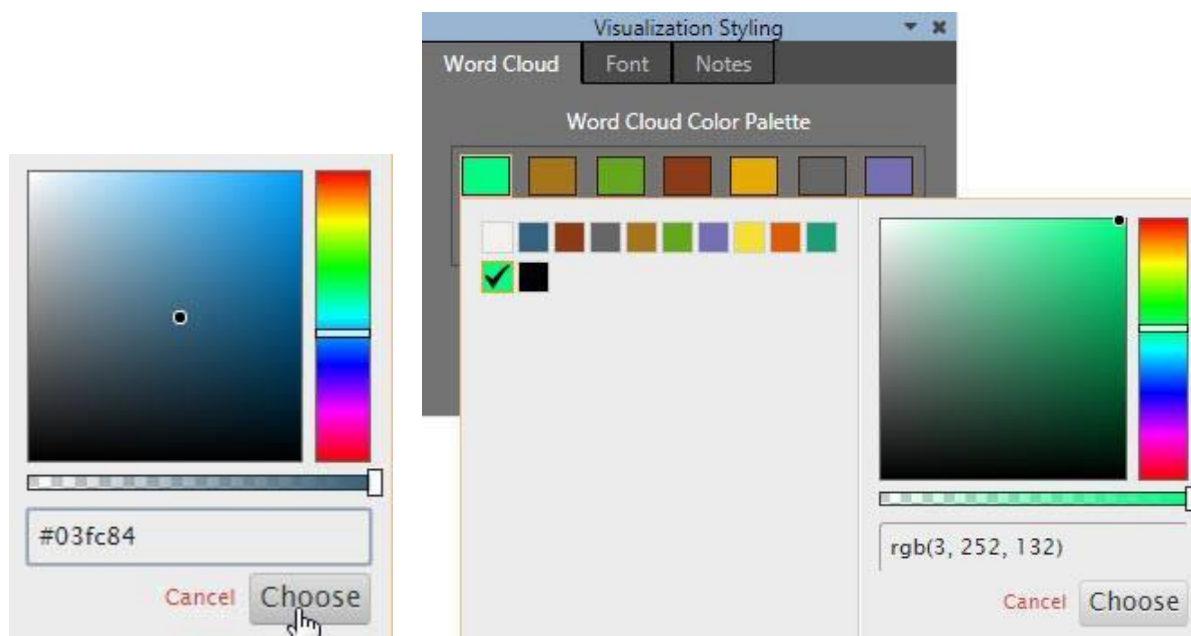


Clicking on one of the Colors in the Color Palette brings up a spectrum view from which to choose another color.

If you know the RGB color, you can type it over the numbers displayed in the field (indicated by the red arrow in the illustration below.)

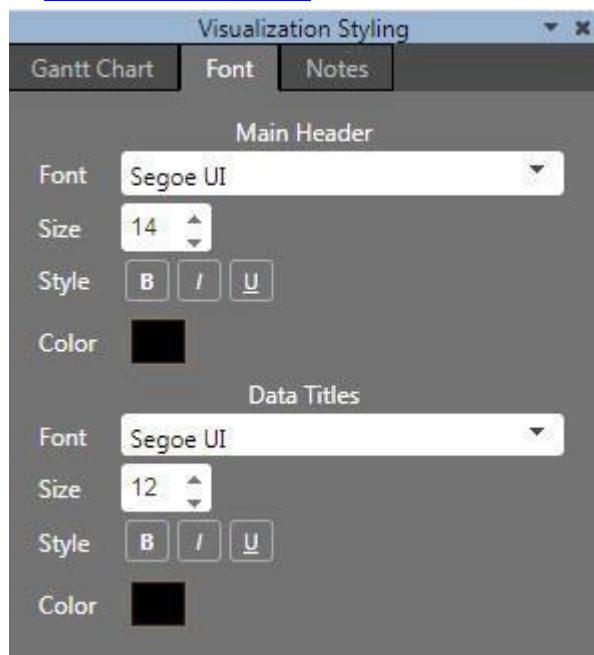


You can also type in the HEX value. VantagePoint converts it to RGB.



Click **Choose** to save and apply. Your Visualization will immediately reflect your new choice.

The Font tab offers choices of Font, Size, Style (Bold, Italics, Underline) and Color for each of the Main Header and Data Titles. Some Visualizations do not allow the Font Size of Data Titles to be changed, such as [Browse Classifications](#).



While these Settings apply only to the current sheet, the default Color and Font control for Visualizations is found on the **Options** dialog, Colors tab.

In some Visualizations, such as [Matrix Viewer](#), the Settings for the Layout are found on the first tab. For the [Bubble Chart](#), the option to display Record counts is selected here.

Notes (also known as "[Sticky Notes](#)") can be created for these visualizations. See that topic for details.

Applicable Visualizations/Charts for which these Controls apply:

1. [Map](#)
2. [Browse Classifications](#)
3. [Column/Bar Chart](#)
4. [Pie Chart](#)
5. [Line Chart](#)
6. [Word Cloud](#)
7. [Multi Donut](#)
8. [Bubble Chart](#)
9. [Gantt Chart](#)
10. [Butterfly Chart](#)
11. [Matrix Viewer](#)
12. [Scatter Plot](#)
13. [Cluster Map](#)
14. [World Map](#)
15. Plot Classifications
  - a. [Circle Pack](#)
  - b. [Treemap](#)
  - c. [Sunburst](#)
16. [Plot Emergence](#)

See Also:

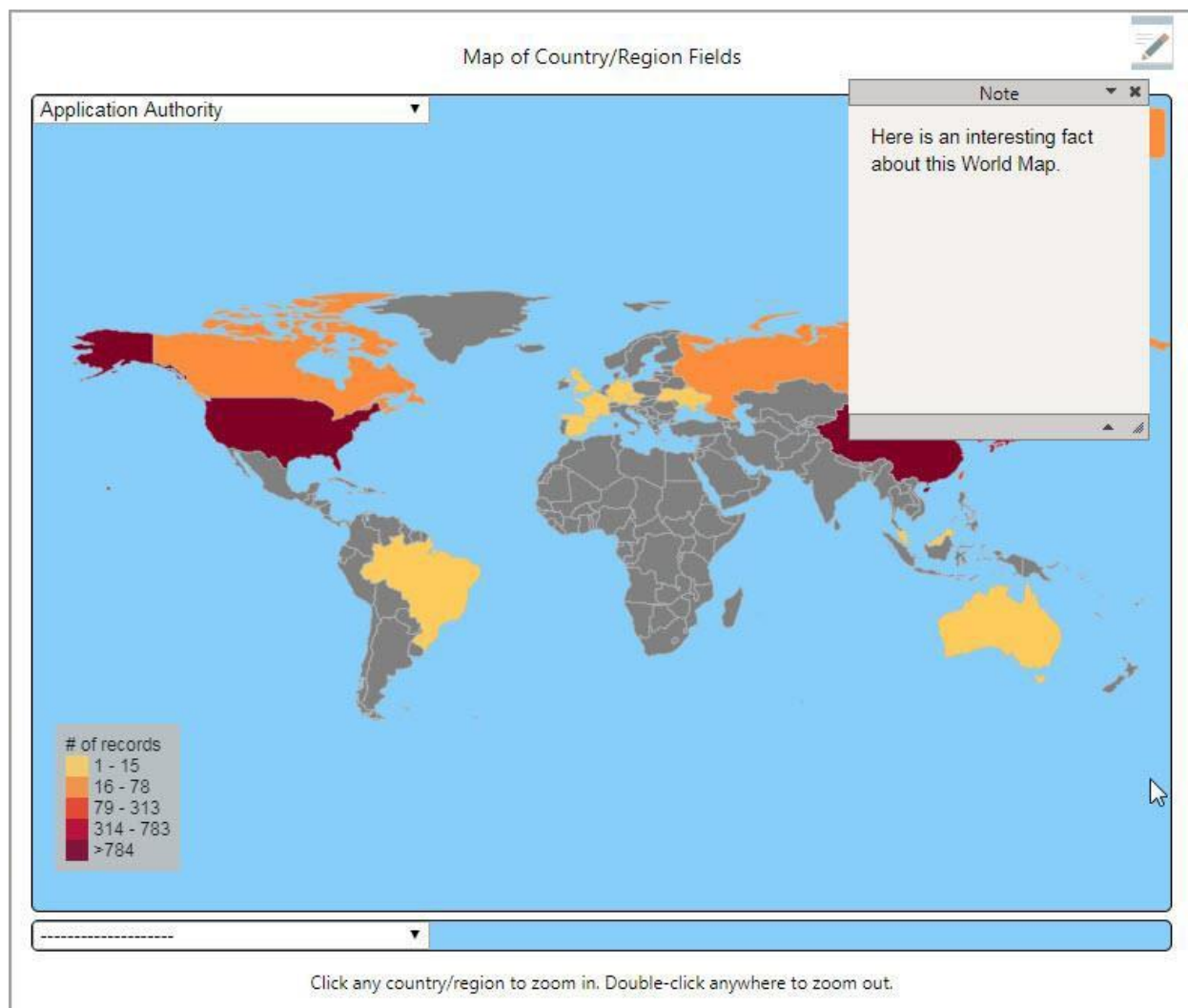
[Sticky Notes](#)

## **Sticky Notes**

Users can add a "Sticky Note" to newly-created Report visualizations that will be saved with the image, even when it is exported.

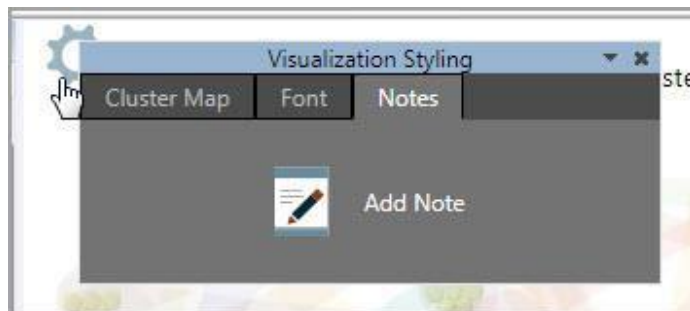
Specifications:

- Limit of one Note per sheet
- Text is saved in the sheet
- Collapsible and close-able
- Drag-able and re-sizable when open; position and size are saved
- Should export with sheet

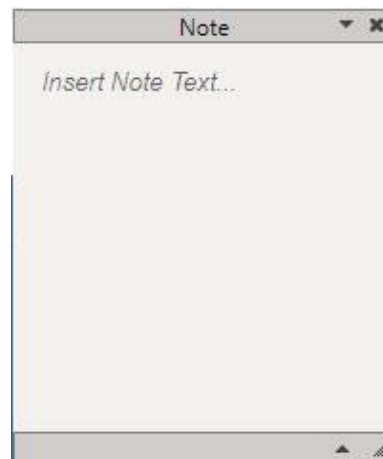


In most Visualizations and Charts, the option to Create a Note is accessed by first clicking the gear icon in the upper left corner of the Chart/Visualization.

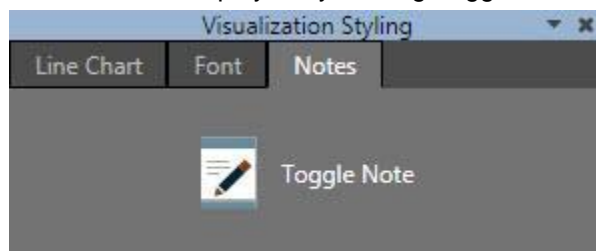
Then click the Notes tab, and click on the **Add Note** icon.



The Note "pad" is then displayed for use:



"Toggle Note" is now displayed in the Visualization Styling box. The Note is then always displayed with that Chart, but can be hidden/displayed by clicking Toggle Note.



You can also click the Note icon that now appears in the upper right corner of the chart to toggle display.



Clicking the arrow below the note will display the settings for color and font:



Here, you can change the color of the text box and font used for the note.



See Also:

[Visualization Controls](#)



## Export

The Export functions are found on the Report ribbon: [Export Fielded Records](#), [Export Raw Records](#), [Export Pivot Data](#), [Export Image](#).



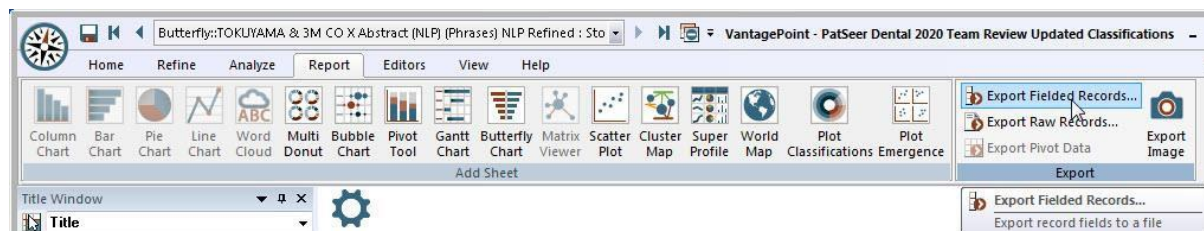
### Export Fielded Records

You can use VantagePoint to create a custom record according to a user-defined set of fields, then export those records to the clipboard or save to a file.

1. Choose which records you want to export.

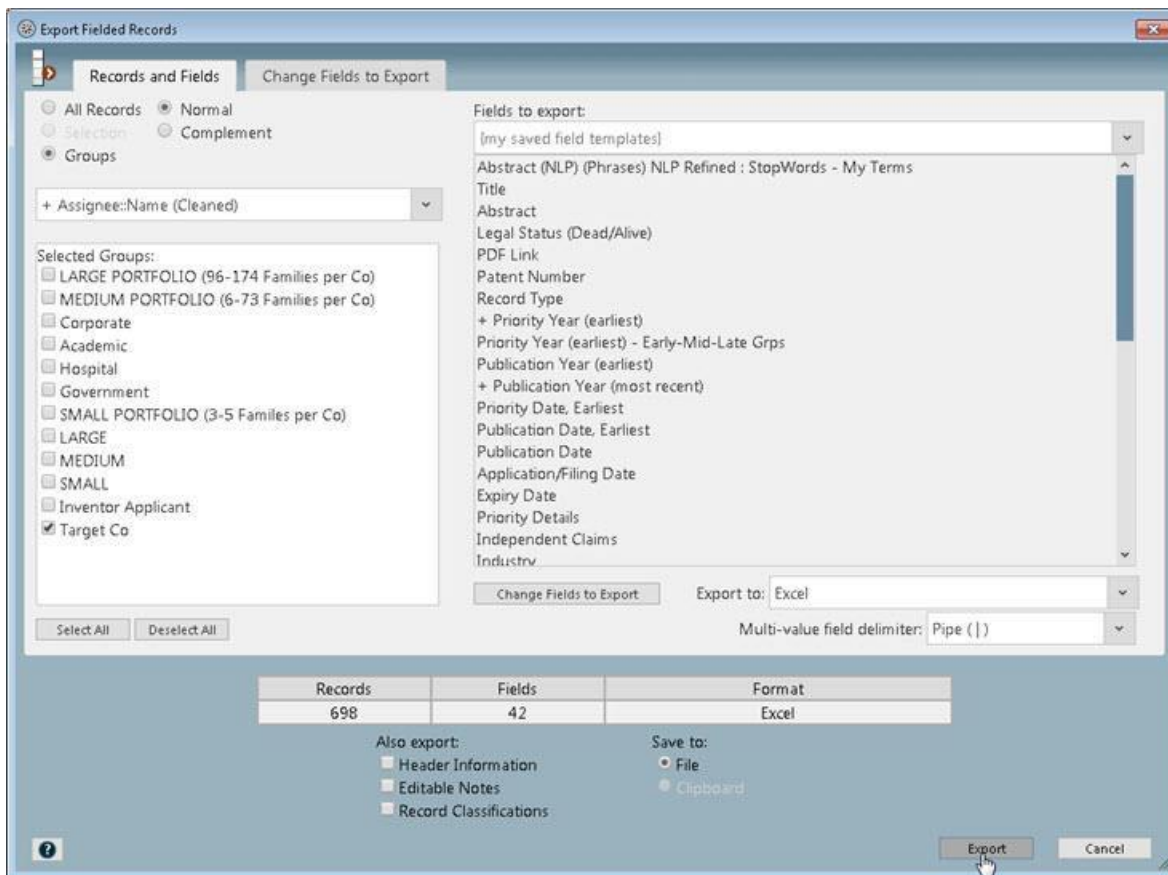
As with the [Export Raw Records](#) and [Create Sub-dataset](#) operations, you can export All records, a set of records based on a selection made in a list or matrix view, or an existing Group of items in your dataset.

2. From the Report Ribbon, select **Export Fielded Records**.

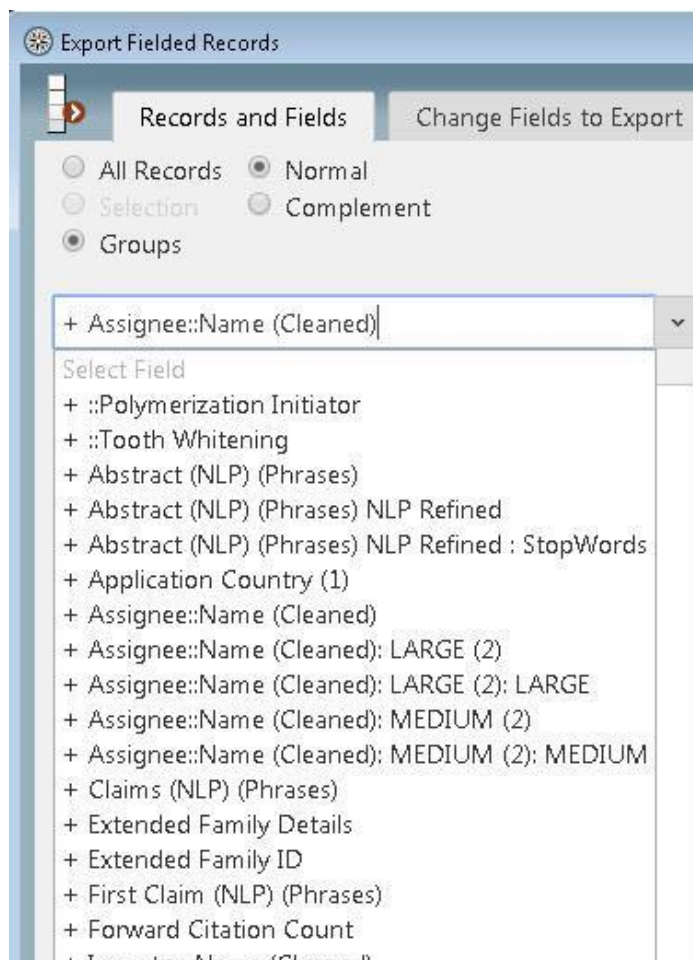


3. In this dialog, choose what to export: All Records, a Selection made, or Groups.

If Groups is selected, as in the illustration below, the Group names for the active sheet or selection will appear in the left window. (The left window is interactive only after “Groups” is selected.) Here, the user is working with a List of Assignees that has several groups, and has selected the “Target Co” group. Notice the **Select All** button below the window for quick selection of all groups in the field.



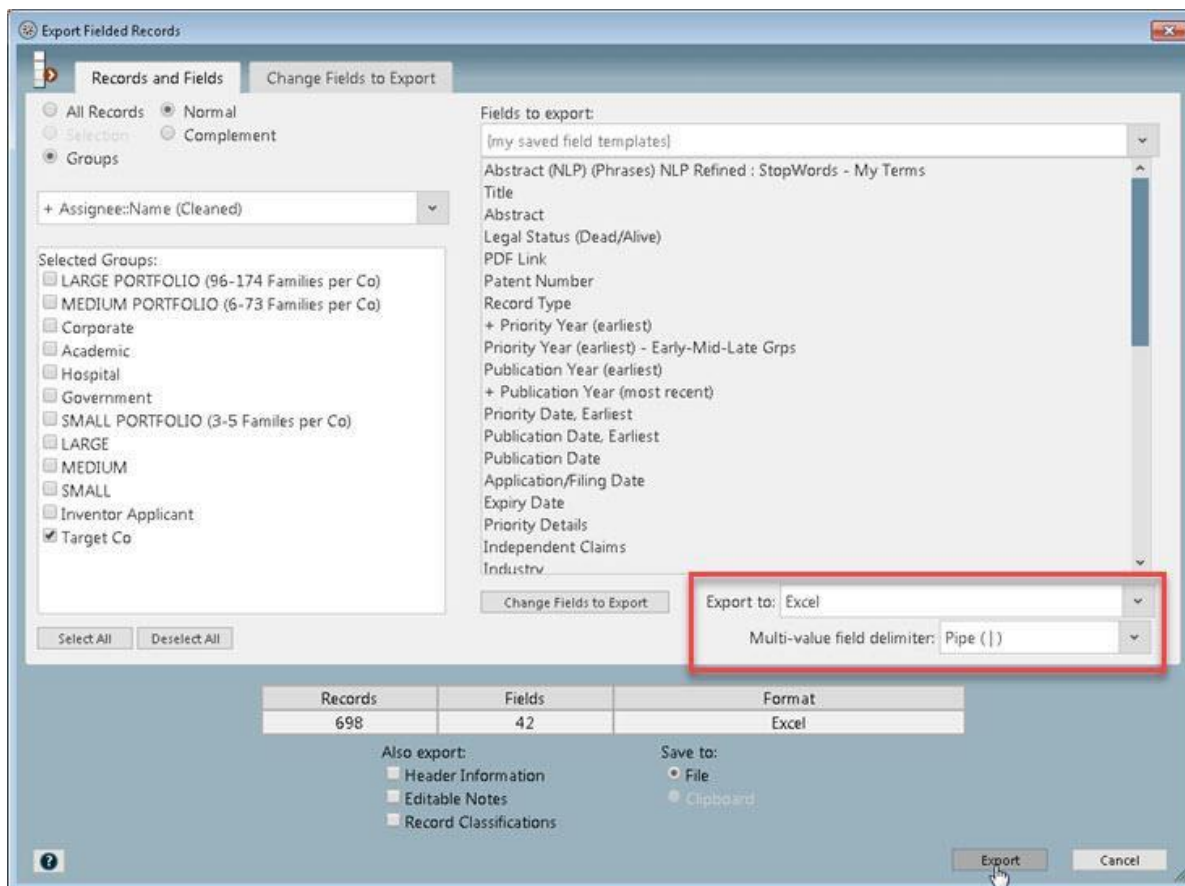
A different field with Groups could be selected by clicking the dropdown box to display all fields containing groups, as shown here.



4. Choose Normal or Complement for the export. "Normal" results in the creation of a sub-dataset consisting of the selected records or group. "Complement" excludes the records or group selected, and creates a sub-dataset using all the other records.

If any of the records in the selection have been marked for omission (see details in Record View), you can choose to omit these records during export.

- Choose the output type from selections listed in the "Export to:" dropdown (default is Excel).

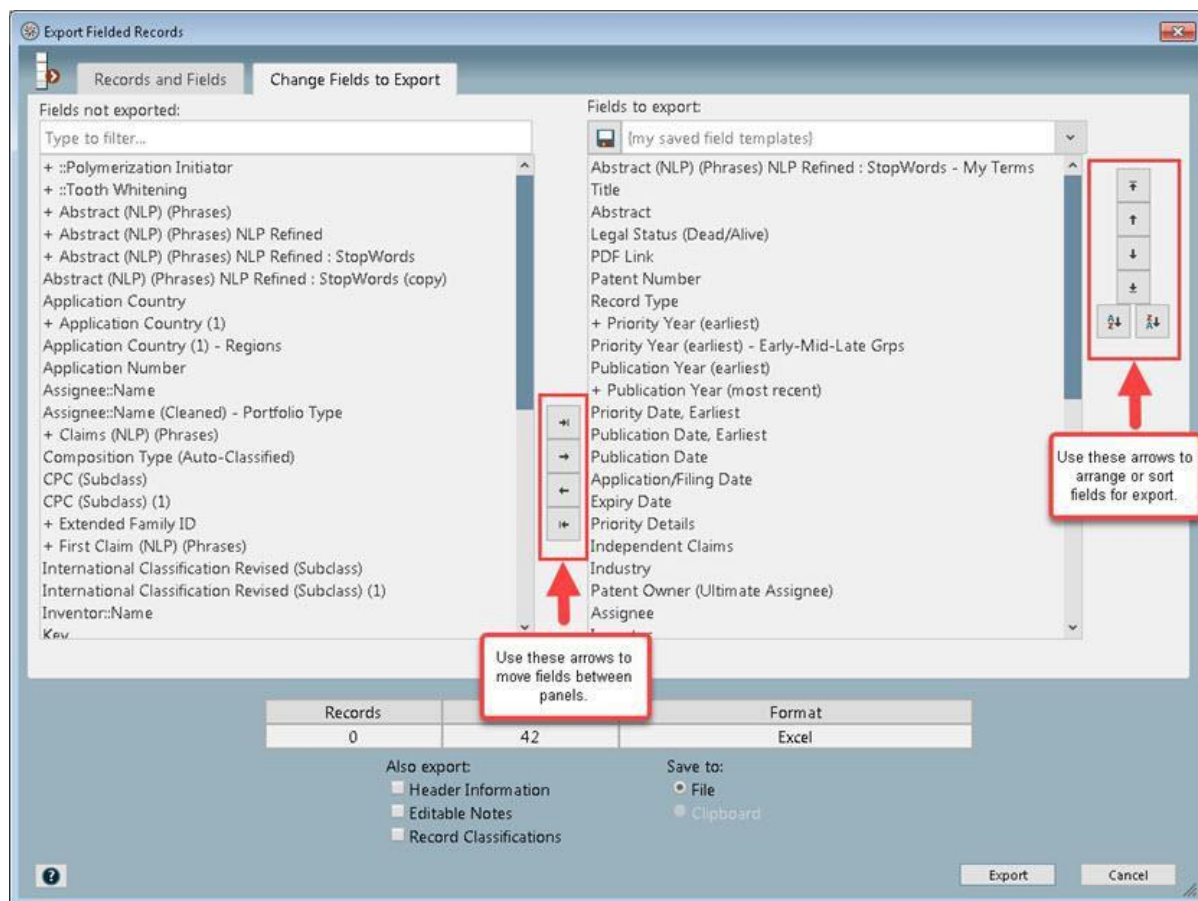


Currently supported output types include:

- **XML (Smart Data Exchange) (\*.xml)** - A generic XML format.
- **Comma Separated (\*.csv)** - Alternative to the Tab Delimited export that uses commas to delimit fields.
- **Tab Separated (\*.tab)** - Recommended format when the exported data will be used in spreadsheet applications such as Microsoft Excel.
- **Text (\*.txt)** - An easy-to-read, field-tagged text extract.
- **Excel (\*.xlsx)** - Export directly to Excel. Choose the appropriate delimiter for multi-value fields. Child fields export as separate columns when exporting compound fields.  
*Note: Items containing more characters than the cell limit for Excel (32,767) will cause the export to fail. Remove the fields causing the error or switch to a different export format.*
- **BizInt Smart Charts for Drug Pipelines** - (does not display if BizInt Smart Charts is not installed.) Requires BizInt Smart Charts software from BizInt Solutions, Inc.
- **BizInt Smart Charts for Patents** - (does not display if BizInt Smart Charts is not installed.) Requires BizInt Smart Charts software from BizInt Solutions, Inc.

- The panel on the right displays all the Fields to be exported. These Fields are populated using the Field Order for Record View setting. You can also retrieve a saved Field Template using the dropdown box. Click the "Change Fields to Export" tab to change these selections (you can also click the **Change Fields to Export** button below the "Fields to export" panel).

Here, you can select from the "Fields not exported" panel (on the left) and move to the "Fields to export" panel (on the right). You can also remove any fields you don't want to export, by selecting the field in the "Fields to export" panel and clicking the left arrow. Move fields between the panels by using the left/right arrows that appear in the middle. (Use Ctrl-click or Shift-click to select multiple fields within one panel.) Arrange the order of the fields to be exported by using the up/down/sort arrows on the right.



You have the option of saving your field selections as a template for future use. At the top of the "Fields to export" panel, enter a name and click the Save icon adjacent to the name.

The bottom portion of the dialog displays the number of Records and Fields to be exported. (Note: The Export Format is selected from the "Records and Fields" tab. You must first select that tab if you want to make a change to the selected output.)

- When you are finished making selections in this window, click **Export**.

If you chose to save your records to a file, a **Save As...** dialog will appear, where you choose a location to save the file and enter a name. If you chose to export to the Clipboard, the Export Wizard window will close when you select **Export**, and after a moment, you will be able to paste your records into another application.

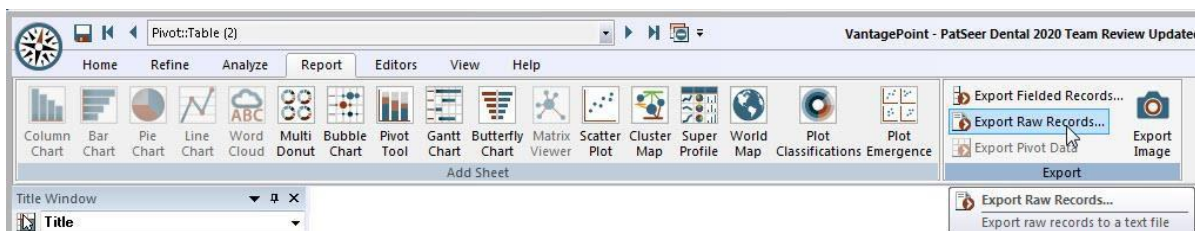
#### See Also:

[Import XML \(Smart Data Exchange\)](#)

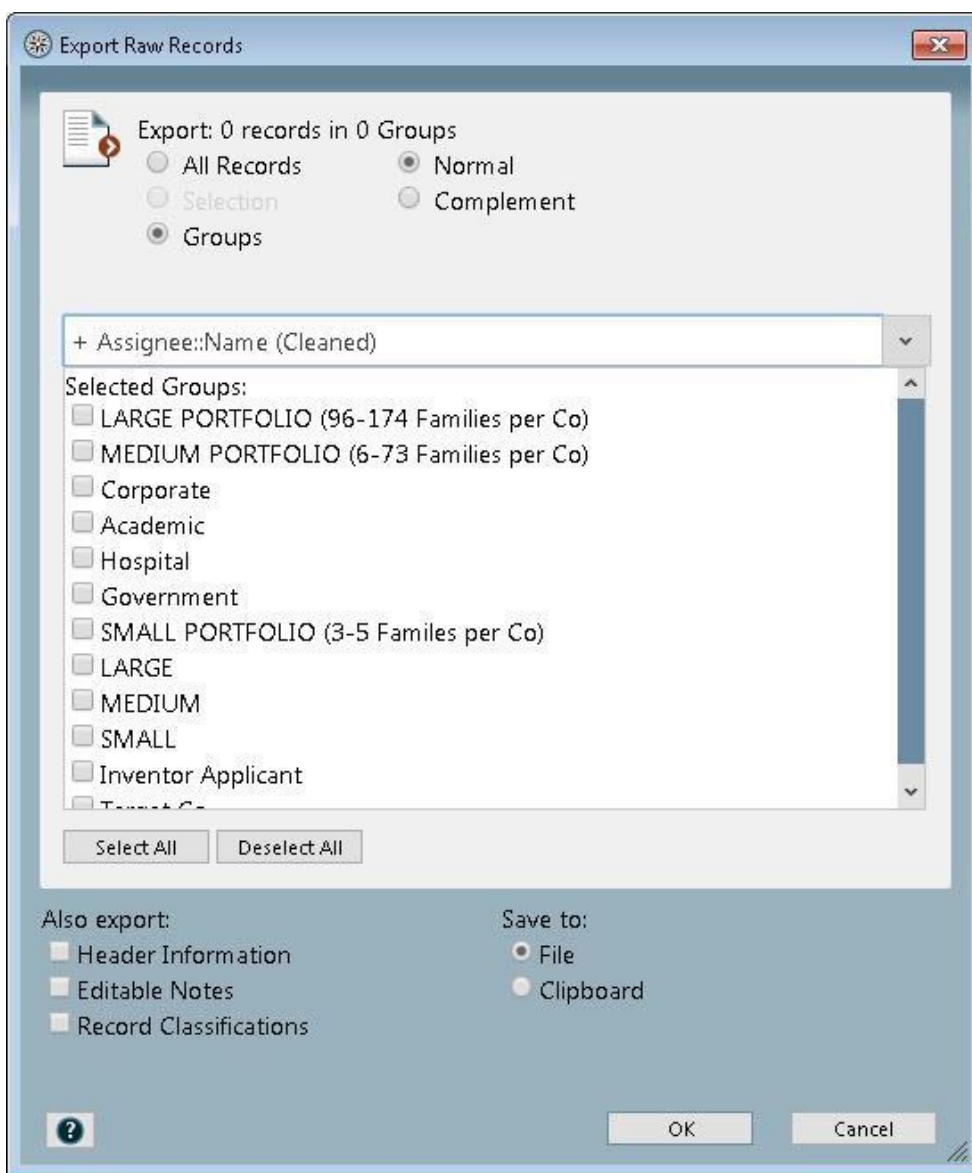
## Export Raw Records

You can export collections of raw records to the clipboard or to a file. This operation is similar to Create Sub-dataset, except that instead of creating a new VantagePoint file, **Export Raw Records** creates a text file similar to the original raw data file, but including only a sub-set of the records.

1. From the Report ribbon, select **Export Raw Records**.



2. In this dialog, choose what to export: All Records, a Selection already made, or Groups.





If choosing Groups, click the dropdown box to select a Field. All fields containing groups will be displayed. When a field is selected, the Groups for that field will then display (as shown above). Click the checkbox next to the Selected Group(s), or use the **Select All** button.

3. Choose Normal or Complement. "Normal" results in the creation of a sub-dataset consisting of the selected records or group. "Complement" excludes the records or group selected, and creates a sub-dataset using all the other records.

If any of the records in your dataset are tagged "Omit from new datasets" (see Record View), the **Omit records marked for omission** checkbox will be displayed. The tagged records will be omitted if the box remains checked. If you uncheck the box, the "omit" tag will be ignored, and all records in your group (or selection) will be exported

4. You can also choose to export information associated with the data (Editable Notes and Record Classifications would appear at the end of the record for which they were created):
  - Header Information
  - Editable Notes ("Notes about this record" in Record View)
  - Record Classifications
5. Save to a File or Copy to the Clipboard.
6. Click **OK**.

## Export Pivot Data

A co-occurrence matrix (or a selection within a matrix) can be exported to other applications simply by selecting the portion you want to export, choosing Copy with Headers from the Home ribbon (which copies the selection and headers to the clipboard), and then pasting into your application.

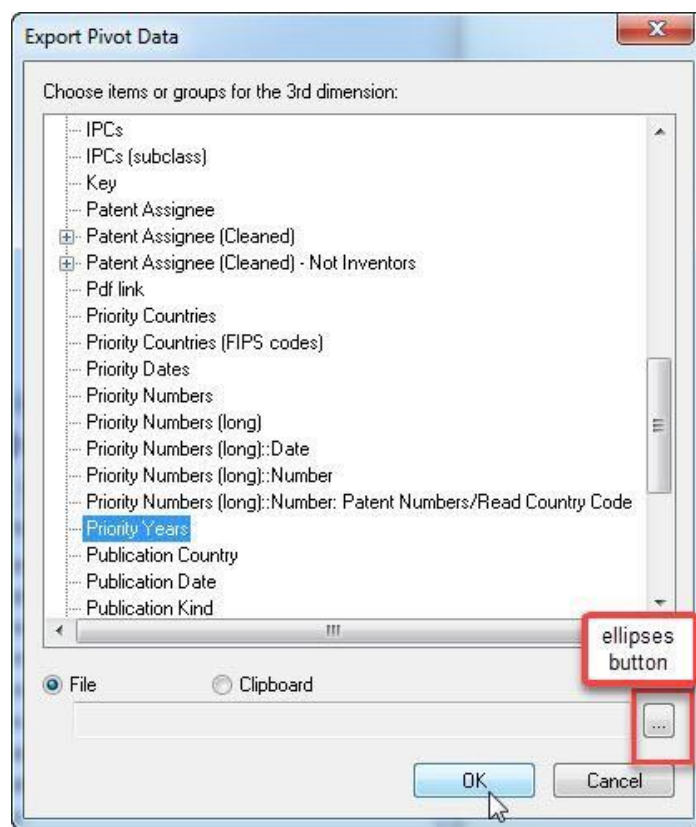
You can also export 3-field co-occurrence data from VantagePoint. Beginning with a normal 2-field co-occurrence, select a portion of the matrix.

From the Report ribbon, select **Export Pivot Data**:

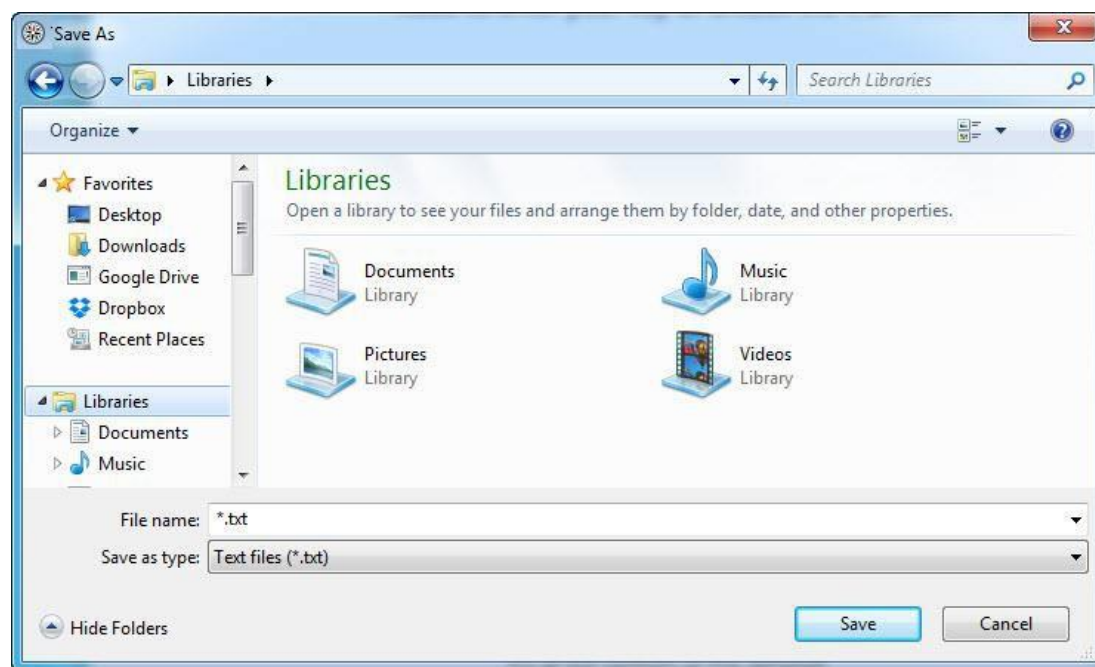
The screenshot shows the VantagePoint software interface. The main window displays a data table with columns for 'CPC' (1-11) and 'Records' (1-11). The 'Export Pivot Data' dialog box is open, showing options for exporting data. The 'Export Pivot Data' option is selected, and a sub-dialog is open asking to 'Export 3D co-occurrence matrix to text file'.

|                               | CPC | 1   | 2   | 3   | 4   | 5  | 6  | 7  | 8  | 9  | 10 | 11 |  |
|-------------------------------|-----|-----|-----|-----|-----|----|----|----|----|----|----|----|--|
| # Records                     |     | 359 | 228 | 197 | 150 | 50 | 50 | 46 | 25 | 19 | 12 | 11 |  |
| ACUSHNET CO                   |     |     |     |     |     |    |    |    |    |    |    |    |  |
| BRIDGESTONE SPORTS CO LTD     |     |     |     |     |     |    |    |    |    |    |    |    |  |
| SUMITOMO RUBBER IND           |     |     |     |     |     |    |    |    |    |    |    |    |  |
| CALLAWAY GOLF CO              |     |     |     |     |     |    |    |    |    |    |    |    |  |
| NIKE INTERNATIONAL LTD        |     |     |     |     |     |    |    |    |    |    |    |    |  |
| SPALDING SPORTS WORLDWIDE INC |     |     |     |     |     |    |    |    |    |    |    |    |  |
| TAYLOR MADE GOLF CO           |     |     |     |     |     |    |    |    |    |    |    |    |  |
| TOP FLUTE GOLF CO             |     |     |     |     |     |    |    |    |    |    |    |    |  |
| DUNLOP SPORTS CO LTD          |     |     |     |     |     |    |    |    |    |    |    |    |  |
| LUSCO INC                     |     |     |     |     |     |    |    |    |    |    |    |    |  |
| DU PONT                       |     |     |     |     |     |    |    |    |    |    |    |    |  |
| MCNEIL PPC INC                |     |     |     |     |     |    |    |    |    |    |    |    |  |
| MIZUNO KK                     |     |     |     |     |     |    |    |    |    |    |    |    |  |
| YOKOHAMA RUBBER CO LTD        |     |     |     |     |     |    |    |    |    |    |    |    |  |
| AERO X GOLF INC               |     |     |     |     |     |    |    |    |    |    |    |    |  |
| FANTOM COMPANY LTD            |     |     |     |     |     |    |    |    |    |    |    |    |  |
| JOHNSON AND JOHNSON           |     |     |     |     |     |    |    |    |    |    |    |    |  |
| RAIAR GOLF INC                |     |     |     |     |     |    |    |    |    |    |    |    |  |
| SHINTO PANT CO LTD            |     |     |     |     |     |    |    |    |    |    |    |    |  |
| WILSON SPORTING GOODS         |     |     |     |     |     |    |    |    |    |    |    |    |  |
| AVACO LTD                     |     |     |     |     |     |    |    |    |    |    |    |    |  |
| BLUE MARLIN LLC               |     |     |     |     |     |    |    |    |    |    |    |    |  |
| COBRA GOLF INC                |     |     |     |     |     |    |    |    |    |    |    |    |  |
| DIAMONTRACK GROUP             |     |     |     |     |     |    |    |    |    |    |    |    |  |

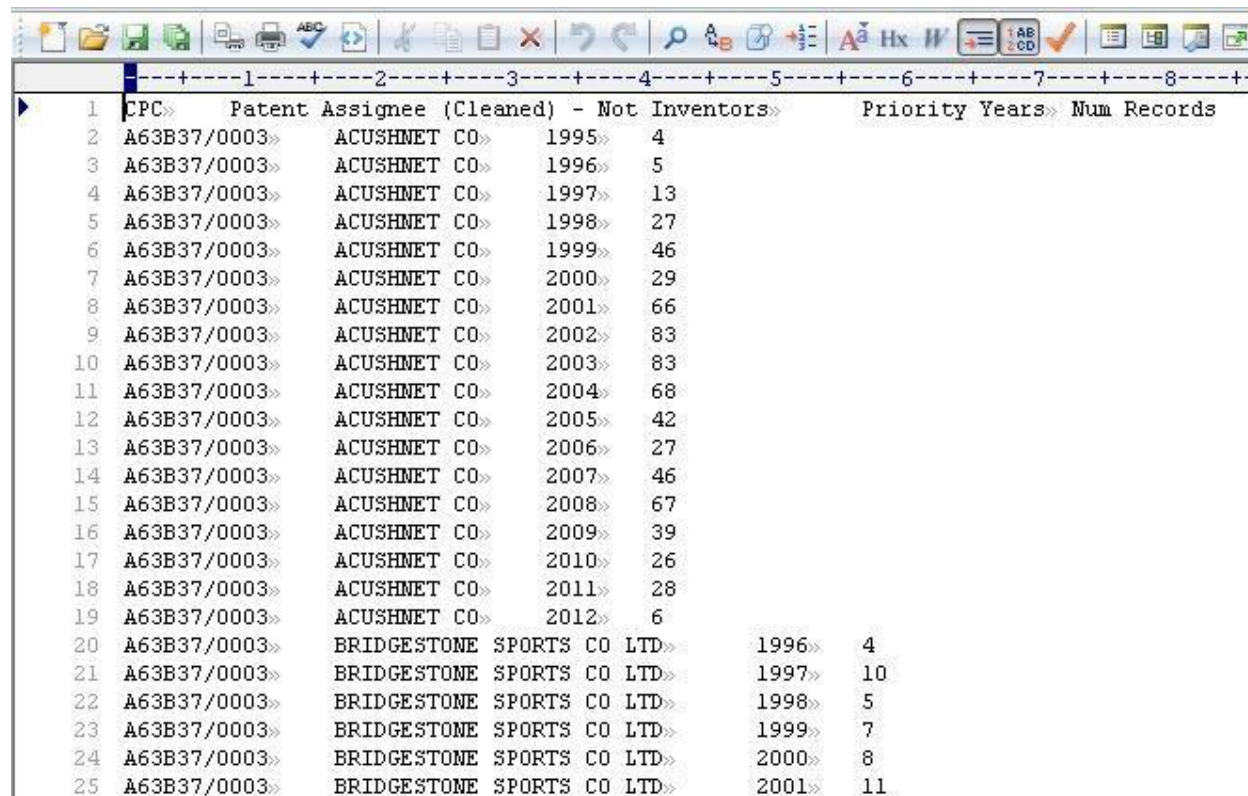
You will then be prompted to select the third field, as illustrated below.



If saving the output to a File, click the ellipses button, which brings up the "Save As" dialog, where you would enter the file name and location for the exported data file. (You can also copy the output to the Clipboard, which can be pasted into another application.)



The resulting data are exported with one line per "observation" as illustrated next. This is a standard data format that can be easily imported into many other analysis tools.



|    | 1            | 2  | 3               | 4           | 5 | 6 | 7 | 8 |
|----|--------------|--|-----------------|-------------|---|---|---|---|
|    | CPC»         | Patent Assignee (Cleaned) - Not Inventors» | Priority Years» | Mum Records |   |   |   |   |
| 2  | A63B37/0003» | ACUSHNET CO»                               | 1995»           | 4           |   |   |   |   |
| 3  | A63B37/0003» | ACUSHNET CO»                               | 1996»           | 5           |   |   |   |   |
| 4  | A63B37/0003» | ACUSHNET CO»                               | 1997»           | 13          |   |   |   |   |
| 5  | A63B37/0003» | ACUSHNET CO»                               | 1998»           | 27          |   |   |   |   |
| 6  | A63B37/0003» | ACUSHNET CO»                               | 1999»           | 46          |   |   |   |   |
| 7  | A63B37/0003» | ACUSHNET CO»                               | 2000»           | 29          |   |   |   |   |
| 8  | A63B37/0003» | ACUSHNET CO»                               | 2001»           | 66          |   |   |   |   |
| 9  | A63B37/0003» | ACUSHNET CO»                               | 2002»           | 83          |   |   |   |   |
| 10 | A63B37/0003» | ACUSHNET CO»                               | 2003»           | 83          |   |   |   |   |
| 11 | A63B37/0003» | ACUSHNET CO»                               | 2004»           | 68          |   |   |   |   |
| 12 | A63B37/0003» | ACUSHNET CO»                               | 2005»           | 42          |   |   |   |   |
| 13 | A63B37/0003» | ACUSHNET CO»                               | 2006»           | 27          |   |   |   |   |
| 14 | A63B37/0003» | ACUSHNET CO»                               | 2007»           | 46          |   |   |   |   |
| 15 | A63B37/0003» | ACUSHNET CO»                               | 2008»           | 67          |   |   |   |   |
| 16 | A63B37/0003» | ACUSHNET CO»                               | 2009»           | 39          |   |   |   |   |
| 17 | A63B37/0003» | ACUSHNET CO»                               | 2010»           | 26          |   |   |   |   |
| 18 | A63B37/0003» | ACUSHNET CO»                               | 2011»           | 28          |   |   |   |   |
| 19 | A63B37/0003» | ACUSHNET CO»                               | 2012»           | 6           |   |   |   |   |
| 20 | A63B37/0003» | BRIDGESTONE SPORTS CO LTD»                 | 1996»           | 4           |   |   |   |   |
| 21 | A63B37/0003» | BRIDGESTONE SPORTS CO LTD»                 | 1997»           | 10          |   |   |   |   |
| 22 | A63B37/0003» | BRIDGESTONE SPORTS CO LTD»                 | 1998»           | 5           |   |   |   |   |
| 23 | A63B37/0003» | BRIDGESTONE SPORTS CO LTD»                 | 1999»           | 7           |   |   |   |   |
| 24 | A63B37/0003» | BRIDGESTONE SPORTS CO LTD»                 | 2000»           | 8           |   |   |   |   |
| 25 | A63B37/0003» | BRIDGESTONE SPORTS CO LTD»                 | 2001»           | 11          |   |   |   |   |

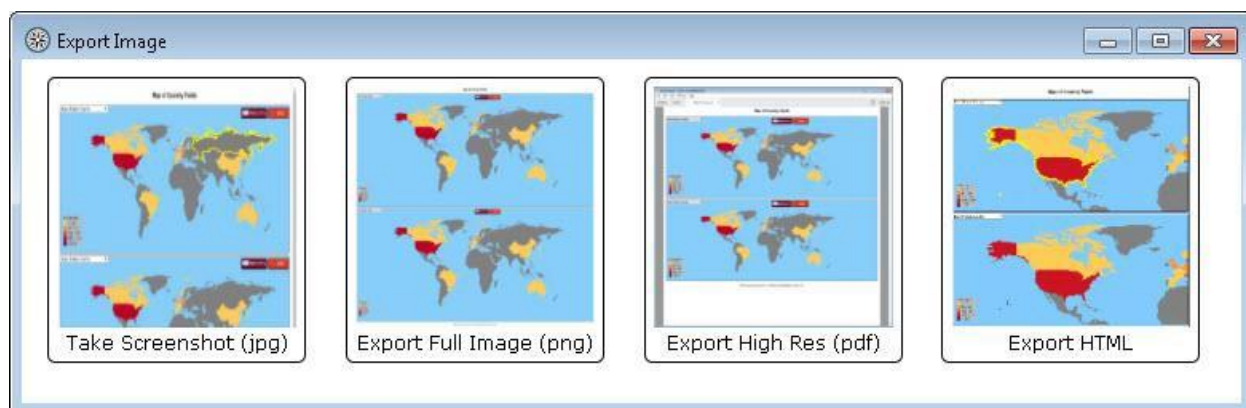
## Export Image

Screenshots of reports created in VantagePoint can be exported to other applications in these formats: jpg, png, pdf, and HTML.

From the Report ribbon, select **Export Image**.



You then select which export format to use:



## Editors

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Edit a Thesaurus, Fuzzy file, Import Filter, Meta Tags.

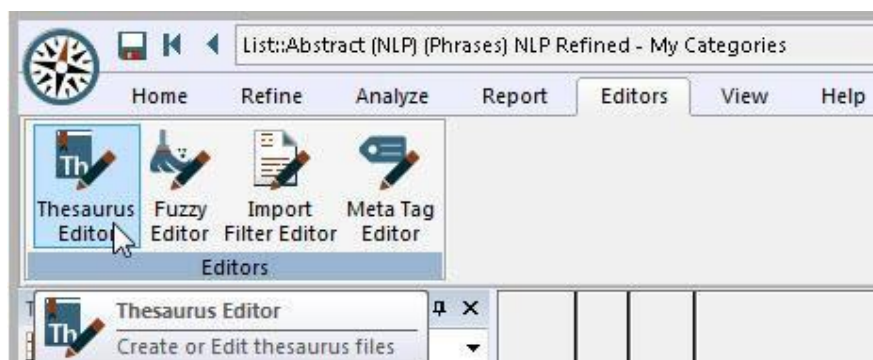


## Thesaurus Editor

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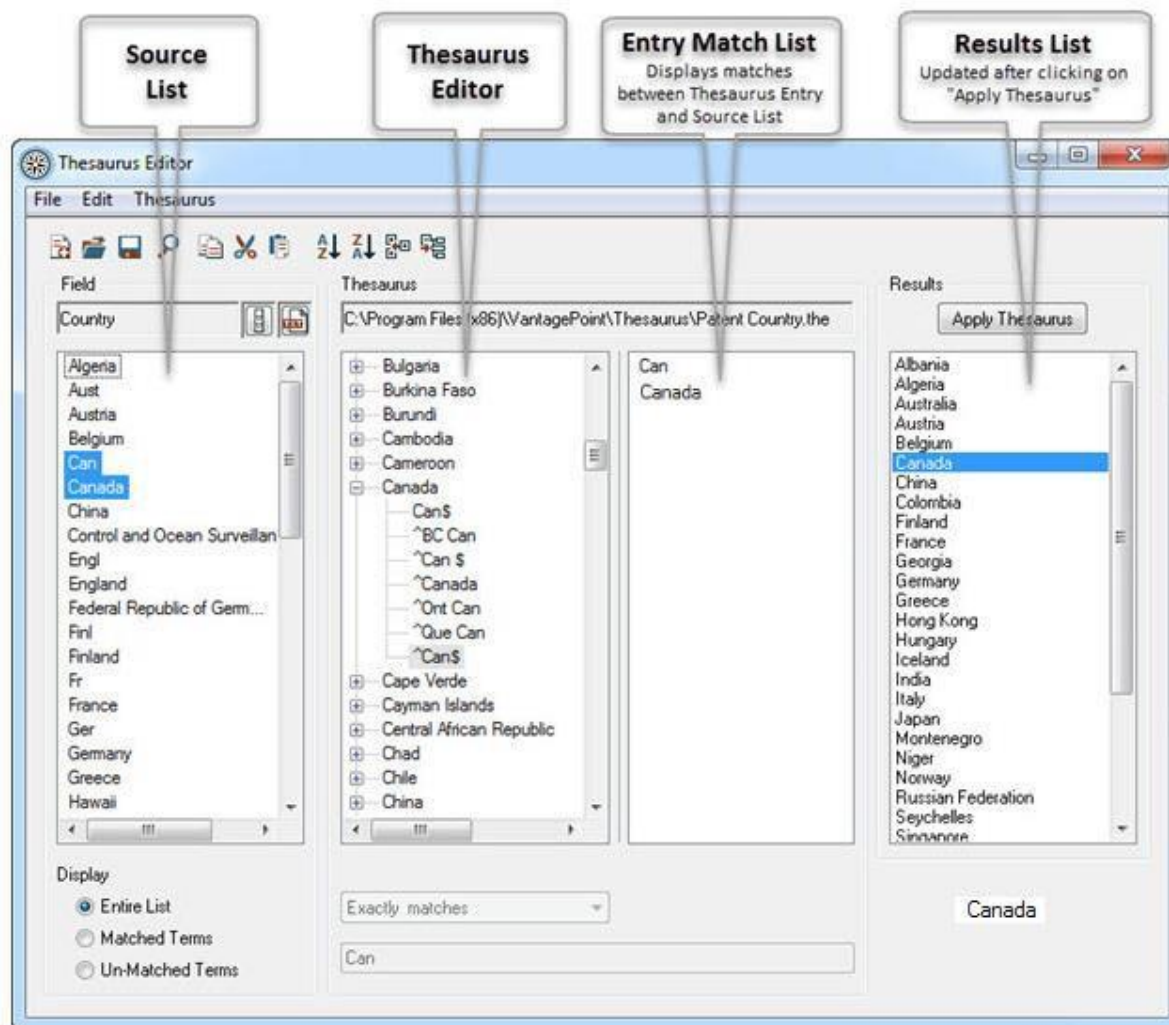
You can create your own thesauri using the VantagePoint Thesaurus Editor.

To edit or create a thesaurus, select **Thesaurus Editor** from the Editors ribbon.



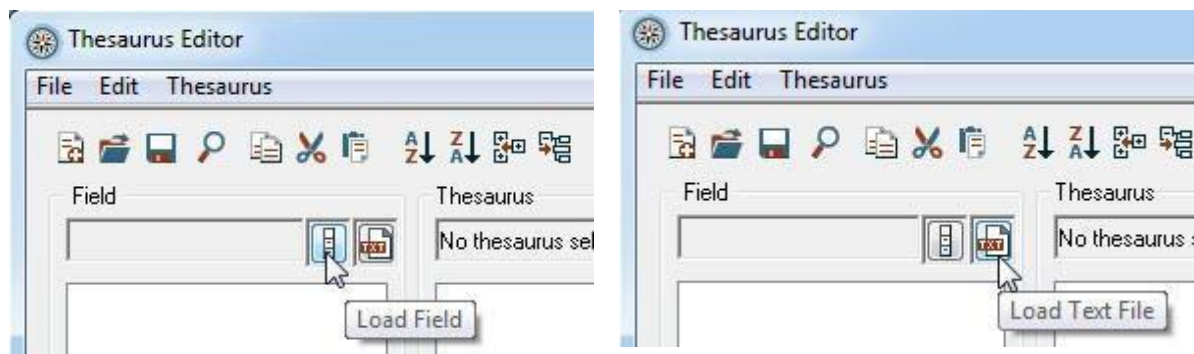


The following illustration shows the major component of the Thesaurus Editor:



**Source List Window** - You can load any list from the active VantagePoint dataset into the Source List Window by clicking **File** and **Load Field** from the Thesaurus Editor Menu. While it is not necessary to load a source list while editing a thesaurus, it is usually helpful. Alternatively, you can load a text file containing a list of words or phrases by clicking **File** and **Load Text File** from the Thesaurus Editor Menu.

Note the **Load Field** and **Load Text File** shortcut icons in the Field window:





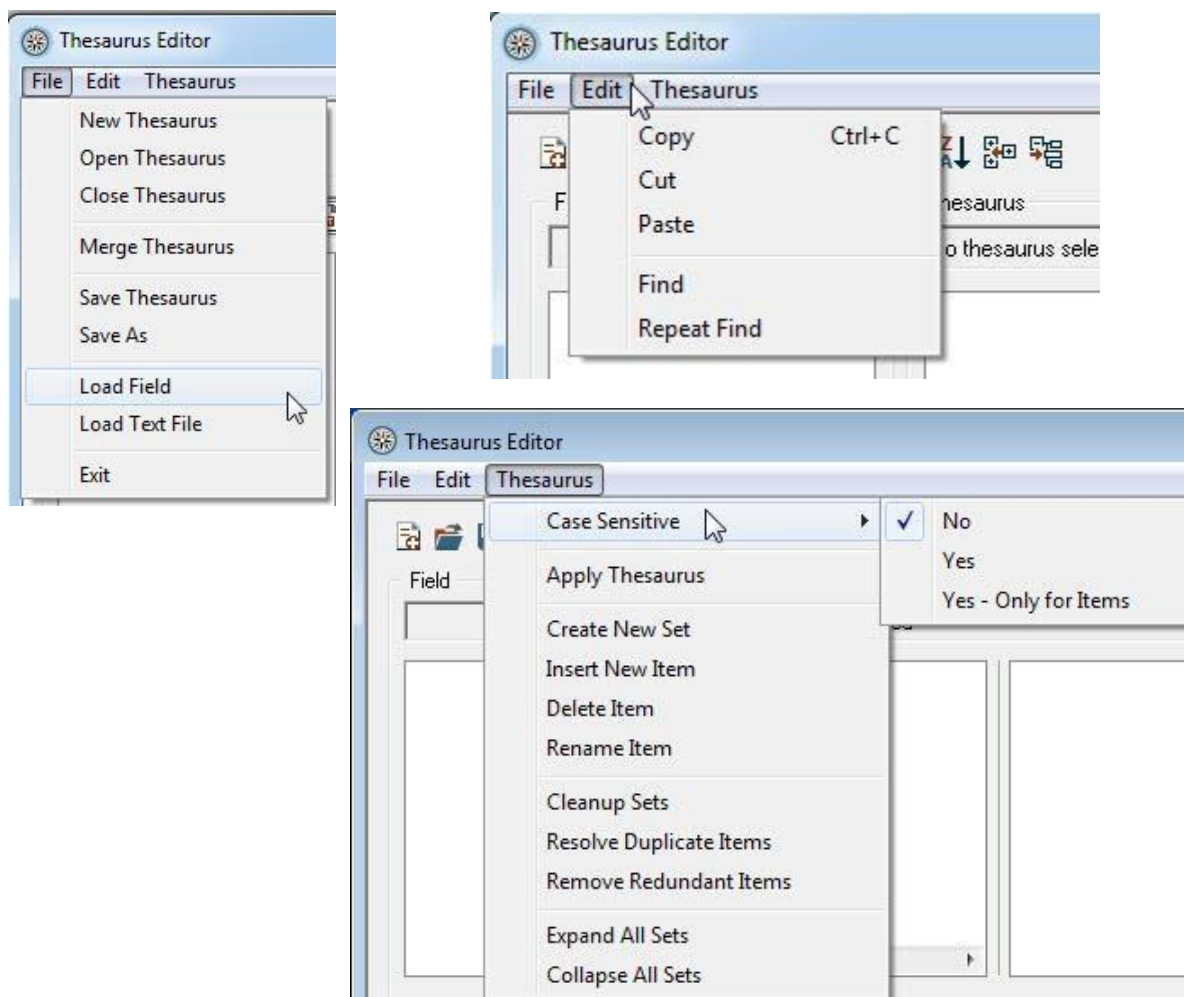
The "Display" buttons below the Source List Window control the content of the Source List Window. After you **Apply Thesaurus** (see the Results List below), the "Display" buttons allow you to view: a) the entire list, b) only the terms that were matched by the thesaurus, or c) only the terms that were not matched by the thesaurus.

**Note:** The "Display" buttons work after applying the thesaurus to the source list. Also, if you then make changes to the thesaurus, you need to **Apply Thesaurus** again to refresh the matched or unmatched view (as well as the Results List).

**Thesaurus Editor Window** - You create and edit your thesauri in this window. To edit an existing thesaurus, click **File** and **Open Thesaurus** from the Thesaurus Editor Menu and select the thesaurus from the selection dialog box. To save the changes you have made to the thesaurus, click **File** and **Save Thesaurus** from the Thesaurus Editor Menu. See [Editing a Thesaurus](#) for the details of building a thesaurus.

**Entry Match List Window** - As you create and edit your thesaurus, this window shows the items in the Source List Window that match the selected thesaurus entry. In the example illustration above, the thesaurus entry "Canada" is selected in the Thesaurus Editor Window and the Entry Match Window shows two matches from the Source List Window. See [Editing a Thesaurus](#) for the details of using this window to build a thesaurus.

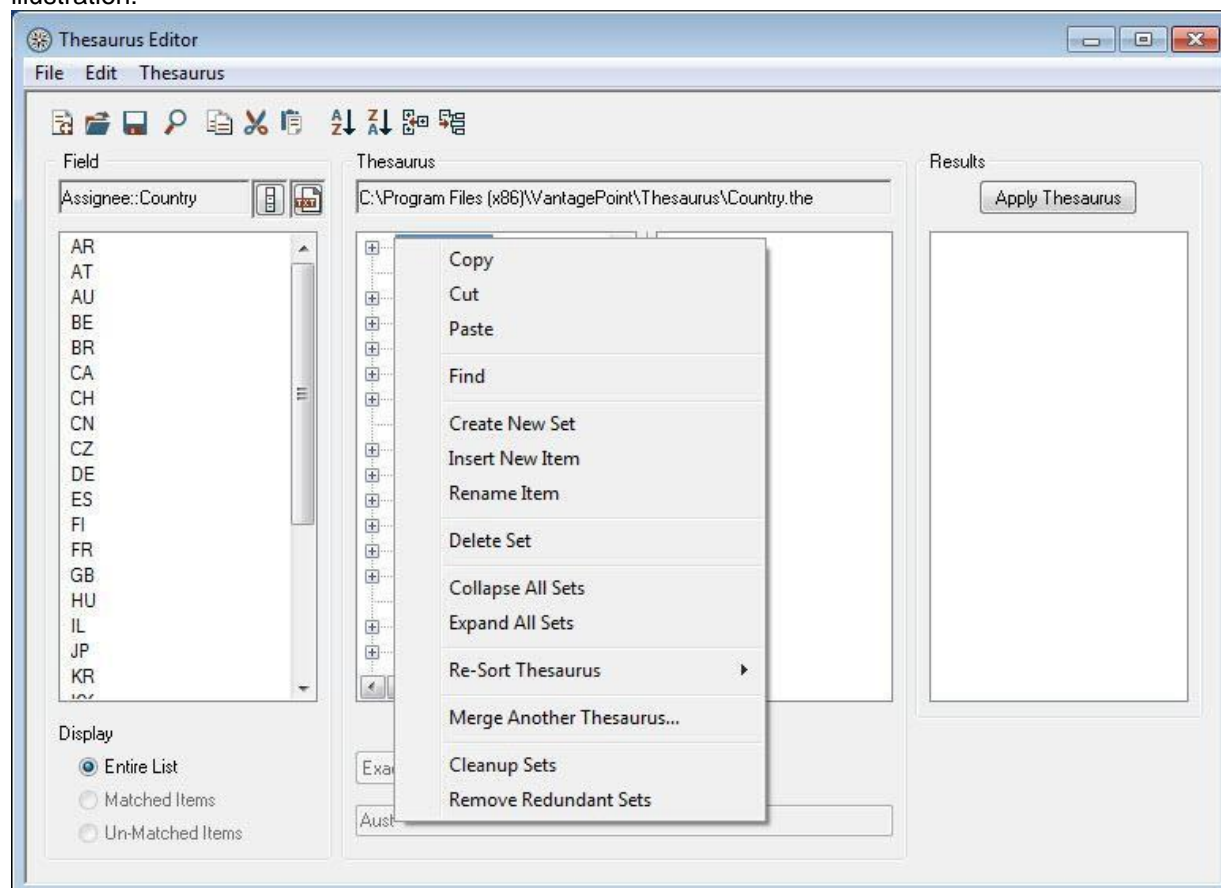
**Results List** - When you click **Apply Thesaurus**, the Thesaurus Editor applies the thesaurus to the Source List and displays the resulting aliases. After applying a thesaurus, if you click on an alias (such as "Canada" in the illustration above), the Thesaurus Editor highlights items in the Source List Window that the thesaurus grouped into that Set. (In the illustration above, "Can", and "Canada" are shown).



## Editing a thesaurus

**Expanding/Collapsing Sets** - In the Thesaurus Editor window (see Thesaurus Editor), you can click on the "+" sign in the box to the left of a Set, to expand the list of Items. You can collapse the Set by clicking on the "-" sign.

When you Right-Click in the Thesaurus Editor window, a pop-up menu appears, as in the following illustration:



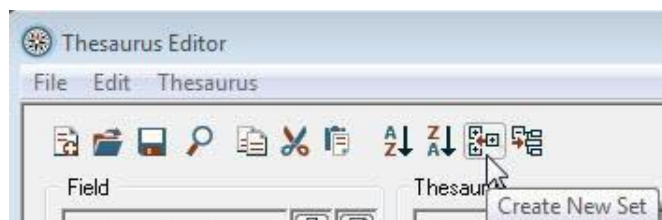
**Copy** - Copies the selected item. Or you can use the shortcut **Ctrl C**. You can also click and drag an item to another group.

**Cut** - Cut the selected item. You can also use the shortcut **Ctrl X**.

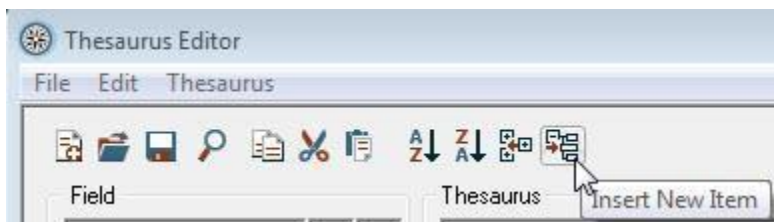
**Paste** - Paste the item previously copied. You can also use the shortcut **Ctrl V**.

**Find** - Displays the "Find" dialog. You can also use the shortcut **Ctrl F**.

**Create New Set** - Adds a new Set to the thesaurus. The default name for the new Set is "New Set nn", where "nn" is a number. You can type in the name of the new Set while "New Set" is still editable. Or change this to the name you want using the "Rename Item" menu item (see below). Note the **Create New Set** icon on the toolbar. You can also use the Insert key as a shortcut.



**Insert New Item** - Adds a new Item to the selected Set. Again, the default name for the new Item is "New Item nn". You change this to the Item you want using the edit controls at the bottom of the Thesaurus Editor window (see Editing a Thesaurus Pattern). Note the new **Insert New Item** icon on the toolbar. You can use the Shift + Insert keys as a shortcut. You can also click and drag an Item to another Set.



**Rename Item** - Opens the Set or Item for editing. Can also use shortcut **Ctrl R**.

**Delete Set** - Deletes the selected Set or Item. Can also use Delete key as a shortcut.

**Collapse All Sets** - Collapses all branches of the thesaurus, leaving only the Sets viewable.

**Expand All Sets** - Expands all branches of the thesaurus, showing the Sets and all of the Items that will be used to match list items.

**Re-Sort Thesaurus** - Select the order of sorting for the view: Ascending or Descending.

**Merge Another Thesaurus** - Leads to file selection where you can select an existing thesaurus file (\*.the) to merge into the thesaurus currently being edited.

**Cleanup Sets** - Identifies Sets that are potential matches for thesaurus reduction. This uses the fuzzy matching algorithm based on the fuzzy rule set you specify.

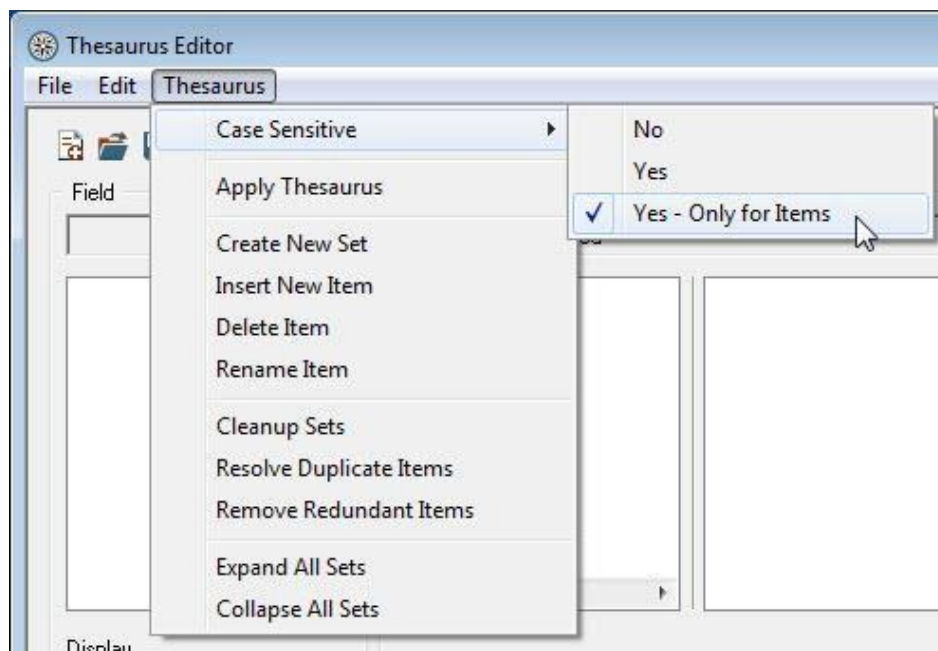
**Remove Redundant Sets** - Searches for and removes redundant Items from your thesaurus.

These actions can also be accessed under Thesaurus Editor Menu items **Edit** and **Thesaurus**.

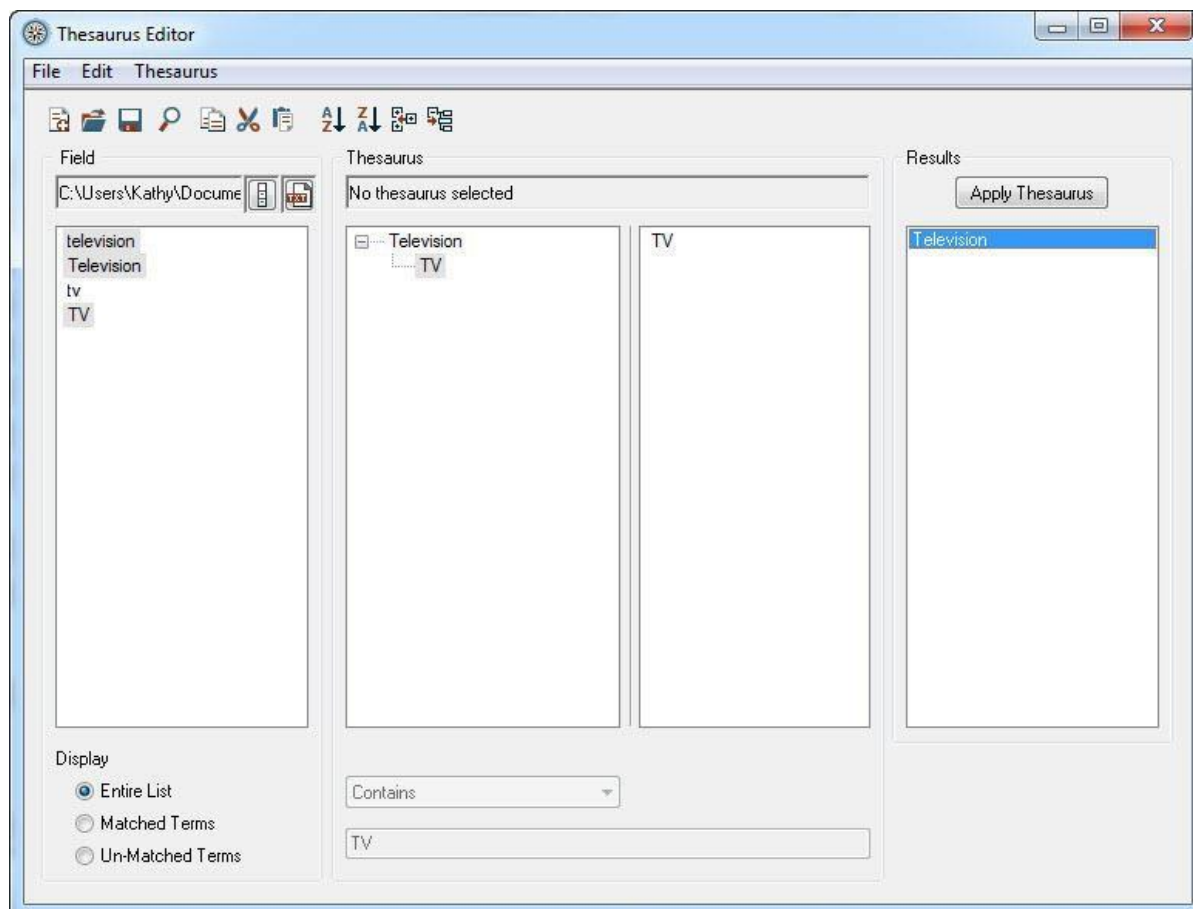
One menu item that isn't on the right-click menu is:

**Resolve Duplicate Items** - Searches your thesaurus for identical Items that are assigned to more than one Set. Each Item is presented one-at-a-time along with the Sets that contain the Item. You can select to keep one or more of the assignments, or if you choose none of the Sets, you are prompted to confirm the removal of the Item from the thesaurus.

Menu item **Thesaurus** and **Case Sensitive** - Here you can select whether the entry in the Thesaurus Editor is subject to case sensitivity. In the example below, the user is selecting to apply case sensitivity to Items only.



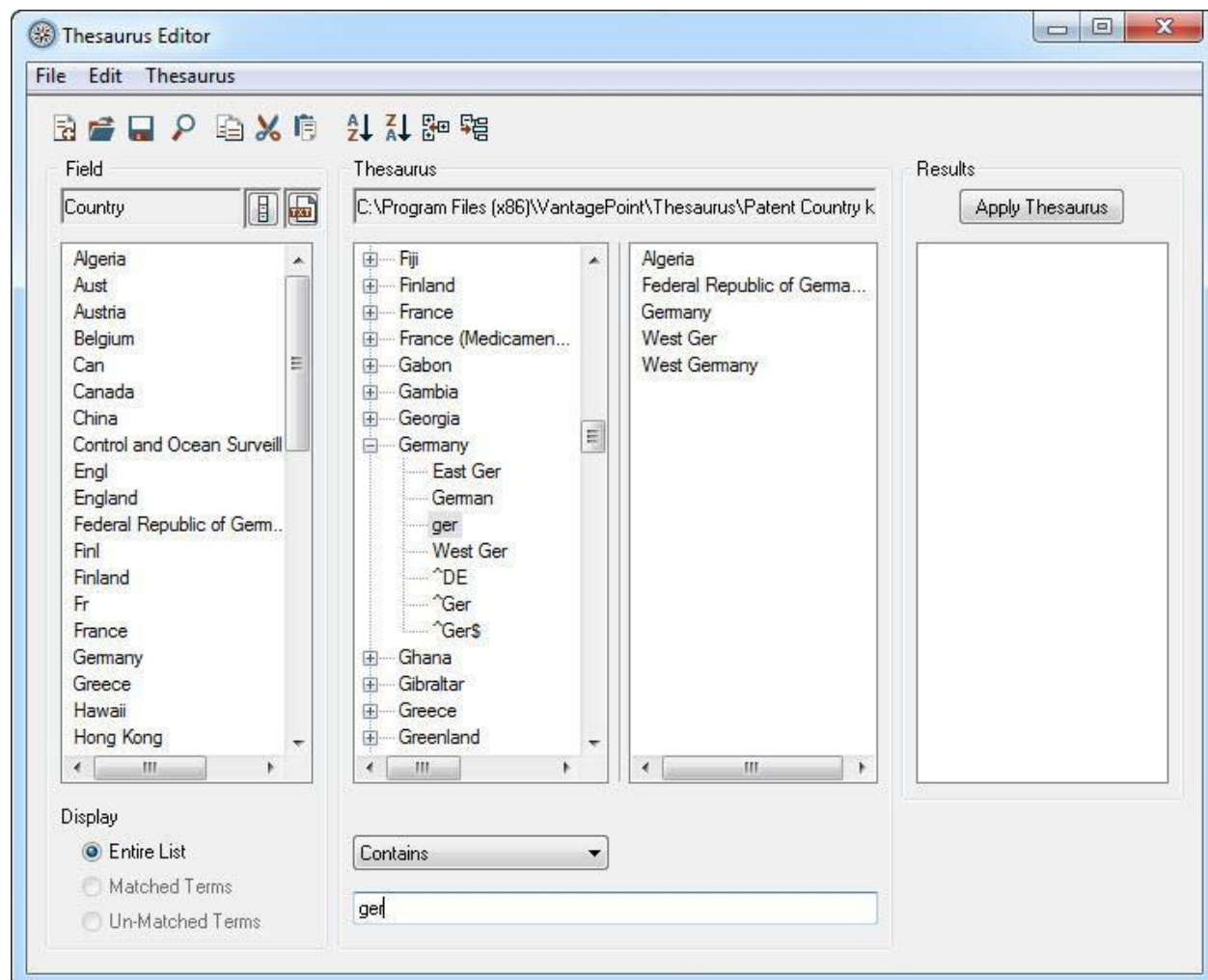
Following is the result after pressing **Apply Thesaurus**. Because Sub item "TV" is subject to case sensitivity, "tv" (in the Source List Window) is not included in the matched (shaded) terms. The top level item, "Television", is not subject to case sensitivity, and therefore "television" is included in the matched terms.



## Editing a thesaurus Item

After you insert an Item to a Set (see [Editing a Thesaurus](#)), you enter the Item that you want a list item to match in order to be merged into the Set.

In the following illustration, the user is entering an Item to the Set "Germany".



The user has selected "Contains" from the drop-down menu and has begun typing "Germany" in the text entry box. As the user types in the text entry box, the Thesaurus Editor searches the displayed list in the Source List Window for matches and displays any matches in the Entry Match Window. In this illustration, the user is in the process of typing "Germany", has typed "ger", and the Entry Match Window displays matches that contain "ger", including "Algeria". As the user finishes typing "Germany" the Thesaurus Editor will remove "Algeria" from the Entry Match Window.

The Thesaurus Editor list-selection drop-down menu has four types of matches. When you click on the list-selection box in the Thesaurus Editor window, you see the selections available: "Begins with", "Contains", "Ends with", and "Exactly matches".

The Thesaurus Editor uses a matching syntax called Regular Expressions, and it has reserved characters that require special treatment - most notably, to match the "." ("period") character, you must use "\" ("backslash" followed by "period"). For example, to match "Inst." you must enter "Inst\\. ". Other reserved characters include the following:

`()[]{}*+^|$_`

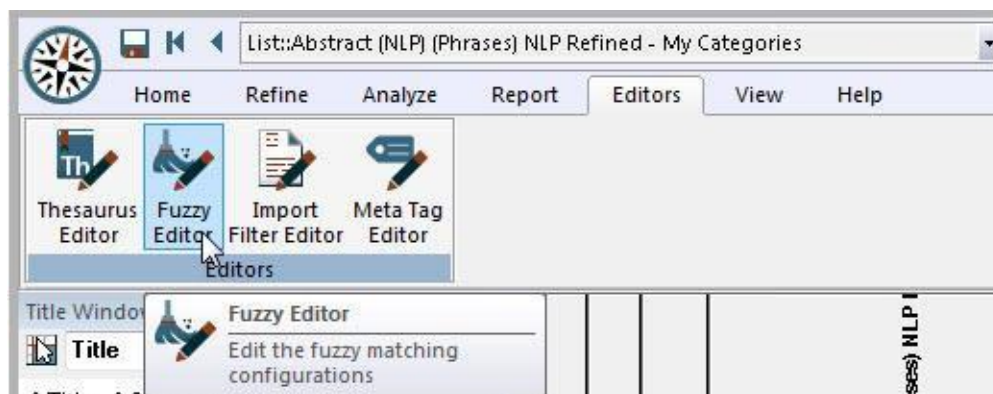
See Also:

[Regular Expressions in VantagePoint](#)

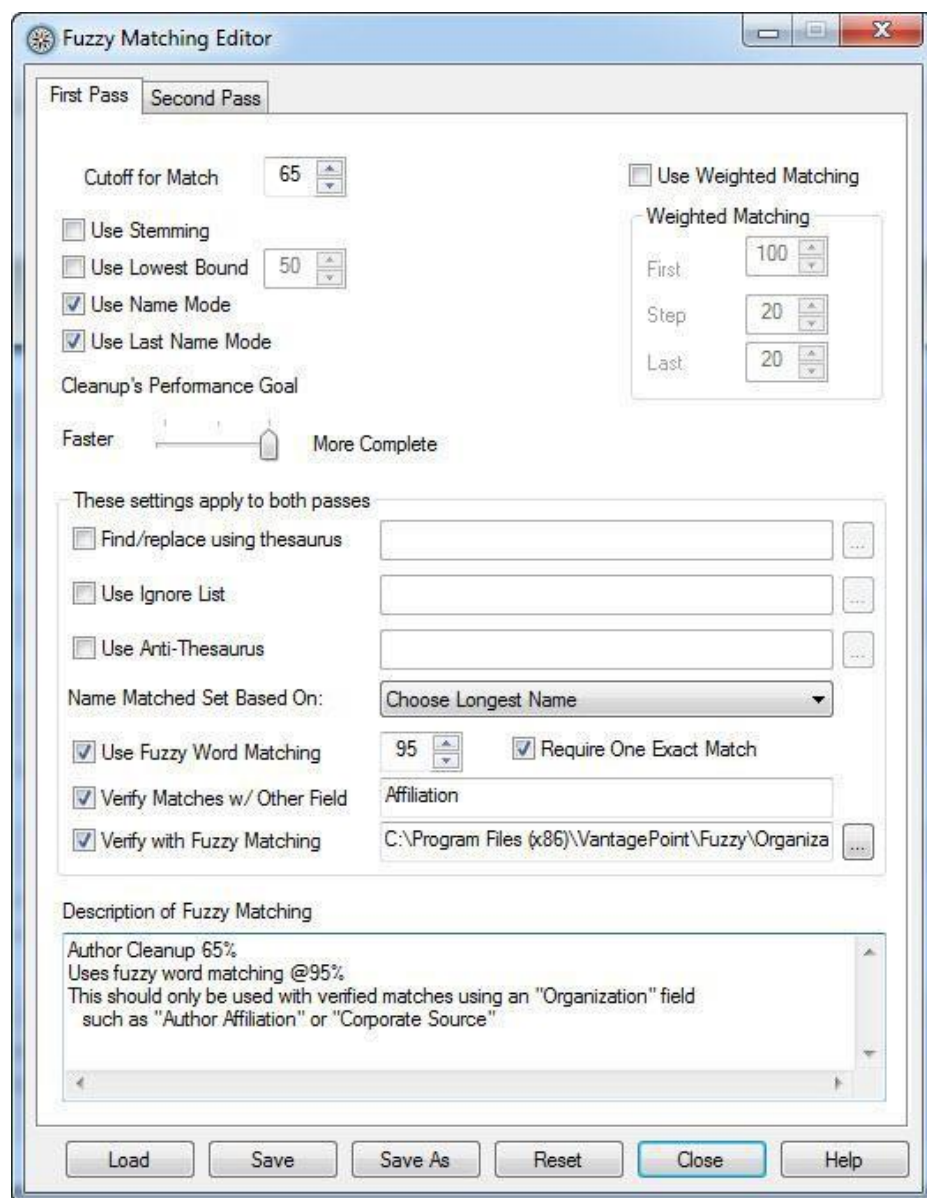
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## Fuzzy matching editor

The Fuzzy Matching Editor allows you to tailor VantagePoint's cleanup algorithms to suit your own requirements and data sources. The Fuzzy Matching Editor is accessed from the Editors ribbon by selecting **Fuzzy Editor**:







**Cutoff for Match** – the percentage match required for the whole item.

**Use Weighted Matching** – Assigns a weight to each part (word) of a whole term before calculating the percent match.

**Use Stemming** – use the stemming module to stem words before matching.

**Use Lowest Bound** – specify the lowest acceptable match for a single term.

**Use Name Mode** – use the rule set that is tailored for names of people.

*Use Last Name Mode* – add in the rule set for identifying last names.

**Cleanup's Performance Goal** – Slide the marker to the desired performance goal.

**Find/replace using thesaurus** – specify a Find and Replace thesaurus to use before identifying matches (e.g., for normalizing American and British spellings).

**Use Ignore List** – specify a text file of items to ignore in determining matches.

**Use Anti-Thesaurus** – specify a text file of sets of items that will prevent a match under any condition. The text file consists of items, each on a single line, with each set of items separated by "---" on a line by itself.

**Name Matched Set Based On:** The default choice for naming of root level items can be set for the fuzzy modules to one of the following: Most Frequent Name, Longest Name, or Shortest Name.

**Use Fuzzy Word Matching** – matches words within whole items using fuzzy matching rules. This is useful for correcting spelling errors in which letters have been transposed. Adjust the percentage match required for two words to match.

*Require One Exact Match* – set a condition that at least one word in the list term match exactly before a fuzzy word comparison will be made.

**Verify Matches w/ Other Field** – Set a condition that items are combined only if terms also match in another field in the dataset. Enter the name of the field to be used for verification in the text box.

**Verify with Fuzzy Matching** – Match terms in the verification field using a fuzzy comparison. Browse for the fuzzy file to be used by verification.

**Description of Fuzzy Matching** – This is a free-text field that appears in the List Cleanup dialog box when the fuzzy module is selected.

**First Pass/Second Pass** tabs – specify rules for first and an optional second pass.

Buttons at the bottom:

**Load** – load an existing \*.fuz file to edit or review.

**Save / Save As** – Save current file or Save As a new file.

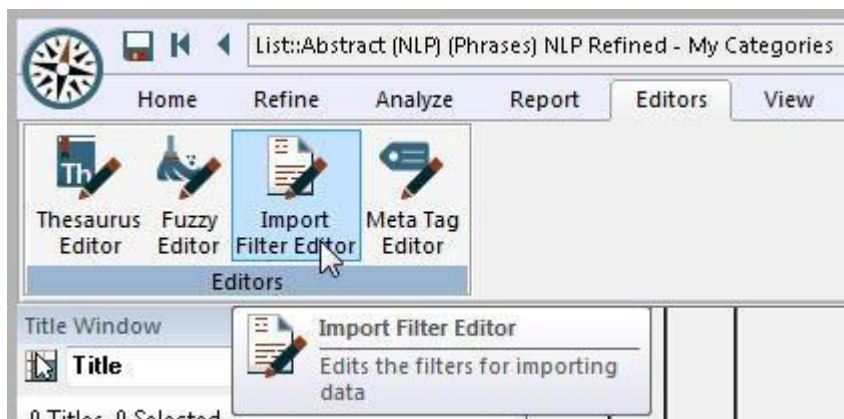
**Reset** – resets changes made in this window and restores to previous settings.

**Close** – Closes this dialog. Prompts to save before closing.

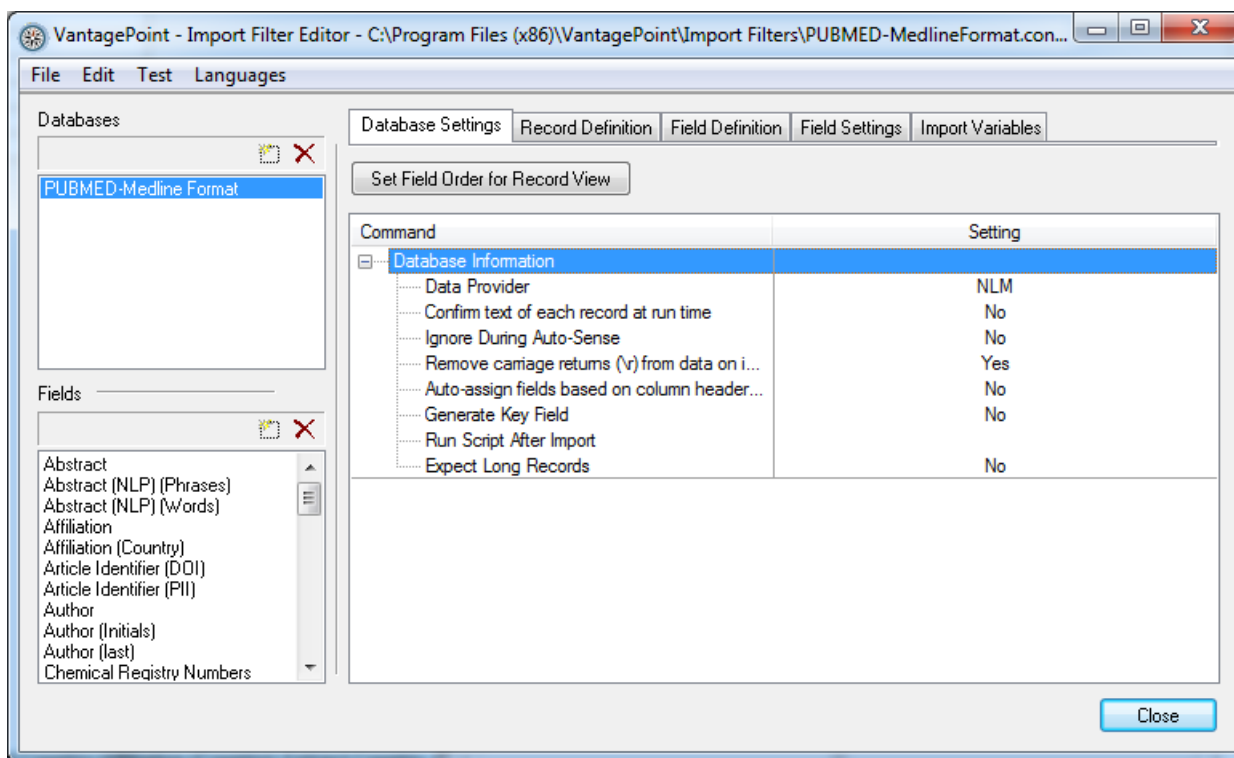
**Help** – Opens VantagePoint Help for this dialog.

## Import Filter Editor - Overview

The user accesses the **Import Filter Editor** by selecting it from the Editors ribbon:



The dialog is shown below (user has already opened the Import Filter for Database PUBMED-Medline Format):



The Databases and Fields areas of the dialog (the windows on the left) function as follows: select a database and the fields are shown in the fields window; select a field and the commands are shown in the larger "Command" window (hereinafter referred to as the "Command Stack" window). The Import Filter Editor allows an expandable stack of text manipulation tools be built for each field. These commands are described in the [Text Manipulation Commands](#) topic.

In the Import Filter Editor, you will find an extensive set of copy/paste tools (accessible via right-clicking on items) and keyboard shortcuts that, once mastered, make the iterative development of import filters easier.

## Menu

**File – New:** Begin making a new import filter.

- **Open:** Open an existing import filter.

- **Save** and – **Save As:** Save the changes to the open Import Filter file, or Save the Import Filter under a new name.

- **Open from/Save to Dataset:** Import filters can be edited within \*.vpt files.

- **Exit:** Close Import Filter Editor.

**Edit – Copy:** Copy the selected item (database, field, or command) to memory.

- **Cut:** Cut the selected item (database, field, or command) to memory.

- **Paste:** Paste from memory.

- **Paste Before (Command):** Paste from memory before the selected command.

- **Rename:** Rename the selected item (Database or Field)

- **DB Record Definition / Settings:** Activate the tab for database record definition or settings (toggle).

- **Field Commands / Settings:** Activate the tab for field commands or settings (toggle).

- **Import Variables:** Activate the tab for Import Variables.

- **Field List / DB List**

- **Next Tab:** Activate the next tab.

- **Previous Tab:** Activate the previous tab.

**Test – Check for Errors – Display All Errors:** Run error checking on the import filters and display all errors.

- **Check for Errors – Display Only Fatal Errors:** Run error checking on the import filters, but display only fatal errors.

- **Automatically Check for Errors When Saving:** A checkmark must appear to enable this function.

- **Open Test Window:** Opens a test window in which you can place snippets of raw text and test your command stack on the raw text.

- **Quick Import:** Performs a quick import of a single field for testing.

## Languages

- **Set Active Language:** Populates the Fields list in the Import Filter Editor with the translated field name (if it exists). The translated field name is entered in the Field Settings section.

- **Export Translated Field Names:** Export field names and translations from any import filters that have been opened to a tab delimited text file.

- **Import Translated Field Names:** Import any changes from exported field translation file. Applies field name translations to currently opened import filter.

## Tabs

**Database Settings:** Shows the database information sheet (name of data provider and other database-specific parameters for import) for the selected database in the Command Stack window.

**Record Definition**: Opens the record definition sheet for the selected database in the Command Stack window, showing the command sequence for identifying record start, end, and other processing actions that define the record. See the [Text Manipulation Commands](#) topic for Command Stack commands and parameters.

**Field Definition**: Opens the field definition sheet for the selected field in the Command Stack window, showing the command sequence for identifying field start, end, and other processing actions that define the field. See the Text Manipulation Commands topic for Command Stack commands and parameters.

**Field Settings**: Opens the field settings sheet for the selected field in the Command Stack window, showing several field-specific parameters, and opening controls for assigning meta tags to fields.

**Import Variables**: Opens the controls and Command Stack for creating and defining import variables for the selected database. Import Variables allow you to bring in text that isn't within the boundaries of the record. (For example, bringing in chapter names when parsing book sections or a higher-level tag in hierarchical XML.) See the [Text Manipulation Commands](#) topic for Command Stack commands and parameters.

#### Windows listing Databases and Fields

On the left side of the Import Filter Editor dialog box are two windows listing databases and fields. These lists may be edited using the two buttons at the top of each list (New and Delete). An existing database (or field) can be copied (or cut) and pasted using right-click menus. "Rename" is also an option on the right-click menus.

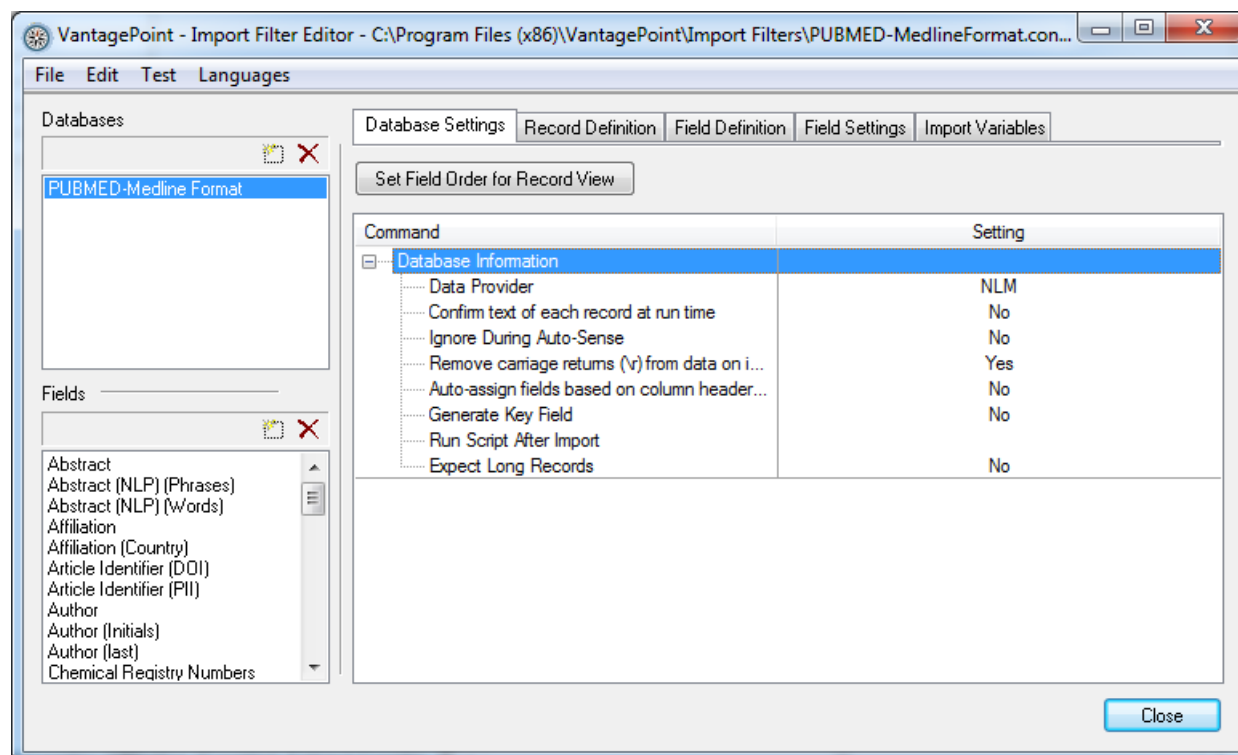
#### Command Stack Window.

The Command Stack Window is where you enter specific information defining your database, records, and fields. The options available in this window depend on which tabs are selected. When the "Database Settings" or "Field Settings" tabs are selected, the Command Stack Window allows you to enter information or set attributes for the selected database or field. When the "Record Definition", "Field Definition" or "Import Variables" tabs are selected, the Command Stack Window is used to assemble an extensible list of text-manipulation tools, each with numerous options. The stack is built using Right-Click menus (or keyboard shortcuts) as shown in the [Text Manipulation Commands](#) topic. Commands are entered and managed on the Stack through Right-Click walking menus or via keyboard shortcuts.

## Import Filter Editor - Database Settings

The **Database Settings** tab shows the database information sheet (name of data provider and other database-specific parameters for import) for the selected database in the Command Stack window.

Button: Set Field Order for Record View. Click this button to arrange the way the records are displayed in the Fielded Record View. (See the illustration and explanation in the [Dataset Properties](#) section.)



The following table contains detailed explanations of the commands and/or settings that appear in the Command Stack Window, and their options:

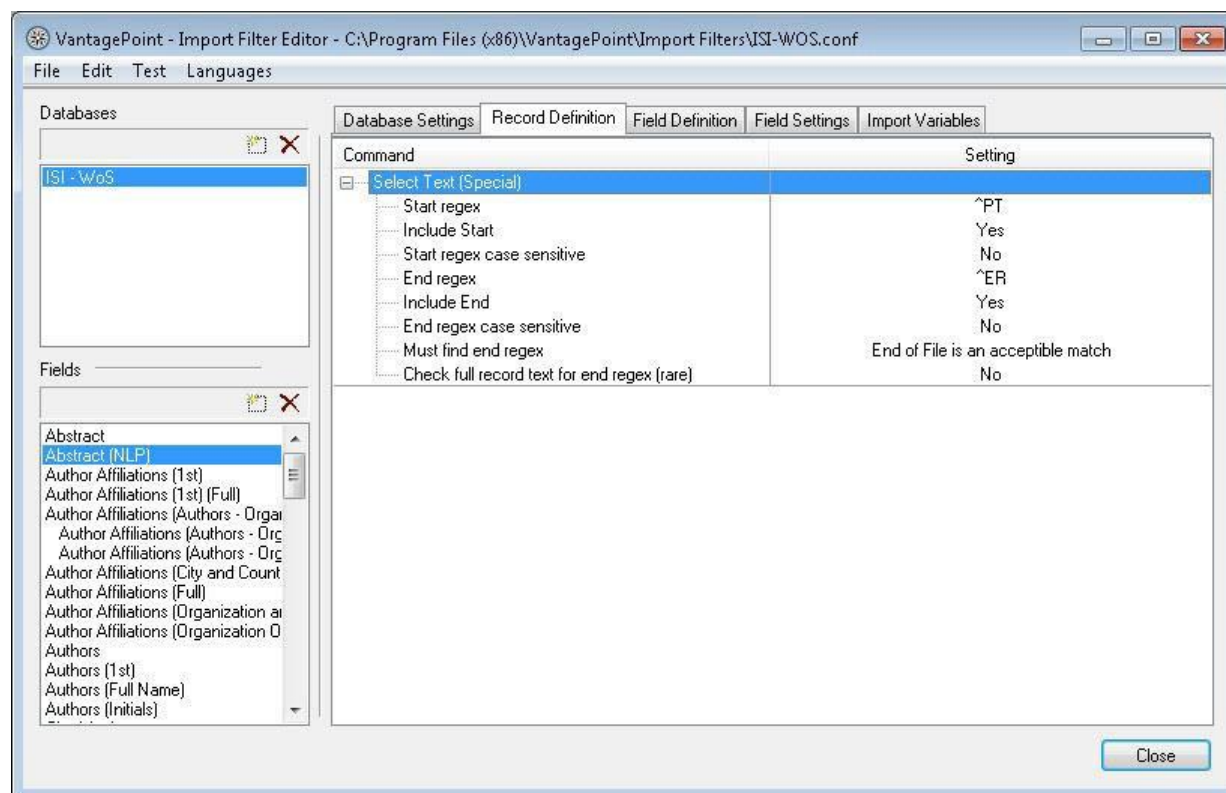
| Database Settings tab                           | To enter descriptive information about this database   |
|---|--|
| Database Information                            |  |
| Data Provider                                   | Enter the name of the data provider.   |
| Confirm text of each record at run time         | [Yes or No] – “Yes” causes the “Confirm Record Text” dialog to be presented for each record during import.   |
| Ignore During Auto-Sense                        | [Yes or No] – “Yes” causes this database import filter to be ignored when attempting to autosense the appropriate filter for the raw dataset. This is necessary when “record start” is easily matched (e.g., “.” for columnar import). |
| Remove carriage returns (r) from data on import | [Yes or No] – “Yes” strips all carriage return (r) characters from the raw data before importing it.   |
| Auto-assign fields based on column header       | [Yes or No] – For import of columnar data. “Yes” assigns import filter fields to columns based on matches between the text string in “Field Settings” and first  |



|   |  |
|---|--|
| names   | row column header names in the raw data file.  |
| [Auto-Assign] Row # Containing Column Headers | <b>Integer</b> - [Auto Assign] Enter the row number that contains the column headers.  |
| [Auto-Assign] Column Delimiter (regex)        | <b>Regular Expression</b>  |
| [Auto-Assign] Use Text Qualifier              | [Yes or No]  |
| [Auto-Assign] Text Qualifier                  | Single Character   |
| Generate Key Field                            | [Yes or No]  |
| Run Script After Import                       | Enter the Script name to run after Import (if any).  |
| Expect Long Records                           | <b>Yes or No</b> Set this option to "Yes" if your filter works on records that are commonly >500KB to suppress a message warning that you may be using the wrong import filter. The warning message is suppressed until VP reads 1MB of text before reaching the end of that record. |

### Import Filter Editor - Record Definition

**Record Definition:** Opens the record definition sheet for the selected database in the Command Stack window, showing the command sequence for identifying record start, end, and other processing actions that define the record.



|   |   |
|---|---|
| <b>Record Definition tab</b>                | Defines how to extract records from the raw data file.  |
| Select Text (Special)                       | <b>This segment is required as the first command in the Record Definition Field.</b>  |
| Start regex                                 | Enter the <b>regular expression</b> that uniquely identifies the beginning of the record.   |
| Include Start                               | <b>[Yes or No]</b> – Does the record include the text matched by the Start regex? Typically “Yes”.  |
| Start regex case sensitive                  | <b>[Yes or No]</b> – Require the match to be case sensitive?  |
| End regex                                   | Enter the <b>regular expression</b> that uniquely identifies the end of the record. This could be the beginning of another record.  |
| Include End                                 | <b>[Yes or No]</b> – Does the record include the text matched by the End regex? If you are defining the end of one record by detecting the beginning of the next record, this is “No”, leaving the matched text for the next record.  |
| End regex case sensitive                    | <b>[Yes or No]</b> – Require the match to be case sensitive?  |
| Must find end regex                         | <b>[End of File is an acceptable match or Must find ending regex]</b><br><br>For the final record in the file, must the End regex be matched? If you are normally defining the end of one record by detecting the beginning of the next record, you should accept the End of File as an acceptable end of the final record. |
| Check full record text for end regex (rare) | <b>[Yes or No]</b> - The import engine uses some rules to stop looking for the end regex. This overrides those rules and requires that the remainder of the raw data file be searched for the end regex.  |
| (subsequent manipulation commands)          | The “Select Text (Special)” command may be followed by <b>Text manipulation commands</b> .  |

Subsequent Commands are entered and managed on the Stack through Right-Click walking menus (see the illustration on the next page) or via keyboard shortcuts. See the [Text Manipulation Commands](#) topic for Command Stack commands and parameters.

| Command                | Setting                          |
|------------------------|----------------------------------|
| Select Text (Selected) |                                  |
| Insert Command         | Before this Command Shift-Insert |
| Delete Command         | After this Command Insert        |
| Copy                   | ^PMID[*][*]                      |
| Cut                    | No                               |
| Paste Before           | No                               |
| Paste After            | End of File is an acc (rare)     |
| Collapse All           | No                               |
| Expand All             | \r                               |
| Regex case sensitive   | No                               |

Select Text

Select Text from Rear

Select Text from Table

Select Text from DB Table

Change Case

Clean Text

Dictionary Lookup

Divide Text

Entity Extraction

Find and Replace

Thesaurus

Math - Average Results

Math - Count Results

Math - Sum Results

Math - Keep Minimum Value

Math - Keep Maximum Value

NLP

Keyphrases

Read from Variable

Get File Name

Extract Data from JSON

Extract Data from XML

Build Results

Create New Import Buffer

Activate Import Buffer

Copy Import Buffer

Combine Text

Convert Text

Set Data Type

Set Meta Tag

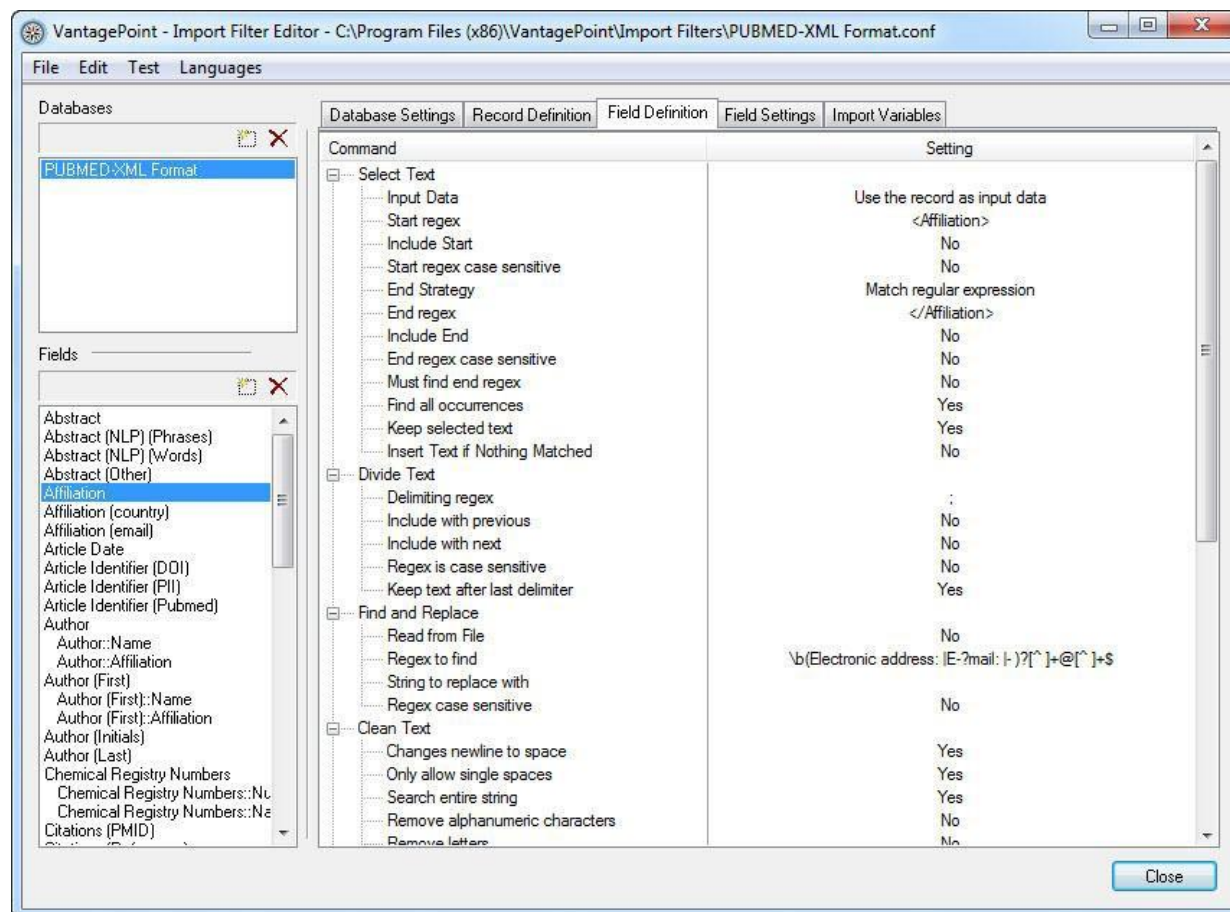
Load Image File

Load Text File

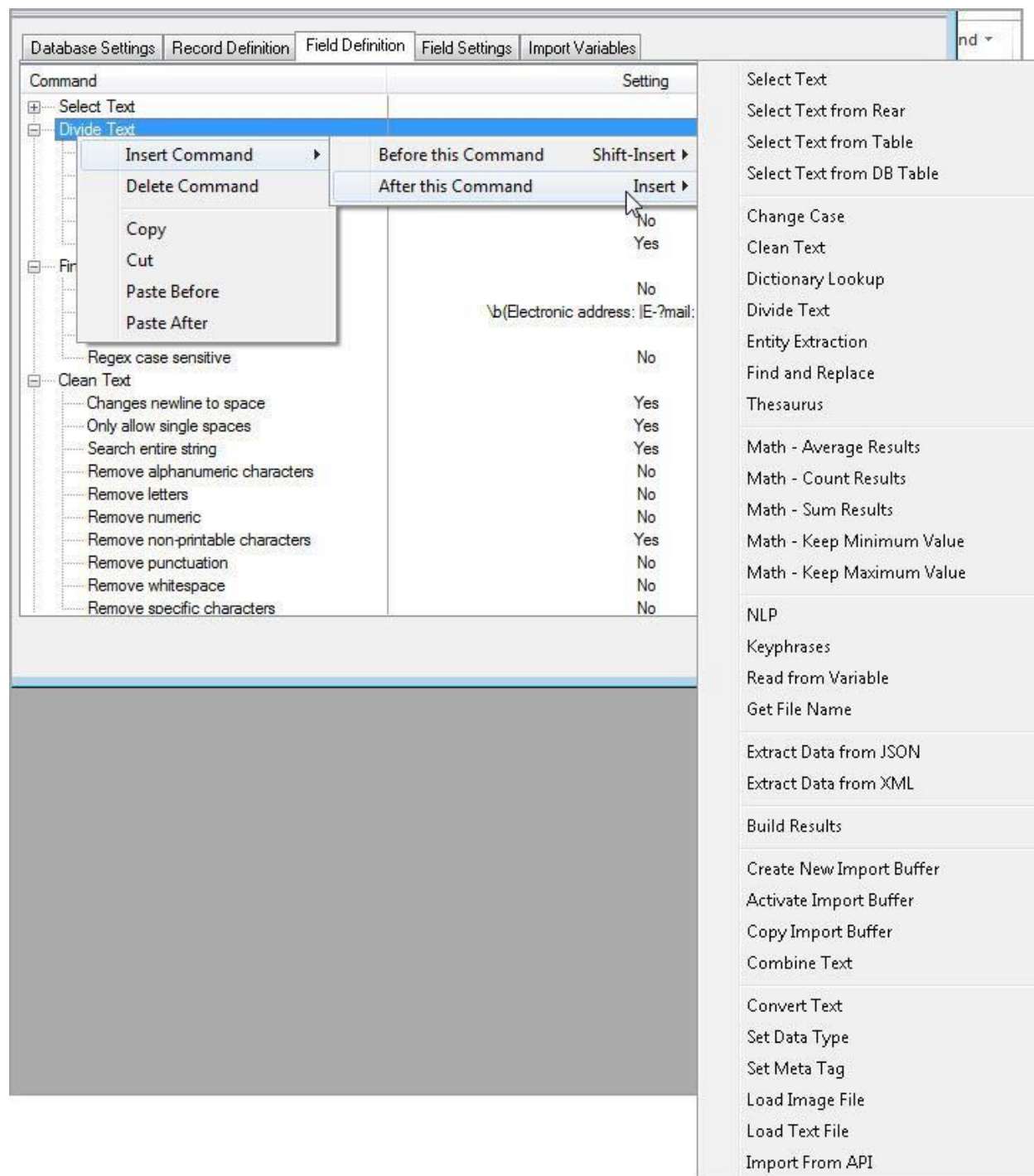
Import From API

## Import Filter Editor - Field Definition

**Field Definition:** Opens the field definition sheet for the selected field in the Command Stack window, showing the command sequence for identifying field start, end, and other processing actions that define the field.



Commands are entered and managed on the Stack through Right-Click walking menus or via keyboard shortcuts.



The [Text Manipulation Commands](#) topic contains detailed explanations of the commands and/or settings that appear in the Command Stack Window, and their options.

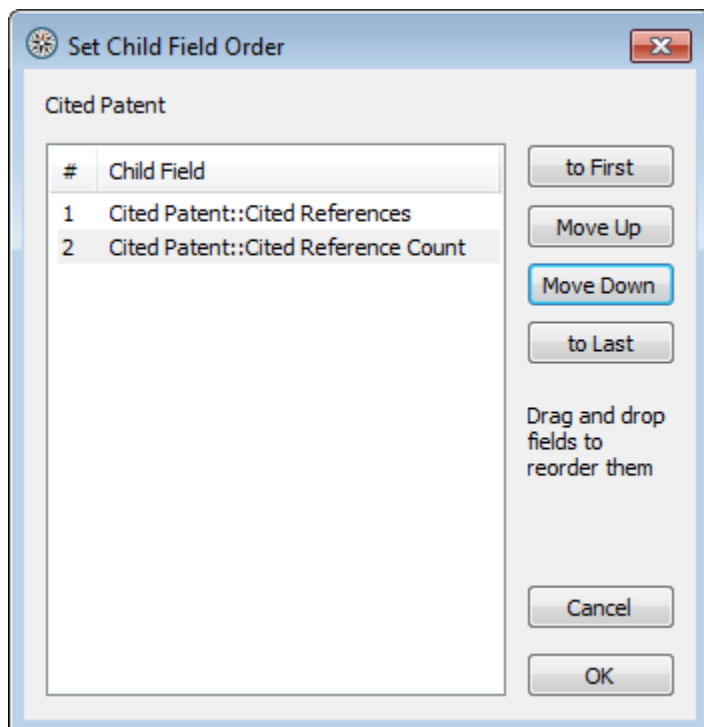
## Import Filter Editor - Field Settings

**Field Settings:** Opens the field settings sheet for the selected field in the Command Stack window, showing several field-specific parameters, and opening controls for assigning meta tags to fields.

Buttons:

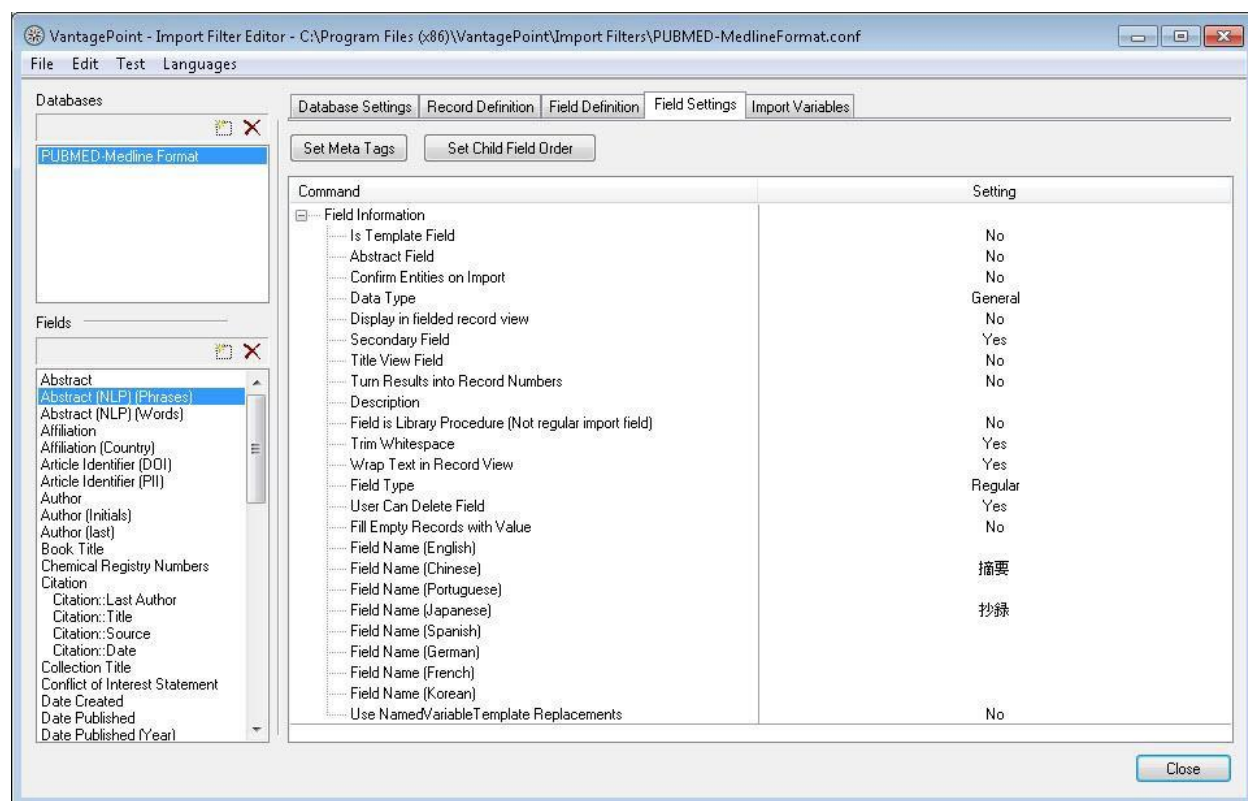
**Set Meta Tags.** Click this button to assign meta tags to the selected field. (See the Add/Remove Meta tags illustration in the [Adding Meta tags for fields](#) section.)

**Set Child Field Order.** When more than one Field is defined as a Compound Child, you can arrange the order of the siblings. Clicking this button will bring up the children associated with the Field.



When the "Field Settings" tab is selected, the Command Stack Window allows you to enter information or set attributes for the selected field.





| Field Settings tab                             | Defines attributes for the selected field.   |
|--|--|
| Is Template Field                              | [Yes or No]  |
| [Template] Template Field String (Regex)       |  |
| [Template] Case Sensitive                      | [Yes or No]  |
| [Template] Field Name from Which SubExpression |  |
| Abstract Field                                 | [Yes or No] – Use this field for Cluster Summaries. Only one field should have this set to “Yes”.          |
| Confirm Entities on Import                     | [Yes or No] – “Yes” causes the “Entity Confirmation” dialog to be presented for each record during import. |
| Data Type                                      |  |
| Category                                       | For data items that have a relatively small number of discrete values.                                     |
| General  | This is the default data type.   |
| Image  | For data items that are images.  |
| Link   | For data items that are links to file names.   |

|   |   |
|---|---|
| Number  | For data items that are numbers.  |
| Year  | For data items that are years.  |
| [Automatically Set Internally]                        |   |
| Display in fielded record view                        | [Yes or No] – Set to “Yes” to include this field in the Fielded Record View.  |
| Display Position in Fielded Record View               | <b>Integer</b> – Enter an integer for the relative position of this field in the Fielded Record View (“1” at the top).  |
| Secondary Field                                       | [Yes or No] – Set to “Yes” for fields that are not usually imported.  |
| Title View Field                                      | [Yes or No] – Use this field in Title View. Only one field should have this set to “Yes”.   |
| Turn Results into Record Numbers                      | [Yes or No]   |
| Description   | Not used - for future capability  |
| Field is Library Procedure (Not regular import field) | [Yes or No] (Default is “No”) – This should be set to “Yes” only if you are writing a Library Procedure for “Further Processing”. (See Creating or Editing Library Procedures.) |
| Trim Whitespace                                       | [Yes or No]   |
| Wrap Text in Record View                              | [Yes or No]   |
| Field Type  |   |
| Regular   | Field is not a compound field.  |
| Compound Parent                                       | Field is defined as the Parent of a Compound Field. This field should be defined before a Compound Child Field is defined.  |
| Compound Child  | Field is defined as the Child of a Compound Field.  |
| Compound Field's Parent                               | Dropdown box offers previously-defined Compound Parent Field from which to select as Parent.  |
| Compound Field Display Delimiter                      | <b>Regular Expression</b>   |
| Compound Field Child Display Order                    | Order of rank when Child field has siblings.  |
| User Can Delete Field                                 | [Yes or No]   |
| Fill Empty Records with Value                         | [Yes or No]   |
| Fill Empty Records with this value                    | Insert a string. Default is “<None>”.   |
| Field Name ({Language})                               | (Optional). Enter the name of this field in other languages. This will be displayed as the field name when the user chooses that language.                                      |
| Use NamedVariable Template Replacements               | [Yes or No]   |

## Import Filter Editor - Import Variables

**Import Variables:** Opens the controls and Command Stack for creating and defining import variables for the selected database. Import Variables allow you to bring in text that isn't within the boundaries of the record. (For example, bringing in chapter names when parsing book sections or a higher-level tag in hierarchical XML.)

### Buttons:

**Add/Delete.** Add/Delete a variable for the selected database.

**Text Box: Variable Name.** Selection box to choose the variable shown in the Command Stack window.

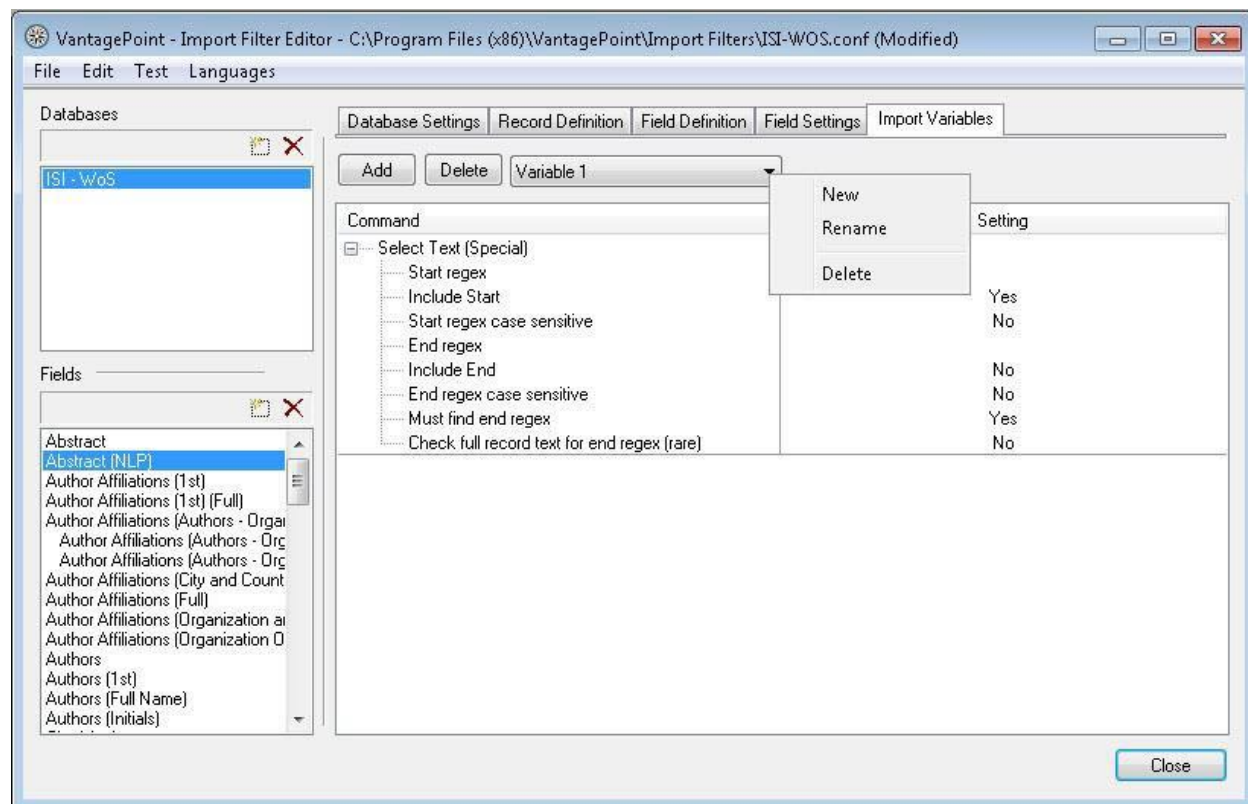
Right-Click Menu on Text Box:

**New** (add a new variable);

**Rename** (allows typing in the text box to rename the variable);

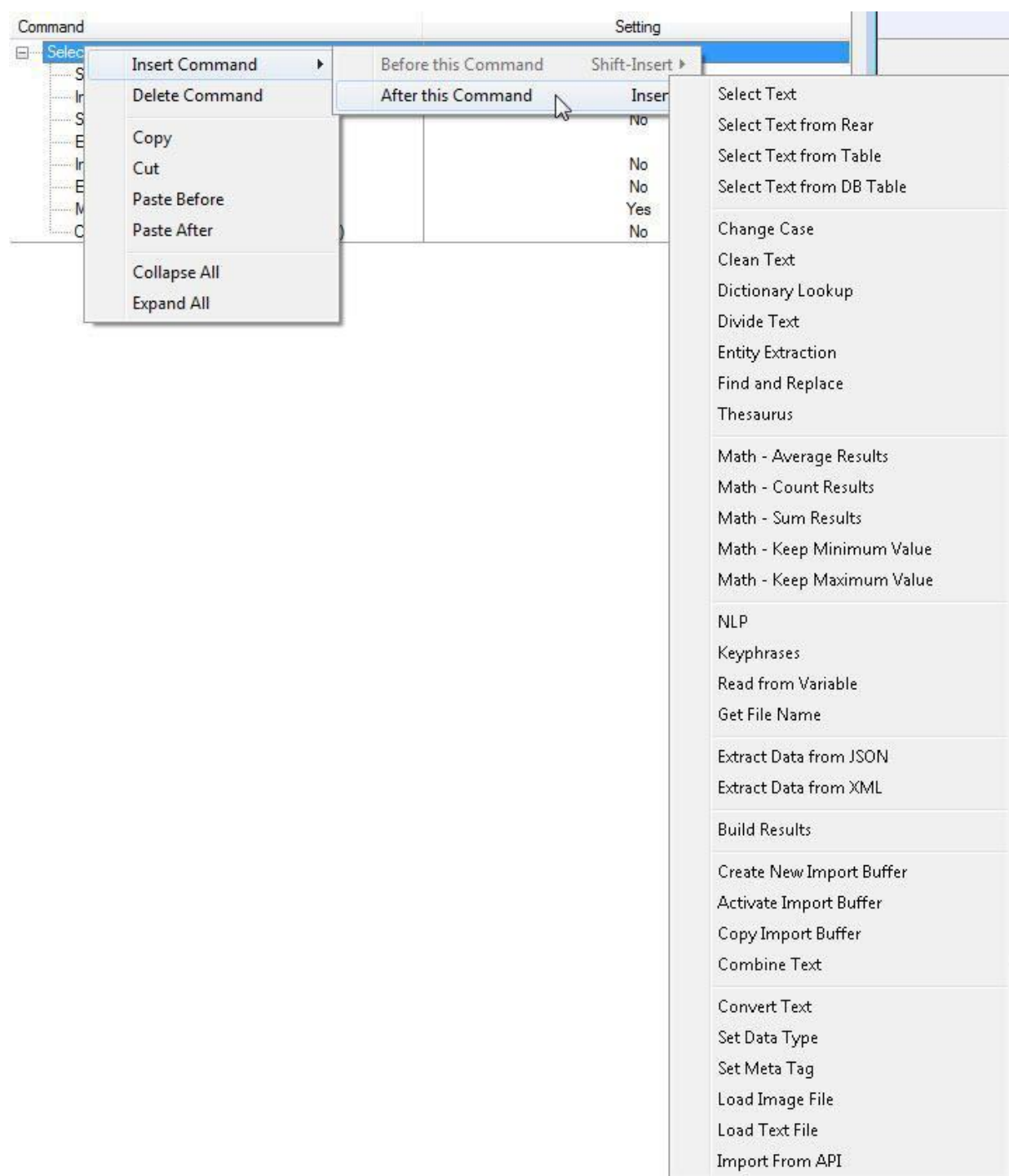
**Delete** (delete the selected variable).

When the "Import Variables" tab is selected, the Command Stack Window is used to assemble an extensible list of text-manipulation tools, each with numerous options.



| Import Variables tab               |  |
|------------------------------------|--|
| Select Text (Special)              | This segment is required as the first command in the Import Variable.  |
| (parameters)                       | Parameters and values are the same as "Select Text (Special)" – in Record Definition Tab (see above)   |
| (subsequent manipulation commands) | The "Select Text (Special)" command may be followed by General <b>text manipulation commands</b> , with the exception of "Read from Variable". |

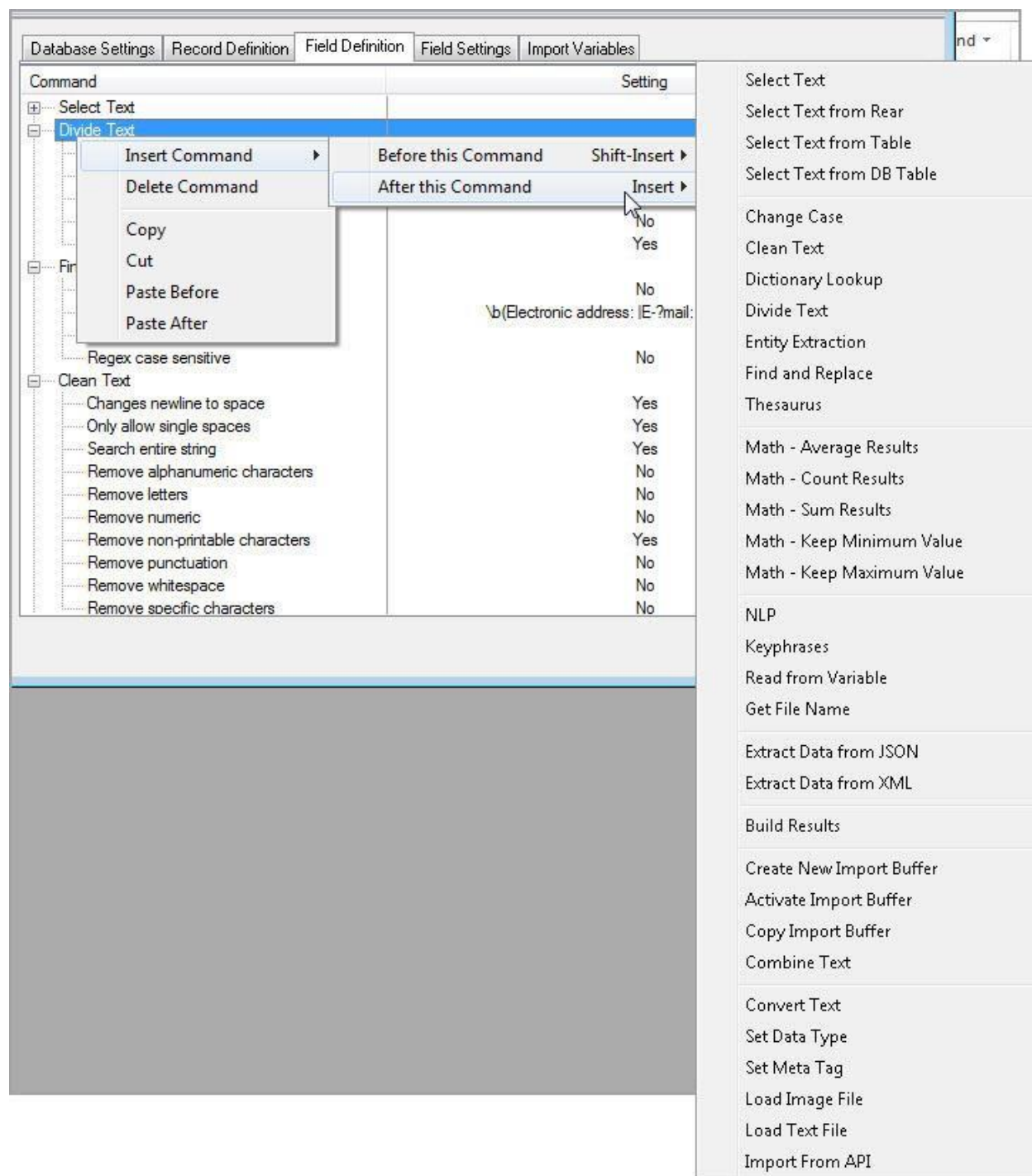
The stack is built using Right-Click menus (or keyboard shortcuts) as shown below.



The [Text Manipulation Commands](#) topic contains detailed explanations of the commands and/or settings that appear in the Command Stack Window, and their options.

## Import Filter Editor - Text Manipulation Commands

When you right-click in the Command window, this menu appears. An explanation of each command appears in the table below.



### Right-Click Menus

**Insert Command** – Place a command onto the stack. This leads to another menu ...

**Before (or After) this Command** – Place the new command before (or after) the selected command. In the illustration above, the user is inserting a new command (Dictionary Lookup) After the selected "Clean Text" command.

An extensive table presented below defines each of these commands:

- [Select Text](#)
- [Select Text from Rear](#)
- [Select Text from Table](#)
- [Select Text from DB Table](#)
- .....
- [Change Case](#)
- [Clean Text](#)
- [Dictionary Lookup](#)
- [Divide Text](#)
- [Entity Extraction](#)
- [Find and Replace](#)
- [Thesaurus](#)
- .....
- [Math - Average Results](#)
- [Math - Count Results](#)
- [Math - Sum Results](#)
- [Math - Keep Minimum Value](#)
- [Math - Keep Maximum Value](#)
- .....
- [NLP](#)
- [Keyphrases](#)
- [Read from Variable](#)
- [Get File Name](#)
- .....
- [Extract Data from JSON](#)
- [Extract Data from XML](#)
- .....
- [Build Results](#)
- .....
- [Create New Import Buffer](#)
- [Activate Import Buffer](#)
- [Copy Import Buffer](#)
- [Combine Text](#)
- .....
- [Convert Text](#)
- [Set Data Type](#)
- [Set Meta Tag](#)
- [Load Image File](#)
- [Load Text File](#)
- [Import from API](#)



**Delete Command** – Delete the selected command (with confirmation).

**Copy** – Copy the selected command to memory.

**Cut** – Cut the selected command and place it in memory.

**Paste Before** – Paste a command from memory and place it before the selected command.

**Paste After** – Paste a command from memory and place it after the selected command.

## **Text Manipulation Commands**

|  |   |
|--|---|
| <b>Select Text</b>                                     | Define what portion of text you want to work with.  |
| Input Data   |   |
| Use the record as input data                           | Uses the entire record. You usually use this as the first command in the stack.   |
| Use the output from the previous command as input data | You can stack "Select Text" commands to burrow into a chunk of text. In this case, you may want to peel away layers of text to get to the core.   |
| Start regex  | <b>Regular Expression</b> – Enter the Regular Expression that specifies the beginning of the text you want to select.   |
| Include Start  | <b>[Yes or No]</b> – When your Start RegEx matches a chunk of text, do you want to keep the chunk of text with your selection? If it is a field label, maybe not.                                     |
| Start regex case sensitive                             | <b>[Yes or No]</b>  |
| End Strategy   | What defines the end of the text you want to select?  |
| Match regular expression                               | You can use another regular expression to end your selection.   |
| End regex  | <b>Regular Expression</b>   |
| Include End  | <b>[Yes or No]</b> – When your End RegEx matches a chunk of text, do you want to keep the chunk of text with your selection?  |
| End regex case sensitive                               | <b>[Yes or No]</b>  |
| Must find end regex                                    | <b>[Yes or No]</b> – Do you require matching the End RegEx (in that case "yes")? A common alternative is also allowing a selection from the Start RegEx to the end of the record (in that case "no"). |
| Find text before a specified column                    | This option is very useful for text that is field-structured using "hang-indent." This alternative has no arguments.  |
| Read until a line without the start indicator          | This option is used when every line has your start indicator, for example when a record lists each author on a separate line prefixed by "AU-".   |
| Read a certain number of lines                         |   |
| Number of Lines  | <b>Integer</b>  |
| Read until the end of the current record               | This option selects everything to the end of the record.  |

|                                    |   |
|------------------------------------|---|
| Find all occurrences               | [Yes or No] – Do you want to select all occurrences in the record or only the first?  |
| Keep selected text                 | [Yes or No] – Do you want to keep the selected text ("yes") or keep everything except the selected text ("No").   |
| Insert Text if Nothing Matched     | [Yes or No]   |
| Text to Insert if Nothing Selected | Enter text. The next command will operate on this text; or, if this is the last command in the stack, this text will be inserted as a data item in the field. |

|  |  |
|--|--|
| <b>Select Text from Rear</b>                           | Select a portion of the text, but start from the end of the string instead of the beginning.   |
| Input Data   |  |
| Use the record as input data                           | Uses the entire record. You usually use this as the first command in the stack.  |
| Use the output from the previous command as input data | You can stack "Select Text" commands to burrow into a chunk of text. In this case, you may want to peel away layers of text to get to the core.                  |
| Regex  | <b>Regular Expression</b> – Enter the RegEx that will terminate the selection. In other words, select from the end of the string until you encounter this RegEx. |
| Regex case sensitive                                   | [Yes or No]  |
| Include Start  | [Yes or No] – Once the RegEx is matched, do you want to include the matching text?   |
| Keep selected text                                     | [Yes or No] (see earlier)  |
| Must find regex  | [Yes or No] (see earlier)  |
| Insert Text if Nothing Matched                         | [Yes or No]  |
| Text to Insert if Nothing Selected                     | Enter text. The next command will operate on this text; or, if this is the last command in the stack, this text will be inserted as a data item in the field.    |

|  |  |
|--|--|
| <b>Select Text from Table</b>                          | Select text from a delimited columnar table (e.g., *.csv or *.tab).  |
| Input Data   |  |
| Use the record as input data                           | Uses the entire record. You usually use this as the first command in the stack.  |
| Use the output from the previous command as input data | You can stack "Select Text" commands to burrow into a chunk of text. In this case, you may want to peel away layers of text to get to the core.  |
| Delimiter (regex)                                      | <b>Regular Expression</b> (e.g. a comma for *.csv or tab \t for *.tab)   |
| Delimiter Case Sensitive                               | [Yes or No]  |
| Use Text Qualifier                                     | [Yes or No] – Frequently, text in a cell includes the delimiter. Most tools allow this by using text qualifiers to surround text in a cell. Frequently, this qualifier is a pair of double quotes. |

|   |  |
|---|--|
| Text Qualifier  | Single character   |
| Select Column by Name                                       | [Yes or No] - Yes to accept Column Name or No to accept Column Number  |
| Column Name   | <b>Regular Expression</b>  |
| Column Name is Regex  | [Yes or No]  |
| Column Number   | <b>Positive integer</b> – the column from which to select the data. When using "Auto-assign fields based on column header names", use zero (0). (See Database Settings.) |
| Insert Text if Nothing Matched                              | [Yes or No]  |
| Text to Insert if Nothing Selected                          | Enter text. The next command will operate on this text; or, if this is the last command in the stack, this text will be inserted as a data item in the field.            |
| Pre-Parse Columns. Avoid this if entire record is not table | [Yes or No]  |

|                                   |  |
|-----------------------------------|--|
| <b>Select Text from DB Table</b>  | A simplified version of the Select Text from Table command. It is the default command for quick import from database.  |
| Select Column by Name             | [Yes or No] - Yes to accept Column Name or No to accept Column Number  |
| Column Name                       | <b>Regular Expression</b>  |
| Column Name is Regex              | [Yes or No]  |
| Column Number                     | <b>Positive integer</b> – the column from which to select the data. When using "Auto-assign fields based on column header names", use zero (0). (See Database Settings.) |
| Insert Text if Nothing Matched    | [Yes or No]  |
| Text to Insert if Nothing Matched | Enter text. The next command will operate on this text; or, if this is the last command in the stack, this text will be inserted as a data item in the field.            |

|                    |  |
|--------------------|--|
| <b>Change Case</b> |  |
| Change to          |  |
| Upper Case         |  |
| Lower Case         |  |
| Proper Case        |  |
| Sentence Case      |  |

|                   |  |
|-------------------|--|
| <b>Clean Text</b> | Frequently, "Clean Text" commands come in pairs or triads. A typical triad will (1) clean the entire string changing newlines to space, removing non-printing characters, and allowing only single spaces; (2) cleaning from the front to remove whitespace and punctuation; and finally (3) cleaning from the rear to |
|-------------------|--|

|   |   |
|---|---|
|   | remove whitespace.  |
| Changes newline to space                | [Yes or No] – Change all occurrences of newline to a single space. This removes line wrap inserted in some records.   |
| Only allow single spaces                | [Yes or No] – Removes all multiple spaces (e.g., “between words”) and leaves only one space (e.g., “between words”).  |
| Search from front                       | [Yes or No] – In cleaning text, do you want to work from the front of the string? This can be used in combination with “Search from rear”.  |
| Search until regex – front              | [Yes or No] – If you are working from the front of the string, do you want to specify when to stop cleaning by matching a regular expression?   |
| Read until regex – front                | <b>Regular Expression</b> – This is the regular expression that, when matched, indicates to stop cleaning. For example “[A-Za-z]” will start cleaning at the front of the string and stop when a letter is encountered. |
| Include front regex in searchable text  | [Yes or No] – When you match the regular expression, do you want to also clean the matched text or not?   |
| Search until regex Case Sensitive       | [Yes or No]   |
| Process text if regex not found - front | [Yes or No] – When the Regular Expression is not found, do you still want to clean the entire selection?  |
| Search from rear                        | [Yes or No] – In cleaning text, do you want to work from the rear of the string? This can be used in combination with “Search from front”.  |
| Search until regex – rear               | [Yes or No] – (see above)   |
| Read until regex – rear                 | <b>Regular Expression</b> – (see above)   |
| Include rear regex in searchable text   | [Yes or No] – (see above)   |
| Search until regex Case Sensitive       | [Yes or No] – (see above)   |
| Process text if regex not found - rear  | [Yes or No] – (see above)   |
| Search entire string                    | [Yes or No] – An alternative to searching from front and rear is to clean the whole string.   |
| Remove alphanumeric characters          | [Yes or No] – Finally, what to clean? This removes all alphanumeric characters, leaving for example symbols, punctuation, and non-printables.   |
| Remove letters                          | [Yes or No] – Remove all letters (A-Z and a-z).   |
| Remove numeric                          | [Yes or No] – Remove all numbers (0-9)  |
| Remove non-printable characters         | [Yes or No] – Remove any non-printing characters (usually garbage)  |

|   |   |
|---|---|
| Remove punctuation                        | [Yes or No] – Remove all punctuation.                 |
| Remove whitespace                         | [Yes or No] – Remove all whitespace (spaces and tabs) |
| Remove specific characters                | [Yes or No] – Remove specific characters              |
| Treat Remove Specific Char as Single Word | [Yes or No]   |
| Characters to remove<br>(Not a regex)     | <b>String</b> – The list of characters to remove.     |

|                                  |  |
|----------------------------------|--|
| <b>Dictionary Lookup</b>         | Looks for specific terms within the <i>selected text</i> . If a match is found, the entire <i>selected text</i> is either kept (a filter list) or removed (a stopwords list). The list of terms is in an external file (the Dictionary). |
| Filename                         | <b>String (path + filename)</b> – Filename of a list of words or regular expressions (one per line).   |
| Keep entries found in dictionary | [Yes or No] – If the selected text matches, keep the selected text ("yes") or throw out any selected text that matches ("no", e.g., a stopwords list).   |
| Treat as regex                   | [Yes or No] – Does the dictionary contain Regular Expressions or straight text?  |
| Case sensitive                   | [Yes or No]  |

|                                |  |
|--------------------------------|--|
| <b>Divide Text</b>             | For multi-valued fields, how are the items divided?  |
| Delimiting regex               | <b>Regular Expression</b> – Specify the Regular Expression that separates items.   |
| Include with previous          | [Yes or No] – Do you want to include the text that matches the Delimiting RegEx with the previous item (usually "no")?           |
| Include with next              | [Yes or No] – Do you want to include the text that matches the Delimiting RegEx with the next item (usually "no")?               |
| Regex is case sensitive        | [Yes or No]  |
| Keep text after last delimiter | [Yes or No] – Frequently the last item of a multivalued field does not have the delimiter following it. This is typically "yes". |

|                          |   |
|--------------------------|---|
| <b>Entity Extraction</b> | Looks for <i>specific terms</i> within the selected text. If a match is found, the <i>term</i> is either kept (a filter list) or removed (a stopwords list). The list of terms is in an external file (the Dictionary). |
| Filename                 | Name of the file (with path) that contains the dictionary of entities   |
| Keep Entities            | [Yes or No] – Keep the entities that are found (Yes) or discard the entities and keep everything else (No)  |
| Treat as regex           | [Yes or No] – The contents of the file (dictionary) are Regular Expressions (Yes) or plain text (No)  |
| Case sensitive           | [Yes or No] – Make the matches sensitive to case (Yes) or not (No)  |
| Match Whole Word         | [Yes or No] – Require all matches to end on word boundaries (e.g., white space or punctuation) (Yes) or not (No).   |

|  |  |
|--|--|
|  | <b>Note:</b> "No" allows sub-string match, which may produce erroneous results for short strings (e.g., "sea" would match "re <u>s</u> earch") |
|--|--|

|                         |  |
|-------------------------|--|
| <b>Find and Replace</b> | Use this to edit data.   |
| Read from File          | [Yes or No]  |
| Thesaurus file to read  | Enter the filename and path of thesaurus file to use.  |
| Regex case sensitive    | [Yes or No] – Should thesaurus file be used in a case-sensitive manner? Only for sub-items – not implemented or supported. |
| Regex to find           | <b>Regular Expression</b> – Specify the regular expression to match.   |
| String to replace with  | <b>Regular Expression</b> – Specify the regular expression to replace the matched string.                                  |
| Regex case sensitive    | [Yes, No, or Only for Sub-Items]   |

|                        |   |
|------------------------|---|
| <b>Thesaurus</b>       |   |
| Thesaurus File to read | Enter the filename and path of thesaurus file to use. |
| Save to Groups         | [Yes or No]   |
| Save to Single Group   | [Yes or No]   |
| Single Group name      | Enter the group name                                  |
| Keep Unmatched Items   | [Yes or No]   |

|                               |  |
|-------------------------------|--|
| <b>Math - Average Results</b> | For numeric data, calculates the average (mean) of the data items in the record. For example, a grants database might list dollar amounts of funding each year - this command could average the dollar amounts of the grants. More obscurely, you could find the "average" family member year for a patent family. |
|-------------------------------|--|

|   |   |
|---|---|
| <b>Math - Count Results</b>               | Counts the number of terms that would be retrieved. For example, number of authors, number of IPCs, or number of cited references.  |
| Include Duplicates                        | [Yes or No] (Default is "Yes") - If a given item appears more than once in a record, set this option to "Yes" to include those repeating terms in the count, or "No" to count only the unique entities. |
| Case sensitive for determining duplicates | [Yes or No]   |

|                           |   |
|---------------------------|---|
| <b>Math - Sum Results</b> | For numeric data, calculates the sum of the data items in the record. (Using the grants database example above, this command could sum the grant dollar amounts.) |
|---------------------------|---|



|                                  |  |
|----------------------------------|--|
| <b>Math - Keep Minimum Value</b> | For numeric data, select the lowest value. |
|----------------------------------|--|

|                                  |   |
|----------------------------------|---|
| <b>Math - Keep Maximum Value</b> | For numeric data, select the highest value. |
|----------------------------------|---|

|   |  |
|---|--|
| <b>NLP</b>                                  | Run the selected text through the Natural Language Processor to extract Words and/or Noun Phrases.   |
| Whether to output words or phrases from NLP | <b>[Words or Phrases or Words and Phrases]</b>   |
| Extract entities before NLP                 | <p><b>[Yes or No]</b> – “No” means to simply run NLP on the selected text. “Yes” instructs the import filter to first identify entities using an external file (dictionary) and then run NLP on the remaining text.</p> <p><b>Note:</b> This “shields” or “protects” the terms from the NLP which might otherwise be parsed (broken up) or combined with additional terms, but still brings in additional terms from the text via NLP.</p> |
| Filename                                    | Name of the file (with path) that contains the dictionary of entities  |
| Treat as regex                              | <b>[Yes or No]</b> – The contents of the file (dictionary) are Regular Expressions (Yes) or plain text (No)  |
| Case sensitive                              | <b>[Yes or No]</b> – Make the matches sensitive to case (Yes) or not (No)  |
| Match Whole Word                            | <p><b>[Yes or No]</b> – Require all matches to end on word boundaries (e.g., white space or punctuation) (Yes) or not (No).</p> <p><b>Note:</b> “No” allows sub-string match, which may produce erroneous results for short strings (e.g., “sea” would match “research”)</p>   |

|                              |  |
|------------------------------|--|
| <b>Keyphrases</b>            | Run the selected text through the keyphrase extractor to produce meaningful words or phrases for text summarization. |
| Single or multi-word phrases | <b>[Single words or Multiple words]</b>  |

|                                |   |
|--------------------------------|---|
| <b>Read from Variable</b>      | Read a value from an Import Variable. The import variables are pulled from the entire file and the Read from Variable command allows the record to access this pool of items. |
| Variable Name                  | Select the Import Variable to use   |
| Which Instance                 | Select which value of the Import Variable to use ...  |
| First Instance                 | Use the very first value found in the raw data file for this Import Variable.   |
| Previous Instance              | Use the value that occurred closest to and before this record.  |
| Next Instance                  | Use the value that occurred closest to and after this record.   |
| Closest Instance               | Use the value that occurred closest to this record (either before or after).  |
| Last Instance                  | Use the very last value found in the raw data file for this Import Variable.  |
| Insert Text if Nothing Matched | <b>[Yes or No]</b>  |

|                                    |   |
|------------------------------------|---|
| Text to Insert if Nothing Selected | Enter text. The next command will operate on this text; or, if this is the last command in the stack, this text will be inserted as a data item in the field. |
|------------------------------------|---|

|                      |   |
|----------------------|---|
| <b>Get File Name</b> | Reads the name of the raw data file being imported. Mostly useful when importing multiple files where the filename is a topic or record number. |
| Get full path name   | [Yes or No] – Option to include the location of the file being imported [Yes] or the file name only [No].                                       |

|                                 |  |
|---------------------------------|--|
| <b>Extract Data from JSON</b>   | Use when importing JSON data (typical for API Import).   |
| Data Name to Extract            | JSON data comes in key:value pairs, so the Data Name to Extract is the "key" that you want to look for to get the "value". |
| Treat Data to Extract as XPath? | [Yes or No] - This is a way to parse the data that is analogous to XPath for XML. See Example usage here.                  |

|                              |   |
|------------------------------|---|
| <b>Extract Data from XML</b> | Extracts data directly from within an xml tag.                |
| Data Name to Extract         | Supports XPath as well. (See Extract Data from JSON command.) |

|                          |   |
|--------------------------|---|
| <b>Build Results</b>     | May be used to output intermediate results. This is especially useful for importing mixed data into a single field. Data may be processed and "built", followed by processing new selections from the record and building those into the same field. For example, you can write a series of commands to bring in the title phrases; then, after a Build Results command, you can start over and go back for phrases from the abstract. You can even mark each "build" section as a group so you can tell if the term came from the title or abstract (or both). |
| Clear in progress buffer | [Yes or No] – "Yes" writes out the values found and clears the buffer. Subsequent commands require another "Select Text" command to place something in the buffer. "No" writes out the values found, but does not clear the buffer. Subsequent commands continue to work on the values found.   |
| Add to Group             | [Yes or No] – In addition to adding the items to the field, "Yes" adds the items in the Results list to the group specified in "Group Name".  |
| Group Name               | Enter Group Name to which items will be added.  |
| Break if not Empty       | [Yes or No] – "Yes" will stop import for a field when the buffer contains at least one item.  |

**Buffer commands:** Buffer commands allow you to combine text selected from different sections of a record to create a single term before building the list of items for the field. For example, if you wanted to build a "citation" field from the record author, title, and source fields you could use the following sequence:

First, create the import buffers you will need:

Create Import Buffer: *1st Author*  
Create Import Buffer: *Title*  
Create Import Buffer: *Source*  
Create Import Buffer: *Temporary Combination Buffer 1*

### Create Import Buffer: *Temporary Combination Buffer 2*

Then "fill" each buffer with the appropriate text:

Activate Import Buffer: *1st Author*

- insert series of import commands to get the 1st Author

Activate Import Buffer: *Title*

- insert series of import commands to get the Title

Activate Import Buffer: *Source*

- insert series of import commands to get the Source

Next, combine the strings:

Combine Import Buffer: *1st Author* and *Title* with "," to *Temporary Combination Buffer 1*

- *Temp Buffer 1* now has 1st Author, Title

Combine Import Buffer: *Temporary Combination Buffer 1* with *Source* with "," to *Temporary Combination Buffer 2*

- *Temp Buffer 2* now has 1st Author, Title, Source

Finally, copy your result to the "VP-Main-Import-Buffer" and activate it:

Copy Buffer: *Temporary Combination Buffer 2* to *VP-Main-Import-Buffer*

Activate Import Buffer: *VP-Main-Import-Buffer*

In this case, the second combination could have been copied straight into the VP-Main-Import-Buffer, but using two temporary buffers allows you to go back and forth between them, combining as many text sections as you want; if, for example, you had to bring in journal, volume, issue, page, etc., separately.

Here is an example of the effect of the "Build All Combinations" command:

Buffer: Publication Country

US

CA

Buffer: INPADOC Legal Status (code)

1994-02-03 AS

1996-06-05 AS

1996-06-15 AS

2001-08-27 AS

"Build All Combinations" command Yields:

US 1994-02-03 AS

CA 1994-02-03 AS

US 1996-06-05 AS

CA 1996-06-05 AS

US 1996-06-15 AS

CA 1996-06-15 AS

US 2001-08-27 AS

CA 2001-08-27 AS

|                                 |   |
|---------------------------------|---|
| <b>Create New Import Buffer</b> | Adds a new empty import buffer. (See note on Buffer commands above) |
| New Buffer Name                 | Name for the new buffer (cannot be "VP-Main-Import-Buffer")         |

|                               |   |
|-------------------------------|---|
| <b>Activate Import Buffer</b> | Loads a buffer to memory so that general text manipulation commands can be performed. (See note on Buffer commands above) |
| Buffer to Activate            | Select buffer to activate from dropdown menu  |

|                                |   |
|--------------------------------|---|
| <b>Copy Import Buffer</b>      | Copies the contents from one buffer to another. (See note on Buffer commands above) |
| Source Buffer                  | Buffer to be copied   |
| Destination Buffer             | Buffer to be copied to. (Existing contents will be overwritten.)                    |
| Clear source buffer after copy | [Yes or No]   |

|                                   |  |
|-----------------------------------|--|
| <b>Combine Text</b>               | Catenates data from two buffers and stores the result in a third buffer                          |
| Source Buffer #1                  | Select the buffer which holds the data that you want to appear first                             |
| Source Buffer #2                  | Select the buffer which holds the data that you want to appear last                              |
| Destination Buffer                | Name of the buffer which will store the catenated data. (Existing contents will be overwritten.) |
| Text before first string          | Enter any text here that you want to add to the result before the first string (not a regex)     |
| Text between strings              | Any text that you want to add between first and second strings (not a regex)                     |
| Text after second string          | Any text that you want to include after the last string  |
| Clear source buffer #1 after copy | [Yes or No]  |
| Clear source buffer #2 after copy | [Yes or No]  |
| Build All Combinations            | [Yes or No]  |

|   |   |
|---|---|
| <b>Convert Text</b>                           | Protects or removes special characters used in XML data. Changes Unicode dates to a human readable format.  |
| Conversion Type                               |   |
| Unprotect HTML Special Characters             | For example, convert "&gt;" to ">"  |
| Protect HTML Special Characters               | For example, convert ">" to "&gt;"  |
| Convert UNIX timestamp to human readable date | Also known as POSIX time or Epoch time, UNIX timestamp is a computer readable date (for example "1429133484"). This converts it to a human readable format (for example "2015-04-15 17:31:24"). |

|                      |   |
|----------------------|---|
| <b>Set Data Type</b> | Use the result as the field's Data Type |
|----------------------|---|

|                          |             |
|--------------------------|-------------|
| Clear in progress buffer | [Yes or No] |
|--------------------------|-------------|

|                          |  |
|--------------------------|--|
| <b>Set Meta Tag</b>      | Use the result as the field's Meta Tag |
| Clear in progress buffer | [Yes or No]                            |

|                        |  |
|------------------------|--|
| <b>Load Image File</b> | Convert an image link into a binary image file or read the text contents of that file.   |
| Binary or Text         | <b>[Binary or Text]</b> - Binary is for loading raster graphics such as png, jpg, etc. and can then render them in List, Detail, and Record views. Text is used for loading vector graphics such as SVG files into the Record View only. |

|                       |  |
|-----------------------|--|
| <b>Load Text File</b> | Read Text in External file. Same as Load Image File with Text setting. |
|-----------------------|--|

|   |   |
|---|---|
| <b>Import from API</b>                                  |   |
| API Driver Name   | JSON file stored in Import Filters/API Drivers  |
| Template name for Input Data (from VP heading to query) | Placeholder for the query field in the dataset. Typically, FieldIdToImportFrom.   |
| Data name to extract from Results                       | Similar to the JSON and XML data name, this is how you identify the block of data to parse within the returned Results.   |
| Other Name/Value Pairs for Templates (JSON)             | JSON string with key:value pairs to replace template values within the driver. These will also populate in the Manage Selected API section of the Add fields from online database dialog. |

## Creating or Editing Library Procedures

**Note:** See [Further Processing](#) for additional information on what Library Procedures are and how they are used.

A standard set of library procedures are stored in a file named Library.conf, which is located in the VantagePoint \Import Filters\Library Procedures directory. This \*.conf file can be edited, or new library procedures can be added to new \*.conf files. You can have more than one \*.conf file with library procedures, as long as all the \*.conf files reside in the VantagePoint\Import Filters\Library Procedures folder.

The installed set of Library Procedures can be added to or modified using the Import Filter Editor. You can add new procedures to an existing \*.conf file, or create a new \*.conf file with the new procedures. These procedures are added by inserting items in the "Fields" pane (lower left), adding the desired commands for that field on the "Field Definitions" tab, and then setting the "Field is Library Procedure" command to "Yes" in the Field Setting Tab.

In order for VantagePoint to recognize new library procedures, the following two conditions must be met:

1. The "Field is Library Procedure" setting is set to "Yes" – This setting is found on the "Field Settings" tab when the \*.conf file is open in the Import Filter Editor.

2. The \*.conf file which contains the library procedure is saved to the VantagePoint installation's "...\\Import Filters\\Library Procedures" folder.

## Meta Tag Editor

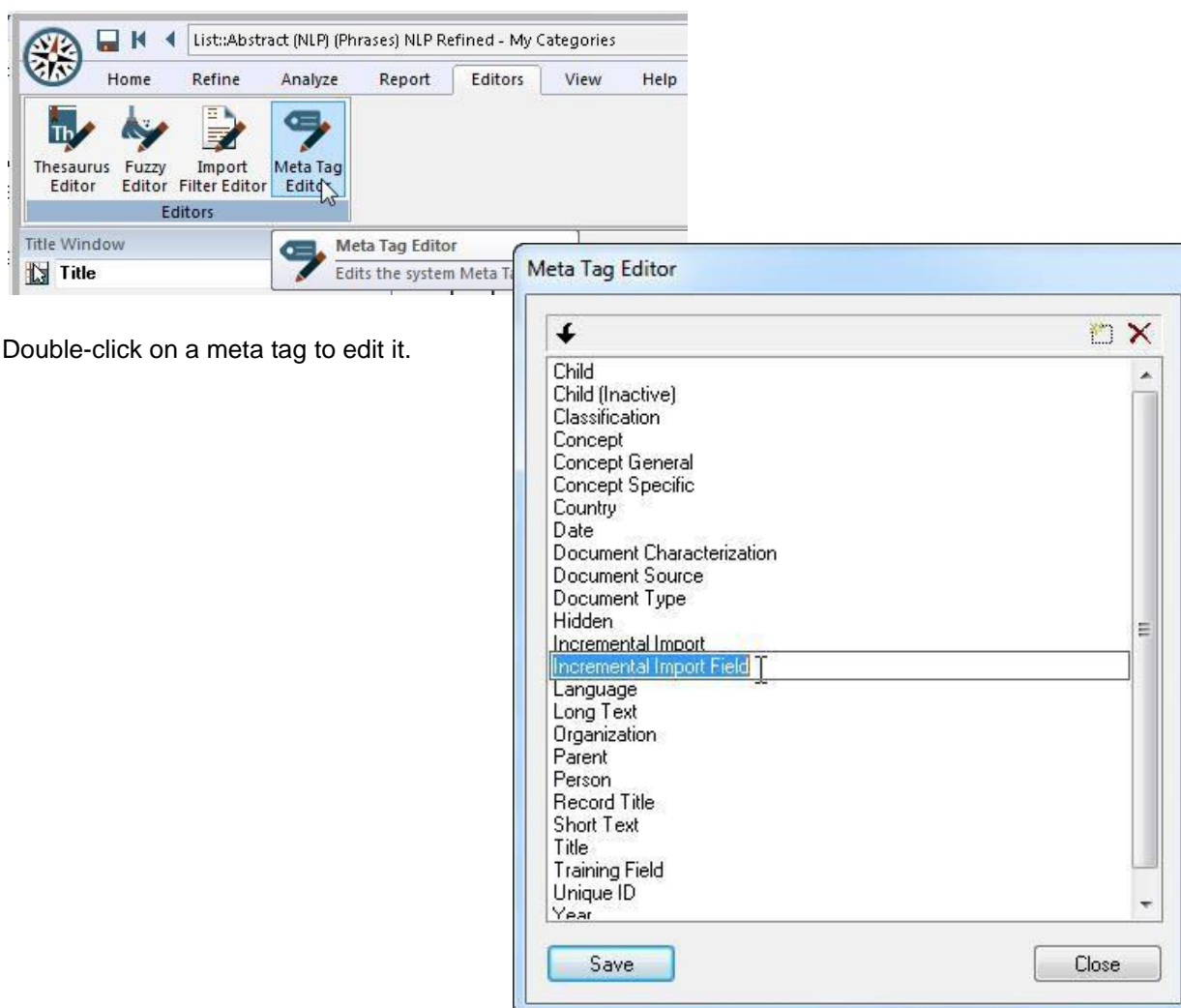
Different data fields frequently have similar types of information. For example, a company's name may appear as a "Corporate Source" in one database and a "Patent Assignee" in another. Meta tags provide a mechanism for the user to indicate the type of data contained in a field, and they are especially useful when combining dissimilar datasets.

VantagePoint provides a user-extensible set of meta tags. There are two ways this set of meta tags is changed.

First, when you open a VantagePoint data file that has meta tags, the list of meta tags is compared to your local list. If there are any meta tags in the data file that are not in your local list, the new meta tags are added to your local list.

Second, the Meta Tag Editor allows you to interactively edit the local set of meta tags.

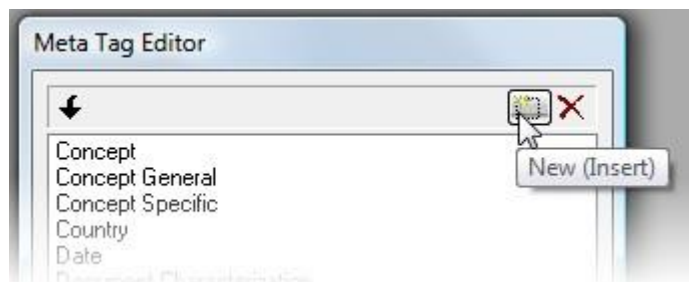
The **Meta Tag Editor** is accessed from the Editors ribbon.



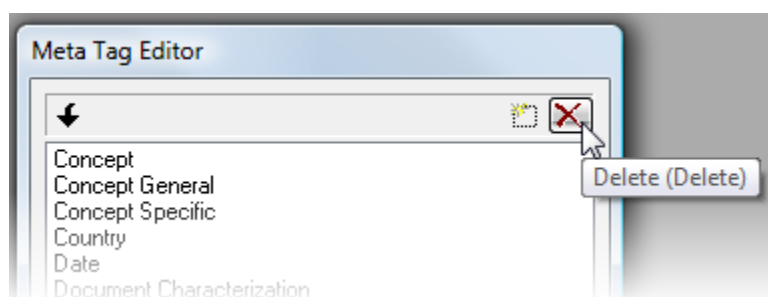
Double-click on a meta tag to edit it.



To add a new meta tag, click the **New** button on the toolbar (see the following illustration). A new blank line is added to the list. Type the new meta tag name in the blank line.



To delete a meta tag, first select the meta tag and then click the **Delete** button on the toolbar.



Click **Save** to save your changes.

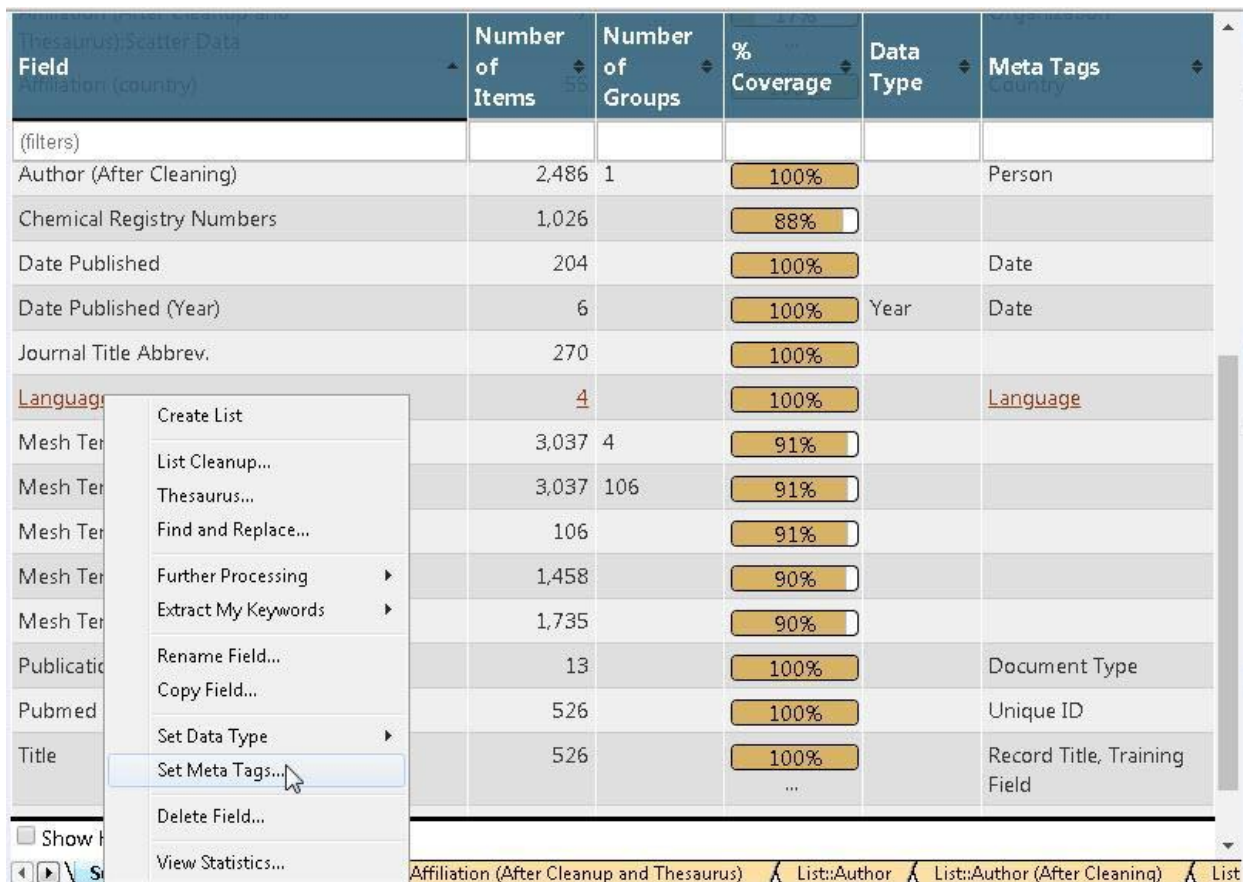
**Note:** Edits, additions, and deletions are not made permanent until you click **Save**.

Click **Close** to close the window.

## Adding Meta tags for fields

Different data fields frequently have similar types of information. For example, a company's name may appear as a "Corporate Source" in one database and a "Patent Assignee" in another. Meta tags provide a mechanism for the user to indicate the type of data contained in a field, and they are especially useful when combining dissimilar datasets.

The following illustration of a [Summary View](#) shows a dataset with meta tags assigned. Note that a field may have more than one meta tag assigned.



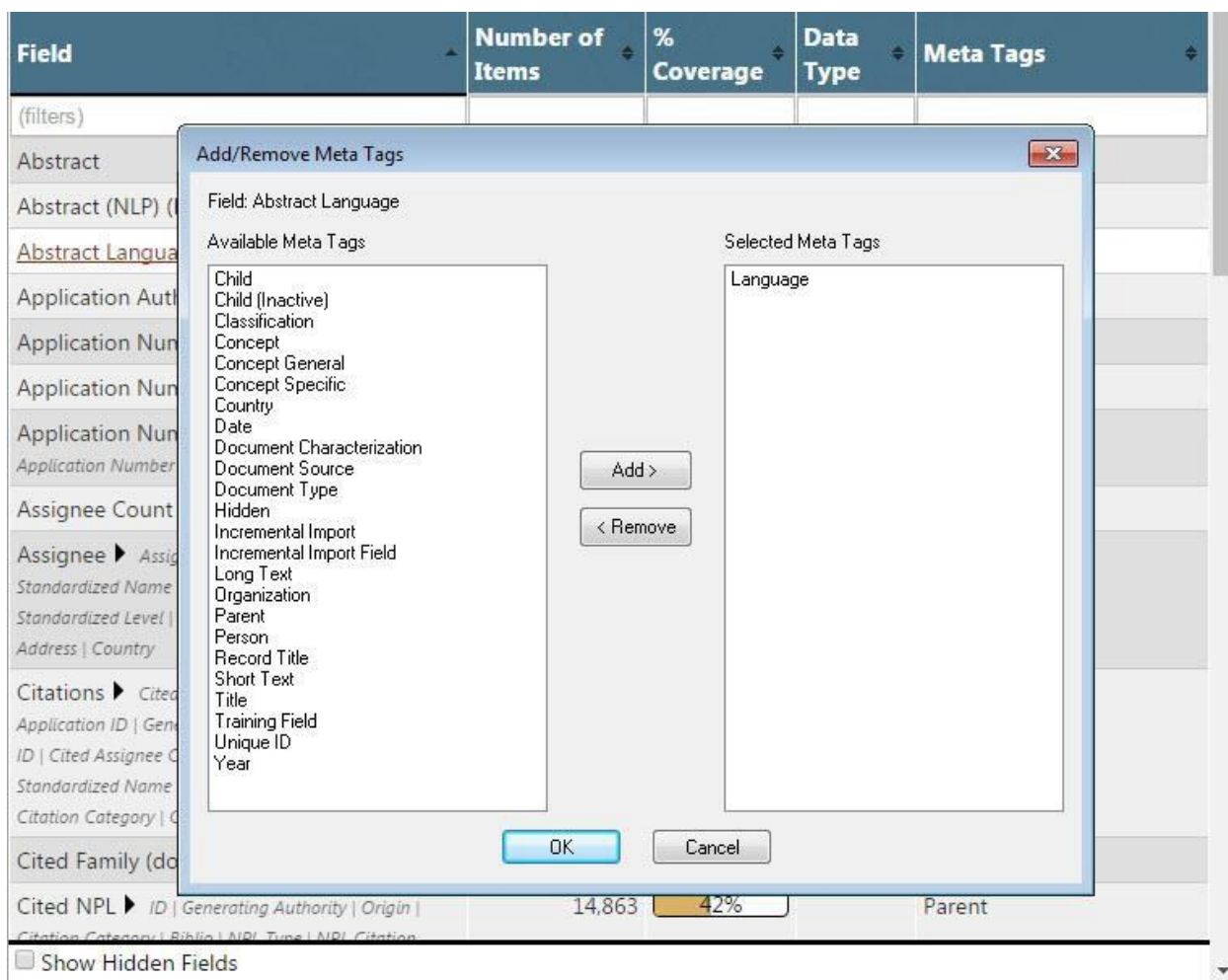
| Field                     | Number of Items | Number of Groups | % Coverage | Data Type | Meta Tags                    |
|---------------------------|-----------------|------------------|------------|-----------|------------------------------|
| (filters)                 |                 |                  |            |           |                              |
| Author (After Cleaning)   | 2,486           | 1                | 100%       |           | Person                       |
| Chemical Registry Numbers | 1,026           |                  | 88%        |           |                              |
| Date Published            | 204             |                  | 100%       |           | Date                         |
| Date Published (Year)     | 6               |                  | 100%       | Year      | Date                         |
| Journal Title Abbrev.     | 270             |                  | 100%       |           |                              |
| Language                  | 4               |                  | 100%       |           | Language                     |
| Mesh Term                 | 3,037           | 4                | 91%        |           |                              |
| Mesh Term                 | 3,037           | 106              | 91%        |           |                              |
| Mesh Term                 | 106             |                  | 91%        |           |                              |
| Mesh Term                 | 1,458           |                  | 90%        |           |                              |
| Mesh Term                 | 1,735           |                  | 90%        |           |                              |
| Publication               | 13              |                  | 100%       |           | Document Type                |
| Pubmed                    | 526             |                  | 100%       |           | Unique ID                    |
| Title                     | 526             |                  | 100%       |           | Record Title, Training Field |

Context Menu Options:

- Create List
- List Cleanup...
- Thesaurus...
- Find and Replace...
- Further Processing
- Extract My Keywords
- Rename Field...
- Copy Field...
- Set Data Type
- Set Meta Tags...**
- Delete Field...
- View Statistics...

Bottom Bar: Affiliation (After Cleanup and Thesaurus) / List::Author / List::Author (After Cleaning) / List

Meta tags are assigned using the following dialog box, which is accessed by right-clicking on a field in the Summary View and selecting **Set Meta Tags...**



To add meta tags to a field, select from the Available Meta Tags list on the left (click, shift-click, and/or ctrl-click) and then click the **Add >** button.

To remove meta tags from a field, select the meta tag(s) from the Selected Meta Tags list on the right (click, shift-click, and/or ctrl-click) and then click the **< Remove** button.

Click **OK** to complete the operation.

## Parent Fields, Child Fields, and Table Views

### Overview of Parent Fields, Child Fields, and Table Views

#### What are they?

Parent Fields are a special collection of Child Fields formed into a parent/child relationship.

Child Fields are like normal fields with one exception: they may also be viewed and used in combination with other Child Fields in a Parent Field.

Table Views are List Views of a Parent Field with its active Child Fields.

#### How are Parent and Child Fields created?

Import Filters and Macro commands are used to create Parent and Child Fields, and to assign Child Fields to a Parent Field.

#### How are they used?

A List View of a Parent Field shows all of the active Child Fields. In the following illustration, the Parent Field (Publication Number (long)) is made up of two Child Fields – Number and Date. This view of a Parent Field is sometimes referred to as a "Table View".

In the Table View, you can perform most of the normal operations you do in a List view – for example, sorting and grouping. In this illustration, the user has sorted by the Child Field "Date" (descending). The column "Number" is sorted alongside the "Date", keeping the Number with the corresponding Date.

|    | # Records | # Instances | Publication Number (long) |           |
|----|-----------|-------------|---------------------------|-----------|
|    |           |             | Number                    | ↓<br>Date |
| 1  | 1         | 1           | US8410220                 | 20130402  |
| 2  | 1         | 1           | US8409034                 | 20130402  |
| 3  | 1         | 1           | US8409033                 | 20130402  |
| 4  | 1         | 1           | US8408891                 | 20130402  |
| 5  | 1         | 1           | US2013079172              | 20130328  |
| 6  | 1         | 1           | US8403775                 | 20130326  |
| 7  | 1         | 1           | US2013072325              | 20130321  |
| 8  | 1         | 1           | US8397664                 | 20130319  |
| 9  | 1         | 1           | US8398911                 | 20130319  |
| 10 | 1         | 1           | US8398507                 | 20130319  |
| 11 | 1         | 1           | US8399564                 | 20130319  |
| 12 | 1         | 1           | US8399566                 | 20130319  |
| 13 | 1         | 1           | US8400346                 | 20130319  |
| 14 | 1         | 1           | US8399563                 | 20130319  |
| 15 | 1         | 1           | US2013065709              | 20130314  |

## Summary View

A Parent/Child field is shown in the Summary View as follows:

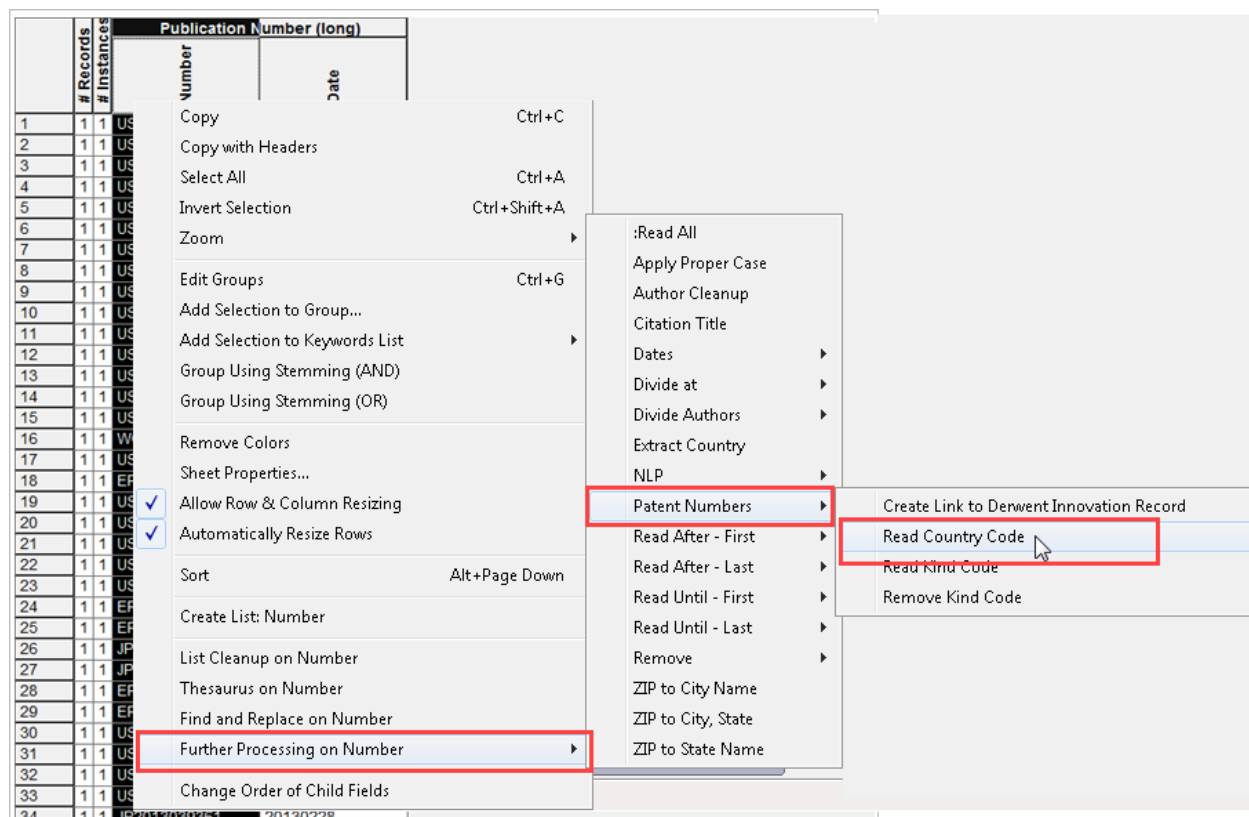
| Field   | Number of Items | Number of Groups | % Coverage | Data Type | Meta Tags      |
|---|-----------------|------------------|------------|-----------|----------------|
| (filters)   |                 |                  |            |           |                |
| Abstract (NLP) (Phrases) NLP Refined  | 6,326           | 10               | 99%        |           |                |
| Abstract (NLP) (Phrases) NLP Refined - My Categories  | 8               |                  | 79%        |           |                |
| Application Number (EPODOC)   | 685             |                  | 100%       |           |                |
| Application Number ▸ Application Country   Application Number   Application Kind  | 685             |                  | 100%       |           | Parent         |
| Assignee::PatStat Standardized Name (Cleaned) - Family Pools  | 3               |                  | 100%       |           |                |
| Assignee ▸ Assignee (Original)   PatStat Standardized Name (Cleaned)   PatStat Standardized Level   PatStat Standardized Sector   Assignee (Standardized) | 428             |                  | 100%       |           | Parent         |
| Citations ▸ Generating Authority   Origin   Citation ID   Cited Assignee Country   Cited Assignee PatStat Standardized Name   Citation Category           | 2,553           |                  | 49%        |           | Parent         |
| Cited Family (count)  | 36              |                  | 100%       | Number    |                |
| CPC   | 416             |                  | 55%        |           | Classification |
| CPC (defined)   | 416             |                  | 55%        |           | Classification |
| Family ID (dedup)   | 460             |                  | 100%       |           |                |
| <input type="checkbox"/> Show Hidden Fields   |                 |                  |            |           |                |
| Summary ▸ List::Assignee::PatStat Standardized Name (Cleaned) ▸ Matrix::Cooccurrence of Assignee (3-17 Families) x Publication Year                       |                 |                  |            |           |                |

The presentation of Parent/Child fields can be changed by clicking the right arrow next to the Parent Field name (in this case, "Assignee"). The presentation changes to:

| Field  | Number of Items | Number of Groups | % Coverage | Data Type | Meta Tags           |
|--|-----------------|------------------|------------|-----------|---------------------|
| (filters)  |                 |                  |            |           |                     |
| Abstract (NLP) (Phrases) NLP Refined   | 6,326           | 10               | 99%        |           |                     |
| Abstract (NLP) (Phrases) NLP Refined - My Categories                             | 8               |                  | 79%        |           |                     |
| Application Number (EPODOC)  | 685             |                  | 100%       |           |                     |
| Application Number ▸ Application Country   Application Number   Application Kind | 685             |                  | 100%       |           | Parent              |
| Assignee::PatStat Standardized Name (Cleaned) - Family Pools                     | 3               |                  | 100%       |           |                     |
| Assignee ▾   | 428             |                  | 100%       |           | Parent              |
| Assignee (Original)  | 385             |                  | 100%       |           | Organization, Child |
| PatStat Standardized Name (Cleaned)  | 314             | 5                | 100%       |           | Organization, Child |
| PatStat Standardized Level   | 3               |                  | 100%       |           | Child               |
| PatStat Standardized Sector  | 8               |                  | 100%       |           | Child               |
| Assignee (Standardized)  | 345             |                  | 100%       |           | Organization, Child |

## Working with Child Fields

Some List View operations (for example, [Thesaurus](#), [Cleanup](#), and [Further Processing](#)) produce a new field. In the same way, these operations can be performed on a Child Field in a Table View. When you do this, a new Child Field is produced. In the following illustration, the user is performing a "Further Processing" operation in the Number field to extract the Country Code.



This operation changes the Child Field to the following:



| Publication Number (long) |           |             |  |          |
|---------------------------|-----------|-------------|--|----------|
|                           | # Records | # Instances | Number: Patent Numbers/Read Country Code | Date     |
| 1                         | 4         | 4           | US                                       | 20130402 |
| 2                         | 1         | 1           | US                                       | 20130328 |
| 3                         | 1         | 1           | US                                       | 20130326 |
| 4                         | 1         | 1           | US                                       | 20130321 |
| 5                         | 6         | 7           | US                                       | 20130319 |
| 6                         | 1         | 2           | US                                       | 20130314 |
| 7                         | 1         | 1           | WO                                       | 20130314 |
| 8                         | 1         | 1           | EP                                       | 20130313 |
| 9                         | 5         | 5           | US                                       | 20130312 |
| 10                        | 2         | 4           | EP                                       | 20130306 |
| 11                        | 2         | 2           | JP                                       | 20130306 |
| 12                        | 3         | 4           | US                                       | 20130305 |
| 13                        | 3         | 3           | JP                                       | 20130228 |
| 14                        | 4         | 4           | US                                       | 20130226 |
| 15                        | 3         | 3           | US                                       | 20130221 |
| 16                        | 2         | 2           | JP                                       | 20130221 |
| 17                        | 1         | 1           | WO                                       | 20130221 |

The Child Field "Number" has been replaced with a new Child Field: Number: Patent Numbers/Read Country Code. (The name includes information about the Further Processing command used to create it.) The Table View of the Publication Number (long) field now shows 4 US documents with a Publication Date of 20130402 together (Row 1, above).

The new Child Field replaces the previous Child Field, and the previous Child Field becomes inactive. In the [Summary View](#), it looks like this:

|                             |       |      |              |
|-----------------------------|-------|------|--------------|
| Publication Number          | 4,606 | 100% |              |
| Publication Number (long) ▼ | 4,617 | 100% | Parent       |
| Number                      | 4,606 | 100% | Child        |
| Date                        | 1,899 | 100% | Child        |
| Publication Year            | 24    | 100% | Year         |
| Record Link                 | 1,498 | 100% | Link         |
| Title                       | 1,914 | 97%  | Record Title |

|  |       |      |                  |
|--|-------|------|------------------|
| Publication Number                       | 4,606 | 100% |                  |
| Publication Number (long) ▼              | 2,611 | 100% | Parent           |
| Number: Patent Numbers/Read Country Code | 36    | 100% | Child            |
| Date                                     | 1,899 | 100% | Child            |
| Publication Number (long):Number         | 4,606 | 100% | Child (Inactive) |
| Publication Year                         | 24    | 100% | Year             |
| Record Link                              | 1,498 | 100% | Link             |
| Title                                    | 1,914 | 97%  | Record Title     |

If you then, for example, apply a Thesaurus to the Child Field "Number: Patent Numbers/Read Country Code", another Child Field is created and replaces the previous Child Field.

|    | # Records | # Instances | Number: Pa               | Date     |
|----|-----------|-------------|--------------------------|----------|
| 1  | 4         | 4           | United States of America | 20130432 |
| 2  | 1         | 1           | United States of America | 20130328 |
| 3  | 1         | 1           | United States of America | 20130326 |
| 4  | 1         | 1           | United States of America | 20130321 |
| 5  | 6         | 7           | United States of America | 20130319 |
| 6  | 1         | 2           | United States of America | 20130314 |
| 7  | 1         | 1           | WIPO (PCT)               | 20130314 |
| 8  | 1         | 1           | European Patent Office   | 20130313 |
| 9  | 5         | 5           | United States of America | 20130312 |
| 10 | 2         | 4           | European Patent Office   | 20130306 |
| 11 | 2         | 2           | Japan                    | 20130306 |

In the [Summary View](#), it now looks like this:

|   |       |      |                  |
|---|-------|------|------------------|
| Publication Number  | 4,606 | 100% |                  |
| Publication Number (long) ▼   | 2,611 | 100% | Parent           |
| Number: Patent Numbers/Read Country Code (1)                        | 36    | 100% | Child            |
| Date  | 1,899 | 100% | Child            |
| Publication Number (long)::Number                                   | 4,606 | 100% | Child (Inactive) |
| Publication Number (long)::Number: Patent Numbers/Read Country Code | 36    | 100% | Child (Inactive) |
| Publication Year  | 24    | 100% | Year             |
| Record Link   | 1,498 | 100% | Link             |
| Title   | 1,914 | 97%  | Record Title     |

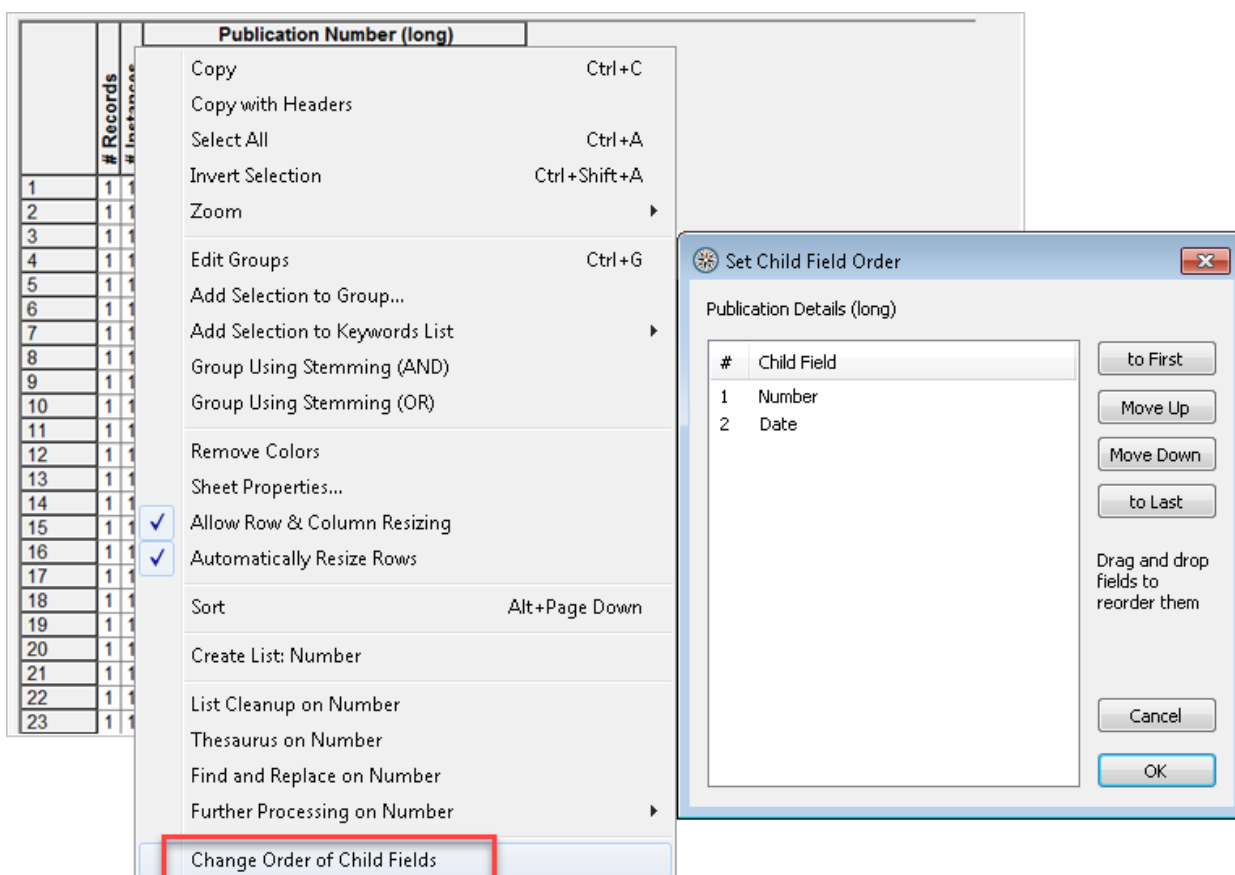
### Swapping in an Inactive Child Field

An inactive Child Field can be swapped back into the Parent Field using the Right-click Context menu in the [Summary View](#), as shown below:

|   |       |      |                  |
|---|-------|------|------------------|
| Pdf link  | 4,632 | 100% | Link             |
| Priority Countries  | 15    | 99%  |                  |
| Priority Countries (FIPS codes)                                     | 15    | 99%  |                  |
| Priority Dates  | 1,840 | 99%  | Date             |
| Priority Numbers  | 3,215 | 99%  |                  |
| Priority Numbers (long) ▼   | 2,120 | 99%  | Parent           |
| Number: Patent Numbers/Read Country Code                            | 15    | 99%  | Child            |
| Date  | 1,840 | 99%  | Child            |
| Priority Numbers (long)::Number                                     | 3,215 | 99%  | Child (Inactive) |
| Priority Years  | 24    | 99%  | Year             |
| Publication Country   | 36    | 100% | Country          |
| Publication Date  | 1,899 | 100% | Date             |
| Publication Kind  | 99    | 100% | Country          |
| Publication Number  | 4,606 | 100% |                  |
| Publication Number (long) ▼   | 2,611 | 100% | Parent           |
| Number: Patent Numbers/Read Country Code                            | 36    | 100% | Child            |
| Date  | 1,899 | 100% | Child            |
| Publication Number (long)::Number                                   | 4,606 | 100% | Child (Inactive) |
| Publication Number (long)::Number: Patent Numbers/Read Country Code | 36    | 100% | Child (Inactive) |
| Publication Year  | 24    | 100% | Year             |
| Record Link   | 1,498 | 100% | Link             |

### Changing the Order of Child Fields in the Parent Field/Table View

The dialog to change the order of Child Fields can be accessed using the Right-click Context menu in the Table View, as shown below. Note: To get this menu, you must right-click on the Child Field column header (e.g., Number or Date, in this illustration):



Or, from the [Summary View](#), right-click on a Parent Field. A menu appears, from which "Change Order of Child Fields" can be selected.

In the **Set Child Field Order** dialog box, select the Child Field you want to move, and click the appropriate button on the right for its placement. (Or, drag and drop the Child Field to the desired position.)

## Create a Child Field List

From a Table view, you can create a list of a Child Field. Right-click on the header of the Child Field for which you want to create the list, and select Create List: <Child field name>.

The screenshot shows a table with columns: #Records, #Instances, Assignee (Original), PatStat Standardized Name, PatStat Standardized ID, PatStat Standardized Level, and PatStat Standardized Sector. A right-click context menu is open over the 'PatStat Standardized Sector' column header. The menu options include: Copy (Ctrl+C), Copy with Headers, Select All (Ctrl+A), Invert Selection (Ctrl+Shift+A), Zoom, Edit Groups (Ctrl+G), Add Selection to Group..., Add Selection to Keywords List, Group Using Stemming (AND), Group Using Stemming (OR), Remove Colors, Sheet Properties..., Allow Row & Column Resizing, Automatically Resize Rows, Sort (Alt+Page Down), **Create List: PatStat Standardized Sector** (highlighted), List Cleanup on PatStat Standardized Sector, Thesaurus on PatStat Standardized Sector, Find and Replace on PatStat Standardized Sector, Further Processing on PatStat Standardized Sector, and Change Order of Child Fields.

The List view of the Child Field is returned.

|   | #Records | #Instances | Assignee: PatStat Standardize | COMPANY                             | UNIVERSITY                          | GOV NON-PROFIT                      | UNKNOWN                             | INDIVIDUAL                          | HOSPITAL                            |
|---|----------|------------|-------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|
| 1 | 1758     | 1835       | COMPANY                       | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/>            |
| 2 | 1480     | 1508       | UNIVERSITY                    | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/>            |
| 3 | 431      | 440        | GOV NON-PROFIT                | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/>            |
| 4 | 197      | 197        | GOV NON-PROFIT UNIVERSITY     | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/>            |
| 5 | 43       | 44         | UNKNOWN                       | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |
| 6 | 30       | 55         | INDIVIDUAL                    | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| 7 | 22       | 22         | COMPANY GOV NON-PROFIT        | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/>            |
| 8 | 3        | 3          | HOSPITAL                      | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 9 | 2        | 2          | COMPANY UNIVERSITY            | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/>            |



## Parent Fields in Other Views: Matrix, Map, Details

Parent Fields are displayed in other views with the values of the Child Fields separated by a slash, as illustrated in the matrix column headings shown below. (Note: Before creating this illustration, the [Further Processing](#) Command "Dates/Extract Years" was applied to the Child Field "Date".)

| Reset                     |           | Patent Assignee (Cleaned) - Not Inve |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |   |
|---------------------------|-----------|--------------------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---|
| Publication Number (long) | # Records | # Records                            |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |   |
|                           |           |                                      |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |   |
|                           |           | Show Values >= 1 and <= 36           |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |   |
|                           |           | Cooccurrence<br># of Records         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |   |
|                           |           |                                      |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |   |
|                           |           | US/2013                              | US/2012 | US/2011 | US/2010 | US/2009 | US/2008 | US/2007 | US/2006 | US/2005 | US/2004 | US/2003 | US/2002 | US/2001 | US/2000 | US/1999 | US/1998 | US/1997 | US/1996 | US/1995 | US/1994 | US/1993 | US/1992 |   |
| 1                         | 118       | BRIDGESTONE SPORTS CO LTD            | 6       | 22      | 20      | 12      | 19      | 15      | 10      | 5       | 5       | 1       |         |         |         |         |         |         |         |         |         |         |         |   |
| 2                         | 70        | ACUSHNET COMPANY                     | 4       | 8       | 13      | 15      | 12      | 17      | 13      | 16      | 9       | 13      | 11      | 6       | 8       | 5       | 5       | 3       | 2       |         |         |         |         |   |
| 3                         | 66        | SRI SPORTS LTD                       | 7       | 22      | 16      | 4       | 9       | 3       | 2       | 3       |         |         |         |         |         |         |         |         |         |         |         |         |         |   |
| 4                         | 43        | NIKE INC                             | 6       | 25      | 12      | 1       |         |         |         |         | 1       |         |         |         |         |         |         |         |         |         |         |         |         |   |
| 5                         | 37        | SPALDING SPORTS WORLDWIDE I          |         |         |         | 1       |         | 3       | 2       | 2       | 3       | 6       | 4       | 9       | 7       | 3       | 6       | 3       |         | 3       | 2       | 1       | 1       | 2 |
| 6                         | 36        | SUMITOMO RUBBER IND                  | 1       |         | 1       | 1       | 1       |         | 3       | 13      | 6       | 5       |         |         | 1       | 1       |         | 1       |         | 1       |         |         |         |   |
| 7                         | 35        | TAYLOR MADE GOLF CO                  | 3       | 13      | 13      | 4       | 6       | 2       | 4       |         | 1       |         |         |         |         |         |         |         |         |         |         |         |         |   |
| 8                         | 17        | CALLAWAY GOLF CO                     |         |         | 1       |         | 2       | 3       | 4       | 3       | 4       | 3       | 6       | 4       | 7       | 1       | 1       |         |         |         |         |         |         |   |
| 9                         | 13        | DUNLOP SPORTS CO LTD                 | 1       | 9       |         |         |         |         |         | 1       | 1       |         | 1       |         |         |         |         |         |         |         |         |         |         |   |
| 10                        | 6         | DU PONT                              |         |         | 1       |         | 1       | 2       | 2       | 1       | 1       | 2       | 2       |         |         |         |         |         |         |         |         |         |         |   |
| 11                        | 6         | LISCO INC                            |         |         |         |         |         |         |         |         | 2       |         | 2       | 2       | 2       | 1       | 3       | 1       | 3       | 1       | 1       | 1       | 2       |   |

## Miscellaneous

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Miscellaneous Operations include:

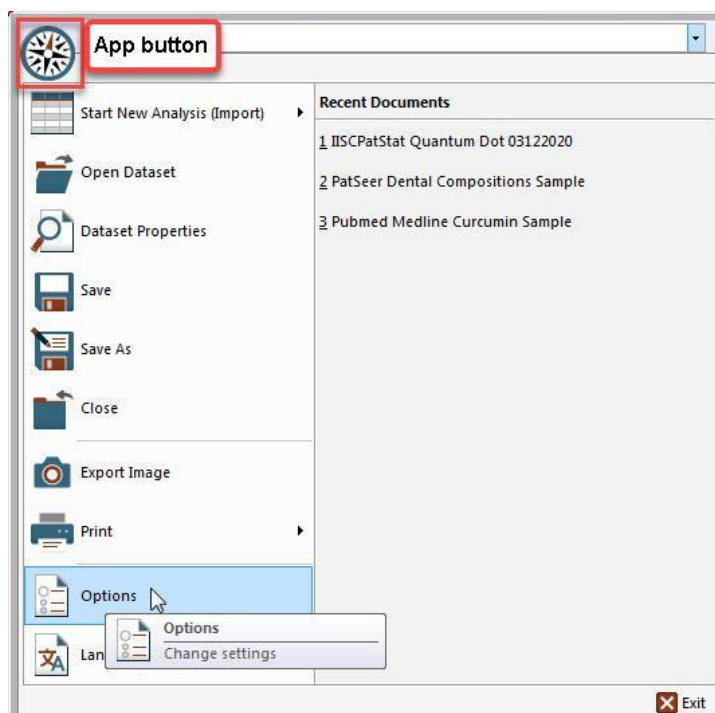
- [Options dialog](#) - Set preferences for certain VantagePoint activities, such as Checking for Updates, method used for importing data, Confirmation when deleting sheets, and Color customization. This is also where you assign Hotkeys.
- [Updating Files in VantagePoint](#)
- [Registration Code - Moving VantagePoint from one computer to another](#)
- [Registration Code - Repair License](#)
- [Import XML \(Smart Data Exchange\)](#)
- [Import XML \(Wizard\)](#)
- [Dataset Properties](#)
- [Changing Import Filter in a Dataset](#)
- [Regular Expressions in VantagePoint](#)

Follow the links for the detailed topics.

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## Options Dialog – Settings for Personal Preferences

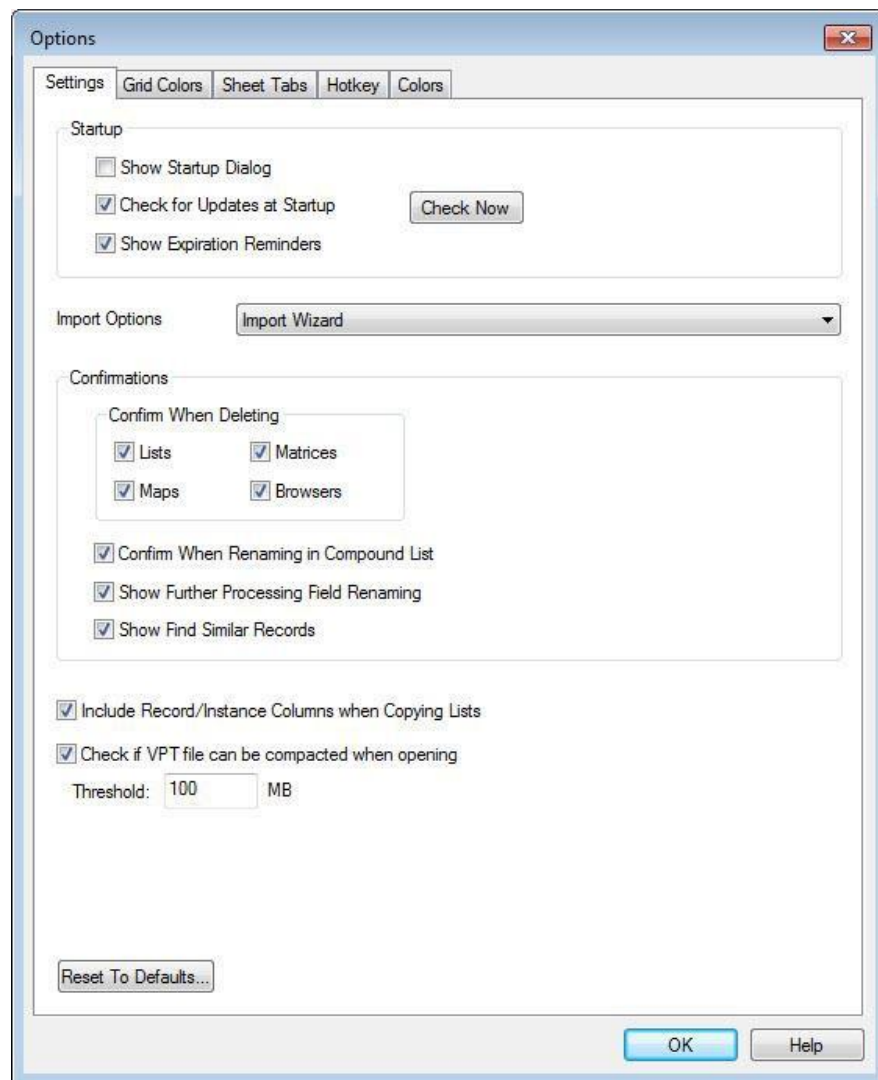
Set personal preferences in VantagePoint by clicking the **App Button** and choosing **Options**.





You are presented with the **Options** dialog. Tabs presented at the top are: Settings, [Grid Colors](#), [Sheet Tabs](#), [Hotkey](#), and [Colors](#).

Under the **Settings** tab:



### Startup

Choose whether to: [Display the Startup dialog](#) every time VantagePoint opens; have VantagePoint automatically Check for Updates at Startup; display Expiration Reminders (if applicable).

### Import Options

Choose your preferred method for Importing Data: [Import Wizard](#), [Classic Interface](#), or "Ask me each time".

### Confirmations

Choose whether VantagePoint should prompt you for confirmation when [deleting sheets](#) in a dataset.

You can suppress other actionable prompts that are offered pertaining to Compound List, Further Processing, and Find Similar Records. See additional details in the [Confirmations](#) sub-topic.

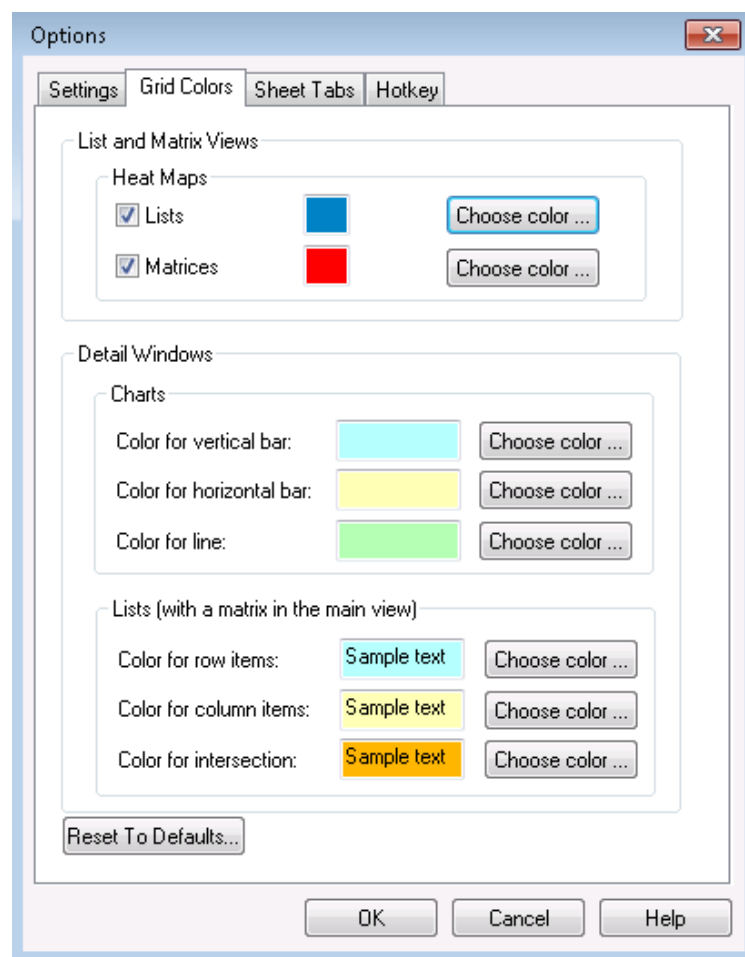
### Other Check boxes

Include Record/Instance Columns when Copying Lists - when copying a List to another application (such as Excel), VantagePoint can copy the #Records and #Instances with the data. If this box is not checked,

only the data will be copied. See the [Records/Instance](#) section under the Copy topic.

Check if the VPT file can be compacted when opening - The size of your VPT file may be able to be reduced from time to time, saving you disk space and memory. Select this option to set the threshold for VantagePoint to try and compact the VPT file.

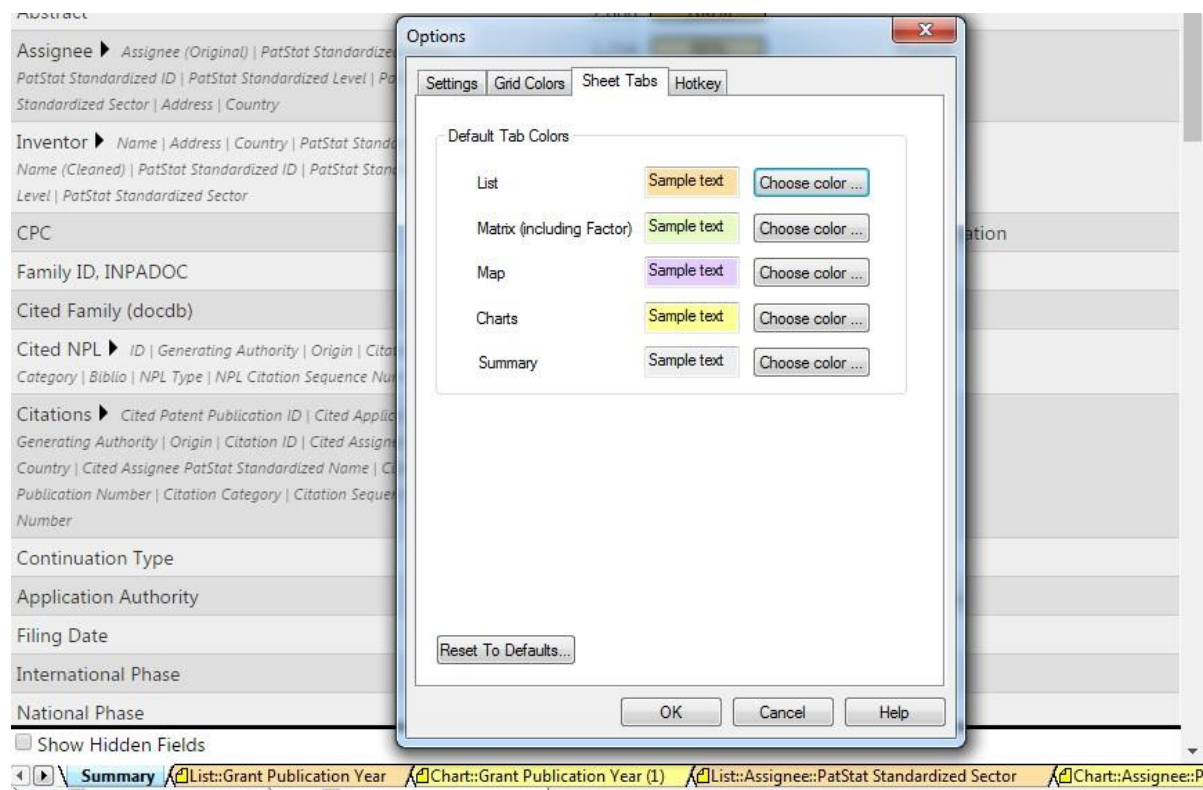
### Grid Colors:



Set Colors for Heat Maps and Detail Windows. See the [Heat Maps Settings](#) and [Detail Windows Colors](#) topics for detailed information.

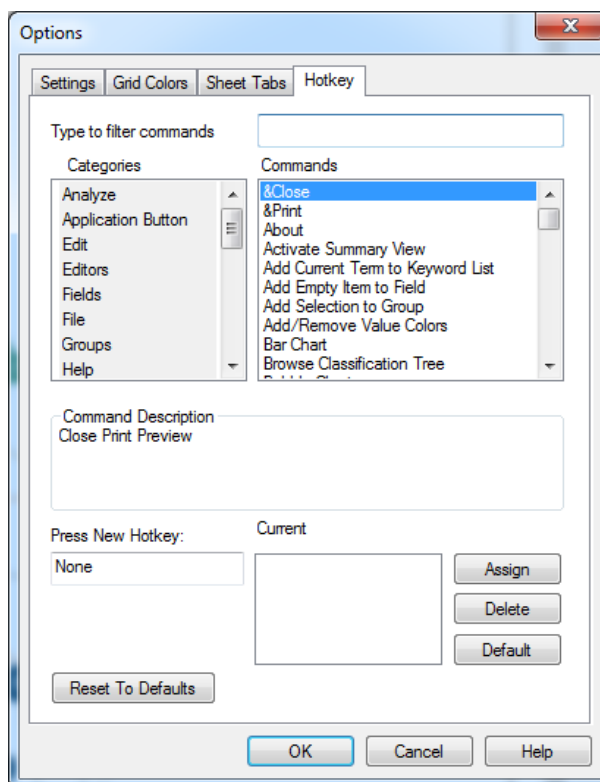
## Sheet Tabs:

Sheet tabs can be assigned a uniform color for quick identification. The sheet being viewed is always blue, as shown by the Summary tab, below:



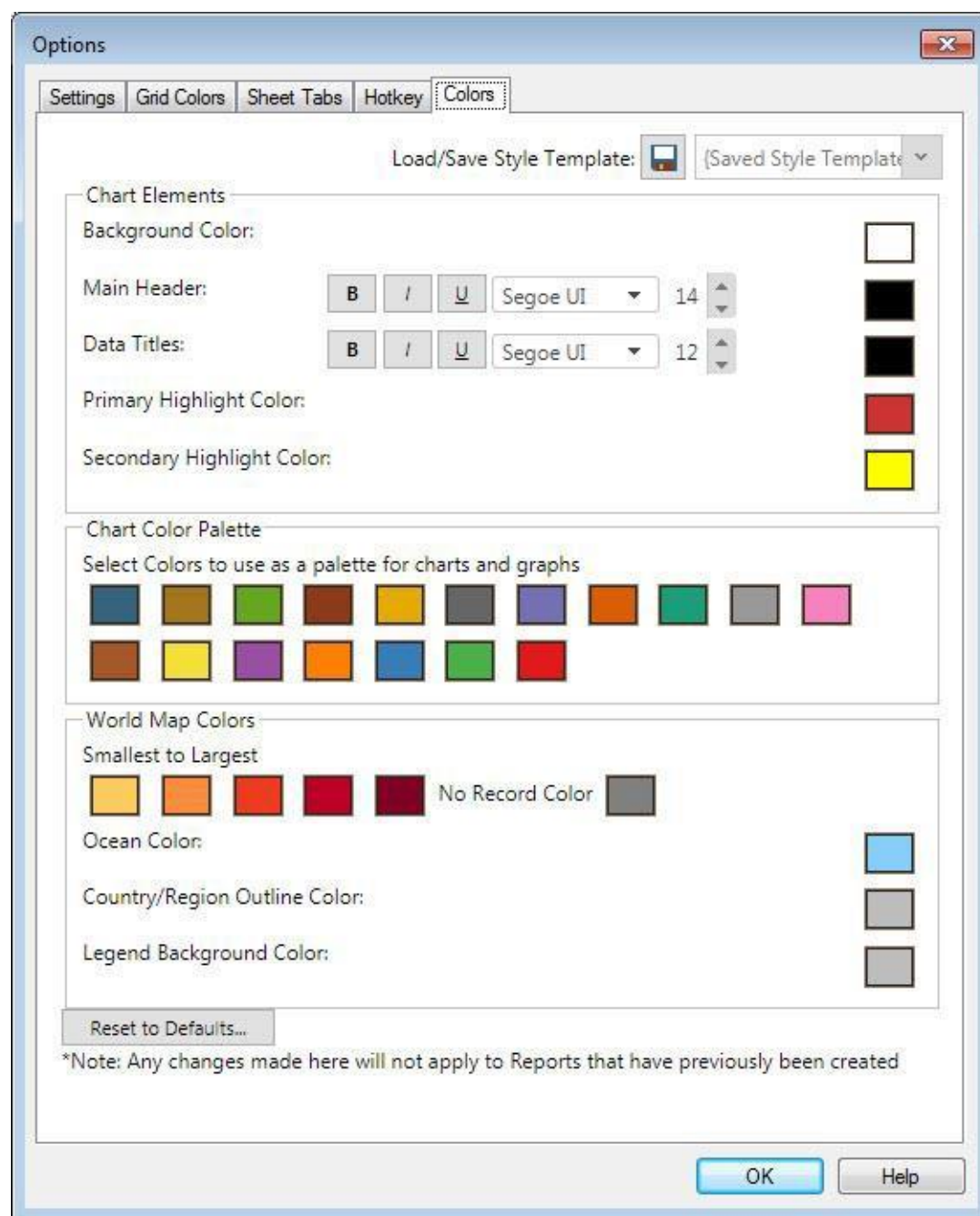
## Hotkey:

Assign Hotkeys/Keyboard shortcuts for VantagePoint commands. See the [Hotkey/Edit Keyboard Shortcuts](#) topic for details.



**Colors:**

This tab contains the global visualization stylized settings for Font and Colors used in Charts and World Maps. See the [Colors](#) sub-topic for details.



## Enabling or disabling the startup dialog box

When VantagePoint is first started, a dialog box appears giving you the choice to Import a File or Open an Existing VantagePoint File. This dialog box can be enabled or disabled as follows:



From the App Button , select **Options**.

The **Options** dialog box is displayed.

Check or uncheck the "Show Startup Dialog" box and click **OK**:



## Changing the import data method



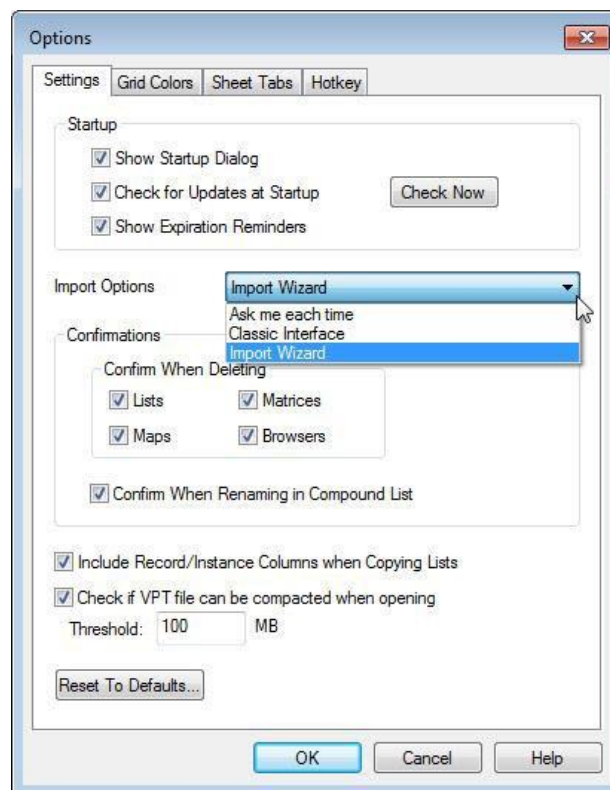
From the App Button , select **Options...**

The **Options** dialog box is displayed.

Under the Settings tab, use the **Import Options** dropdown list to select one of the following methods of import:

- Ask me each time
- Classic Interface
- Import Wizard


After your selection is made, click **OK**.

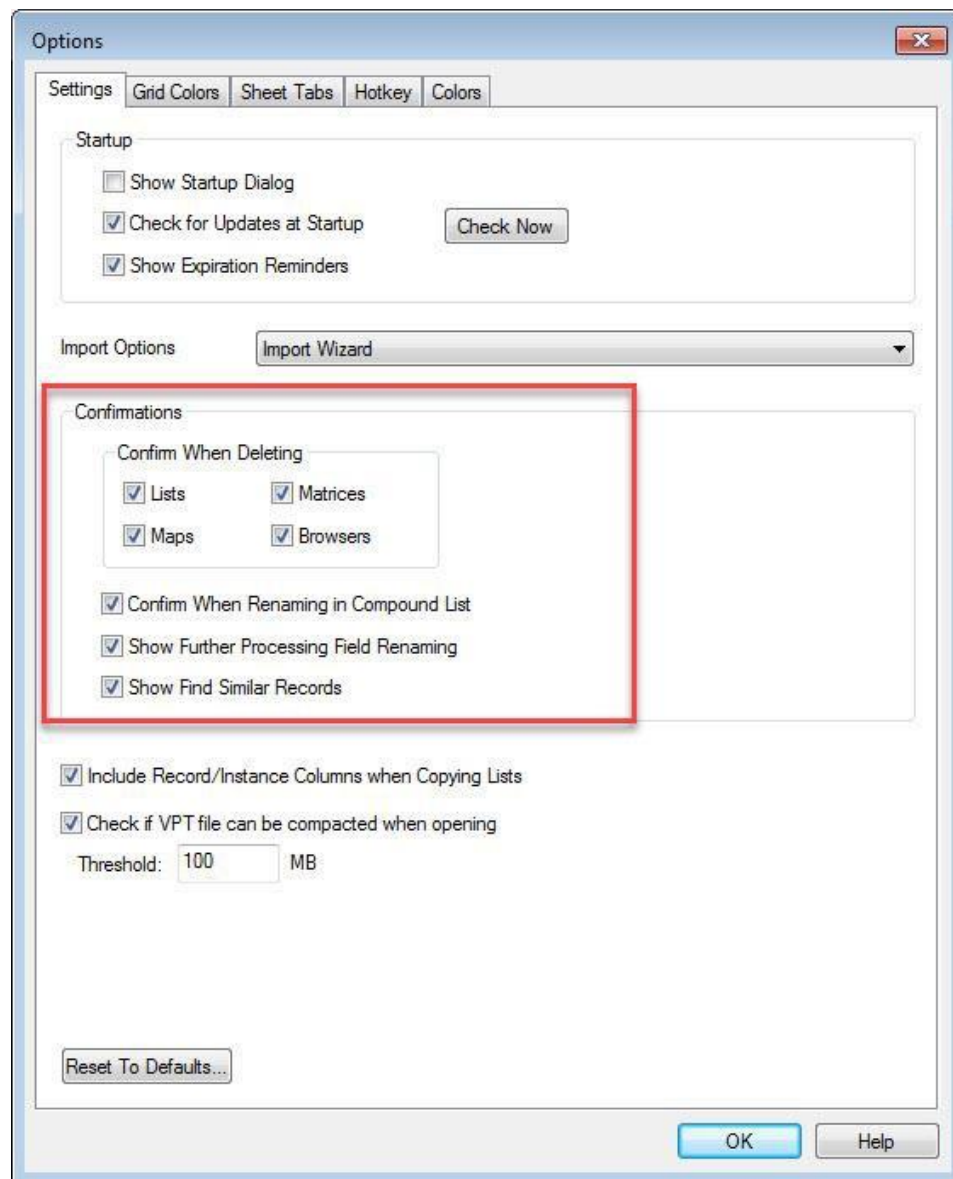


## Changing the Confirmations Settings

### Confirm When Deleting

You can choose whether VantagePoint will prompt you for confirmation when deleting sheets in a dataset.

The setting is found on the Settings tab of the **Options** dialog. (Click the App Button , and select **Options**.)

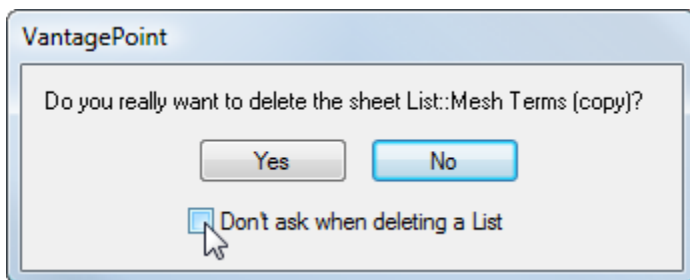


Under "Confirm When Deleting", you can select to be prompted when deleting all sheets, or certain types of sheets. (**Note:** The Confirm delete box will NOT appear when deleting sheets in the [Manage Sheets](#) dialog. It will ONLY appear when deleting sheets using the Delete Sheet icon.)

Unchecking all boxes will enable you to delete sheets without a prompt or warning. If you leave all the boxes checked, you have the opportunity of later changing the option on the Confirmation dialog:



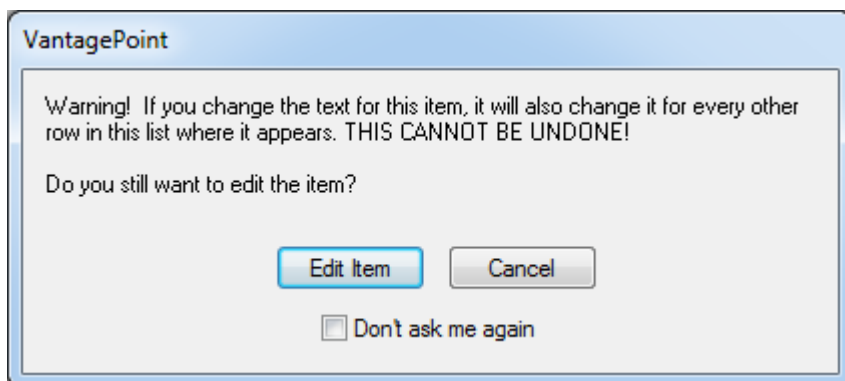
Checking "Don't ask when deleting a List" (or Map, Matrix, etc.) before clicking **Yes** or **No** will un-check the checkmark in the associated box in the **Options** dialog.



### **Confirm When Renaming in Compound List**

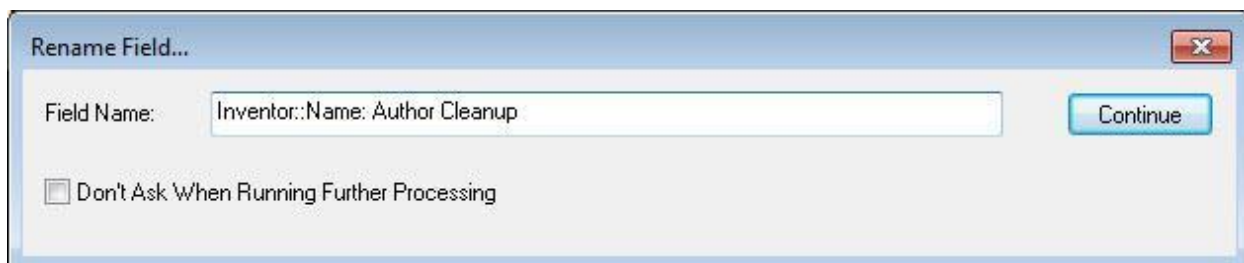
Check the "Confirm When Renaming in Compound List" box to receive a Confirmation prompt when you attempt to edit an item in a List View that is one of a parent/child field ("Compound List").

Before you edit the item, you will receive this Warning:



### **Show Further Processing Field Renaming**

If the "Show Further Processing Field Renaming" box is checked, you will receive this prompt to Rename the new field (when performing the Further Processing function). You can check the "Don't Ask When Running Further Processing" box, which has the effect of un-checking the box in the Options dialog. In that case, VantagePoint will complete the Further Processing operation automatically.



### **Show Find Similar Records**

Here is the prompt for the [Find Similar Records](#) operation, which appears if the "Show Find Similar Records" box is checked:

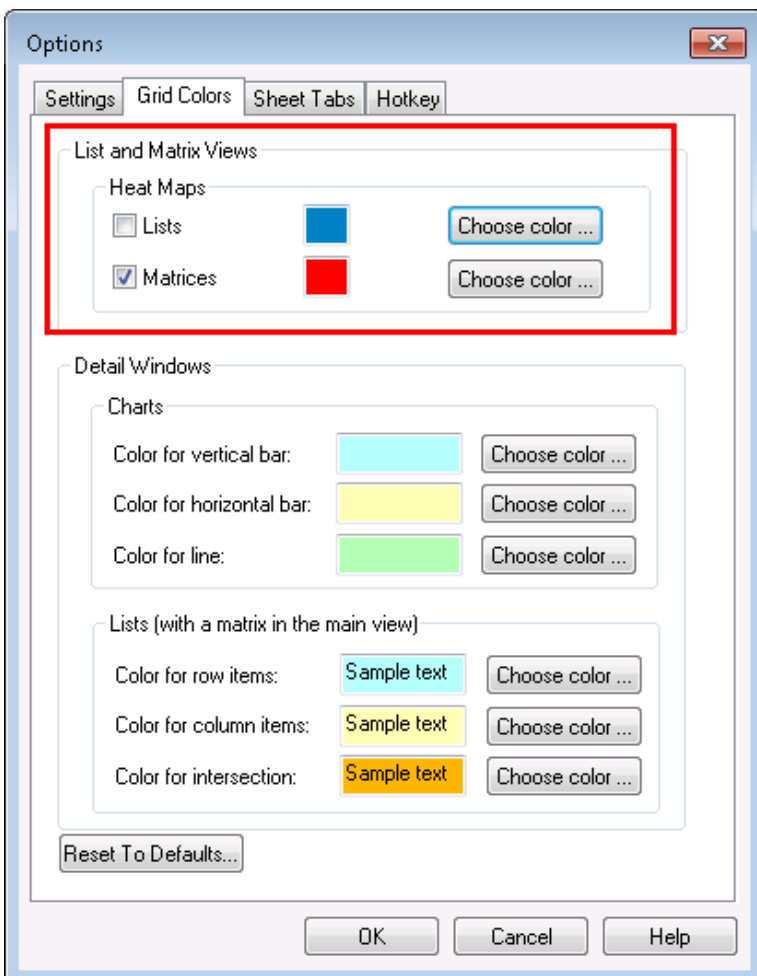


The image shows a dialog box titled "Find Similar Records Options". It contains three settings: "Maximum Number of Similar Records to Find:" with a spinner box set to 10, "Only Find Records that Match at Least (%):" with a spinner box set to 40, and a checkbox labeled "Don't Show When Finding Similar Records" which is currently unchecked. A "Continue" button is located to the right of the first spinner box.

User can check the "Don't Show When Finding Similar Records" box, which has the effect of un-checking the box in the Options dialog. In that case, VantagePoint will perform the Find Similar Records operation automatically.

## Heat Maps Settings

The default is to make Heat Maps for every list and/or matrix you create. You can be selective if you want this setting to apply only to one of the view types, as the User has done in this example:



Users can change the default color to one of your preference.

With any List or Matrix for which a Heat Map is displayed, you can Remove the Colors using the right-click menu within the List or Matrix.

The first screenshot shows a List view with columns: # Records, # Instances, and Grant Publication Year. A right-click menu is open over the data, with 'Remove Colors' highlighted.

|    | # Records | # Instances | Grant Publication Year |
|----|-----------|-------------|------------------------|
| 1  | 528       | 528         | 2015                   |
| 2  | 483       | 483         | 2014                   |
| 3  | 456       | 456         | 2014                   |
| 4  | 370       | 370         | 2014                   |
| 5  | 280       | 280         | 2014                   |
| 6  | 198       | 198         | 2014                   |
| 7  | 105       | 105         | 2014                   |
| 8  | 86        | 86          | 2014                   |
| 9  | 86        | 86          | 2014                   |
| 10 | 86        | 86          | 2014                   |
| 11 | 80        | 80          | 2014                   |
| 12 | 70        | 70          | 2014                   |
| 13 | 54        | 54          | 2014                   |
| 14 | 41        | 41          | 2014                   |
| 15 | 40        | 40          | 2014                   |
| 16 | 15        | 15          | 2014                   |

The second screenshot shows a Matrix view with columns: Assignee::PatStat Standardized Name, # Records, and 7 IPC Subclass columns (H01L, C09K, G01N, H01S, B82Y, G02F, B82B). A right-click menu is open over the data, with 'Remove Colors' highlighted.

| Reset | Assignee::PatStat Standardized Name | 1    | 2    | 3    | 4    | 5    | 6    | 7    |
|-------|-------------------------------------|------|------|------|------|------|------|------|
|       | # Records                           | 1490 | 450  | 416  | 334  | 319  | 180  | 165  |
|       | IPC Subclass                        | H01L | C09K | G01N | H01S | B82Y | G02F | B82B |
| 1     | 165 FUJITSU                         | 121  | 0    | 0    | 84   | 19   | 17   | 1    |
| 2     | 149 CHINESE ACADEMY                 |      |      |      |      |      |      |      |
| 3     | 97 SAMSUNG ELECTRO                  |      |      |      |      |      |      |      |
| 4     | 51 TOSHIBA CORPORA                  |      |      |      |      |      |      |      |
| 5     | 45 JAPAN SCIENCE AND                |      |      |      |      |      |      |      |
| 6     | 41 SHANGHAI JIAO TON                |      |      |      |      |      |      |      |
| 7     | 38 BOE TECHNOLOGY                   |      |      |      |      |      |      |      |
| 8     | 38 ITRI (INDUSTRIAL TE              |      |      |      |      |      |      |      |
| 9     | 37 SEOUL NATIONAL U                 |      |      |      |      |      |      |      |
| 10    | 34 WUHAN UNIVERSITY                 |      |      |      |      |      |      |      |
| 11    | 32 ETRI (ELECTRONICS                |      |      |      |      |      |      |      |
| 12    | 31 KIMM (KOREA INSTIT               |      |      |      |      |      |      |      |
| 13    | 31 SONY CORPORATION                 |      |      |      |      |      |      |      |
| 14    | 28 UNIVERSITY OF TOK                |      |      |      |      |      |      |      |
| 15    | 26 KIST (KOREA INSTIT               |      |      |      |      |      |      |      |
| 16    | 25 LG INNOTEK COMPA                 |      |      |      |      |      |      |      |
| 17    | 23 NEC CORPORATION                  |      |      |      |      |      |      |      |
| 18    | 21 HANYANG UNIVERSITY               | 19   | 1    | 0    | 0    | 0    | 0    | 3    |

See Also:


[Detail Window Colors](#)

[Detail Window - Colors for Charts](#)

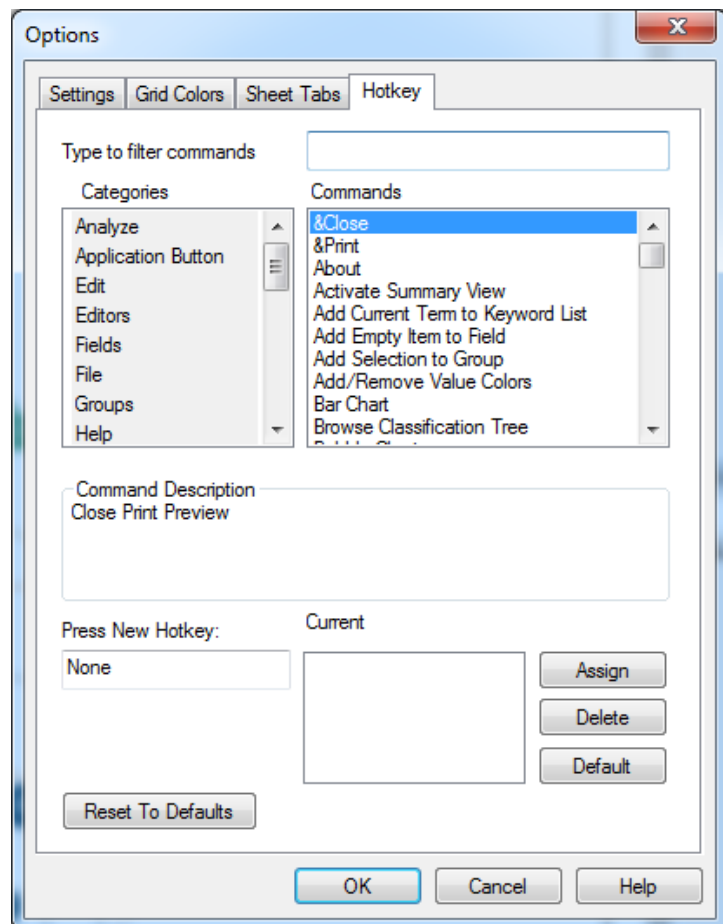
## Hotkey/Edit Keyboard Shortcuts

You can assign Hotkeys/Keyboard shortcuts for many VantagePoint commands.



Click the App Button , select **Options**. Then click the Hotkey tab. All Commands are displayed in alphabetical order.

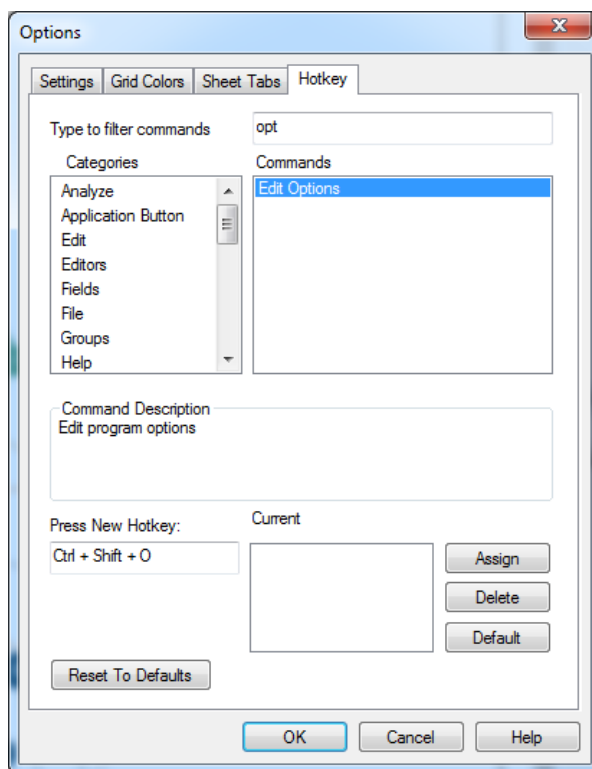
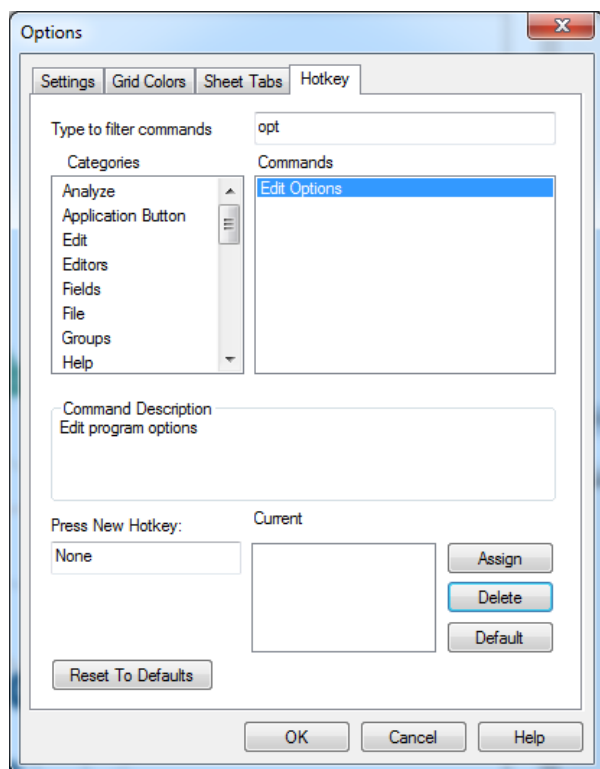
As Categories are selected, the Commands corresponding to the selected Category are displayed. You can also use the "type to filter commands" box to quickly locate a Command.



In this example, the user wants to assign a shortcut to open the Options dialog.

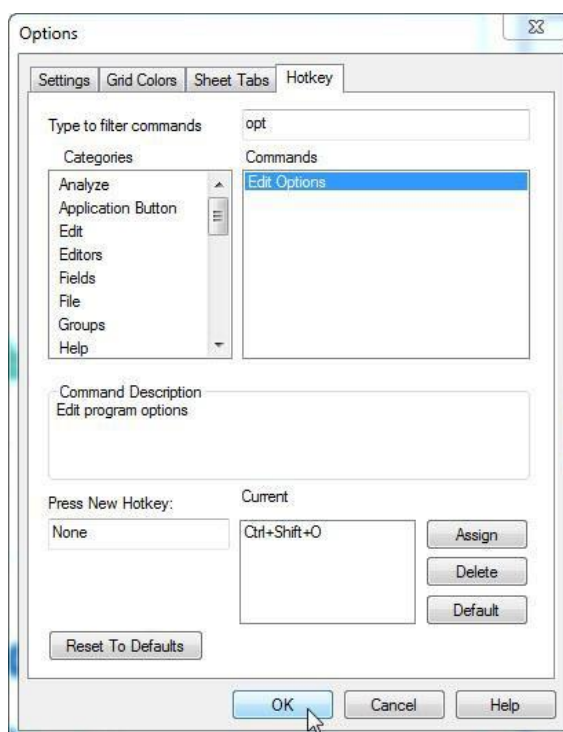
In the "Type to filter commands" field, the user is typing "options" and the "Edit Options" command appears in the Commands window.

Next, the user clicks in the Press New Hotkey window and, using the keyboard, types the desired shortcut keys. (in this illustration, the user pressed the keys: Ctrl Shift O.) Click the **Assign** button to save the new command.



After the command is Assigned, the Hotkey is displayed in the "Current" window. Click **OK**.

Now, when the user presses the keys **Ctrl Shift O**, the Options dialog will appear.





## Colors

This tab contains the global Visualization stylized settings for Font and Colors used in Charts and World Maps.

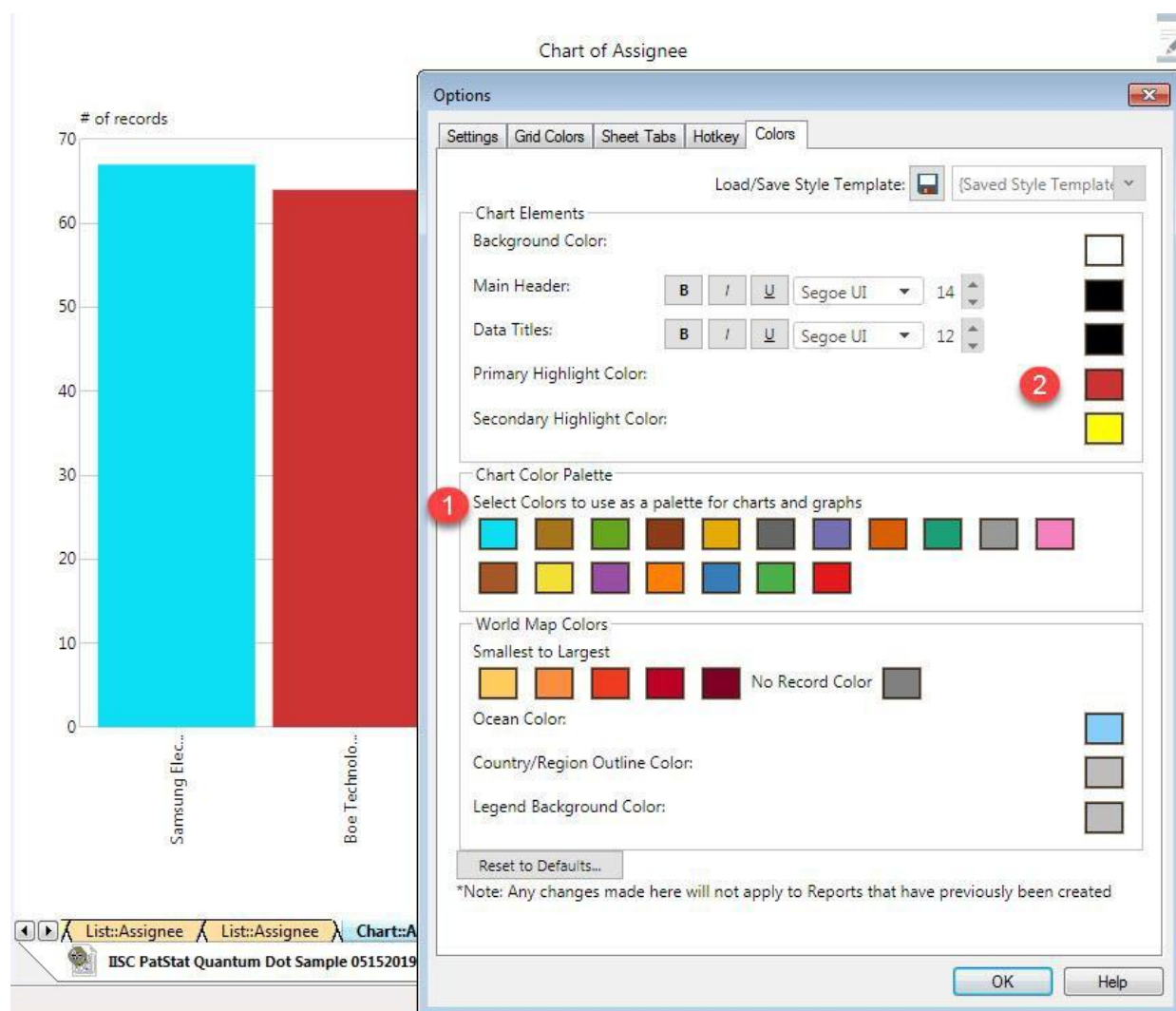
Accept the defaults or create your own special palette.


Note that changes to these settings will only affect charts created after the change was made, not to charts that were created previously. These are global settings and will apply to all charts and labels made after the change. (Changes to existing charts and visualizations can now be made using [Visualization Controls](#).)

You can Save a Style Template that you can Load/retrieve for future use.

In the illustration below, you can see the colors chosen in the Chart Color Palette (#1 in the picture) reflected in the Chart. The user has clicked on the second column of the Chart, showing the Primary Highlight Color (dark red) based on the setting in the Colors dialog (#2 in the picture).

Currently, the Secondary Highlight Color only applies to Cluster Maps.

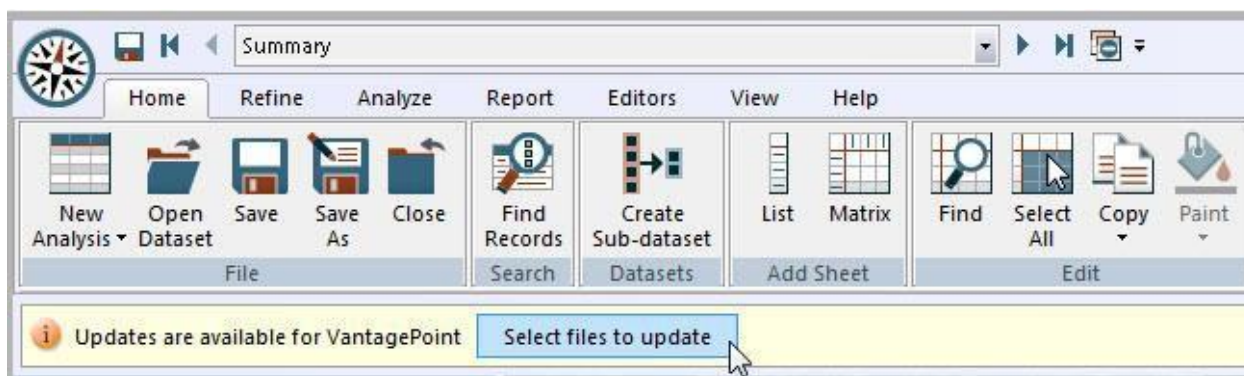


To save your choices as a Template, enter a name in the field in the upper right corner of the dialog and click the "Save" icon  next to the Template name field. After saving, that template will be applied until

you change it, select another template, or Reset to Defaults.


## Updating Files in VantagePoint

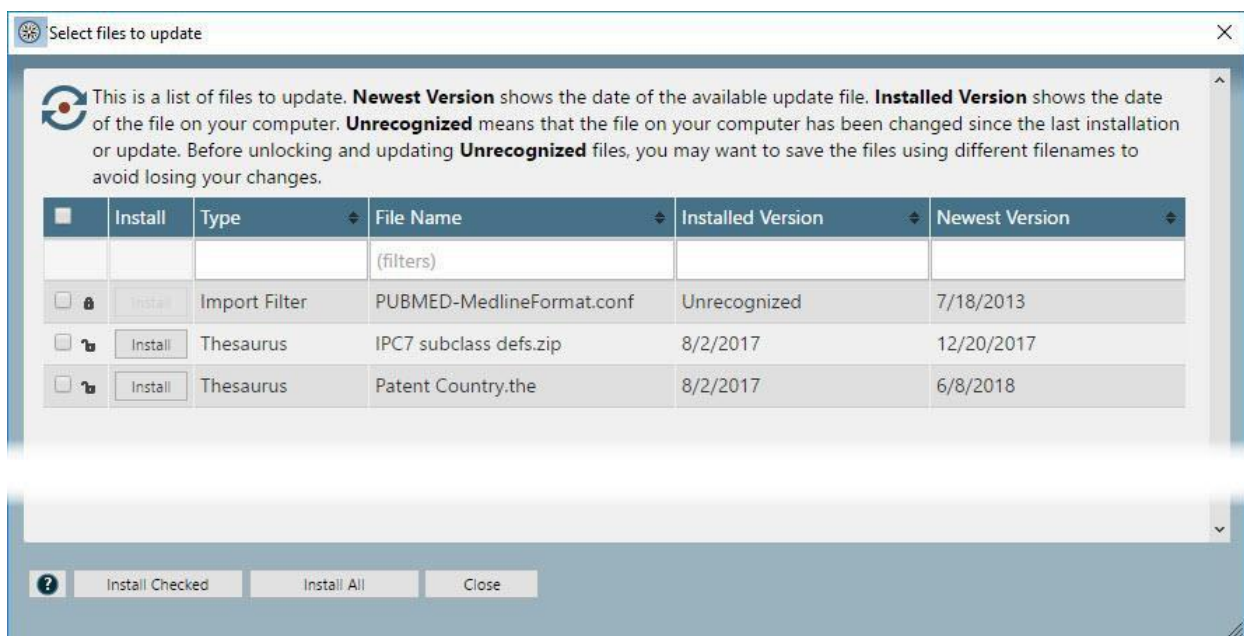
Occasionally VantagePoint will check the downloads site for things that need to be updated, such as import filters, scripts, thesauri, or internal components such as dialogs and resource files. When an update is available, you will see a notice in a yellow bar under the ribbon, like this:



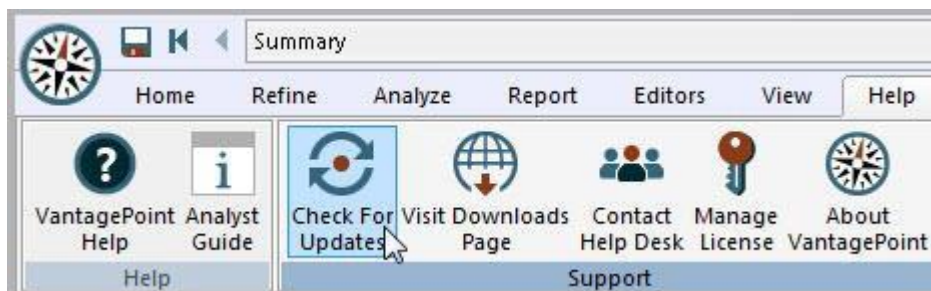
Click the button **Select files to update** and you will see a list of files to update.

The column **Newest Version** (far right, in the illustration below) shows the date of the available update file. **Installed Version** shows the date of the file on your computer. "Unrecognized" in that column means that the file on your computer has been changed since the last installation or update. These files have a "locked"

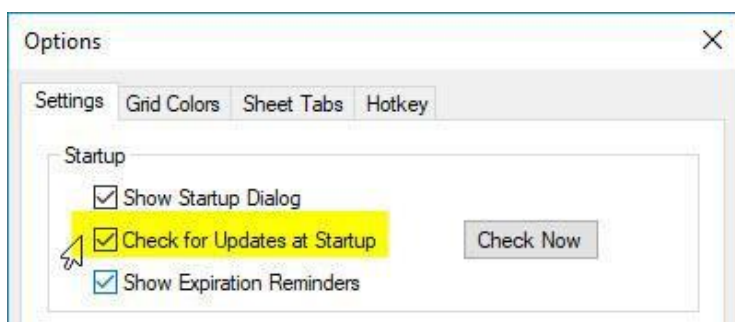
icon  to prevent accidental overwriting of files you may have customized. Before unlocking and updating "Unrecognized" files, you may want to save the files using different filenames to avoid losing your changes. When you want to update a locked file with our newest version, click on the locked icon to unlock it.



If you prefer to wait and update at a later time, you can dismiss the message by clicking the small 'x' in the right-hand margin beside the yellow bar. VantagePoint will prompt you again at another time. You can also manually **Check For Updates** in the Help ribbon:



You can disable automatic checking for updates in the Options dialog:



---

## Registration Code - Moving VantagePoint from one computer to another

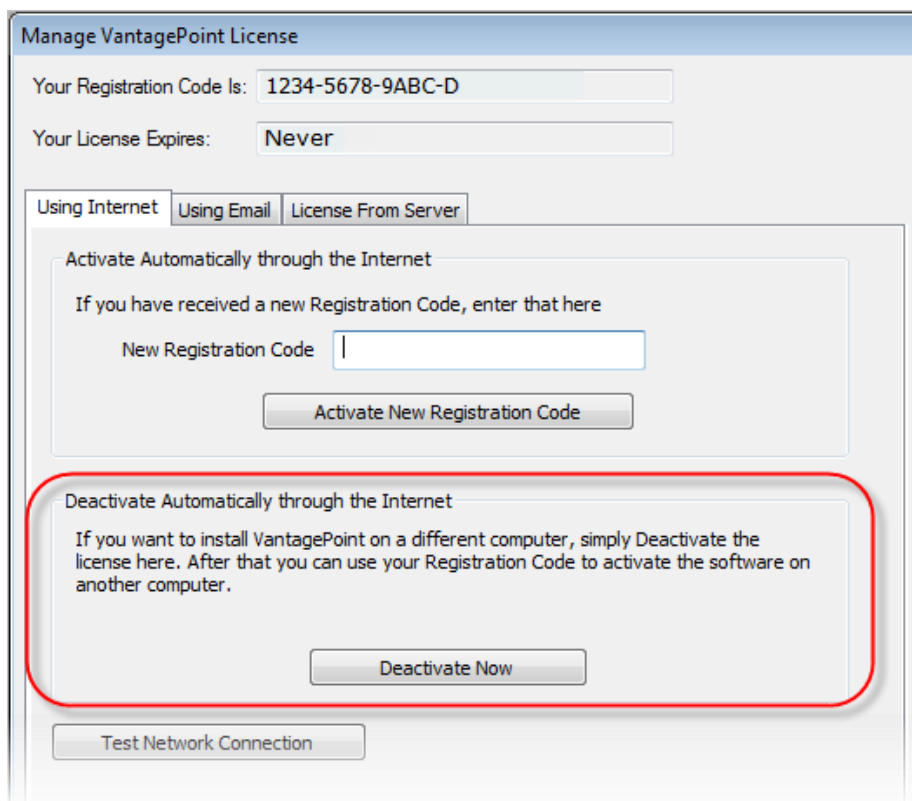
Your Registration Code is your key to unlock VantagePoint. Sometimes you may need to change computers and move VantagePoint to a new or different computer. Or, if your computer will be reformatted or upgraded to a new operating system, you must first deactivate the Registration Code or you won't be able to use it again. In all these cases, you must deactivate the Registration Code on the old computer before it can be used on the new (or reformatted) computer.

The Registration Code/License Deactivation is done using the **Help / Manage License** menu item. You are presented with the **Manage VantagePoint License** dialog.

First, copy and paste the Registration Code to a text file or somewhere it can be retrieved later. Then, choose whether you will deactivate Using the Internet or Using Email.

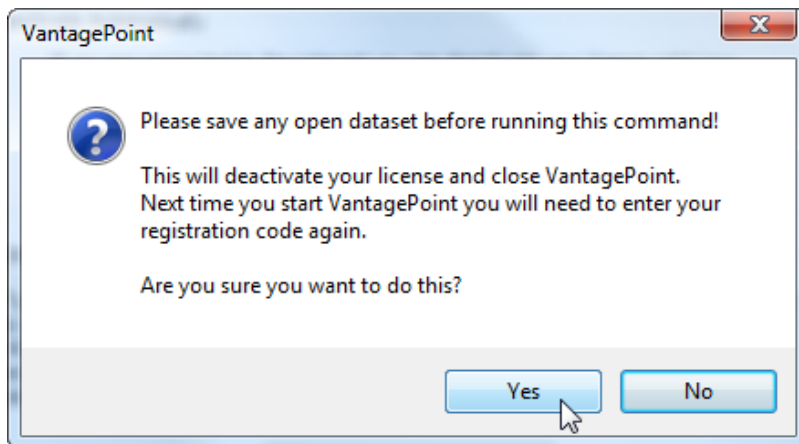
### Deactivate Using Internet

To Deactivate Using the Internet (preferred method for those with internet connection), click the **Deactivate Now** button:



The 'Manage VantagePoint License' dialog box shows the current registration code '1234-5678-9ABC-D' and an expiration date of 'Never'. It has three tabs: 'Using Internet' (selected), 'Using Email', and 'License From Server'. Under the 'Using Internet' tab, there are two sections. The first, 'Activate Automatically through the Internet', includes a text prompt, a 'New Registration Code' input field, and an 'Activate New Registration Code' button. The second section, 'Deactivate Automatically through the Internet', is highlighted with a red rounded rectangle and contains instructions on how to deactivate the license and a 'Deactivate Now' button. At the bottom of the dialog is a 'Test Network Connection' button.

You are presented with the warning box for confirmation:



When you are ready to accept, click **Yes**. You should receive a message box stating: "Successfully deactivated license. VantagePoint will now close". Click **OK**. VantagePoint closes.

That Registration Code is now available for use on another computer.

### Deactivate Using Email

If you do not have internet access, you can Deactivate your Registration Code Using Email. (Note: This Process may take a few hours or as many as two business days to complete, depending on your location.)

1. Click the **Using Email** tab, then Click the **Deactivate Using Email** button.

The screenshot shows a window titled "Manage VantagePoint License". At the top, there are three input fields: "Your Registration Code Is:", "Your Email Address Is:", and "Your License Expires:". Below these are three tabs: "Using Internet", "Using Email" (which is selected), and "License From Server".

Under the "Using Email" tab, there are two main sections:

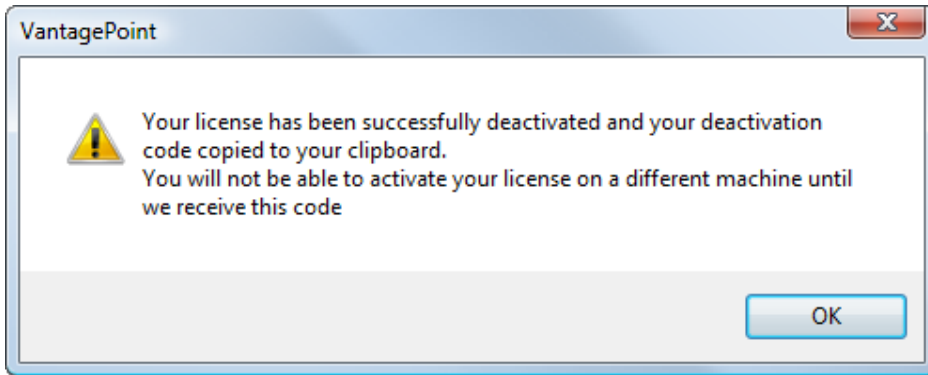
- Activate using Email:** This section contains instructions for activating the license. It includes a "Step 1: Enter your new Registration Code here (copy/paste)." with a "New Registration Code" input field. Below this is a button "Create Activation Request Email". Further down is an "Activation Request Code" input field. "Step 2: After you receive the email from us, find the Activation Code in the email and copy/paste it here. Then click 'Activate Now!'" is followed by an "Activation Code" input field and an "Activate now!" button.
- Deactivate using Email:** This section contains instructions for deactivating the license. It includes a paragraph explaining the process: "If you are not connected to the internet you can still deactivate your license, but you must send us your Deactivation Code so we can mark that license seat as unused. Until you do so you will only be able to re-activate your license on this computer. After we have received your Deactivation Code you will be able to re-activate your license on any computer (requires 1-2 business days)." Below this is a button "Deactivate using Email" which is highlighted with a red rectangle, and a "Deactivation Code" input field.

At the bottom of the dialog, there is a "View Contact Info" button and "Close" and "Help" buttons.

A Warning box appears, advising you to save any open datasets, and that performing this action will deactivate your license and close VantagePoint. Click **Yes** to confirm, if you want to proceed.

2. An email addressed to "activate@searchtech.com" appears, with a Deactivation Code pasted in the body of the email. **Send the email.** Deactivation is not complete until you receive an email from Search Technology confirming it is complete.

In VantagePoint, another message appears:



Press **OK**, then click **Close** in the Manage VantagePoint License dialog. VantagePoint closes.

3. Soon after sending the email containing the Deactivation Code, you should receive an email confirming your Registration Code was successfully deactivated. The Deactivation process is not complete until you receive this confirmation. (It may take a few minutes or as many as two days for a response, depending on your geographic location.)

See Also:

[Registration Code - Activating/Reactivating your License](#)



## Registration Code - Repair License

The **Repair License** dialog appears if something goes wrong with a user's License. The fastest way to repair your License is to select "Repair Automatically through the Internet", for those with an internet connection.

### Repair Automatically through the Internet:

If your Registration Code doesn't automatically appear in the Registration Code box, Copy and Paste it in the field at the top. Then, click the **Repair Now!** button. You will receive a "License successfully activated!" message box. Click **OK**. VantagePoint should open.

**Repair License**

We were unable to confirm your license data. This has several possible causes, including your system clock being changed or a lack of write permissions for the registry or the folder containing License.dat.

Step 1: Enter your Registration Code

Registration Code  ☐ I use a license server

Step 2: Choose whether to repair automatically through the internet or by contacting us another way

☒ Repair Automatically through the Internet

☐ Repair using Email

If you are not connected to the internet, you can repair your license using Email. Send us this Repair Request Code. We will reply with a Repair Code which will allow you to run the software (requires 1-2 business days).

Create Request Email View Contact Info

Repair Request Code

Repair Code

Activation Code

Repair now!

View Error Codes Close Without Activating

### Repair using Email:

For those without internet connection, select the "Repair using Email" option.

1. If your Registration Code doesn't automatically appear in the Registration Code box, Copy and

Paste it in the field at the top.

2. Click the **Create Request Email** button.

An email to activate@searchtech.com appears containing your Registration Code and the Repair Request Code. **Send the email.**

**Repair License**

We were unable to confirm your license data. This has several possible causes, including your system clock being changed or a lack of write permissions for the registry or the folder containing License.dat.

Step 1: Enter your Registration Code

Registration Code

Step 2: Choose whether to repair automatically through the internet or by contacting us another way

☐ Repair Automatically through the Internet

☒ Repair using Email

If you are not connected to the internet, you can repair your license using Email. Send us this Repair Request Code. We will reply with a Repair Code which will allow you to run the software (requires 1-2 business days).

Repair Request Code

Repair Code

Activation Code

You will soon receive an email in response, containing the Repair Code and Activation Code necessary to repair your License. Copy and Paste your Registration Code in the top field. (It will be in the email you receive.)

The screenshot shows the 'Repair License' dialog box. At the top, it states: 'We were unable to confirm your license data. This has several possible causes, including your system clock being changed or a lack of write permissions for the registry or the folder containing License.dat.'

**Step 1: Enter your Registration Code**

Registration Code:  ☐ I use a license server

**Step 2: Choose whether to repair automatically through the internet or by contacting us another way**

☐ Repair Automatically through the Internet

☒ Repair using Email

If you are not connected to the internet, you can repair your license using Email. Send us this Repair Request Code. We will reply with a Repair Code which will allow you to run the software (requires 1-2 business days).

Repair Request Code:

Repair Code:

Activation Code:

Three red callout boxes with white text are overlaid on the dialog:

- Callout 3: '3. Copy and Paste here the Repair Code received in the email' points to the 'Repair Code' text box.
- Callout 4: '4. Copy and Paste here the Activation Code received in the email' points to the 'Activation Code' text box.
- Callout 5: '5. Click this Button.' points to the 'Repair now!' button.

3. Copy and Paste the Repair Code received in the email into the Repair License dialog.
4. Copy and Paste the Activation Code received in the email into the Repair License dialog.
5. Click the **Repair now!** button.

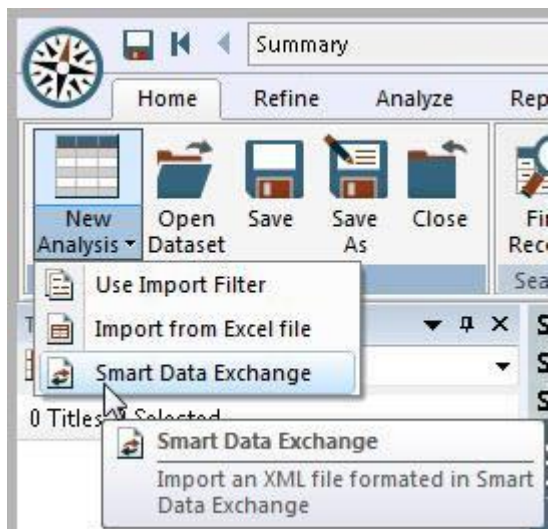
You will receive a "License successfully activated!" message box. Click **OK**. VantagePoint should open.

See Also:

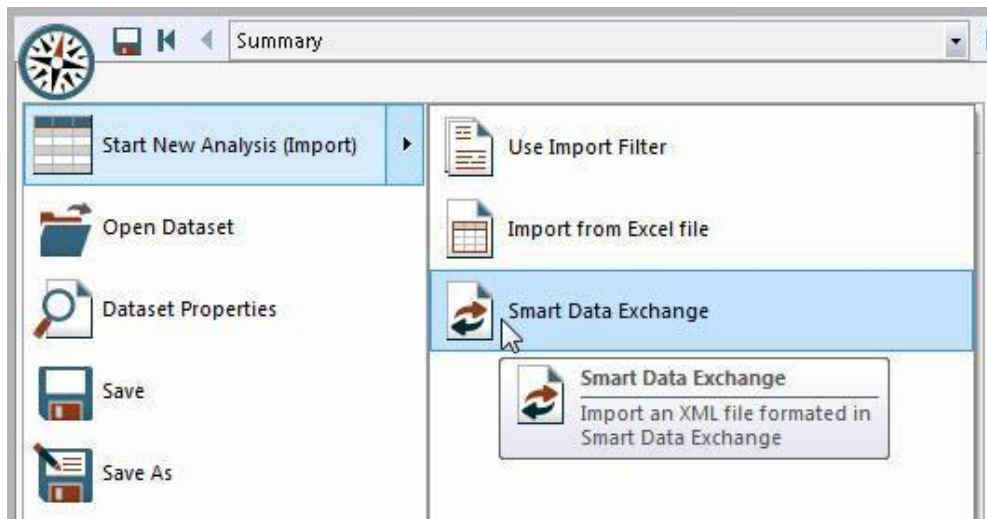
[Registration Code - Activating/Reactivating your License](#)

## Import XML (Smart Data Exchange)

This is a simple "point and click" operation. From the **Home** Ribbon, select the dropdown list on the **New Analysis** icon and select **Smart Data Exchange**.



Or, from the App Button, select **Start New Analysis (Import) / Smart Data Exchange**:



Next, select the XML data file and click **Open**. The file is automatically imported into VantagePoint. When import is complete, a [Summary View](#) will be presented.

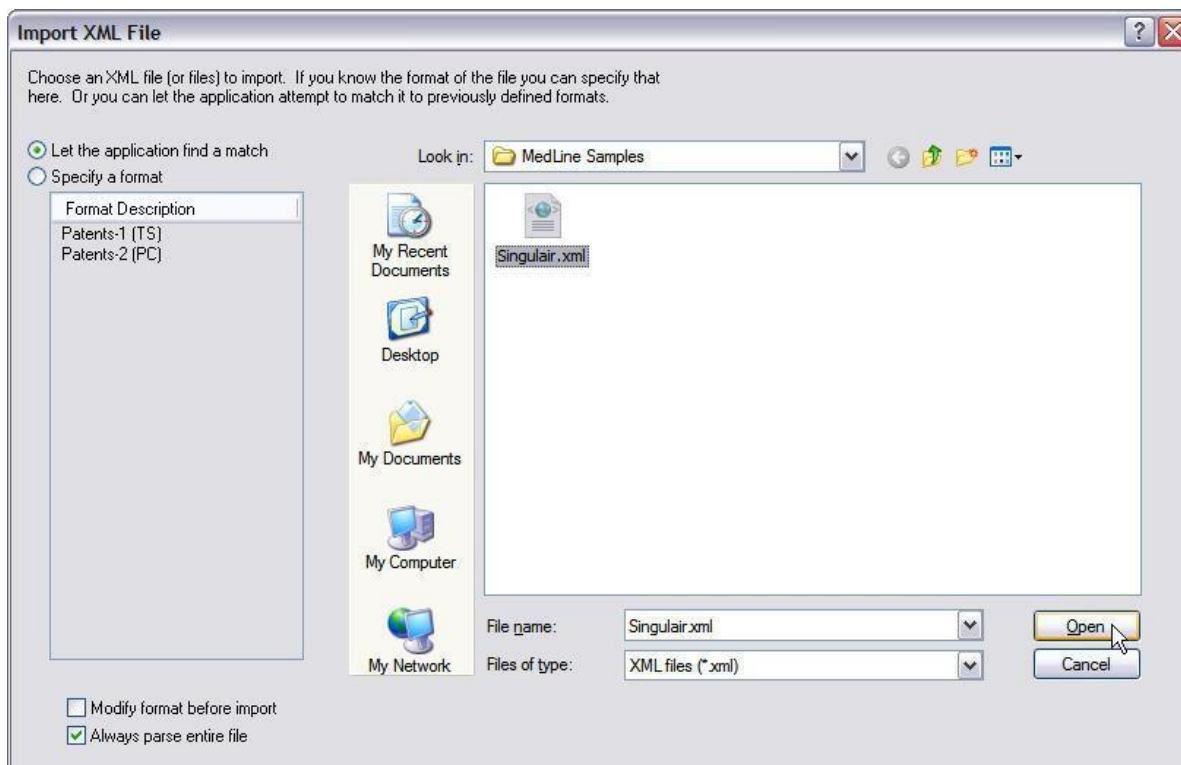
## Import XML (Wizard)

The wizard for importing XML files helps you import XML data and, if the XML format has not previously been imported using the wizard, it helps you create an Import Filter for your data.

**Note:** If you already have an Import Filter for your XML data, you can also import the files using **Import Raw Data File** from the opening dialog or **New Analysis** under the Home ribbon.

**The Import XML File Wizard is only available via Hotkey. You must Assign a Hotkey to access this function. See the Hotkey topic for instructions.**

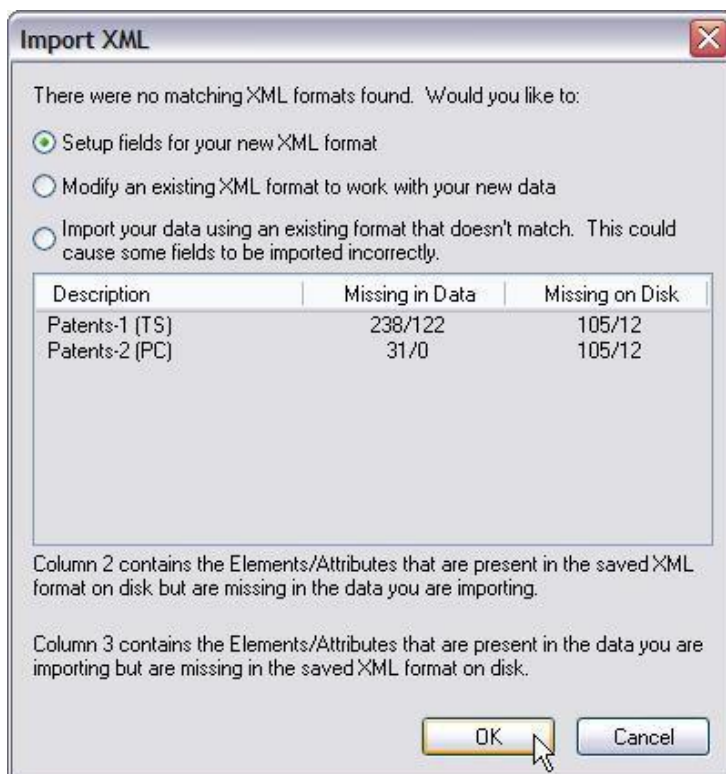
1. Use the assigned Hotkey to open Import XML(Wizard). You are presented with the **Import XML File** dialog:



2. Locate the file(s) to be imported. (Use Shift-click or Ctrl-click for multiple selections.) If you have imported XML files like these before, you can click **Open** to continue. VantagePoint will take you directly to the **Choose Database and Fields** dialog (see the illustration in Step 8 of this section).
3. On the left side of the dialog are the following choices:
  - a. **Let the application find a match:** (default selection) If you choose to let VantagePoint find a match, it will scan the XML file and the known XML Import Filters for a match. If a match is found, VantagePoint will take you directly to the **Choose Database and Fields** dialog (Step 9 of this section), as explained above. If no match is found, VantagePoint will give you further options (see the next illustration).
  - b. **Specify a format:** If you choose to specify (or “force”) a format, you can select one from the known formats listed under “Format Description”. *This option should be used only in unusual situations.*

4. Check the "Modify format before import" checkbox if you want to step through the full wizard before importing the data. This is especially useful for incremental development of the XML Import Filter.
5. Check the "Always parse entire file" checkbox to have the wizard read through the entire file to determine the XML structure. Otherwise, the wizard will read only the first portion of the file. Uncheck this only if you are sure all XML data elements are present in the first records in the file.
6. Click **Open**.

For new XML formats (or if VantagePoint cannot be certain about the correct format), you will see the following dialog:



Your options and the "match" parameters are explained in the dialog. The first option ("Setup fields for your new XML format") begins the wizard with a "blank slate". The second option ("Modify an existing XML format...") allows you to adapt an existing format by loading that format into the wizard. The third option ("Import your data...") forces VP to use an existing format even though the format is not a good match for the data. This third option should be used with care.

**Note:** Regarding the "match" parameters in the table, 0/0 in both columns would indicate a perfect match between the raw data file(s) and the XML format.

Make your selection and click **OK**. You are taken to the **Set up Record** dialog (Step 7).

The Import XML Wizard, while a little complex, can be overviewed simply as a two-step process:

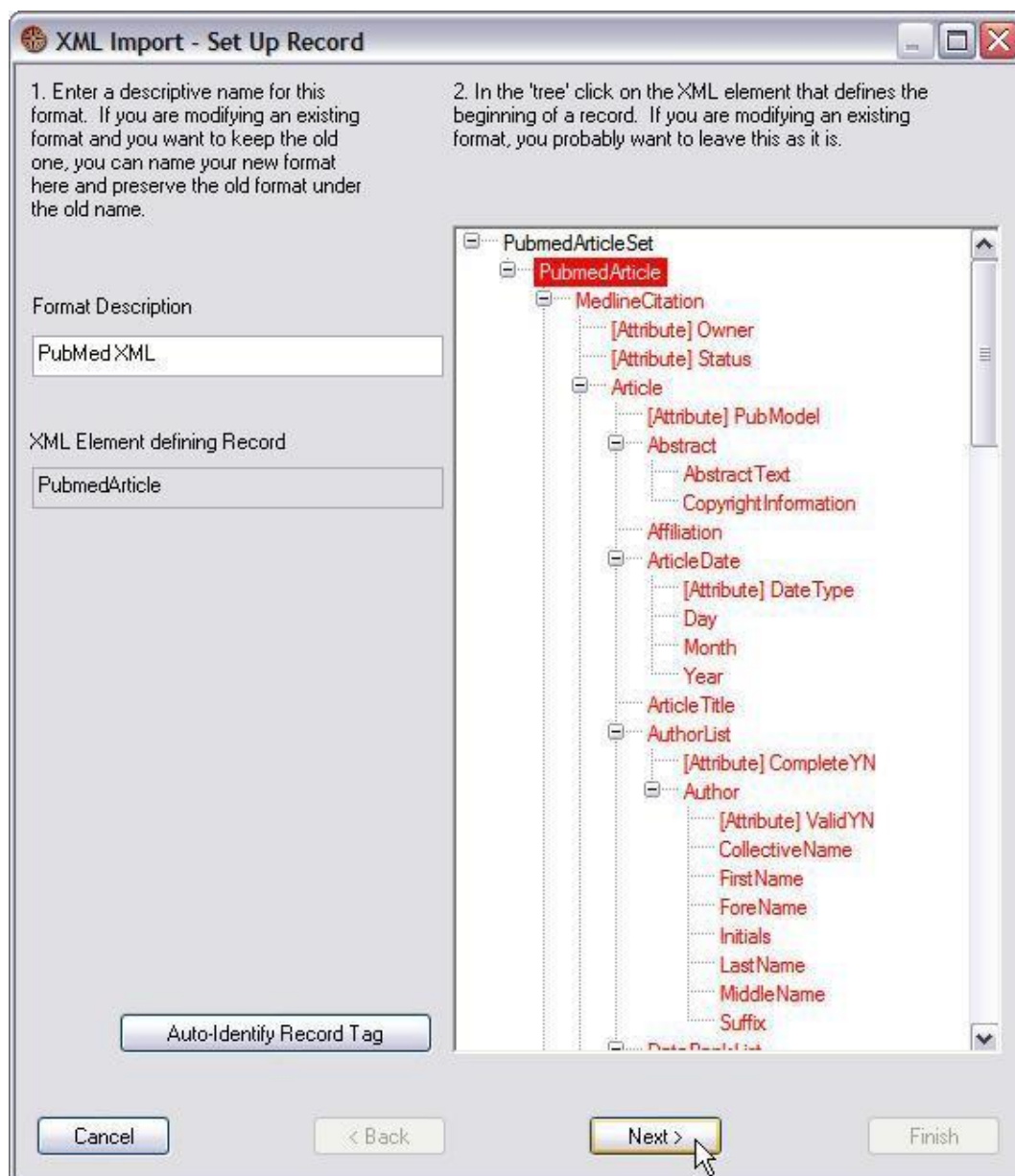
- a. Set up the Record
- b. Set up the Fields

The **XML Import - Set up Record** dialog is illustrated next. Actions to be taken are described in the dialog box.

7. In the "Format Description" box, type in a descriptive name for the format. This is used as the



filename for the Import Filter, so the rules for naming files apply. This will also be displayed as the "Source Database" in the Summary View.

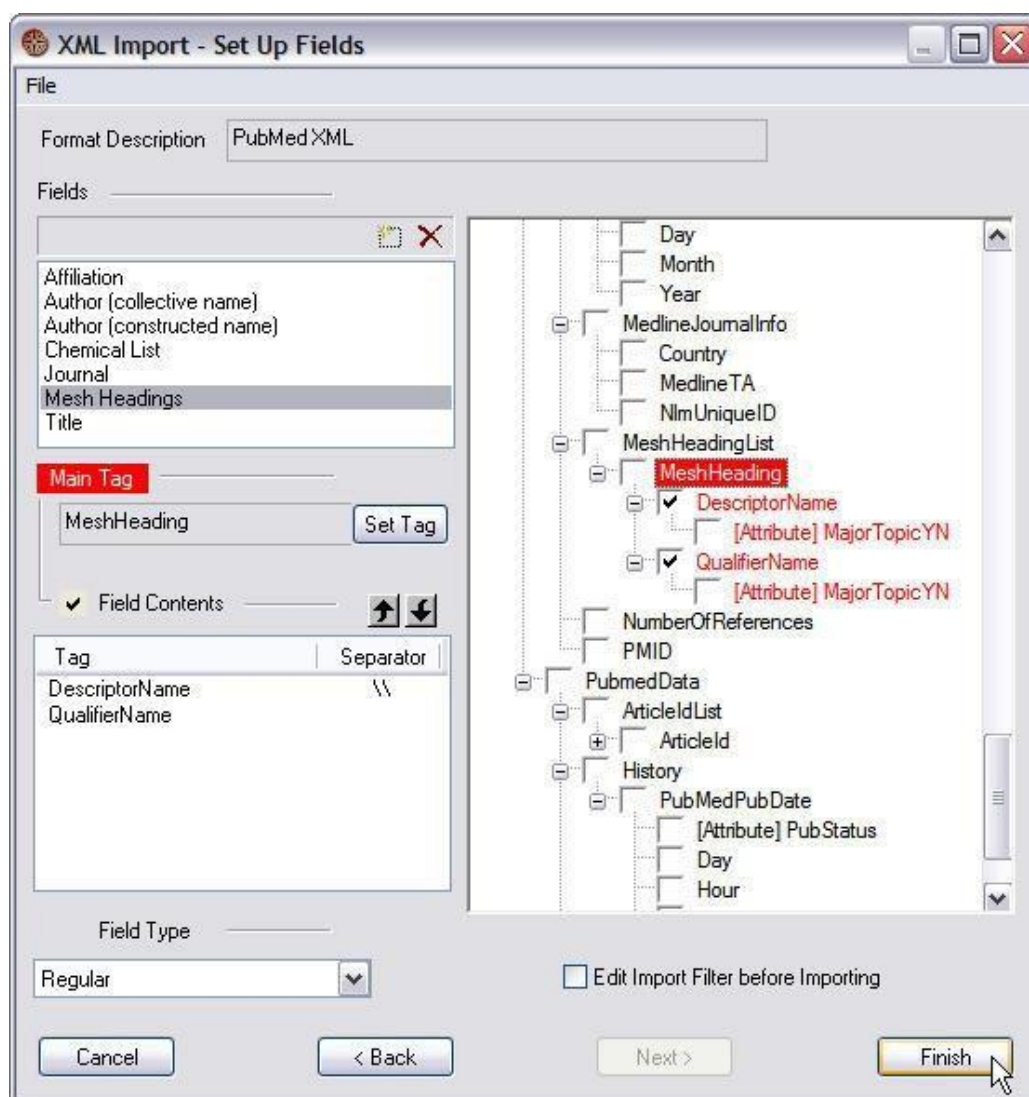


A "tree" is displayed on the right-hand side of the dialog. This tree shows the XML structure found in your data file. At this point, you only need to specify the XML element that defines the records in your data. You do this by clicking on the tag in the tree (in the illustration above, "PubMedArticle"). The "children" of that tag are then highlighted in red. These are the XML elements that will be available for constructing the fields to be extracted from your data. If you click the **Auto-Identify Record Tag** button, VantagePoint will attempt to determine this for you.

Click **Next** to go to the **Set Up Fields** step in the wizard. You will be able to come back to this step if you need to.

8. The **Set Up Fields** dialog is divided into two basic parts – on the left side are the controls for setting up the fields, and on the right side is the tree displaying the structure of your XML data, the same

tree displayed in the Set Up Record step.

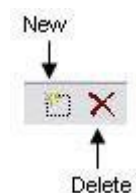


There are four controls on the left side:

- Fields** – for creating, selecting, and deleting fields from your import filter.
- Main Tag** – for setting and displaying the main XML tag that defines the field selected in (a).
- Field Contents** – for displaying and arranging the XML tags that contain the contents of the field and for specifying the separator to use between elements.
- Field Type** – for selecting post-processing of the Field Contents (i.e., “Regular” or “NLP”).

### Fields

To create a field in your Import Filter, click on the ‘New Field’ button in the top right-hand corner of the **Fields** list. Type the field name in the edit line provided and press <Enter>.



To delete a field from your Import Filter, select the field in the list and click the 'Delete Field' button (the red X).

To select a field for editing, click on the field name in the list.

To change a field name, double-click on the field name. The edit line will become active. Edit it, and press <Enter> to make the change.

### **Main Tag**

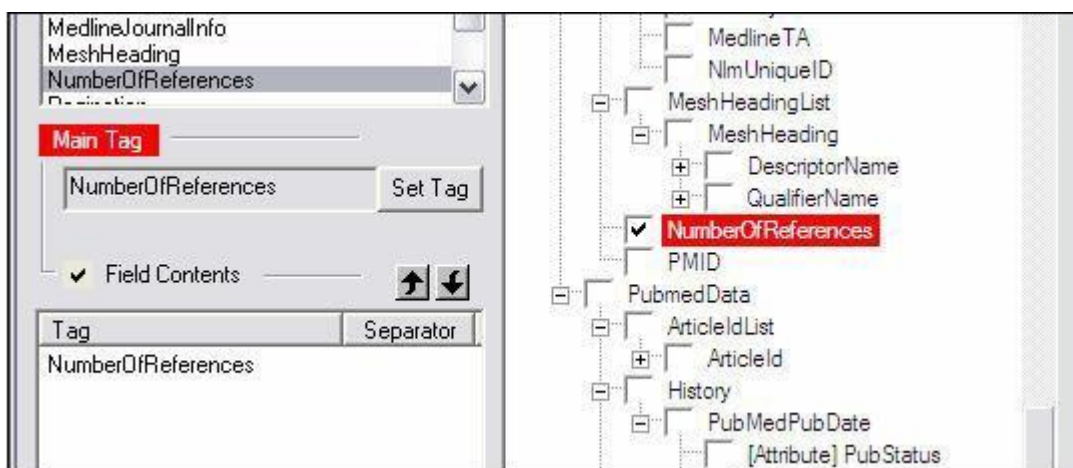
The Main Tag is the XML tag that specifies your field. To set the main tag:

- a. Click on the text label of the XML tag in the tree. Note that you do not click on the check box beside the tag, but on the text itself.
- b. Click the **Set Tag** button.

The text of the XML tag will appear under "Main Tag", and the scope of the field will highlight in red in the tree. The red text indicates the available XML elements for constructing the Field Contents.

### **Field Contents**

To specify the field contents, click on the check boxes beside the appropriate XML elements. Note that the Main Tag may also be used here. In some cases the 'Main Tag' and the 'Field Contents' may be the same, as shown in the following example:



Note also that in the Field Contents list, the order matters. You can change the order of the tags by selecting the tag and clicking the up and down arrows above the list. The field will be constructed by concatenating the XML elements in the order they are listed in the Field Contents list. The individual XML elements may be separated by character string entered under "Separator" (by default a <SPACE> character is added between each element).

The following illustrates the results of adding the Separator specified in the earlier "Mesh Headings" example:

|    | # Records | # Instances | Mesh Headings                             |
|----|-----------|-------------|---|
| 11 | 99        | 99          | Humans \ therapeutic use                  |
| 12 | 92        | 92          | Anti-Asthmatic Agents \ therapeutic use   |
| 13 | 82        | 82          | Acetates \ pharmacology                   |
| 14 | 82        | 82          | Asthma \ drug therapy                     |
| 15 | 81        | 81          | Adolescent \ therapeutic use              |
| 16 | 74        | 74          | Leukotriene Antagonists \ therapeutic use |
| 17 | 65        | 65          | Adult \ therapeutic use                   |
| 18 | 61        | 61          | Acetates \ adverse effects                |
| 19 | 61        | 61          | Asthma \ therapeutic use                  |
| 20 | 58        | 82          | therapeutic use                           |
| 21 | 51        | 51          | Anti-Asthmatic Agents \ drug therapy      |
| 22 | 46        | 46          | Female \ therapeutic use                  |

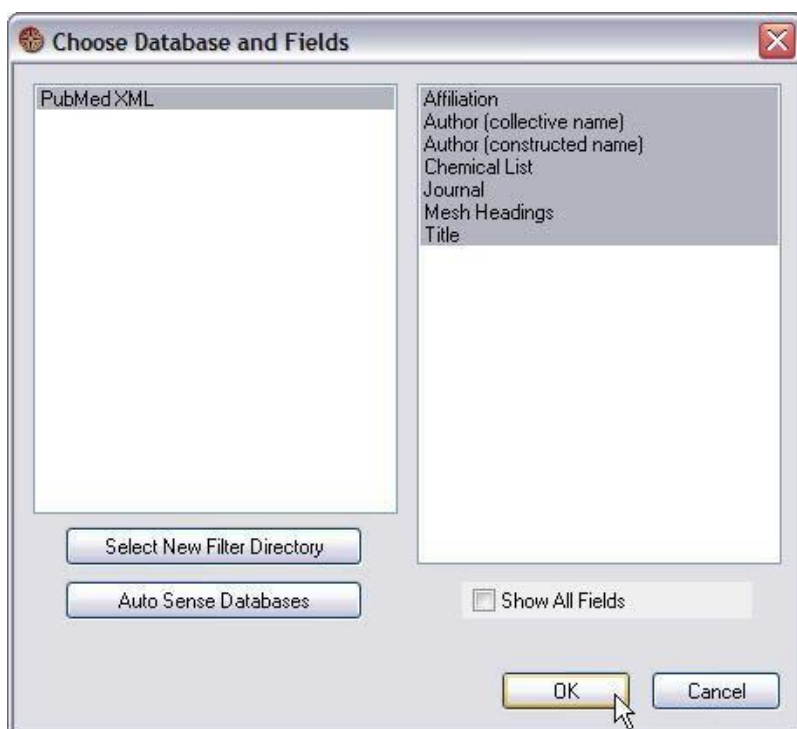
**Field Type**

Set the type of the field using the drop-down selection. The two choices are “Regular” (the default) and “NLP”, which will cause VantagePoint's NLP parser to run on the field extracting noun phrases.

**Edit Import Filter before Importing**

If you want to run the Import Filter Editor on this filter before importing the data, check this box.

- The final step is to choose the fields you want to import, as illustrated here.

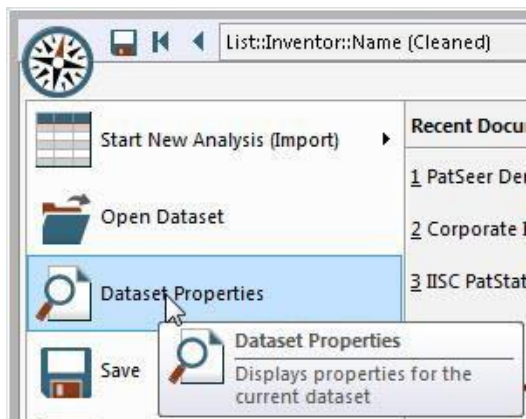


- Click **OK**. When import is complete, a [Summary View](#) will be presented.

## Dataset Properties



The **Dataset Properties** are accessed from the App button :



There are two tabs in the Dataset Properties dialog box: Dataset Properties, which explains the characteristics of the dataset, and External Dependencies, which lists the external files that the dataset uses in VantagePoint's Browser Sheets.

**Dataset Properties**

Dataset Properties | External Dependencies

Source database: PUBMED-XML Format

Source date: Jul 11 2006 18:09

Number of records: 526

Source file: C:\Program Files\VantagePoint\Sample

Database Language: English

Title View Field: Title

Path for "Link" Data Type:

Change Import Filter

Field Order For Record View

Search strategy

```
<?xml version="1.0"?>
<!DOCTYPE PubmedArticleSet PUBLIC "-//NLM//DTD PubMedArticle, 1st January 2006//EN"
"http://www.ncbi.nlm.nih.gov/entrez/query/DTD/pubmed_060101.dtd">
<PubmedArticleSet>
<Acknowledgement>Sample data courtesy of PubMed, a service of the U.S. National Library of Medicine (July,
2006)</Acknowledgement>
```

Comments

OK Cancel Help

Under the **Dataset Properties** tab:

**Database Language:** You can set the language of your data source using the **Database Language** selection box.

**Title View Field:** Select the field to be used to populate the **Title Window**. This attribute is normally set at the time of import. You can select any field as the Title View Field; however, we recommend using only single-valued fields (i.e., fields for which each record has one and only one value).

**Path for "Link" Data Type:** Fields with data type "Link" (see Summary View) contain the names of files associated with a record. The data in the field are links to web pages (URL) or file names with file path. When the user clicks on the data item in the Fielded Record View, VantagePoint should launch the application associated with that file name in the link. Examples of files are: Internet links (e.g., \*.htm, \*.html), images (e.g., \*.jpg, \*.bmp), documents (e.g., \*.pdf, \*.doc), spreadsheets (e.g., \*.xls), and intranet links (e.g., \*.ndl).

**Change Import Filter:** Click this button to change the import filters that are saved in your \*.vpt files. See

[Changing Import Filter in a Dataset.](#)

**Field Order for Record View:** Click this button to change the way records are displayed in the Fielded Record View.

**Search Strategy:** Many data providers place your search strategy at the beginning of the raw dataset. VantagePoint saves the portion of the raw dataset that occurs before the first record in the Search Strategy window of **Dataset Properties**. You can edit the contents of the Search Strategy window to keep other annotations about your raw dataset, such as the date of the search.

**Comments:** **Dataset Properties** also has a **Comments** section where you can enter any additional information you would like to keep with the file (e.g., processing history or thesauri used on and created from the dataset).

#### External Dependencies:

Beginning with version 6.0, the External Dependency files used by browser sheets may be automatically embedded in the \*.vpt data file. Embedding these dependency files eliminates the need to bundle the external \*.jpg or \*.png files when sharing your \*.vpt file with other users of VantagePoint or VantagePoint Reader.

External dependency files created using versions of VantagePoint earlier than v6.0 need to be manually embedded. This is done from the **External Dependencies** tab. Once External Dependency files are embedded in the \*.vpt file, the external file will remain on the source disk until you delete it.

Under the **External Dependencies** tab:

**Check Status for Selected File / Check Status for All Files** – Clicking these buttons makes VantagePoint check for the presence of the external files that the dataset uses in VantagePoint's Browser Sheets.

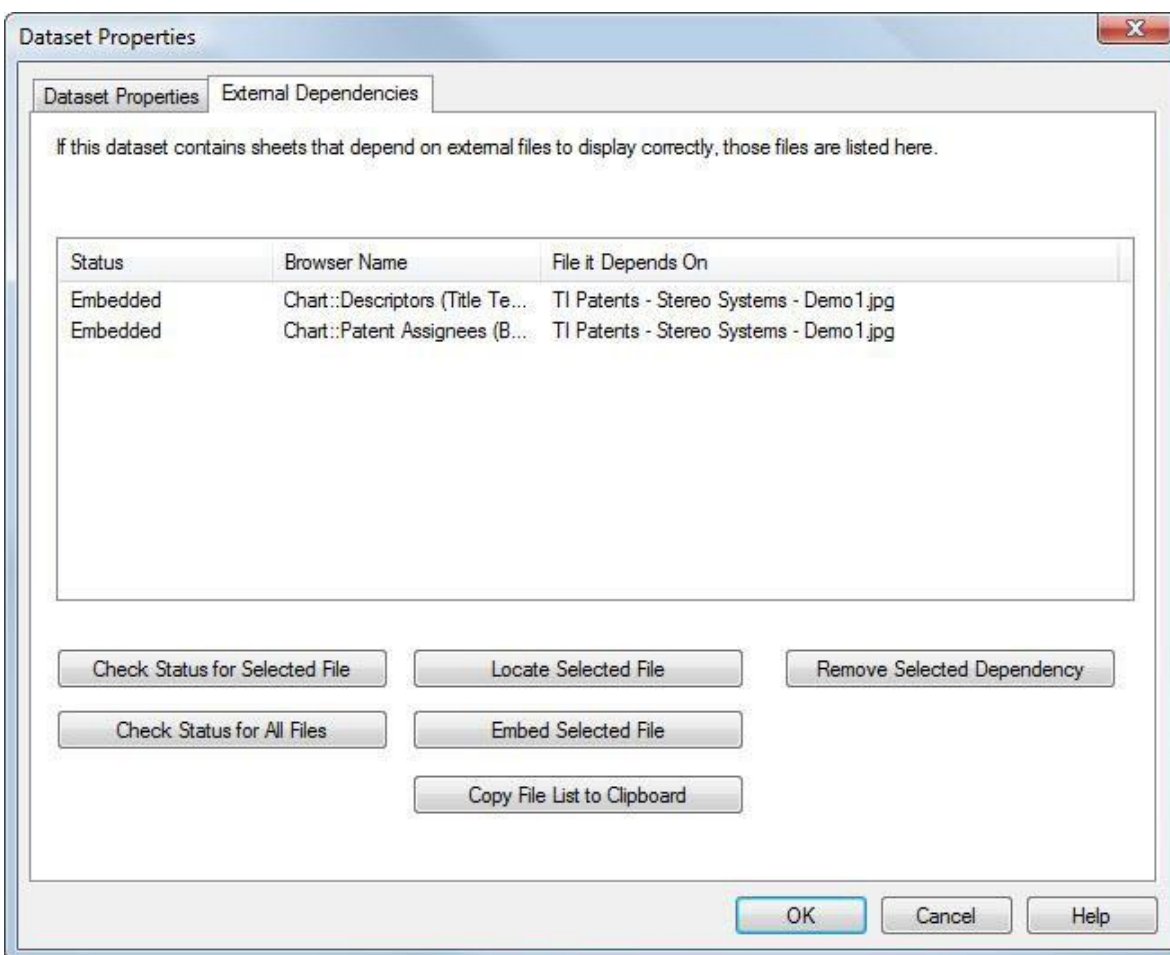
**Locate Selected File** – Leads to a Locate File dialog that lets you re-establish the relationship between the Browser Sheet and the File.

**Embed Selected File** – Embeds the selected dependency file in the \*.vpt data file. If successful, the file's "Status" will change from "OK" to "Embedded".

**Copy File List to Clipboard** – Copies the list of dependency files to the clipboard so it can be pasted into another application (i.e., Notepad or MS Excel).

**Remove Selected Dependency** – Removes the dependency of the Browser Sheet on the File. This should only be used if you are sure that the Browser Sheet does not need the file. A confirmation dialog appears before removing the dependency.





## Changing Import Filter in a Dataset

VantagePoint retains import filters in data files (\*.vpt). This makes the process of importing additional fields easy, and eliminates the need to initially import a large number of fields – they can be brought in later as needed.

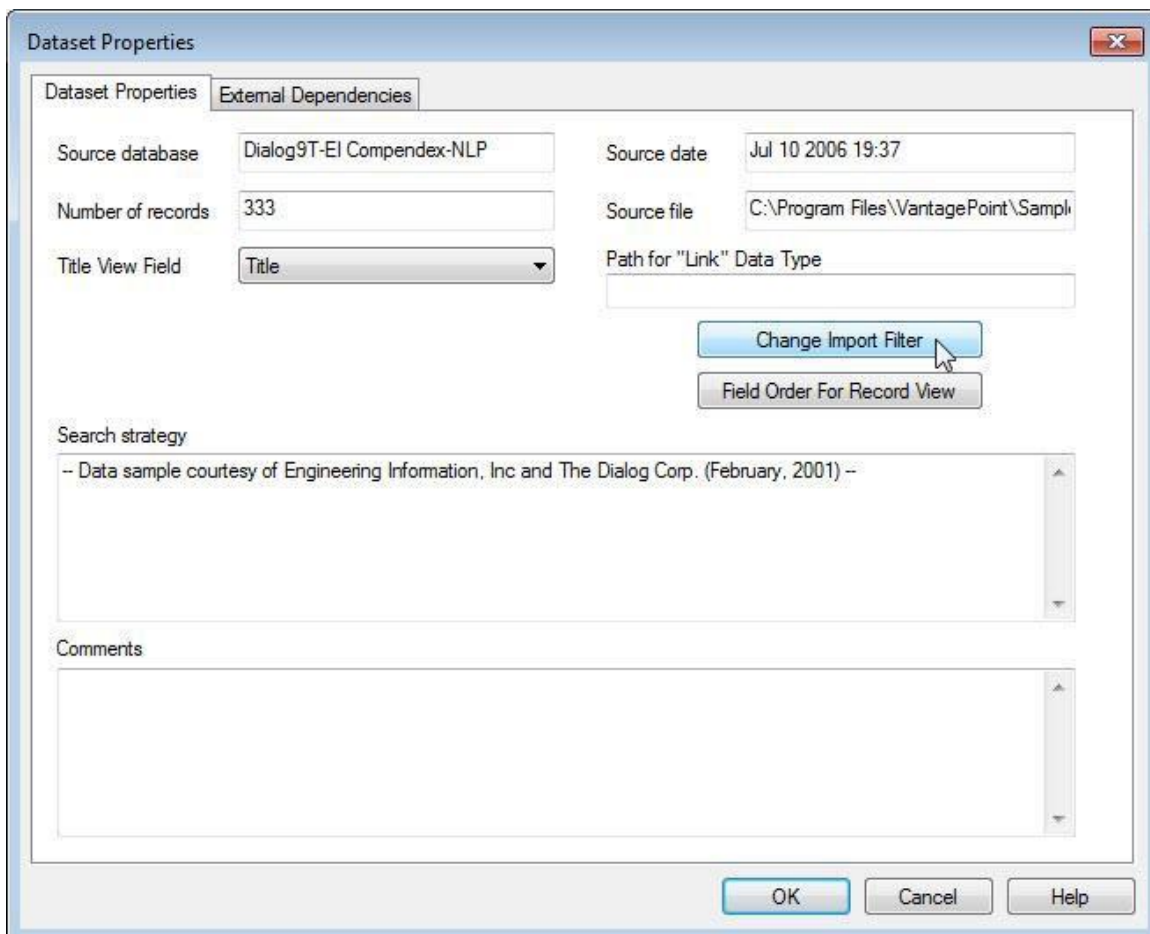
Usually, you do not need to update an import filter in a dataset. When you do, it is usually because you have received an updated import filter and want to update the database configuration in your data file (\*.vpt) so you can take advantage of new fields that can be parsed from the raw data.

The process of changing import filters in a VantagePoint file begins in the **Dataset Properties** dialog box (see Dataset Properties). You can reach the **Dataset Properties** dialog box in two ways:

1. From the App Button, select **Dataset Properties**; or,
2. During "Import More Fields" operation, in the **Choose Database and Fields** dialog box, click on **Change Dataset Properties**.

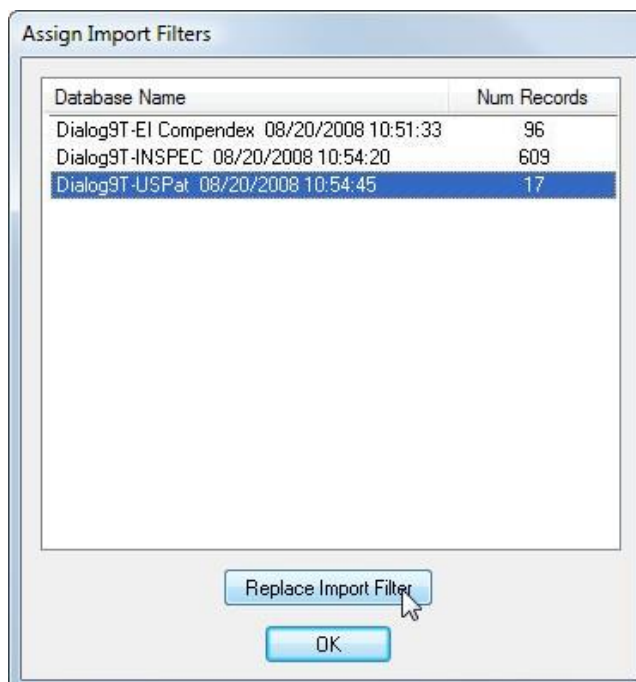
### Changing Import Filters in a Dataset:

Click **Change Import Filter** in the Dataset Properties dialog.

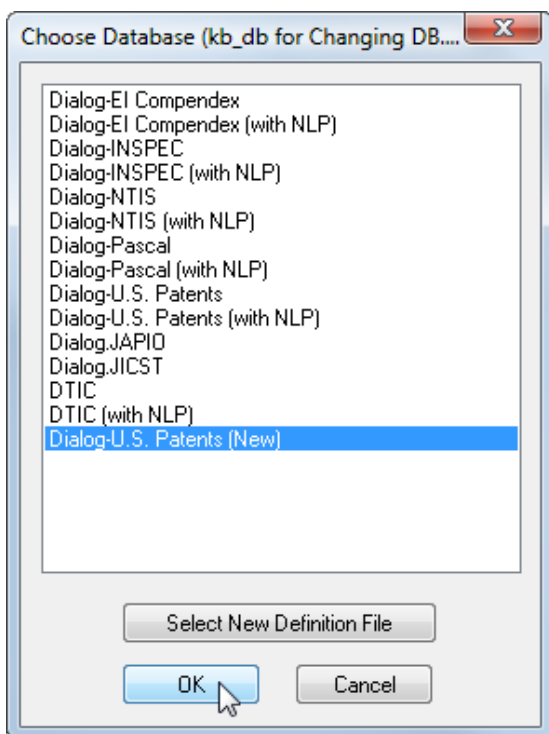


The list shown in the **Assign Import Filters** dialog gives the database configurations currently contained in your \*.vpt file and the number of records associated with each database configuration. Each record is associated with no more than one database configuration.

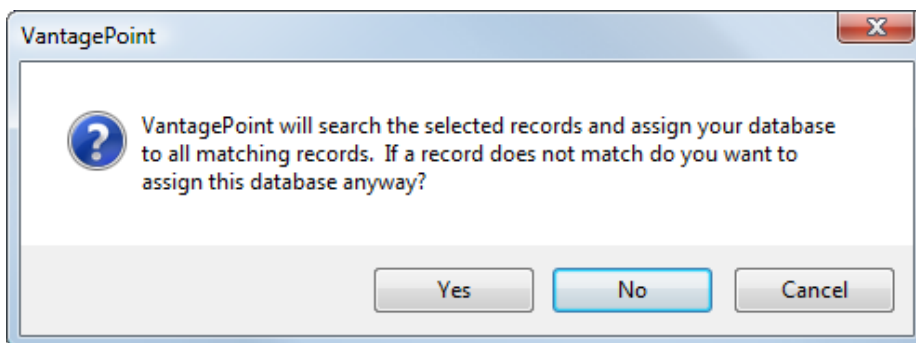
1. In this example, we want to update the database configuration for some of the records in an existing dataset. First, select the set of records you want to update and click **Replace Import Filter**. Here, we are updating the import filter for 17 records currently associated with the "Dialog9T-USPat" database.



2. Choose the \*.conf file in the **Choose Config** dialog, and in the **Choose Database** dialog select the new database to use and click **OK**.



3. You will then see the following message:

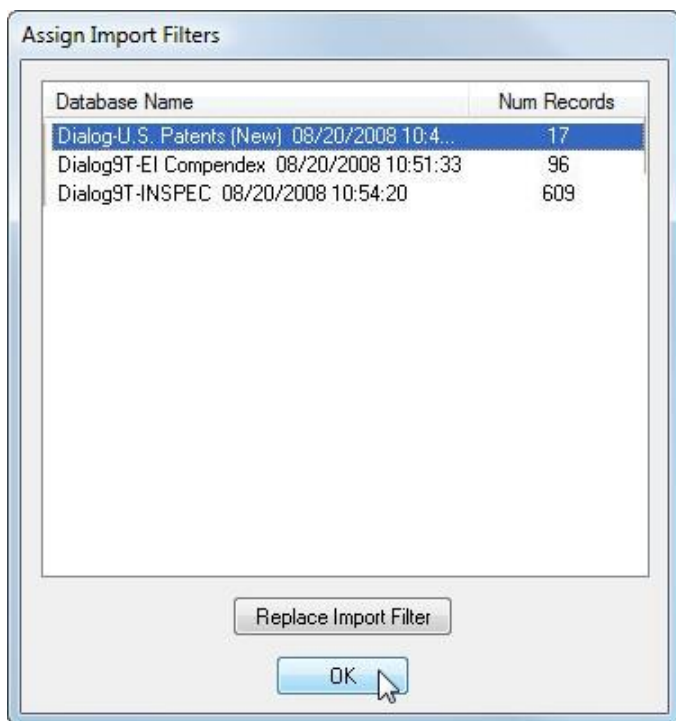


**Yes** - Assigns the selected database configuration to all records selected in the Assign Databases dialog earlier. This forces an association and should only be used in exceptional situations.

**No** - Assigns the selected database configuration to only those records that match the record start and end indicators. Records that do not match remain as "[No Database Assigned]".

Your response should normally be **No**.

4. After the new assignments are made, you should see the new database name associated with the records you selected, as illustrated below.



**Hint:** If you find it difficult to get VantagePoint to assign the databases to the set of records you selected, carefully examine several records in the Raw Records view. Then check the import filter (\*.conf) to make sure that the Record Start and End indicators will match the records. Frequently the problem is that the original import filter did not include ("Inc") the Record Start indicator in the Import Filter Editor's "Record Definition" tab. (See Import Filter Editor.)

5. To complete the operation, click **OK** in the **Assign Import Filters** dialog, and then click **OK** again in the **Dataset Properties** dialog.

To cancel the whole operation, click **OK** in the **Assign Import Filters** dialog, and then **Cancel** in Dataset Properties.

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## Regular Expressions in VantagePoint

This is a simple guide to using Regular Expressions in VantagePoint.

. - matches any single character

x\* - matches zero or more x's

x+ - matches one or more x's

x? - matches one or zero x's

x{n} - matches n x's.

x{m,n} - matches at least m and at most n x's

x{n,} - matches at least n x's

\n - matches newline and/or return

\b - matches a word boundary (e.g., white space, punctuation, end or beginning of line)

\t - matches tab  
() - group  
[] - sets (and with "^" negated sets and with "-" a range of characters)  
^ - anchors the expression at the beginning of line  
\$ - anchors the expression at the end of line  
| - "or"  
\\ - used to "escape" special characters for matching

### Examples

"ei" matches any occurrence of "e" followed by "i". This matches the words "weight", "protein", "their", and "eight". It does not match "patient", "carrier", "variety", or "relief".

"e.i" matches any occurrence of "e" followed by any single character followed by "i". This matches the words "proceedings" (edi), "engineering" (eri), and "design" (esi).

"e.\*i" matches any occurrence of "e" followed by zero or more characters followed by "i". In addition to the matches listed above under "e.i" (one character between) and "ei" (zero characters between), this also matches "restraint" (estrai).

"e.+i" matches any occurrence of "e" followed by one or more characters followed by "i". This matches all of the examples listed under "e.i" (one character between). It also matches "restraint" (several characters between), but not the examples with zero characters between (e.g., "their", "weight", or "eight").

"e.?i" matches any occurrence of "e" followed by one or zero characters followed by "i". This matches all of the examples listed under "ei" and "e.i".

"coll|univ" matches any occurrence of "college" or "university". But it also matches "universal" and "collage".

"(a|e|i){2}" matches any two adjacent occurrences of the vowels "a", "e", or "i" in any order. This matches the words "teeth", "tooth", "pain", "least", "cream", "weight", and "wear". It does not match the words "water", "present", "time", or "range" (i.e., two of the vowels occur but are not adjacent).

"[a-zA-Z]+" matches any string that contains only letters but at least one letter. This matches the words "I", "a", "an", "the", and "characteristics", but not "Dyna3D".

"[^A-Za-z0-9]" matches any non-alphanumeric character (e.g., matches punctuation or the space character).

"[0-9]" matches any single digit.

"(19|20)[0-9]{2}" will capture four digit representations of years in the 20th and 21st century. (For the purist, it also captures 1900 and omits 2100.) Note that will also match potentially spurious strings such as matching 1983 in SN2819832. This can be prevented by expanding the expression to "(^| ) (19|20)[0-9]{2} (\$| [^A-Za-z0-9])". This requires that the match have a leading space or else begin at the start of a string. It also requires a trailing non-alphanumeric character or else end at the end of a string.

"\\(?:[2-9][0-9]{2}(\\.|-|\\s)|[2-9][0-9]{2}(\\.|-|\\s)[0-9]{4})" matches several formats for U.S. phone numbers (e.g., xxx.xxx.xxxx, (xxx)xxx-xxxx, xxx-xxx-xxxx, and xxx xxx xxxx).

Starting from the front, "\\(?)" allows for an optional opening parenthesis in front of the area code. The parenthesis must be "protected" from the normal Regular Expression meaning of "(" using the backslash "\\".

"[2-9][0-9]{2}" matches a three digit sequence in which the first digit is 2 through 9.

"(\\.|-|\\s)" requires one of four characters next. This matches three common delimiters for U.S. phone numbers: "." (the "." protected by the backslash), "-", or a space. The fourth, "\\)", allows for an optional closing parenthesis after the area code.

"[2-9][0-9]{2}" again matches a three digit sequence in which the first digit is 2 through 9.

"(\.|-| )" requires one of three delimiting characters next.

Finally, "[0-9]{4}" matches any four digit sequence.

**Note:** This example also matches mixed formats, which may be objectionable. For example, this Regular Expression will also match "xxx.xxx-xxxx" and "xxx)xxx.xxxx". To avoid this, you could develop strict expressions for each format and join them using the "|" operator. For example, the expression "([2-9][0-9]{2}-[2-9][0-9]{2}-[0-9]{4})|([2-9][0-9]{2})\.([2-9][0-9]{2})\.([0-9]{4})" will find phone numbers with the format "xxx.xxx.xxxx" or "xxx-xxx-xxxx".

## Lookaround Expressions

Lookaround expressions are anchoring expressions, similar to "^", "\$", and "\b". They are helpful when you want to find a particular RegEx only when it appears (or doesn't appear) with a second string.

Positive Lookaround expressions are useful when you want to match a string, but do not want to include it in the selected text.

Negative Lookarounds are used when you want to match a string only if it does not appear with a second string.

### Lookahead

(?=RegEx) - Positive Lookahead:

The Regular Expression: **Nano(?![- ]?technology)** can be used to find the following variants of the term nano-technology:

- Nano-Technology
- Nano technology
- nanotechnology

But will only select the "Nano" portion of the term.

(?!RegEx) - Negative lookahead

Used to match a term only when it is NOT followed by the RegEx

The regular expression **Nano(?![- ]?technology)** will match the string "nano" only when it is NOT followed by the **[- ]?technology** expression. This expression could be used to group all "nano" terms besides the more generic term, "nanotechnology".

### Lookbehind

Lookbehinds function similar to the lookahead expressions, but with two important differences

1. it is used to look for a term occurring before the term to be matched
2. The test inside the lookbehind must be plain text (i.e. not a regular expression)

(?<=text) - Positive Lookbehind.

The expression **(?<=nano)[A-Za-z]+\b** could be used to find the term "nanolithography", but select only the "lithography" part of that string.

(?<!text) - Negative Lookbehind



Matches a string appearing to the right of the lookbehind only when the lookbehind text is NOT found.

For example – The expression **(?<!New South )Wales** could be used to match all instances of “Wales” that are not preceded by the words “New South “.

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