



# VantagePoint User's Guide

---

Version 11.0

---

## SEARCH TECHNOLOGY, INC.

---

### SOFTWARE SINGLE-STATION LICENSE AGREEMENT

#### VantagePoint

**NOTICE TO USER:** Please read this agreement carefully. This is a legal agreement between you, the end-user, and Search Technology, Inc. ("Search Technology"). The enclosed Search Technology software program (the "SOFTWARE") is licensed by Search Technology for use only on the terms set forth herein. By using all or any portion of the SOFTWARE you accept all the terms and conditions of this agreement. You agree that this agreement is enforceable like any written negotiated agreement signed by you. If you do not agree, do not use this SOFTWARE. THE SOFTWARE CANNOT BE USED WITHOUT A LICENSE.

**GRANT OF LICENSE:** Search Technology grants you the right to use one copy of the enclosed SOFTWARE on a single-station computer system. No right to copy, display, or print the SOFTWARE or Documentation, in whole or in part, is granted.

**COPYRIGHT:** The SOFTWARE is owned by Search Technology and is protected by United States copyright laws and international treaty provisions. You may either (a) make one copy of the SOFTWARE solely for backup or archival purposes provided that you reproduce all proprietary notices that are on the original copy of the SOFTWARE provided to you, or (b) transfer the SOFTWARE to a single hard disk provided you keep the original solely for backup or archival purposes. You may not copy the written materials accompanying the SOFTWARE.

**LIMIT OF LIABILITY:** In no event will Search Technology, Inc. be liable to you for any loss of use, interruption of business, or any direct, indirect, special, incidental, or consequential damages of any kind (including lost profits) regardless of the form of action whether in contract, tort (including negligence), strict product liability or otherwise, even if Search Technology, Inc. has been advised of the possibility of such damages. Some states or jurisdictions do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

**EXPORT LIMITATIONS:** This SOFTWARE is subject to the Export Administration Regulations (EAR), issued by the U.S. Department of Commerce. Distribution to places, entities or persons prohibited by the EAR is strictly forbidden. Additionally, the export or re-export of this SOFTWARE to any party listed in the U.S. Department of Treasury's Office of Foreign Assets Control (OFAC) List of Specially Designated Nationals and Blocked Persons is prohibited.

In the following certification, "Any Denial List" refers to any listing of prohibited Parties and Countries published in the EAR and OFAC:

By using this product you are certifying that you:

- a. are not a person listed on Any Denial List;
- b. are not using this SOFTWARE in a country listed on Any Denial List;
- c. are not affiliated with an entity listed on Any Denial List
- d. will not export or re-export this SOFTWARE to any person, place or entity prohibited by U.S. Export laws and regulations.

By using this product you are certifying that you are not a national of Cuba, Iran, Iraq, Libya, North Korea, Sudan, Syria, or any country to which the United States embargoes goods and that you are not a person on the Denied Persons List, the Entity List, or the Specially Designated Nationals and Blocked Persons List.

**REVERSE ENGINEERING:** You agree that you will not decompile, reverse engineer, or otherwise attempt to discover the source code of this SOFTWARE.

**OTHER RESTRICTIONS:** This License Agreement is your proof of license to exercise the rights granted herein and must be retained by you. You may not rent, lease, sell, or give away the SOFTWARE.

## SEARCH TECHNOLOGY, INC.

---

### SOFTWARE LIMITED WARRANTY

**LIMITED WARRANTY.** Search Technology warrants that the SOFTWARE will perform substantially in accordance with the accompanying documentation for a period of ninety (90) days from the date of receipt. The media on which the SOFTWARE is furnished will be free from defects in materials and workmanship under normal use.

**CUSTOMER REMEDIES.** Your sole remedy under the warranty during this ninety (90) day period is that Search Technology will undertake to correct within a reasonable period of time any reported "SOFTWARE Error" (failure of the SOFTWARE to perform substantially the functions described in the documentation), correct errors in the documentation, and replace any media which proves defective in materials or workmanship on an exchange basis without charge. In order to make a claim under this warranty you must return the defective item to Search Technology, postage prepaid, within ten (10) days after the warranty period. If Search Technology is unable to replace defective media or if Search Technology is unable to provide corrected SOFTWARE or corrected documentation within a reasonable time, Search Technology will, at its sole and exclusive option, either replace the SOFTWARE with a functionally equivalent program at no charge to you or refund the purchase price. These are your sole exclusive remedies for any breach of warranty during this ninety (90) day period.

Search Technology does not warrant that the SOFTWARE will meet your requirements, that operation of the SOFTWARE will be uninterrupted or error-free, or that all SOFTWARE errors will be corrected. Search Technology is not responsible for problems caused by changes in the operating characteristics of computer hardware or computer operating systems that are made after the release of the SOFTWARE nor for problems in the interaction of the SOFTWARE with non-Search Technology software. Search Technology will have no responsibility to replace or refund the license fee of media damaged by accident, abuse, or misapplication.

The above warranties are exclusive and in lieu of all other warranties, whether expressed or implied, including the implied warranties of merchantability, fitness for a particular purpose, and non-infringement. No oral or written information or advice given by Search Technology, its employees, distributors, dealers or agents shall increase the scope of the above warranties or create any new warranties.

Some states do not allow the exclusion of implied warranties, so the above exclusion may not apply to you. In that event, any implied warranties are limited in duration to ninety (90) days from the date of delivery of the Software. This warranty gives you specific legal rights. You may have other rights, which vary from state to state.

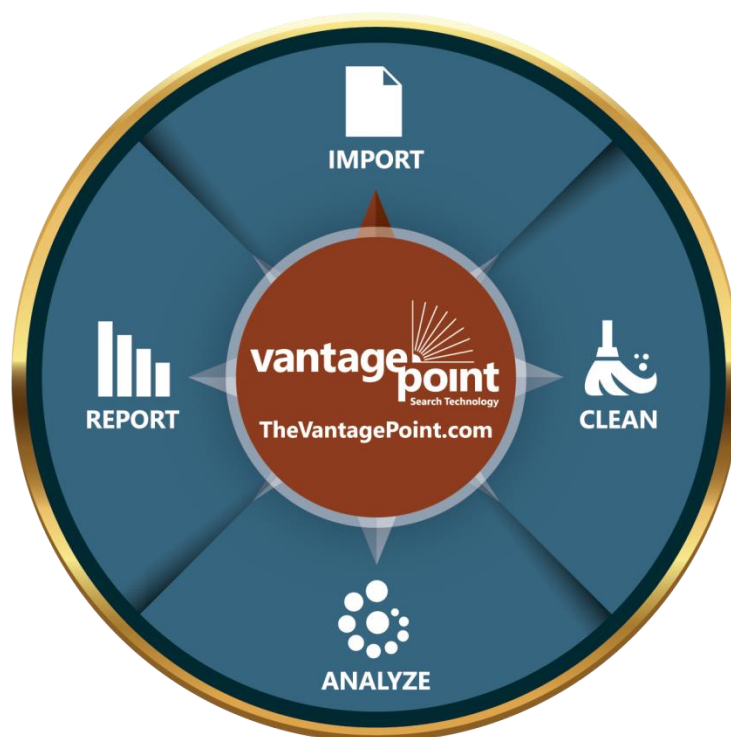
---

## WELCOME TO YOUR NEW VANTAGEPOINT!

---

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. If you are a long time user, you will notice a new User Interface, which should simplify the workflow and improve the user's experience. Ribbons are used to organize VantagePoint's tools in workflow steps of Import, Refine (Clean), Analyze, and Report. See the [Quick Reference](#) page for an overview of the Ribbons.





## Table of Contents

---

<b>INTRODUCTION.....</b>	<b>1</b>
Files and Datasets .....	1
Records and Fields.....	2
<b>GETTING STARTED WITH VANTAGEPOINT .....</b>	<b>3</b>
Registration Code - Activating/Reactivating your License.....	3
Activating VantagePoint Using License from Server.....	5
Starting VantagePoint.....	7
Context-Sensitive Help .....	10
<b>THE VANTAGEPOINT WINDOW .....</b>	<b>11</b>
Ribbons: Quick Reference.....	12
App Button.....	15
Quick Access Toolbar .....	16
Main Workspace .....	19
Summary View .....	20
Field Statistics .....	23
Title Window.....	25
How to update the Title Window .....	26
How to display a Record .....	26
Record View.....	27
Field Order in the Record View.....	31
Detail Windows Overview .....	33
Analyst Guide.....	35
My Keywords Window.....	36
Canceling VantagePoint Processes .....	37
<b>HOME.....</b>	<b>38</b>
File.....	38
Import (Start a New Analysis) .....	39
Importing a Raw Data file .....	39
<i>Importing a Raw Data file using Import Wizard.....</i>	<i>40</i>
<i>Importing a Raw Data file using Classic Interface.....</i>	<i>42</i>
<i>Import from Excel .....</i>	<i>46</i>
Opening a VantagePoint (*.vpt) file.....	49
Datasets .....	50

Add Sheet.....	50
List.....	50
Matrix.....	50
Edit.....	51
Find .....	51
The Find String dialog box.....	51
Finding and selecting multiple items in a list.....	54
Select All .....	54
Copy / Copy with Headers .....	54
Paint.....	56
Sheets .....	56
Sheet Management .....	57
<i>Renaming a Sheet</i> .....	59
<i>Deleting the Current Sheet</i> .....	59
<i>Add Note</i> .....	60
<i>Choose Tab Color</i> .....	60
<b>REFINE .....</b>	<b>61</b>
Datasets .....	61
Create Sub-dataset .....	61
Dataset Fusion .....	64
Record Fusion .....	65
Remove duplicate records.....	67
Combine duplicate records.....	68
Fields.....	69
List Cleanup (Cleaning a List) .....	69
<i>List Cleanup Confirmation</i> .....	72
<i>Saving the Cleanup Session</i> .....	77
<i>Resuming the Cleanup Session</i> .....	78
Thesaurus - Applying a Thesaurus to a list .....	79
<i>Find and Replace</i> .....	80
Manage Fields.....	81
<i>Copying a field</i> .....	82
<i>Deleting a field</i> .....	83
<i>Renaming a field</i> .....	83
Create Field From .....	84
<i>Create field from group names</i> .....	84
<i>Create field from group items</i> .....	86
Merge fields .....	88
Import more fields .....	90
Further Processing .....	92
Concatenate Terms.....	93

Extract Nearby Phrases .....	94
Count Terms   Record .....	96
Key Field.....	96
Groups .....	97
The Edit Groups dialog box.....	98
<i>Creating a group</i> .....	100
<i>Adding items to a group in a list view</i> .....	102
<i>Removing items from a group in a list view</i> .....	102
<i>Adding/clearing/toggling group membership</i> .....	103
<i>Renaming a group</i> .....	103
<i>Deleting a group</i> .....	104
<i>Using Group Exclusion in new dataset operation</i> .....	105
List Comparison (Creating Groups by Comparing two lists) .....	105
Creating groups using a thesaurus .....	108
Creating a thesaurus using groups .....	110
<i>Merging into an existing thesaurus</i> .....	112
<i>Managing Multiple Matches in a thesaurus</i> .....	112
Combine Groups .....	113
Move Groups .....	114
Sort Groups.....	115
<b>ANALYZE .....</b>	<b>116</b>
List View .....	116
Creating a list view.....	117
Working with a List .....	118
<i>Sorting rows in a list view</i> .....	118
<i>Selecting multiple items in a list view</i> .....	119
<i>Adding list items to a group</i> .....	120
<i>Creating groups using stemming</i> .....	121
<i>Edit Item Text</i> .....	123
<i>Zooming In a List or Matrix</i> .....	124
Matrix .....	126
Co-occurrence matrix .....	126
<i>Creating a co-occurrence matrix</i> .....	127
Auto-Correlation Matrix .....	131
<i>Creating an auto-correlation matrix</i> .....	132
Cross-Correlation Matrix .....	135
<i>Creating a cross-correlation matrix</i> .....	136
Working with a Matrix.....	139
<i>Sorting rows or columns in a matrix</i> .....	139
<i>Flooding a matrix</i> .....	140
<i>Make Heat Map</i> .....	141
<i>Painting cells in a matrix</i> .....	143

<i>Selecting multiple cells in a matrix</i> .....	143
<i>Finding a string in a matrix</i> .....	144
<i>Creating Groups from a Matrix</i> .....	144
<i>List Cells in Matrix</i> .....	145
Detail Window Colors .....	148
Maps .....	150
Cross-correlation maps.....	151
<i>Creating a Cross-Correlation Map</i> .....	152
Auto-Correlation Maps .....	155
<i>Creating an Auto-Correlation Map</i> .....	156
Factor Maps .....	158
<i>Creating a Factor Map</i> .....	158
Using Maps .....	161
Using Maps – Classic Version (v10).....	163
<i>Changing preferences for map display</i> .....	167
List Comparison .....	171
Record Classifications .....	175
Auto Classifier.....	181
Terms by Year .....	183
Factor Matrix .....	185
Creating a factor matrix.....	186
Selecting multiple cells in a factor matrix.....	187
Sorting rows and columns in a factor matrix.....	187
Creating groups in a factor matrix.....	187
Creating a Principal Components Decomposition.....	189
TFIDF .....	191
Calculate Emergence Indicators .....	193
Browse Classification Tree .....	195
Scripts .....	196
Running scripts .....	197
Modify scripts menu .....	199
<b>REPORT .....</b>	<b>202</b>
Column Chart .....	203
Bar Chart .....	204
Pie Chart .....	205
Line Chart.....	207
Word Cloud.....	208
Bubble Chart .....	209

Gantt Chart .....	211
Matrix Viewer .....	213
Cluster Map .....	216
Super Profile .....	220
World Map.....	223
Plot Classifications .....	225
Circle Pack.....	226
Treemap.....	228
Sunburst.....	229
Export.....	232
Export Fielded Records .....	232
Export Raw Records .....	235
Export Pivot Data .....	236
Export Image.....	239
<b>EDITORS .....</b>	<b>240</b>
Thesaurus Editor .....	240
Editing a thesaurus .....	243
Editing a thesaurus Item .....	245
Fuzzy matching editor.....	247
Import Filter Editor - Overview.....	248
Import Filter Editor - Database Settings .....	251
Import Filter Editor - Record Definition.....	252
Import Filter Editor - Field Definition.....	255
Import Filter Editor - Field Settings.....	256
Import Filter Editor - Import Variables .....	259
Import Filter Editor - Text Manipulation Commands .....	262
Creating or Editing Library Procedures.....	272
Meta Tag Editor .....	273
Adding Meta tags for fields.....	275
<b>VIEW .....</b>	<b>277</b>
Reset to Defaults .....	277
Detail Windows.....	277
Detail Window-Expectancy Arrows .....	278
Detail Window-List Pop-up Menu.....	278
Detail Window-Chart Pop-up Menu .....	279
Detail Windows-Record/Parent Item Scope.....	280
Detail Window-Sorting Lists.....	282

Detail Window - Zooming in a Chart.....	282
Detail Window-Docking.....	283
Detail Window - Colors for Charts.....	286
My Keywords.....	287
Docking the Title Window, My Keywords Window, and Analyst Guide Window.....	293
<b>OVERVIEW OF PARENT FIELDS, CHILD FIELDS, AND TABLE VIEWS .....</b>	<b>299</b>
Working with Child Fields.....	302
Parent Fields in Other Views: Matrix, Map, Details.....	306
<b>APP BUTTON .....</b>	<b>307</b>
Options dialog.....	307
Settings.....	307
Enabling or disabling the startup dialog box.....	308
Changing the import data method.....	308
Changing the Confirmations Settings.....	309
<i>Confirm When Deleting</i> .....	309
<i>Confirm When Renaming in Compound List</i> .....	310
<i>Include Record/Instance Columns when Copying Lists</i> .....	310
Grid Colors:.....	311
<i>Heat Maps Settings</i> .....	311
Sheet Tabs:.....	312
Hotkey:.....	313
Dataset Properties.....	315
Changing Import Filter in a Dataset.....	317
<b>ADDITIONAL TOPICS .....</b>	<b>321</b>
Updating Files in VantagePoint.....	321
Registration Code - Moving VantagePoint from one computer to another.....	323
Registration Code - Repair License.....	326
Import XML (Smart Data Exchange).....	329
Import XML (Wizard).....	329
Regular Expressions in VantagePoint.....	336
Lookaround Expressions.....	337
<b>APPENDIX: ADDITIONAL NOTICES.....</b>	<b>339</b>

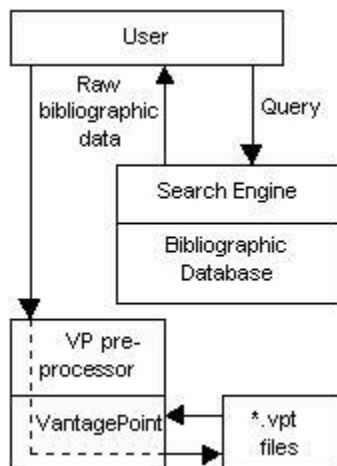
---

## 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 (also called "sheets") of the data, they 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;;gtec  
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



---

# GETTING STARTED WITH VANTAGEPOINT

---

## 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.

### Using Email:

If you do not have Internet access, you can activate your Registration Code Using Email. (Note: This Process may take a few hours 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**.

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**.

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!

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.

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!

### See Also:

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

## 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.

The screenshot shows a Windows-style dialog box titled "Manage VantagePoint License". It has three tabs: "Using Internet", "Using Email", and "License From Server", with the last one being active. The "License From Server" tab contains the following elements: "Your Registration Code" and "Your License Expires" text boxes at the top; a "License Status" label showing "Not Active"; input fields for "Server Address", "Port" (with a default of "0"), "Company ID", and "User Name"; a checkbox labeled "Always use License Server at startup"; a section titled "Activate Using License Server" containing input fields for "Server Address" (with a hint "(put the server address here)"), "Port" (with a hint "(port#)"), "Company ID" (with a hint "(put Company ID here)"), "Username" (with a hint "(put the Username here)"), "Password" (masked with dots), and "Email" (with a hint "(put your email address here)"); an "Activate Using License Server" button; and a "Test Network Connection" button at the bottom left. At the very bottom of the dialog are "Close" and "Help" buttons.

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.

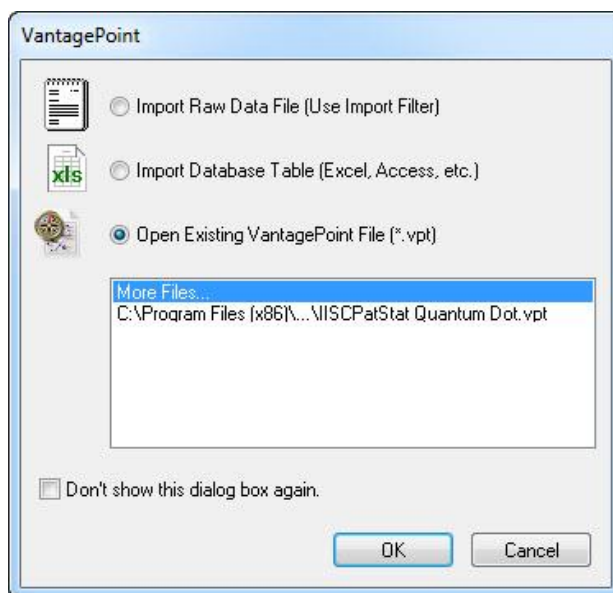
4. Click **Activate Using License Server** to activate your license.

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.

## Starting VantagePoint

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 **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.

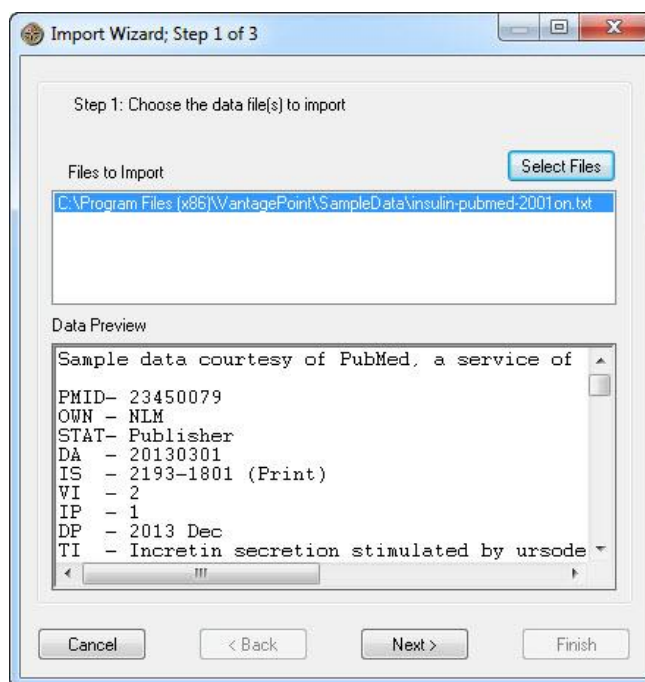
If you choose **Import Database Table**, a dialog box will appear where you choose the data source (either the file name or browse for the location. When the file is located and selected, click **Open** or double-click the file name). If more than one sheet exists in the file, you will be presented with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

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**.

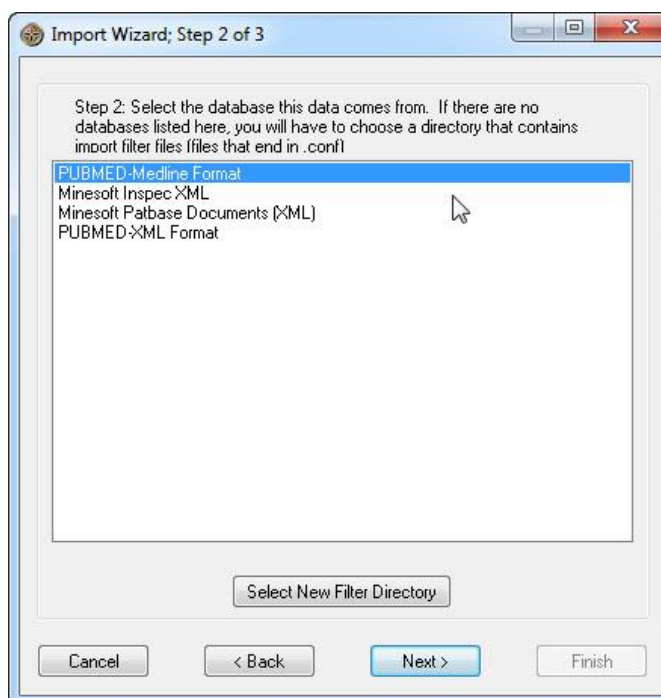


3. **Step 2 of the Import Wizard** selects the database for the file. VantagePoint automatically detects which file to use.

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

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



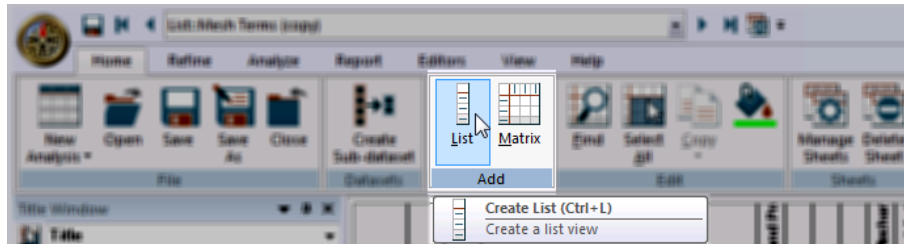
**Note:** Some database import filters have some fields defined as "Secondary Fields" - fields that are not normally imported at first. Check the "Show All Fields" checkbox to view these fields (see below). You can then select fields from the entire list.



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 **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).

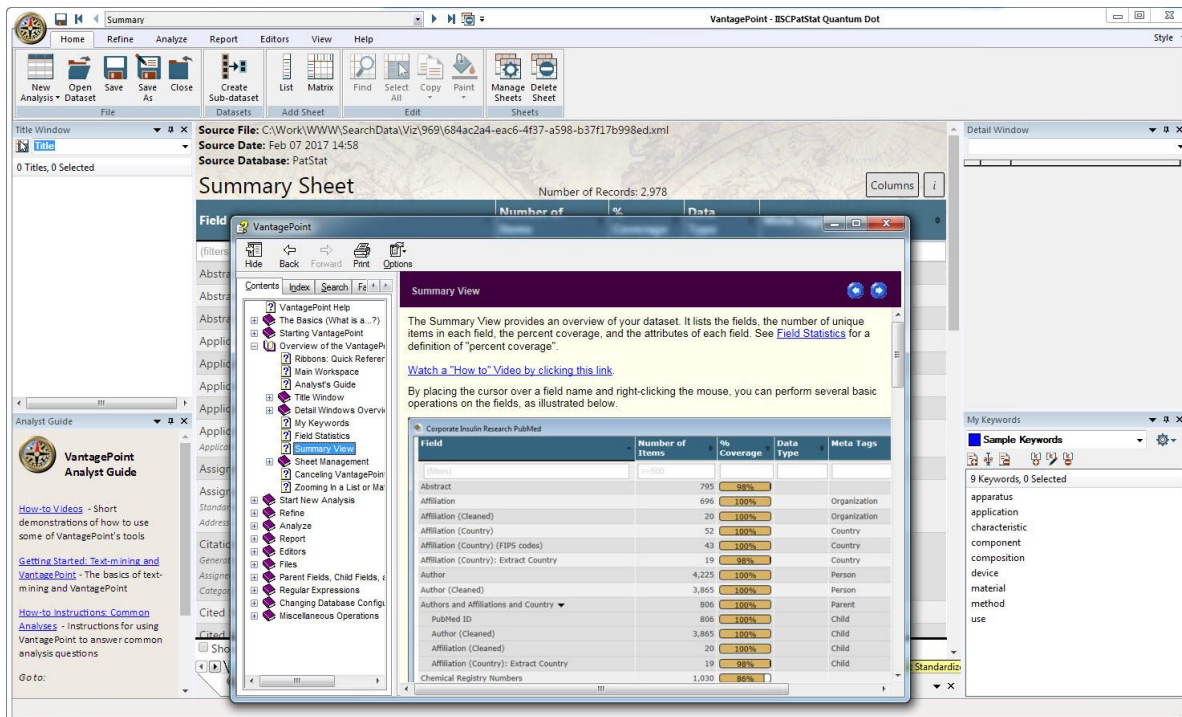


- c) Press Ctrl-L. Select the desired field name from the given list, and click **OK** (or simply double-click the field name).

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.

## Context-Sensitive Help

Context-sensitive Help is available for most VantagePoint functions by pressing F1.





# 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](#), and 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 icons for file operations (New, Open, Save, Save As, Close), dataset management (Create Sub-dataset, List, Matrix, Add Sheet), editing (Find, Select All, Copy, Paint), and sheet management (Manage Sheets, Delete Sheet). A yellow notification bar at the top states 'Updates are available for VantagePoint' with a 'Select files to update' button.

On the left side, the 'Title Window' (2) lists 372 titles, with the first few visible: '11beta-hydroxysteroid dehydrogenas...', '7-Oxopyrrolopyridine-derived DPP4 in...', 'A fibronectin scaffold approach to bis...', 'A fully human insulin-like growth fact...', 'A model of NEFA dynamics with focu...', 'A new general glucose homeostatic ...', 'A new generation of neurobiological ...', 'A novel dipeptidyl peptidase-4 inhibit...', 'A novel high-affinity peptide antagon...', 'A novel selective peroxisome prolifera...', 'A point mutation in Sec61alpha1 lead...', and 'A review of idet of large-scale dege...'. Below the title list is the 'Analyst Guide' (5), which includes a 'VantagePoint Analyst Guide' icon and links to 'How-to Videos', 'Getting Started: Text-mining and VantagePoint', and 'How-to Instructions: Common Analyses'.

The central 'Main Workspace' (3) displays a table with columns: # Records, # Instances, and Mesh Terms. The table contains 27 rows of data, with the first row highlighted in blue. The data is as follows:

	# 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

At the bottom of the workspace, a 'Chart: Mesh Terms (copy) (Group Name)' is visible, and the file name 'Corporate Insulin Research PubMed.vpt' is shown.

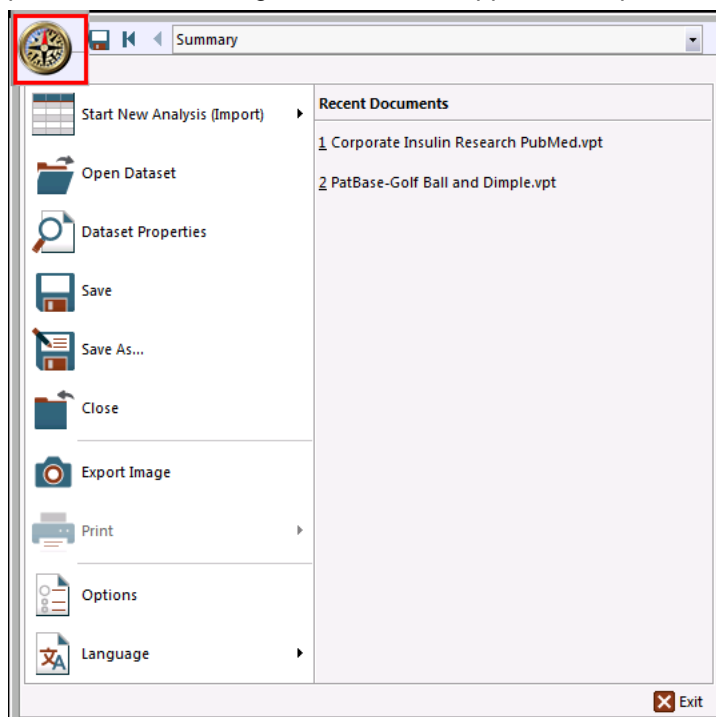
On the right side, the 'Detail Window' (4) displays the 'Author' list, showing 17 authors: Boado, Ruben J; Shibasaki, Masayuki; Pardridge, William M; Tahara, Atsuo; Matsuyama-Yokono, Akiko; Hayakawa, Masahiko; Nakano, Ryosuke; Someya, Yuka; Takeuchi, Koji; Veniant, Murielle M; Carboni, Joan M; and others. Below the author list is a 'Date Published (Year)' bar chart showing the distribution of publications from 2008 to 2013. The 'My Keywords' (6) window shows 'Sample Keywords' and a list of 9 keywords: apparatus, application, and others.

## 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.

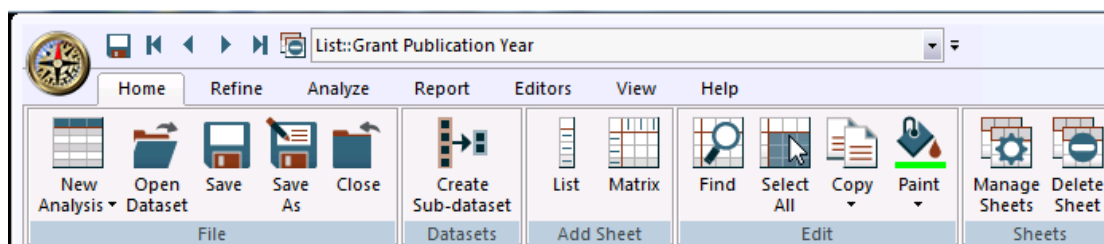


Following are illustrations of each Ribbon and a summary of the functions found on each:

### Home

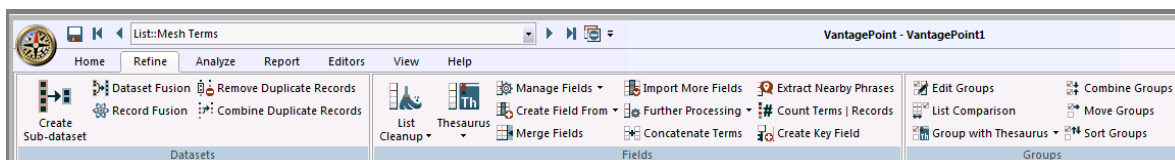
From the Home ribbon you can Import data/Start a New Analysis, Open a dataset (VantagePoint file), Save, and Close VantagePoint files.

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



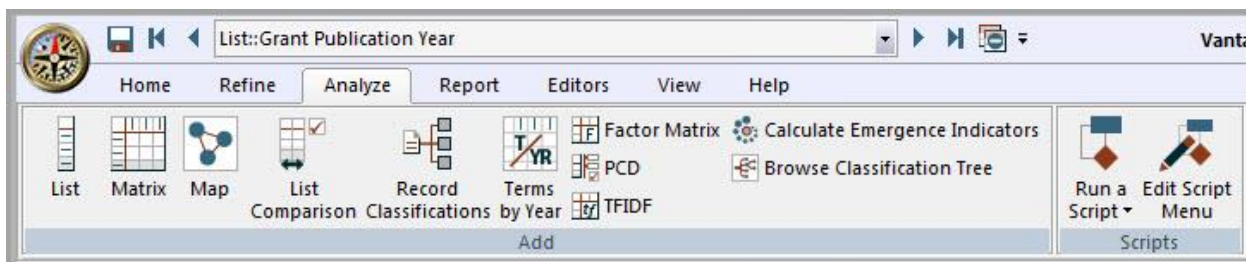
## Refine

Further refine an open VantagePoint file by performing Datasets functions such as [merging datasets](#) or [records](#), [combining](#) or [removing duplicate records](#); functions related to Fields, such as [List Cleanup](#), [apply a Thesaurus](#), [Import more fields](#); and Create and manage [Groups](#).



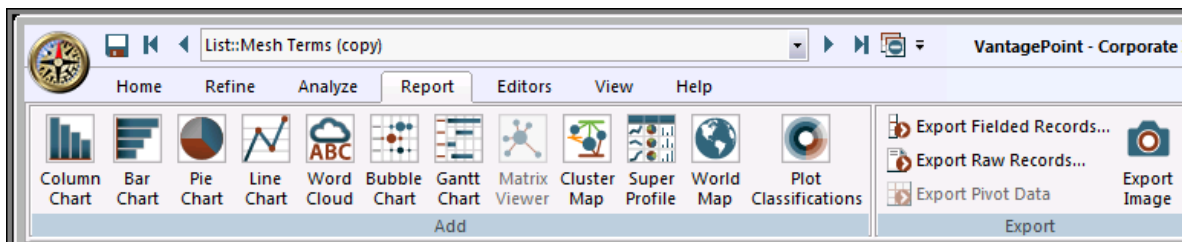
## Analyze

Add [Lists](#), [Matrices](#), [Maps](#), perform [List Comparison](#), assign [Record Classifications](#), run [Terms by Year](#) report, create [Factor Matrix](#), [PCD](#), [TFIDF](#), [Calculate Emergence Indicators](#), [Browse Classification Tree](#), and [Run Scripts/Edit Script Menu](#).



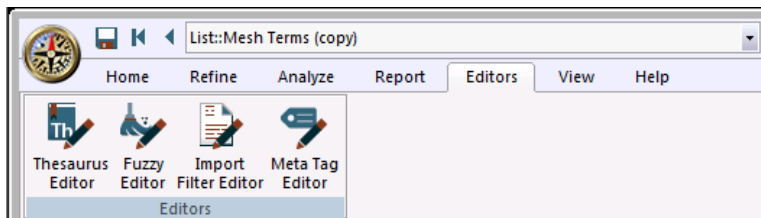
## Report

Create Visualization [Reports](#), [Export Records](#), [Export Image](#).



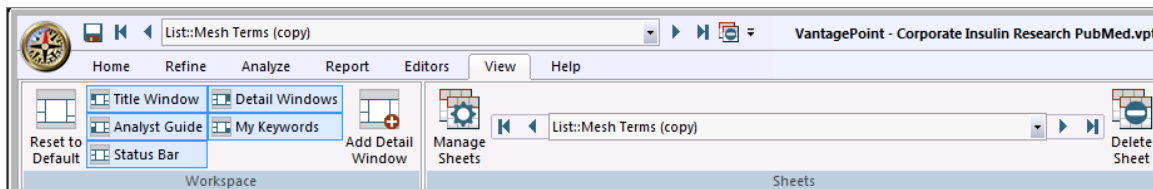
## Editors

Edit a [Thesaurus](#), [Fuzzy file](#), [Import Filter](#), [Meta Tags](#).



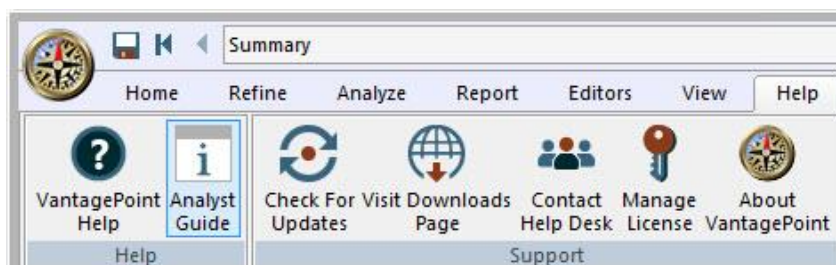
## View

Contains the [Reset to Default](#) button; Select Workspace Windows to show/hide, [Add Detail Window](#), [Manage](#) and [Delete Sheets](#).



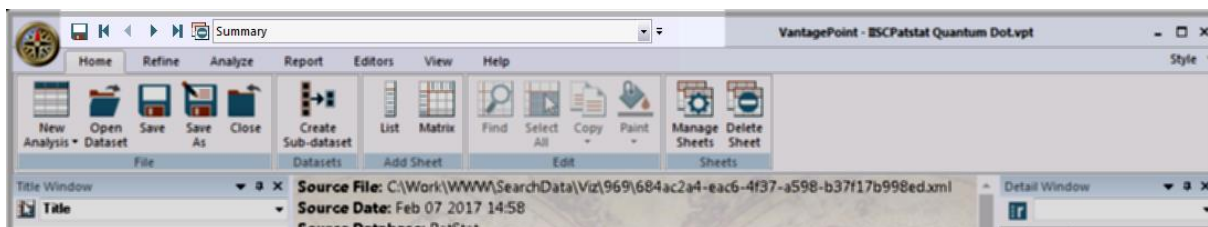
## Help

On this ribbon, you can Display the VantagePoint Help (press F1 for Context-sensitive Help), 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.

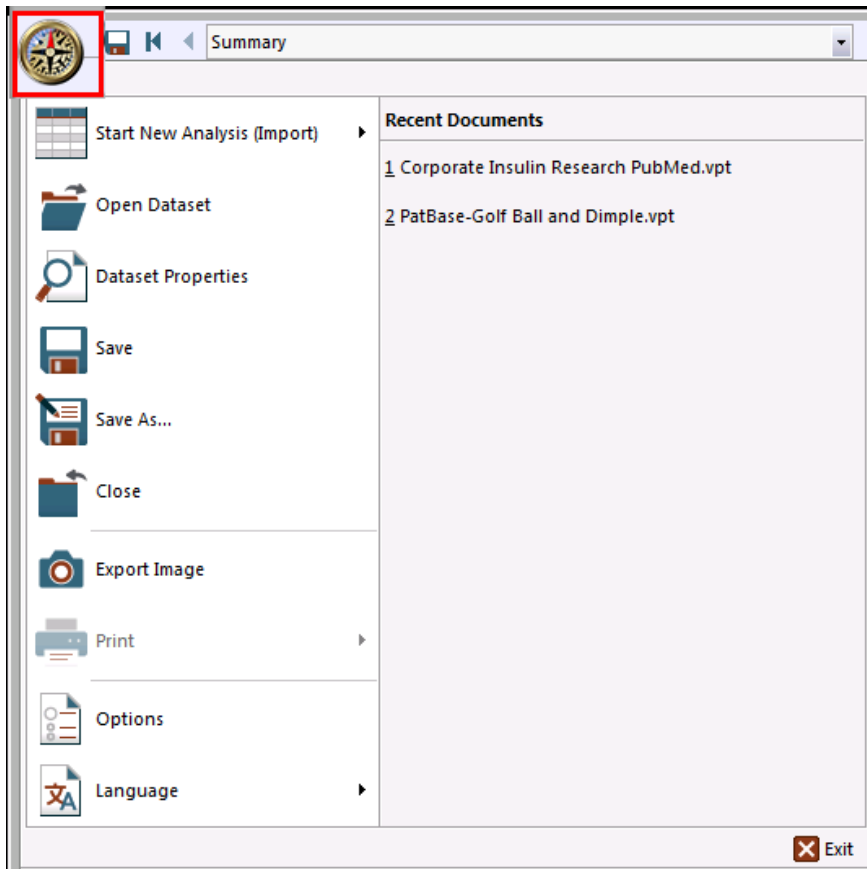


## App Button

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.

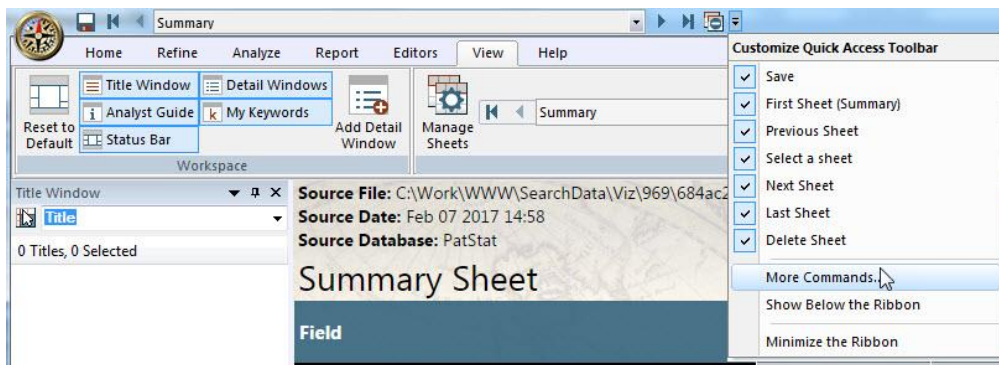
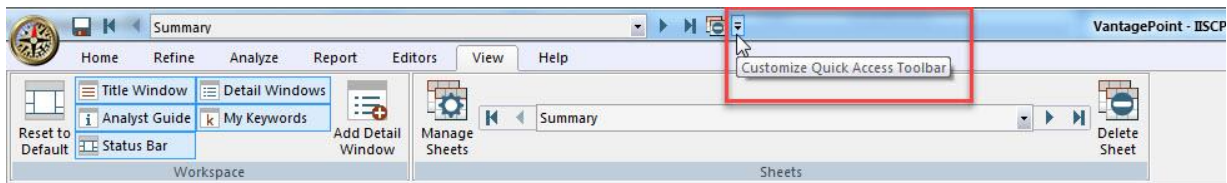
The App Button also provides a link to [Dataset Properties](#), where you can view characteristics of the current dataset.



## Quick Access Toolbar

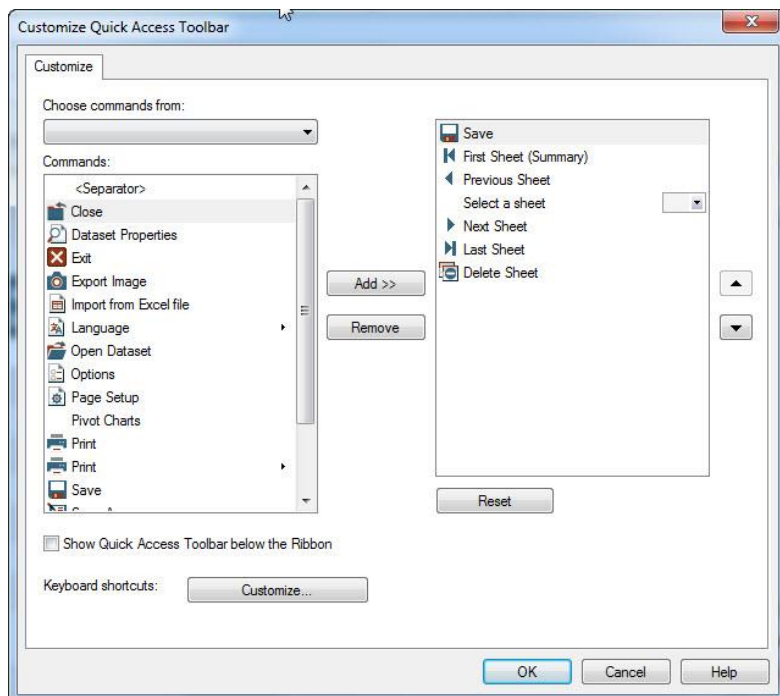
You can add frequently-used commands to the Quick Access Toolbar, which will always appear for handy access. Commands can also be removed from the Quick Access Toolbar, or the Toolbar can be repositioned below the ribbon.

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



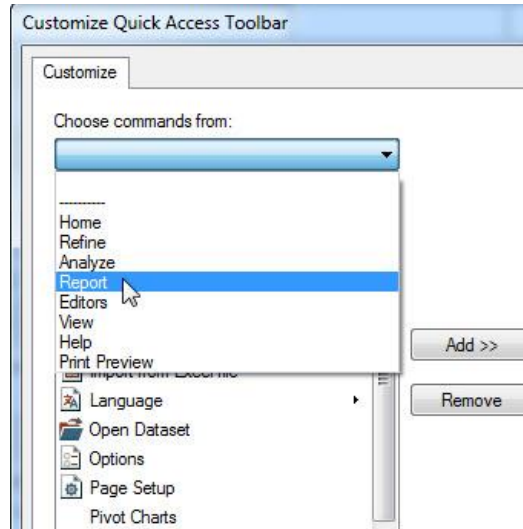
Commands are presented in the left window, and those on the Quick Access Toolbar appear on the right.

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

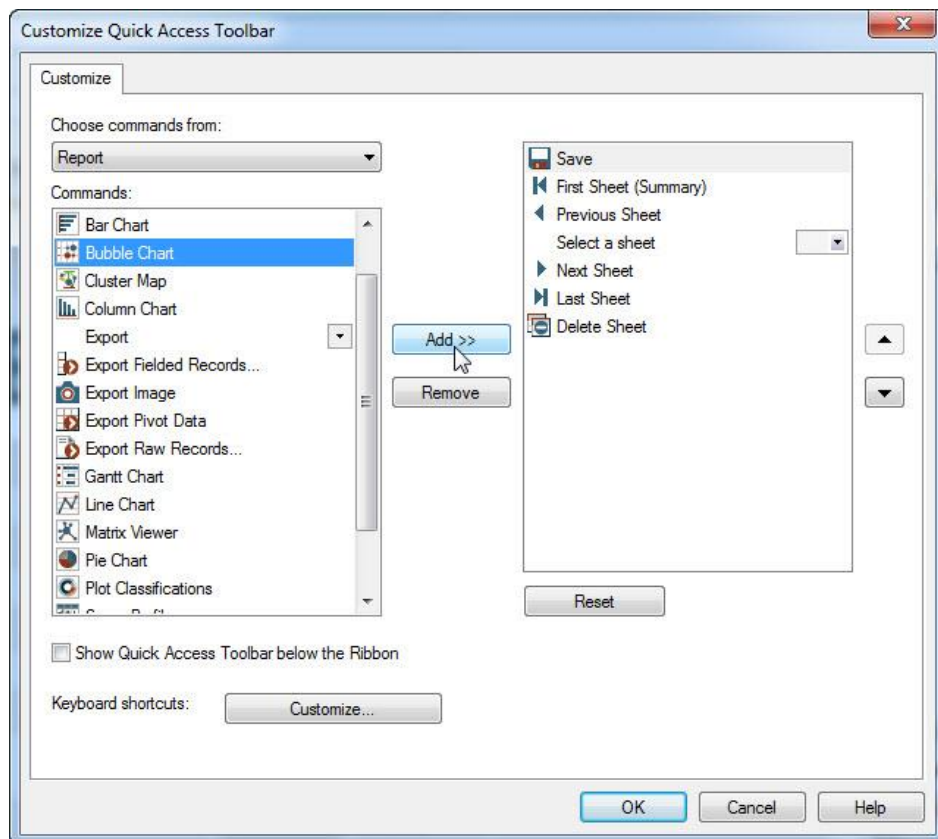




In this case, the user will select "Report" from the dropdown box.

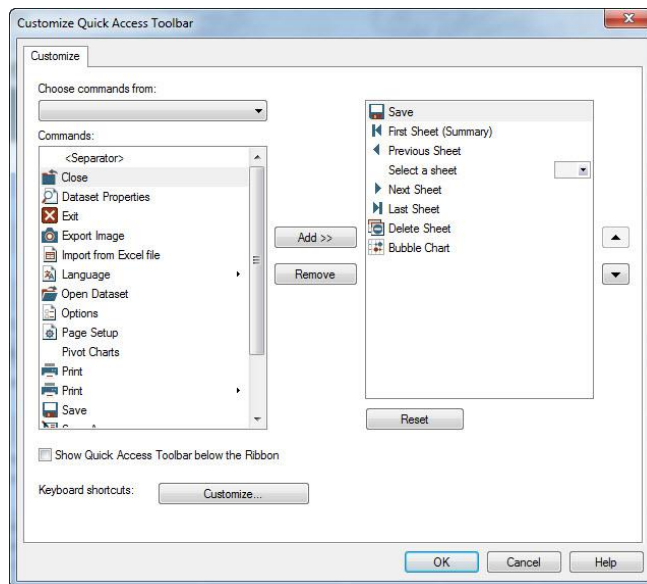


The commands for the Report Ribbon appear. The user wants to move "Bubble Chart" to the Quick Access Toolbar. The user selects that command, and then clicks the **Add** button:

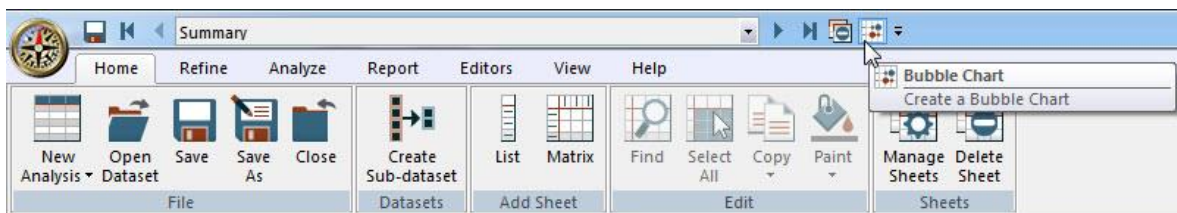


Bubble Chart is moved to the window on the right. Note the up/down arrows to the right of that window.

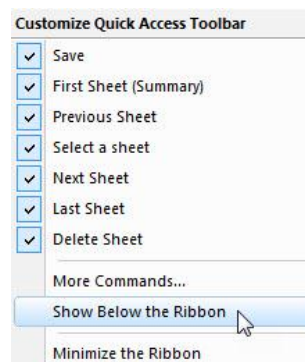
Use them to reposition the commands on the Toolbar:



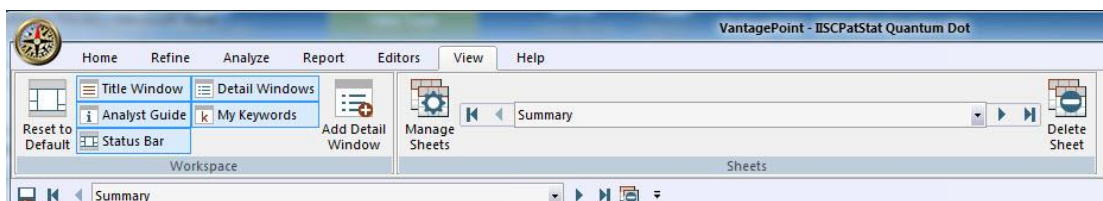
Now the Quick Access Toolbar contains the Bubble Chart icon:



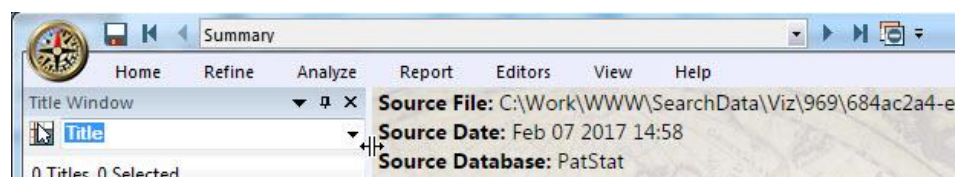
Show Quick Access Toolbar Below the Ribbon:



Result:



Here is the result of choosing Minimize the Ribbon:

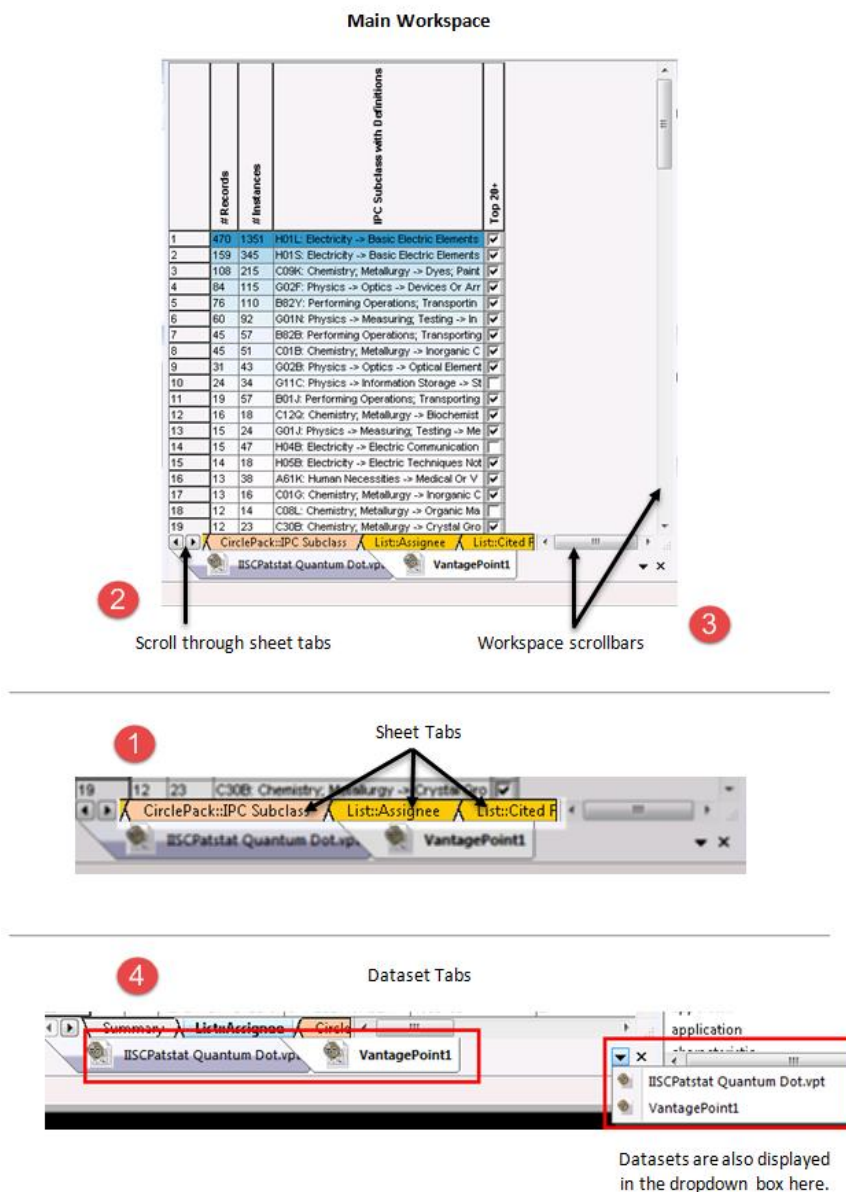




## Main Workspace

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

1. Each view you create 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.



See Also:  
[Sheet Management](#)

## Summary View

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

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.

Field	Number of Items	% Coverage	Data Type	Meta Tags
(filters)	>=500			
Abstract	795	98%		
Affiliation	696	100%		Organization
Affiliation (Cleaned)	20	100%		Organization
Affiliation (Country)	52	100%		Country
Affiliation (Country) (FIPS codes)	43	100%		Country
Affiliation (Country): Extract Country	19	98%		Country
Author	4,225	100%		Person
Author (Cleaned)	3,865	100%		Person
Authors and Affiliations and Country ▼	806	100%		Parent
PubMed ID	806	100%		Child
Author (Cleaned)	3,865	100%		Child
Affiliation (Cleaned)	20	100%		Child
Affiliation (Country): Extract Country	19	98%		Child
Chemical Registry Numbers	1,030	86%		
Date Published	246	100%		Date
<u>Date Published (Year)</u>	6	100%		
Email	377	58%		
Grant Acknowledgements	196	6%		
Journal ID	285	100%		
Journal Title Abbrev.	285	100%		
Key	806	100%	Key	
Language	6	100%		Language
Mesh Date	510	100%		
Mesh Terms	3,657	88%		
Mesh Terms (copy)				
Mesh Terms (copy) (Group Nam				
Number of References			Number	
Publication Country				Country
Publication Type				Document Type
PubMed ID				
Source	806	100%		

Context Menu for 'Date Published (Year)':

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

Bottom Bar: Summary | Profile: Affiliation (Cleaned) - Top 10 (1) | Chart: Affiliation (Cleaned) X Date Published (Year) Bubble Chart (1) | List: Date Published (Year) | List

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, etc.).

Corporate Insulin Research PubMed  
Source Date: May 08 2013 14:32  
Source Database: PUBMED-Medline Format

**SUMMARY SHEET** Number of Records: 806

Field	Number of Items	% Coverage	Data Type	Meta Tags
(filters)	>=500	>90		
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.

You can also change the sort of the Summary View by clicking the column header for which the sort is desired.

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

Field	Number of Items	% Coverage	Data Type	Meta Tags
(filters)	>=500	>90		
Abstract	795	98%		
Affiliation	696	100%		Organization
Affiliation (Cleaned)	20	100%		Organization

Columns

- ☐ Show All:
- ☒ Number of Item
- ☒ % 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...** Reduce or clean a list. Presents the **List Cleanup** dialog box. (See [Cleaning a List.](#))

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

**Find and Replace...** 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.

**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).

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

**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.

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

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

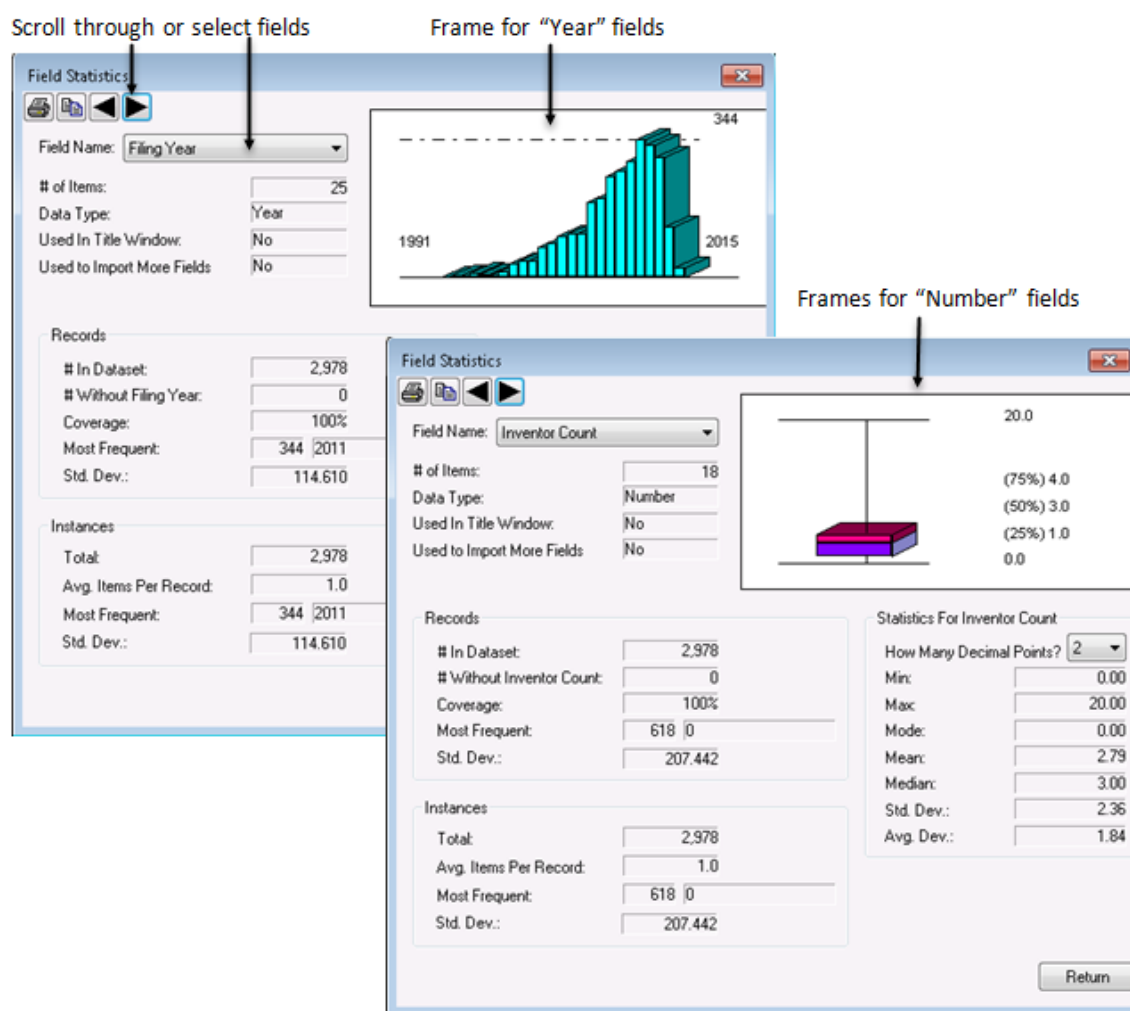
**Delete Field...** Delete the selected field.

**View Statistics...** Open the **Field Statistics** window for browsing the summary statistics of the fields in your dataset.

**Zoom** - Allows you to enlarge or reduce the size of the print in the Summary view. You can also use a mouse wheel to accomplish the same by holding down the Ctrl key and rolling the mouse wheel. To restore the default setting, select **Restore** from the right-click menu.

## 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.

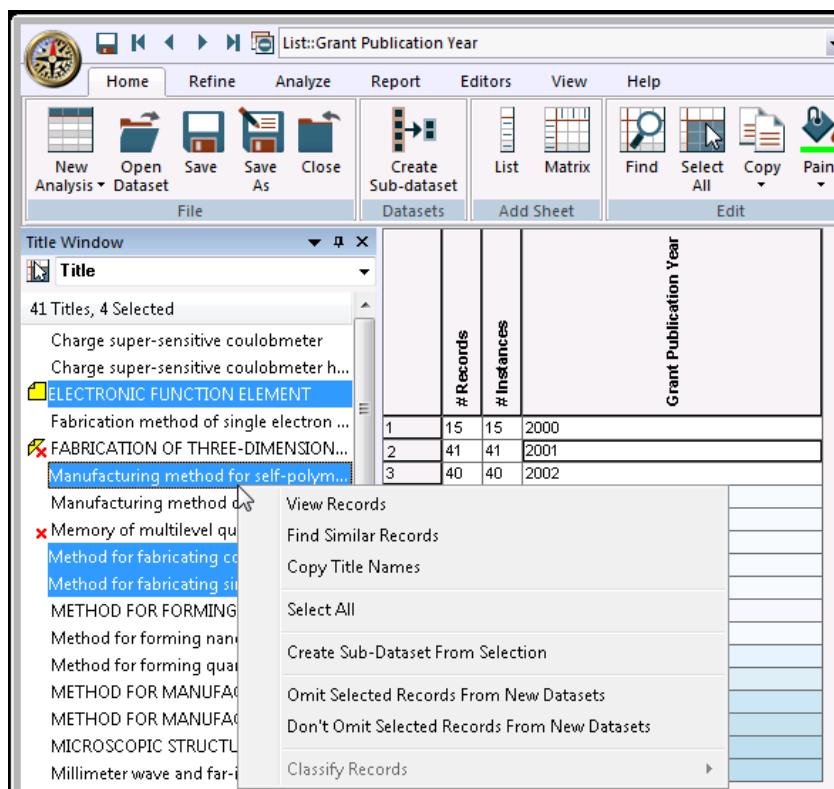
**Plot and Statistics Summary for "Number" Fields:** For fields set as **Data Type** "Number", the Field Statistics window shows several summary statistics of the numeric data in the field, and a "Box-Plot" shows a graphical depiction of the data.

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

## 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.

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.)

**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.

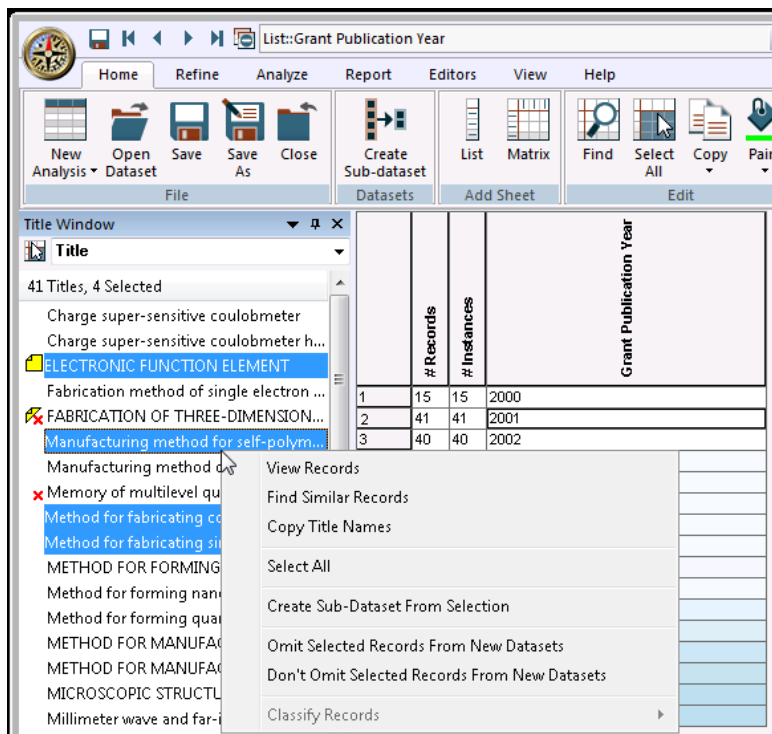
**Classify Records** - allows the user to assign an existing classification to a record or records. (See [Record Classifications](#) in the Record View.)

### 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.



## 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. In this example, the user's Keywords are highlighted.

The screenshot shows the VantagePoint software interface. The main window is titled 'Record View' and displays a table with the following data:

Field Name	Record 1
Application Number (Original)	2003408088
Application Number (EPODOC)	JP20030408088
Title	BIOSUBSTANCE FLUORESCENCE-LABELING AGENT AND METHOD AND BIOASSAY METHOD AND DEVICE
Abstract	<p>PROBLEM TO BE SOLVED: To provide a biosubstance fluorescence-labeling agent affecting less an environment and manufactured easily, and a biosubstance fluorescence-labeling method and a bioassay method using the biosubstance fluorescence-labeling agent and a device therefor.</p> <p>SOLUTION: A quantum dot constituting the biosubstance fluorescence-labeling agent is constituted of a core comprising a silicon crystal having a crystal diameter of four times or less of an exciton Bohr radius, and a shell layer comprising silicon oxide for coating the core. A solution containing a sample DNA fluorescence-labeled with the quantum dot is dropped on a bioassay substrate immobilized preliminarily with a variety of probe DNAs to occur a hybridization reaction. The sample DNA is biochemically analyzed thereby.</p> <p>COPYRIGHT: (C)2005,JPO&amp;NCIP</p>
Assignee	SONY CORP / SONY CORPORATION / 25370122 / 2 / COMPANY / /

Below the table, there is a section for 'Notes about this record' with a text area and a checkbox labeled 'Omit from new datasets'.

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 format. The selection is made here:

The screenshot shows a context menu in the Record View window. The menu is open over the 'Field Name' column header. The options are:

- Record As Table ✓
- Record As Row
- Record As Column

Here is a record displayed in Table format:

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 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 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 H01L27/288 H01L27/3227 H01L2924/0002 H01L31/12

Notes about this record ☐ Omit from new datasets

Here is the first of several records in Row format:

#	Application Number (Original)	Application Number (EPODOC)	Title	Abstract	Assignee	Inventor	IPC Codes::IPC Class Symbol	CPC	Family ID, INPADOC	Cited Family (docdb)	Citation
1	09926698	US20010926698	Information processing structures	An information processing structure is disclosed that is formed of single electron circuits each operating rapidly and stably by way of a single electron operation. The information processing structure includes a MOSFET (11), and a plurality of quantum dots (13) disposed immediately above a gate electrode	Japan Science and Technology Corporation / JAPAN SCIENCE AND TECHNOLOGY AGENCY / 12195095 / 2 / GOV NON-PROFIT / Kawaguchi / JP	IWATA, ATSUSHI / Hiroshima / JP / IWATA ATSUSHI / 11872880 / 1 / INDIVIDUAL MATSUURA, TOMOHIRO / Hiroshima / JP / MATSUURA, TOMOHIRO / 17583906 / 0 / MORIE.	G11C 11/34 H01L 21/8247 H01L 27/10 H01L 29/06 H01L 29/66 H01L 29/78 H01L 29/788 H01L 29/792	B82Y10/00 G11C11/34 G11C2216/08 H01L29/7888	3463451	14921648 16886388 18255565 22646202 26124875 26485918 27517110	29255614 EP / SEA / FUJITA SHINOBU, INOMATA KOICHIRO TANAMO TETSUFUN TOSHIBA CORPORA / 6208000 29284748 / APP / 6, FUJITA SHINOBU, SAKUMOTO TETSUSHI

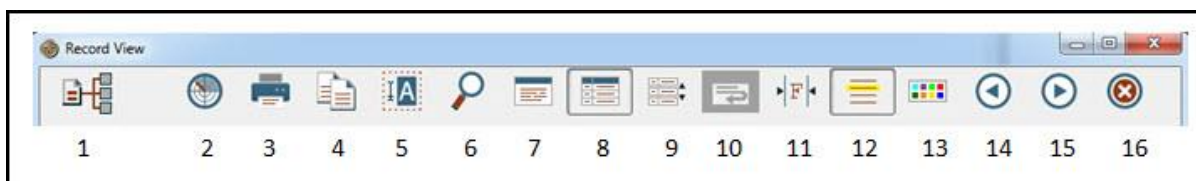
Notes about this record ☐ Omit from new datasets

Here are several records shown in Column format:

Field Name	Record 1	Record 2	Record 3	Record 4	
Application Number (Original)	1020030006380	13040737	090109862	2000131633	09926698
Application Number (EPODOC)	KR20030006380	US201113040737	TW20010109862	JP20000131633	US200105
Title	Forming method for silicon nano-crystal quantum dot	Imaging and decoding device with quantum dot imager	INFORMATION PROCESSING STRUCTURE	INFORMATION PROCESSING STRUCTURE	Informati
Abstract	PURPOSE: A method for forming a quantum dot of a silicon nano-crystal is provided to form the sufficient amount of the	Devices, systems, and methods are disclosed for imaging with a decoding imager based on semiconducting nanocrystals that function as quantum dots, and decoding decodable features in the images. In an illustrative embodiment, a device includes an imaging subsystem, a data storage element, and a processor. The imaging subsystem includes an image sensor array and an imaging optics assembly operative for focusing an image onto the image sensor array. The image sensor array includes a plurality of pixels wherein a pixel includes a photosensitive	An information processing structure formed by single electron circuit to obtain high-speed and stable operation through the use of a single	PROBLEM TO BE SOLVED: To provide an information processing structure constituted with single electronic circuits, which can be operated	An inform disclosed circuits es way of a s informati MOSFET ( dots (13) gate elect of which i

Notes about this record ☐ Omit from new datasets

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



- Record Classifications:** Displays the Manage Record Classifications dialog, where user can set or change assignments. See [Record Classification](#) for details.
- Find Similar Records:** Displays similar records based on a selected record. Resulting records will have a similarity score. The default features are Title and Abstract, but the user can change the training fields (by assigning the "Training Field" Meta Tag to the desired field. See [Adding Meta Tags for Fields](#) for details).
- Print:** Prints the record in the format of the current view ("raw" or "fields")
- Copy:** Copies the highlighted (selected) portion of the record to the clipboard (for pasting to another application).
- Select All:** Selects the entire record (for copying to the clipboard).
- Find:** Brings up the **Find** dialog to find text.
- Raw:** Switches from the **Fields** view to the **Raw Record** view.
- Fields:** Switches from the **Raw Record** view to the **Fields** view, showing the parsed fields.
- Field Order:** User can change the order of Fields displayed in Fielded View. See [Field Order in the Record View](#) for details.
- Wrap:** Word wrap. Applies to the Raw Record view only.

11. **Fixed Font:** Displays record in a fixed-width font. This improves readability for some record formats.
12. **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.
13. **Colors:** Allows you to assign the color of your choice to terms in a Keywords List.
14. **Previous:** Displays previous record in Title Window (disabled if more than one record was selected in the Title Window).
15. **Next:** Displays next record in Title Window (disabled if more than one record was selected in the Title Window).
16. **Exit:** Closes the Record View.

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.

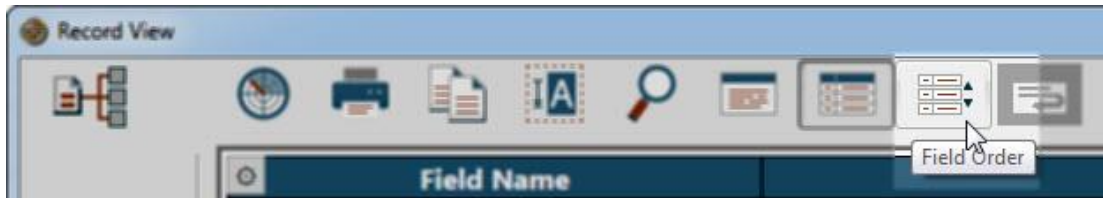
You can view another record by double-clicking on another title in the Title Window without closing the Record View. Or, use the **Previous** / **Next** arrows to browse each record in the Title Window.

See Also:

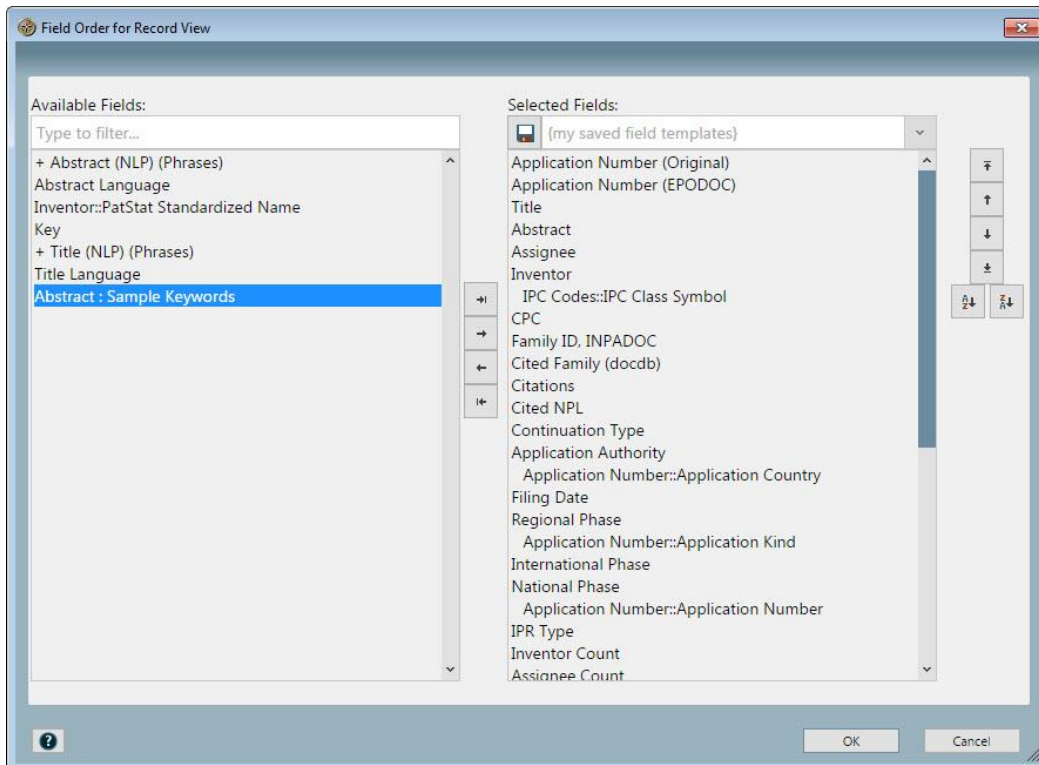
[How to Display a Record](#)  
[My Keywords](#)  
[Record Classifications](#) and [Auto Classifier](#)  
[Summary View](#)  
[Title Window](#)

## 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 Field Order for Record View 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 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 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 H01L27/288 H01L27/3227 H01L2924/0002 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:

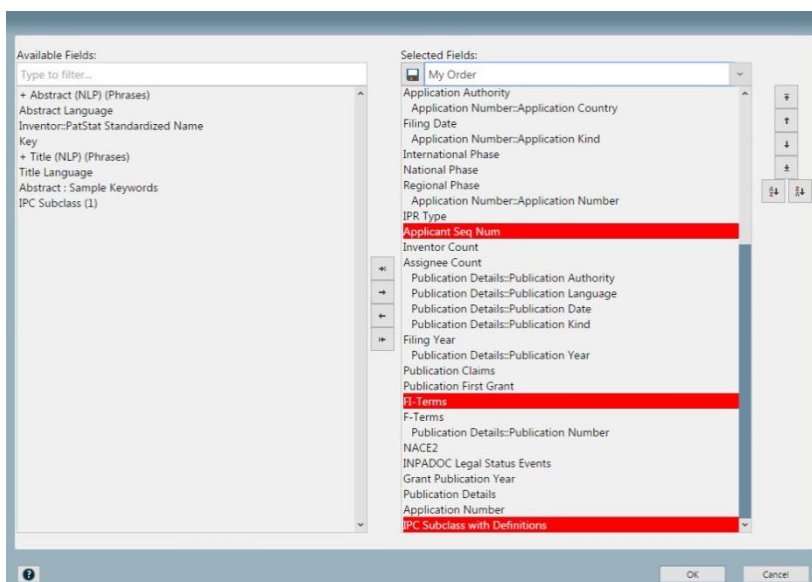
Use the field in the upper right of the dialog to type a name for the template and click the save icon.



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

Now, your saved Field Order can be retrieved and applied in the future by using 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, the fields will be highlighted in red, as shown below.



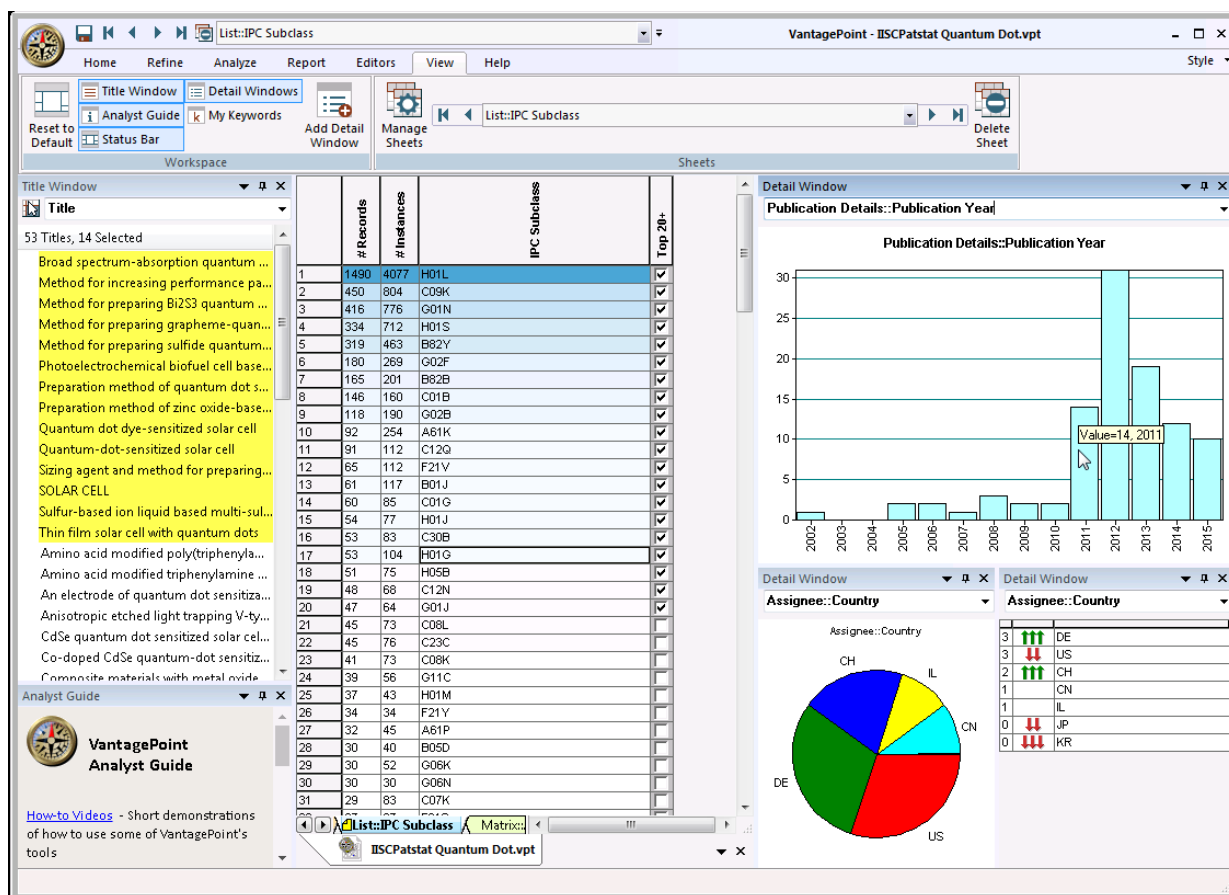
## Detail Windows Overview

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. The fieldname window will populate with

fields matching the entry for easy selection.

See these Topics for additional details:

- [Detail Window - Expectancy Arrows](#)
- [Detail Window - List Pop-up Menu](#)
- [Detail Window - Chart Pop-up Menu](#)
- [Detail Window - Record/Parent Item Scope](#)
- [Detail Window - Sorting Lists](#)
- [Detail Window - Zooming in a Chart](#)
- [Detail Window - Docking](#)
- [Detail Window - Colors for Charts](#)



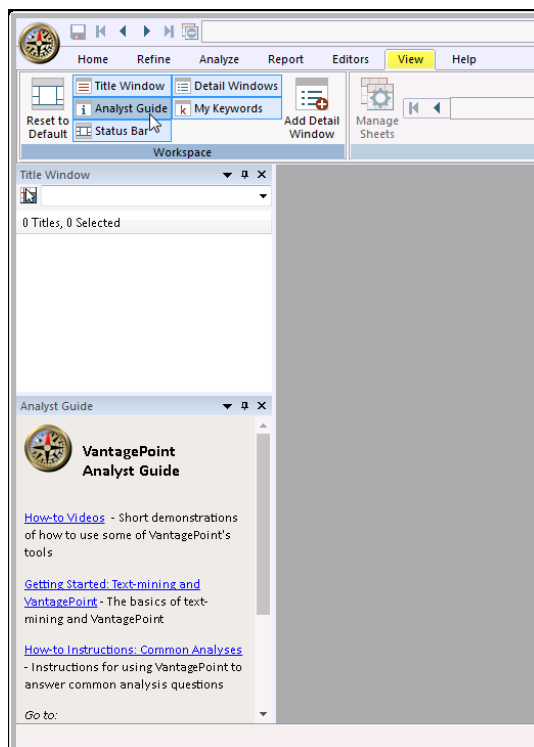
## Analyst Guide

The Analyst 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...

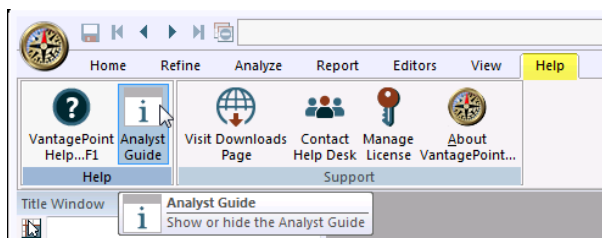
- How-to Videos
- Analyst handbook (overview of the basic analytical process)
- Walkthroughs of common analyses
- Frequently Asked Questions

You can hide (or display) the Analyst Guide by clicking **Analyst Guide** in either:

The **View** Ribbon



or the **Help** Ribbon



The Analyst Guide Window can be "docked" anywhere on the screen by clicking and dragging the banner line.

See Also:

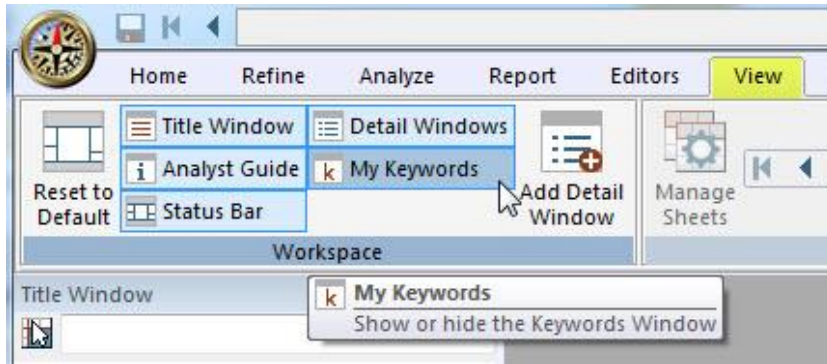
[Docking the Title Window, My Keywords Window, and Analyst Guide Window](#)

## My Keywords Window

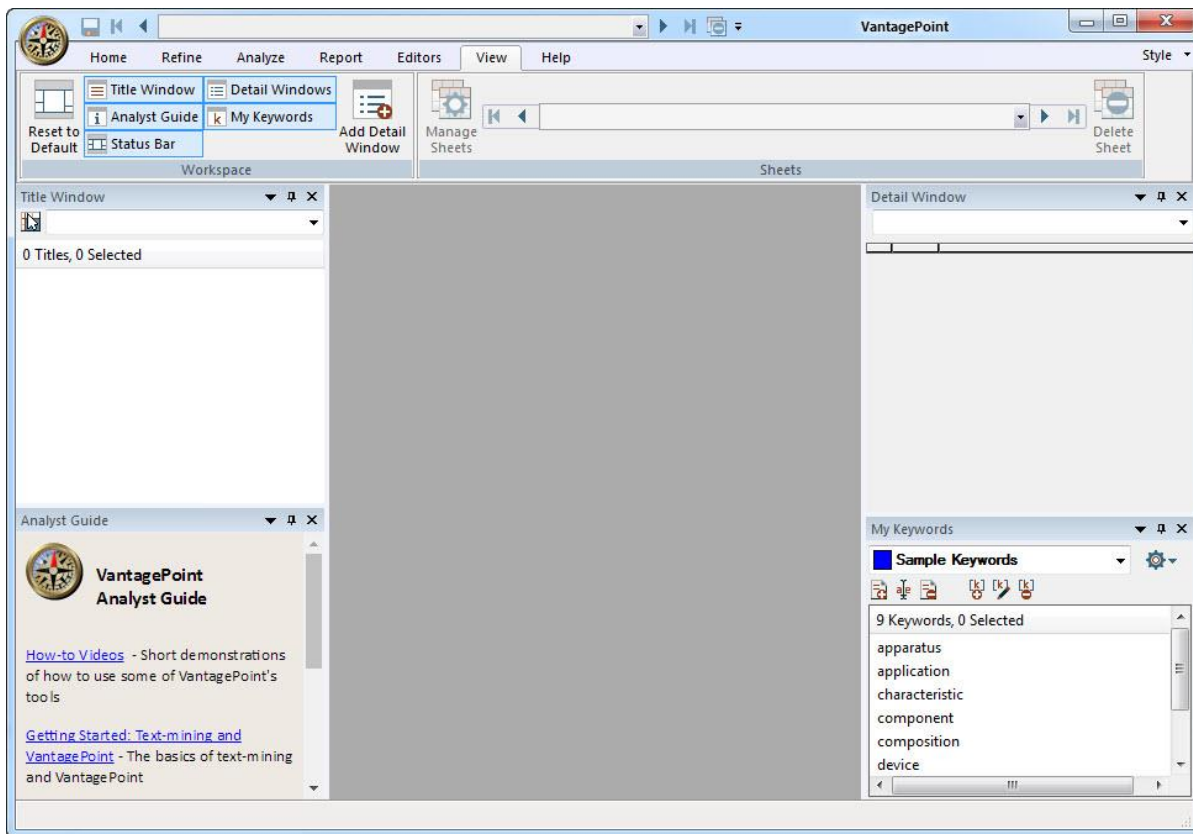
A user can use the “My Keywords” feature to extract terms of interest from a field and highlight the terms in the Record View. This extraction results in a new List and creates a new field, reflected in the Summary View.

If it isn't already visible, enable the “My Keywords” display:

From the View ribbon, click **My Keywords**.



The My Keywords window appears (default location is the lower right-hand corner of the VantagePoint Window). In this case, the Sample Keywords is presented:



See Also:

[My Keywords](#)

## 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.

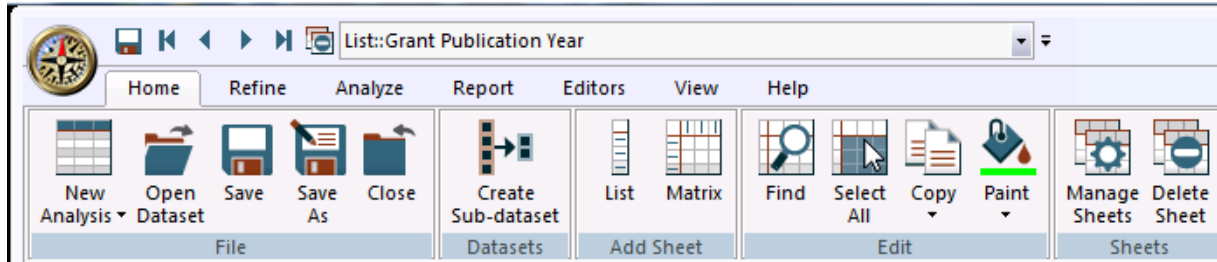


If you check the **Notify Upon Completion** checkbox, VantagePoint will provide an audible alert when the process is complete (if your computer has speakers).

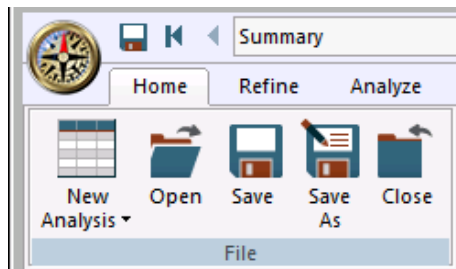
The final steps of some VantagePoint processes cannot be interrupted. The most notable are the steps that create fields in Import and New Dataset, and the step that creates the List Cleanup Confirmation dialog box. On these operations VantagePoint will notify you of the interim completion of the task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

## HOME

The **Home** ribbon has the tools you need to start a new analysis, open and save files, perform frequent tasks, and manage sheets in your dataset.



## File



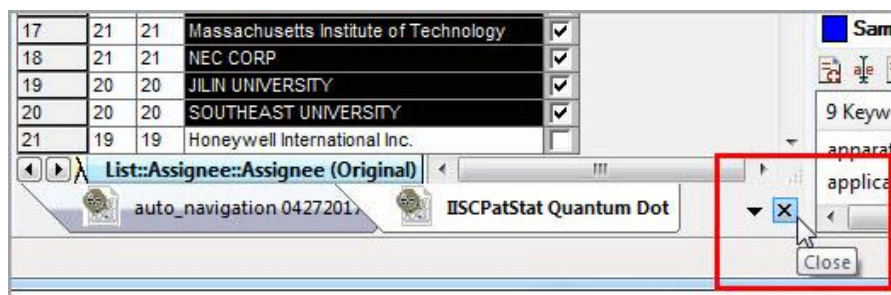
**New Analysis** - Import data, Import from Excel file, Smart Data Exchange. Follow the links to the individual Topics.

**Open** - 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.

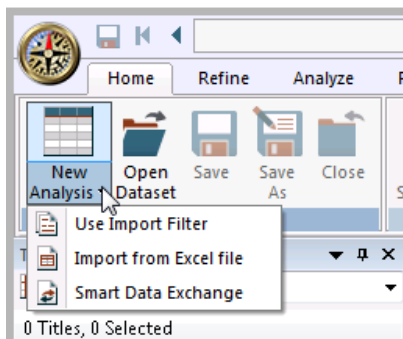
**Save As** - to save with a new file name. *If you have not saved the current file since importing the raw data or creating a new dataset.* In the **Save As** dialog box, select the drive, folder, or network location in which you want to save the VantagePoint file, and type the new file name in the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



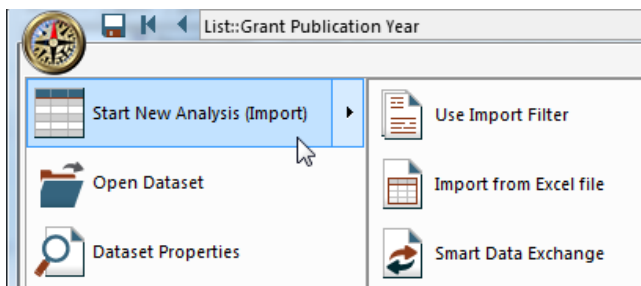
## Import (Start a New Analysis)

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.



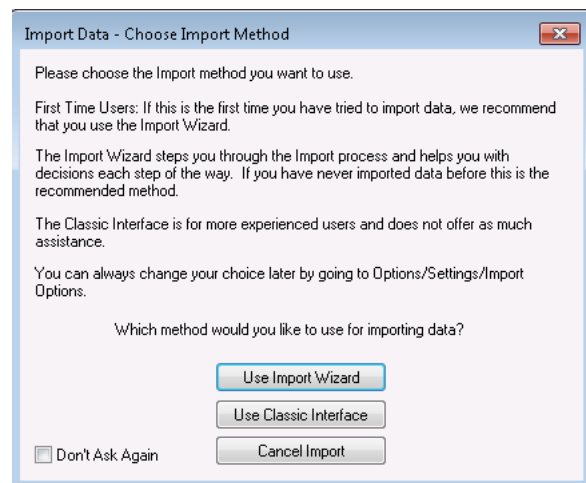
---

### 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 the import method.

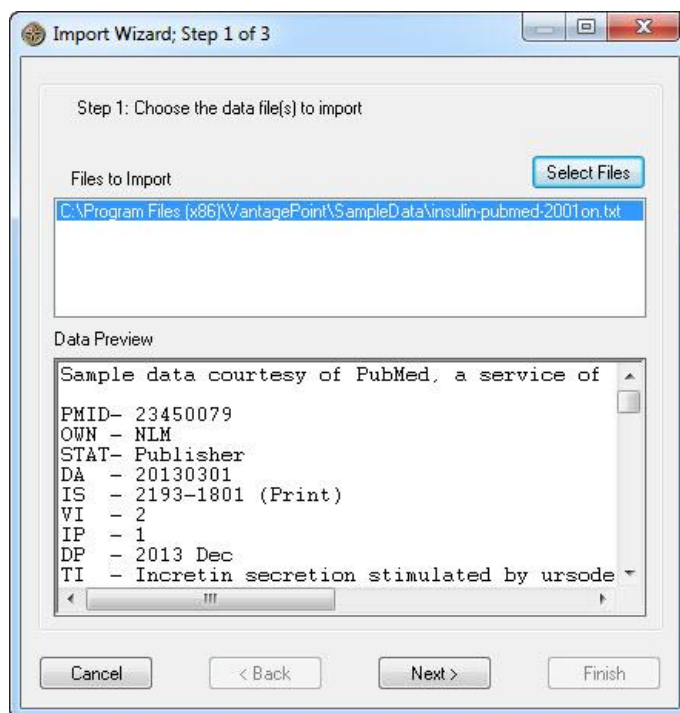
Select from one of the following for detailed instructions on either import method: [Classic Interface](#) or [Using Import Wizard](#).



## Importing a Raw Data file using Import Wizard

From the **Choose Import Method** dialog,

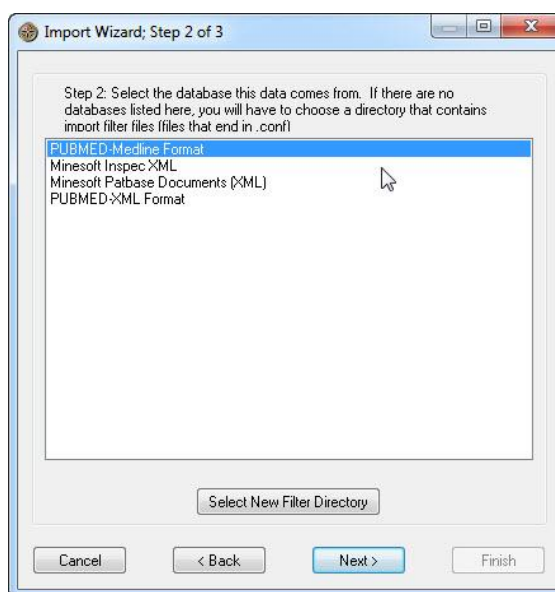
1. Click **Use Import Wizard**. You are presented with **Step 1** of the **Import Wizard**. Here you choose the raw data file (or files) to import. Use the **Select Files** button to locate the file(s). (Use Ctrl-Click or Shift-Click to select multiple files.)



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**.

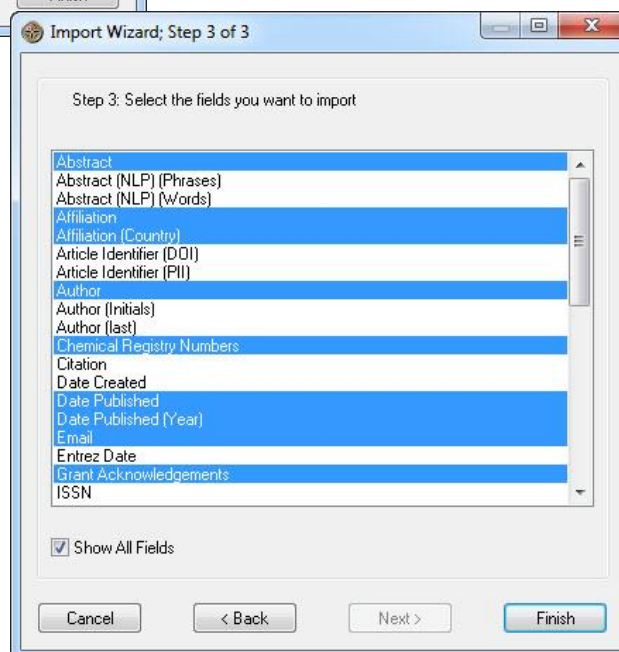


4. **Step 3** of the Import Wizard shows a list of fields to be imported. Initially, all primary fields are selected. To accept all, click **Finish**.

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



**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 (shown here). Click **Finish**.

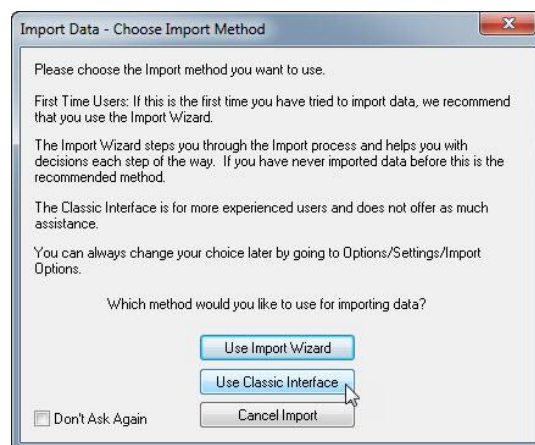


If your dataset is very large, it may take a few minutes to import. When it is finished, you will see a Summary View presenting an overview of the dataset, including total number of records, the date of the original search, and a list of fields with the total number of unique items in each field.

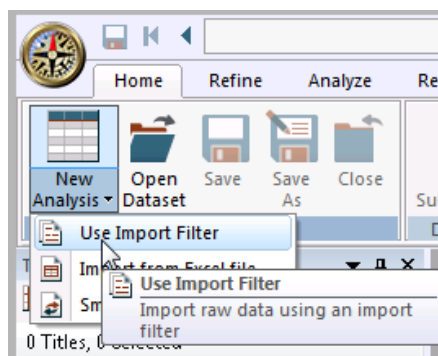


## Importing a Raw Data file using Classic Interface

1. From the **Choose Import Method** dialog box, click **Use Classic Interface**

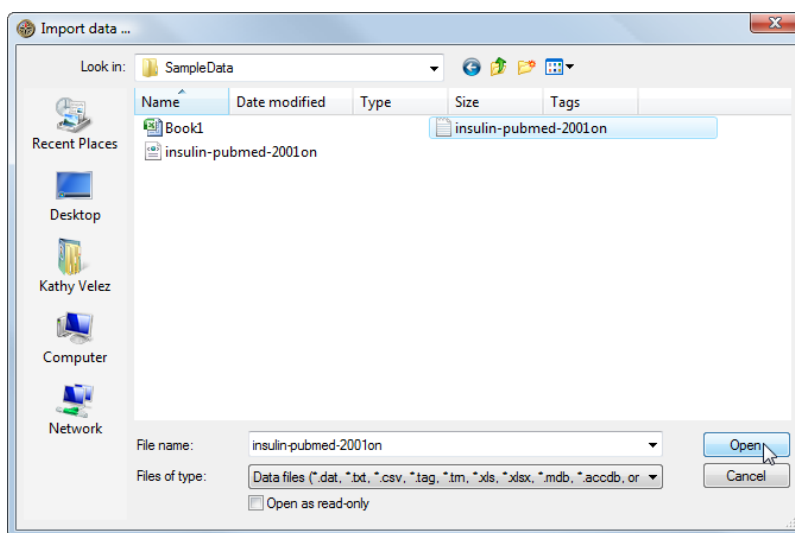


or From the Home Ribbon, select **New Analysis**, then **Use Import Filter**.



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**.

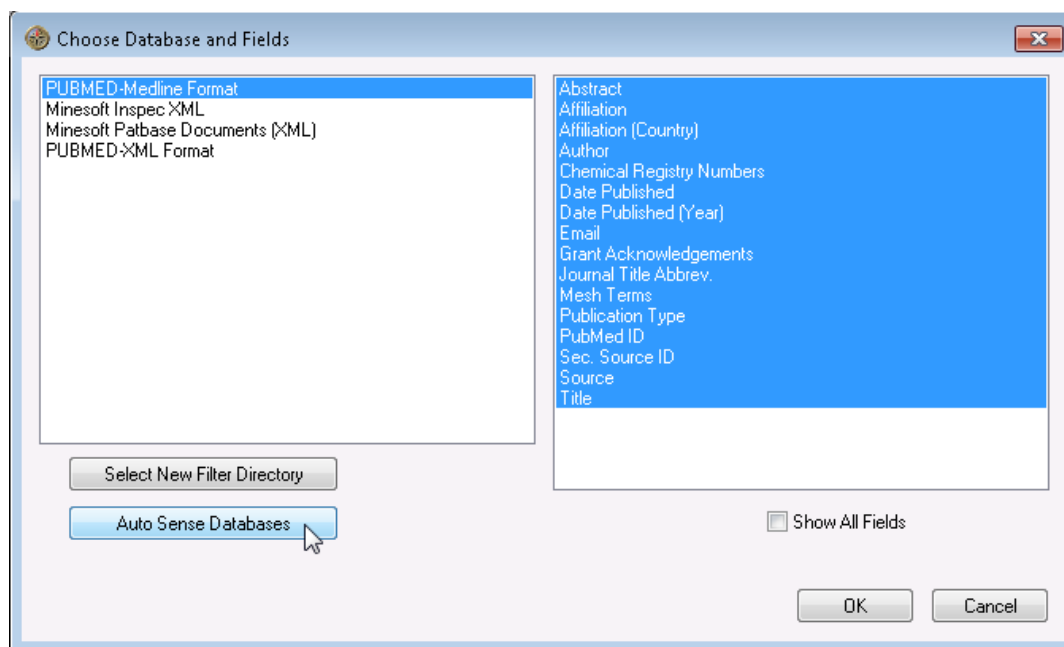


3. You should then see a **Choose Database and Fields** dialog box with a listing of your database import filters. The list of database import filters comes from \*.conf files located in your Import Filters folder. The database import filter contains information about the structure of the raw datasets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

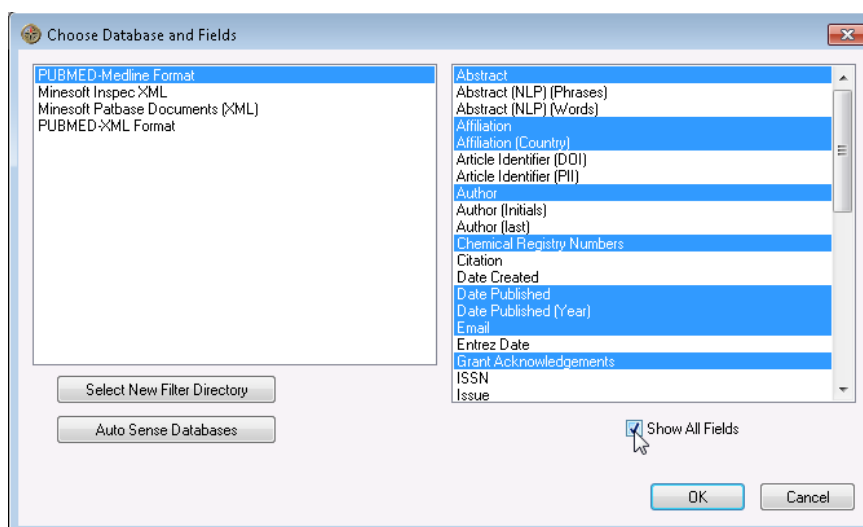
**Note:** Your list of databases may be different from those shown here.



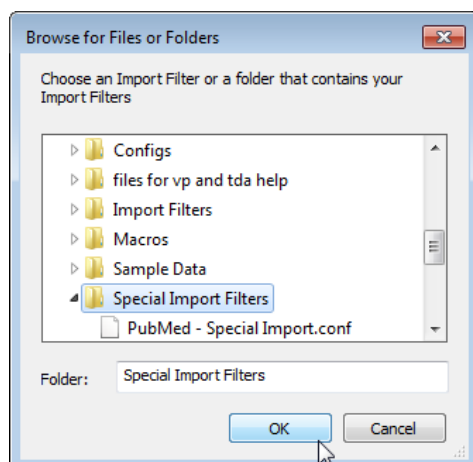
If your raw dataset comes from more than one database, you can manually select multiple databases in the left-hand window by clicking on one and then holding down the Ctrl key while clicking on other database names. Alternatively, you can click the **Auto Sense Databases** button to have VantagePoint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

4. 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.

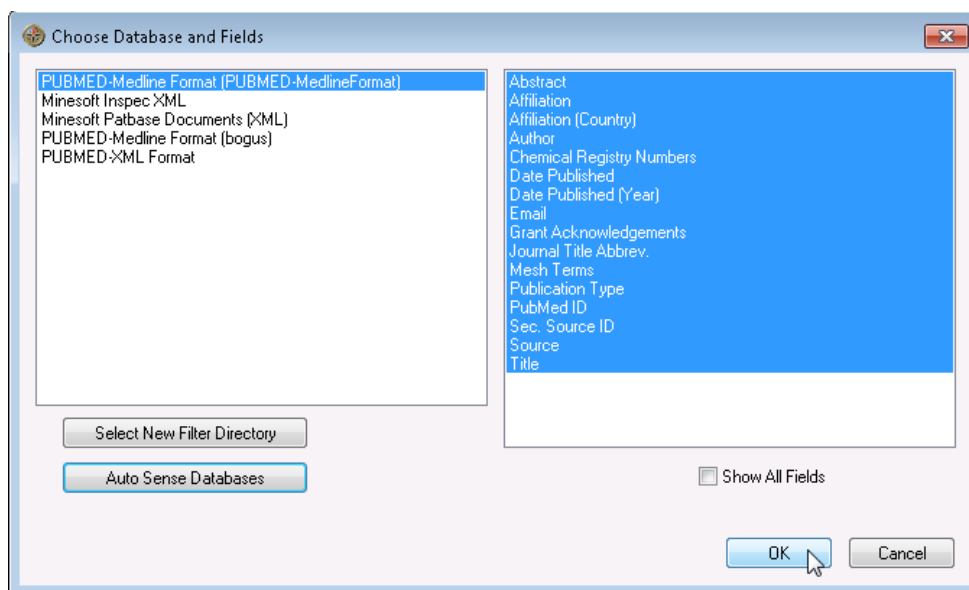
5. Some database import filters have some fields defined as "Secondary Fields" -- fields that are not normally imported at first. Check the "Show All Fields" checkbox to view these fields in the right-hand window, as shown here. You can then select fields from the entire list.



6. 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**.



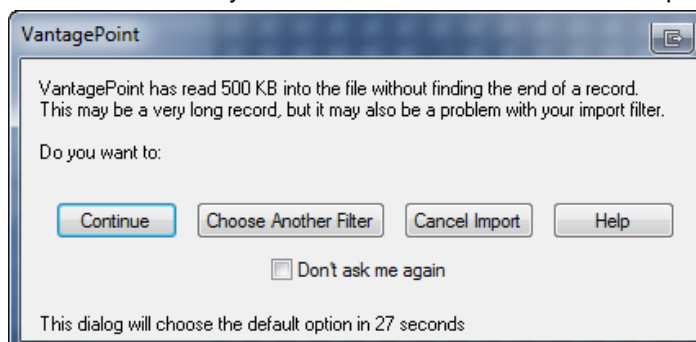
7. Click **OK** in the **Choose Database and Fields** dialog box to begin importing the data.



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.

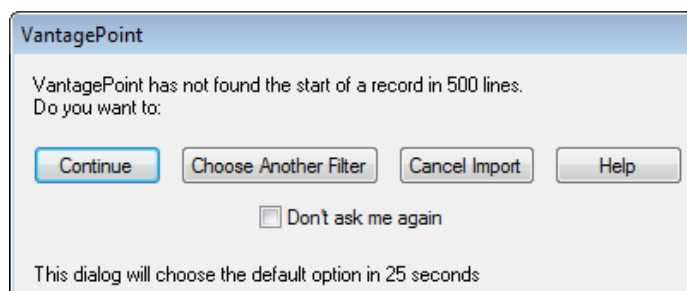
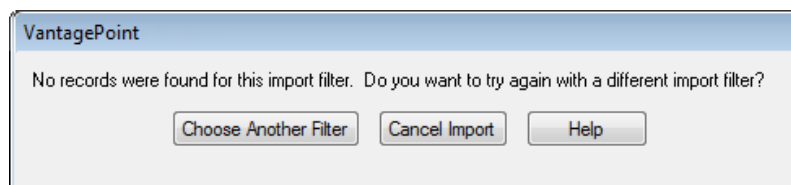
VantagePoint monitors the import process and notifies you of unusual situations. For example, if VantagePoint encounters a problem during import, you may see a warning (illustrated here).

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

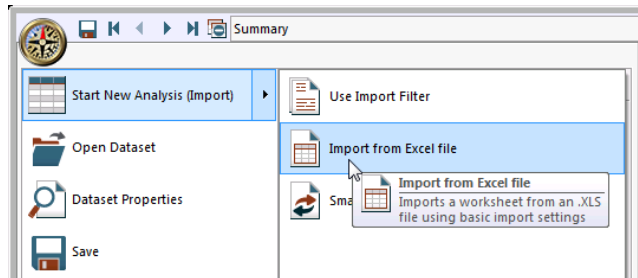
The **Help** option cancels the import and offers a link to contact Customer Support or to the VantagePoint download site, where you can choose another import filter.

## Import from Excel

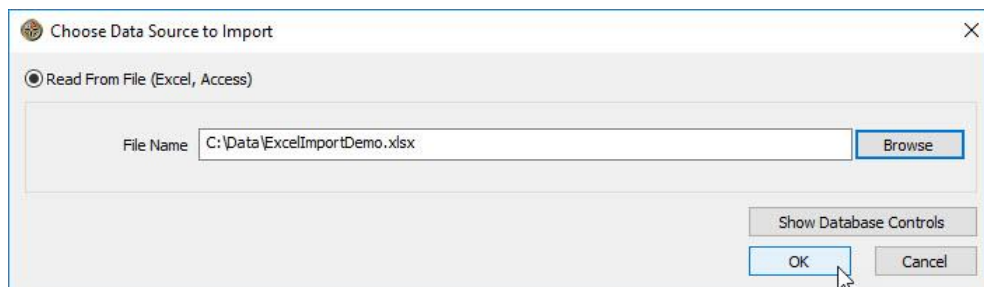
VantagePoint can import MS Excel files (and MS Access files). VantagePoint uses the first row of data as the field names.

To import a file from Excel:

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

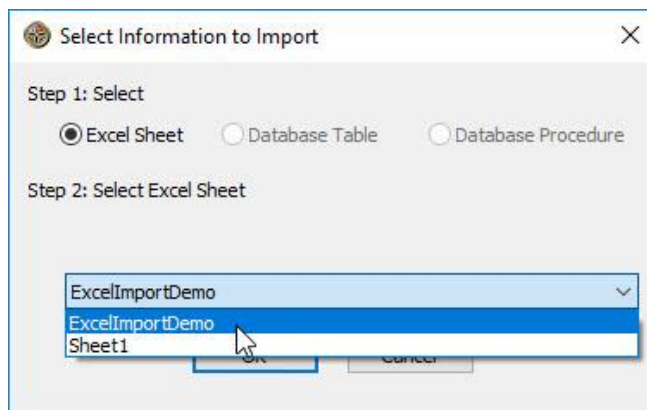


2. In the **Choose Data Source to Import** dialog box, click **Browse** to locate the database file you want to use. When the file is selected, it appears in the "File Name" field. Click **OK**. ("Show Database Controls" button is for other databases such as SQL Server and Oracle - at this time this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

Field Type: 

NLP

Divide Text

NLP

Single Value

Field Preview

```

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

```

< Prev Record | 1 | Next Record >

☐ Save Import Filter to File

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.

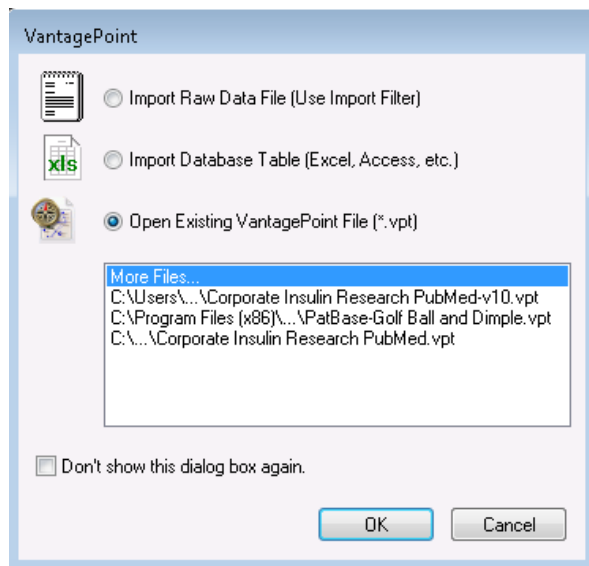
Finally, click **Import** to begin importing the data.

5. When import is complete, a Summary View is presented.

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

There are four methods for opening a VPT file:

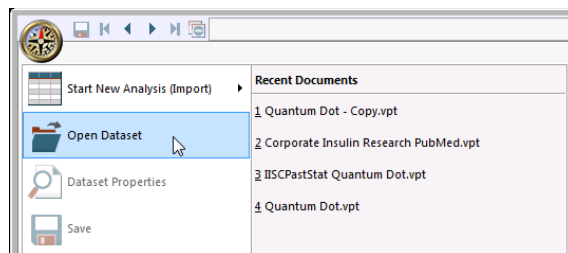
1.) Using the Startup dialog box (lists Recent Documents)



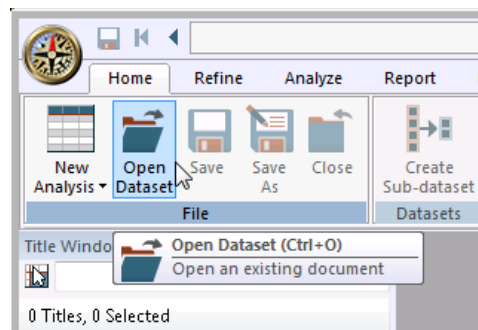
The default is **Open Existing VantagePoint File**. You then select the file to be opened. For your convenience, the window displays recently used files which can be opened by double-clicking on the file name or by selecting the file and clicking **OK**. If the file you want to use is not displayed, 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.) Use the **App Button**



3.) Use the **Home Ribbon**

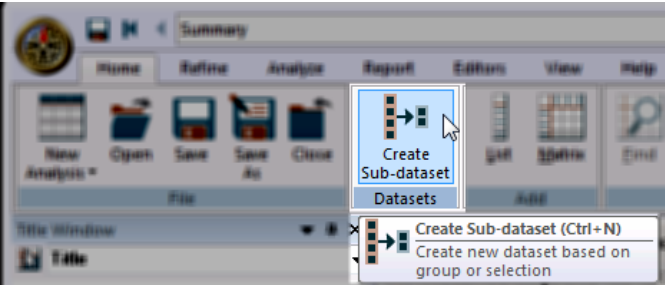


4.) or press **Ctrl+O** on the keyboard.

In the **Open** dialog box select the drive, folder, or network location that contains the \*.vpt file you want.

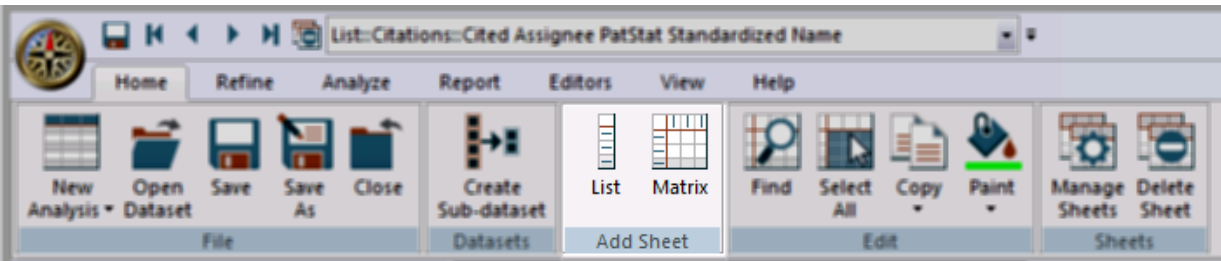
Double-click on the file you want to open.

Datasets



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

Add Sheet



List

	# Records	# Instances	Assignee: PatStat Standardized	Top 15	Corporate	Government	Academic	Hospital	People
1	165	165	FUJITSU	<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	149	149	CHINESE ACADEMY OF SCIENCES	<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	97	99	SAMSUNG ELECTRONICS COMPANY	<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	51	51	TOSHIBA CORPORATION	<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	45	45	JAPAN SCIENCE AND TECHNOLOGY AGE	<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	41	41	SHANGHAI JIAO TONG UNIVERSITY	<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	38	38	BOE TECHNOLOGY GROUP COMPANY	<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	38	38	ITRI (INDUSTRIAL TECHNOLOGY RESEAR	<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	37	37	SEOUL NATIONAL UNIVERSITY	<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	34	34	WUHAN UNIVERSITY	<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	32	32	ETRI (ELECTRONICS AND TELECOMMUNIC	<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	31	31	KIMM (KOREA INSTITUTE OF MACHINERY	<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	31	32	SONY CORPORATION	<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	28	28	UNIVERSITY OF TOKYO	<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	26	26	KIST (KOREA INSTITUTE OF SCIENCE AND	<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	25	25	LG INNOTEK COMPANY	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

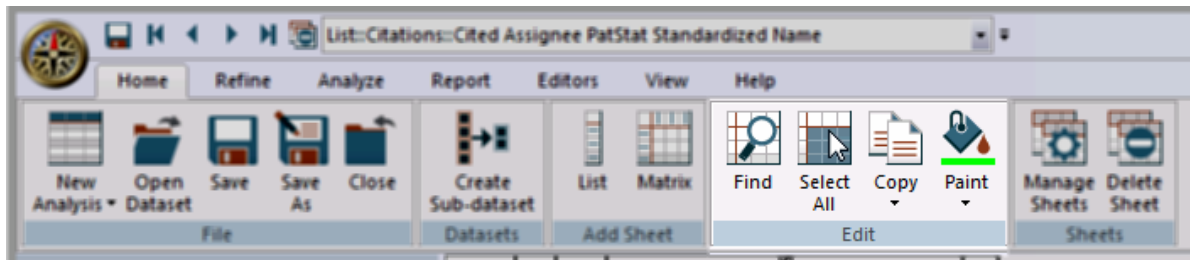
Matrix

Reset	Assignee: PatStat Standardized Name	1	2	3	4	5
	# Records	1780	556	494	421	409
	Show Values >= 1 and <= 135					
	Cooccurrence # of Records					
IPC Subclass	# Records	H01L	C08K	G01N	B82Y	H01S
1	185	FUJITSU	139		23	94
2	164	CHINESE ACADEMY OF SCIENCES	66	33	24	14
3	114	SAMSUNG ELECTRONICS COMPANY	78	22	6	15
4	57	BOE TECHNOLOGY GROUP COMPANY	23	8		5
5	56	TOSHIBA CORPORATION	39		1	7
6	52	SHANGHAI JIAO TONG UNIVERSITY	2	25	8	11
7	48	JAPAN SCIENCE AND TECHNOLOGY AGE	27	1		2
8	44	ITRI (INDUSTRIAL TECHNOLOGY RESEARCH	36	2	1	6
9	41	SEOUL NATIONAL UNIVERSITY	26	8	1	7
10	39	ETRI (ELECTRONICS AND TELECOMMUNICATIONS	31			3
11	39	SONY CORPORATION	37		2	4
12	37	WUHAN UNIVERSITY		16	17	3
13	36	NEC CORPORATION	27			21
14	32	TOSHIBA RESEARCH EUROPE	25			2
15	31	KIMM (KOREA INSTITUTE OF MACHINERY	10	12		4
16	30	UNIVERSITY OF TOKYO	19			8
17	28	JILIN UNIVERSITY	7	15	2	5
18	26	KIST (KOREA INSTITUTE OF SCIENCE AND	18	1	4	3

For details, see the [List View](#) and [Matrix](#) sections under [Analyze](#) Ribbon description.

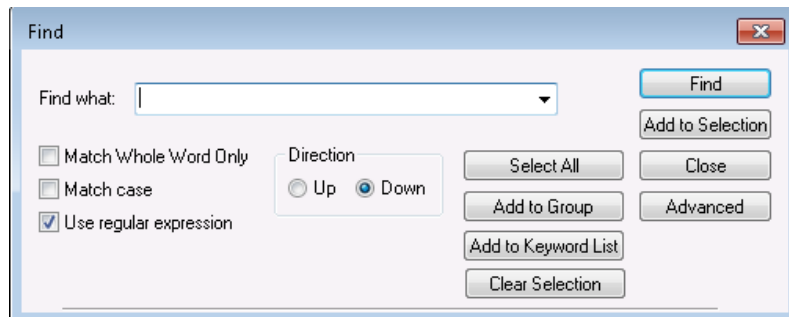


## Edit



## Find

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

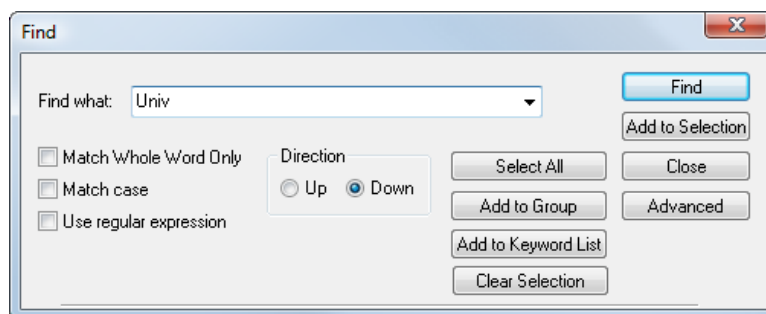


2. In the **Find** dialog box, type in the string of characters you want to find.
3. Click **Find** to search for the string. Once the string is found, click **Find** again to find the next occurrence. Click **Select All** to have VantagePoint highlight and select all records containing the string.

The next topic contains an expanded explanation of the choices in the dialog box.

## 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.)

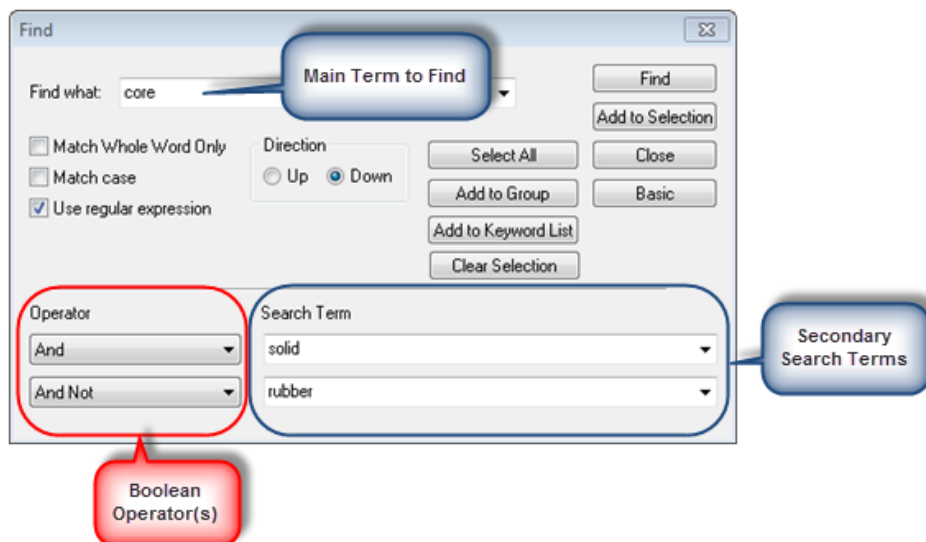
**Clear Selection:** After "Select All" is performed, this de-selects those found.

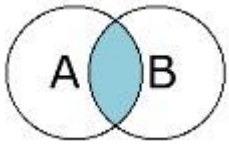
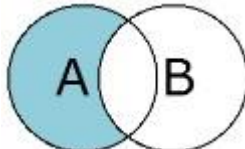
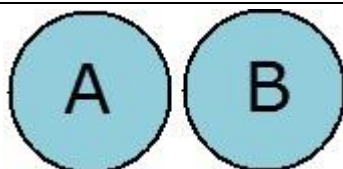
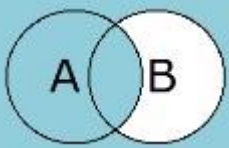
**Find:** Click this button to simply find the character string

**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.



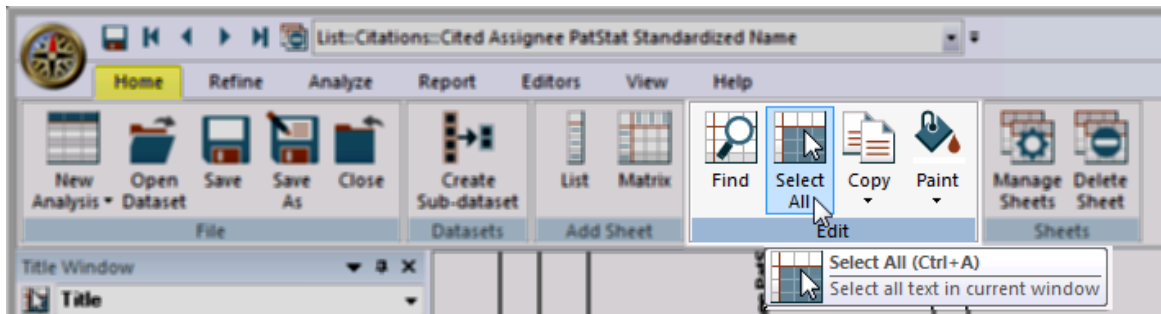
Operator	Description	Diagram
Adjacent	The Secondary term must appear next to the Main term, but the order of the terms is unimportant.	
And	The Boolean “And” – matches when the Main (A) and Secondary terms (B) appear together.	
And Not	Matches the Main term (A) when it appears in the absence of the Secondary 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 Near3 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



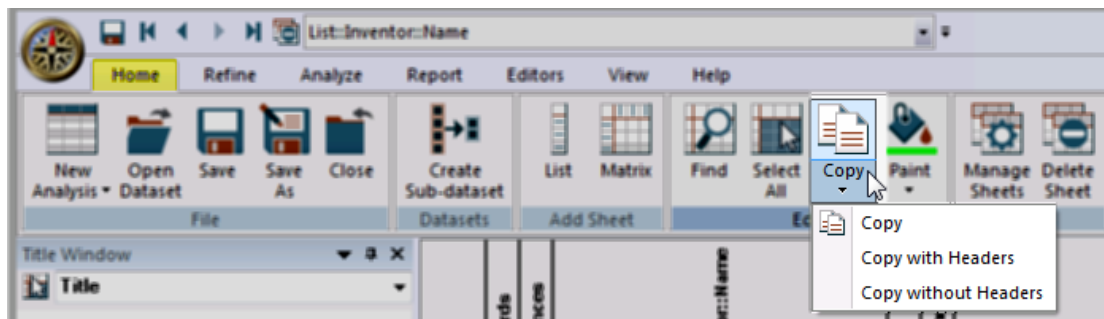
**Select All** is enabled when viewing a List or Matrix. Selects all text in the current window for copying/pasting into another application.

---

## 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**.

	# Records	# Instances	Inventor::Name	top 10	10 or more
1	26	26	OTSU GENICHI		
2	25	25	Choi, Jung Bum		
3	22	22	KAWAZOE TADASHI		
4	18	18	ARAKAWA YASUHIKO		
5	18	18	JEONG, SO HEE		
6	17	17	WANG ZHANGUO		
7	16	16	NISHINO HIROSHI		
8	16	16	Shields, Andrew James		
9	15	15	NAKADA YOSHIAKI		
10	14	14	UCHIYAMA YASUHIITO		
11	13	13	Bawendi, Moungi G.		
12	13	13	UGAJIN RYUICHI		
13	12	12	EBE KOJI		
14	12	12	MATSUKURA YUSUKE		
15	12	12	PANG DAMWEN		
16	12	12	XU CHUANLAI		
17	12	12	YAO QI		
18	11	11	CHEN WEI		
19	11	11	HAN, CHANG SOO		

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.

	A	B	C	D	E	F	G	H	I
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 dialog (accessed via



the App button):

Options

Settings | Grid Colors | Sheet Tabs | Hotkey

Startup

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

Import Options Import Wizard

Confirmations

Confirm When Deleting
 

☒ Lists
 ☒ Matrices

☒ Maps
 ☒ Browsers

☒ Confirm When Renaming in Compound List

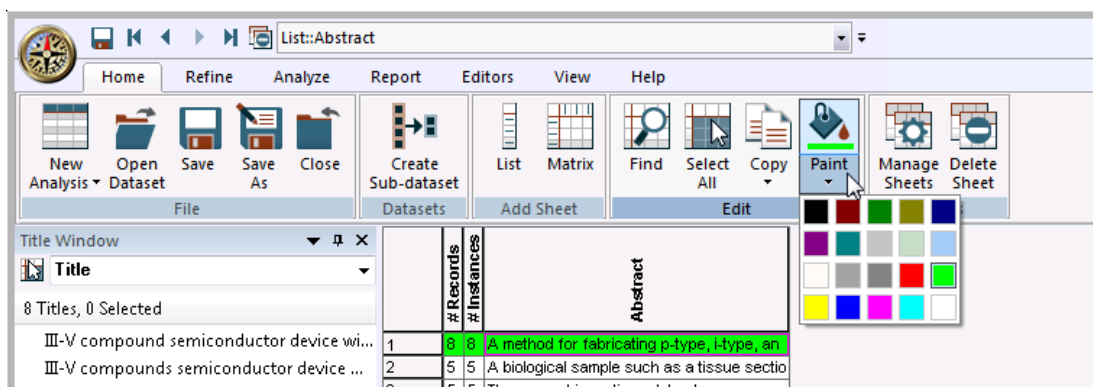
☒ Include Record/Instance Columns when Copying Lists
 ☒ Check if VPT file can be compacted when opening
 Threshold:  MB

Reset To Defaults...

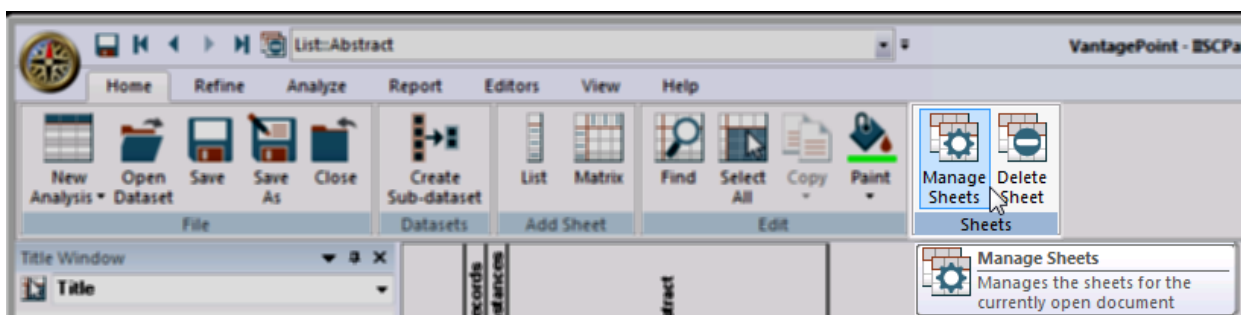
OK Cancel Help

## Paint

Use the Paint feature to highlight items in a List view or in a Matrix. (See "[Painting cells in a matrix](#)")



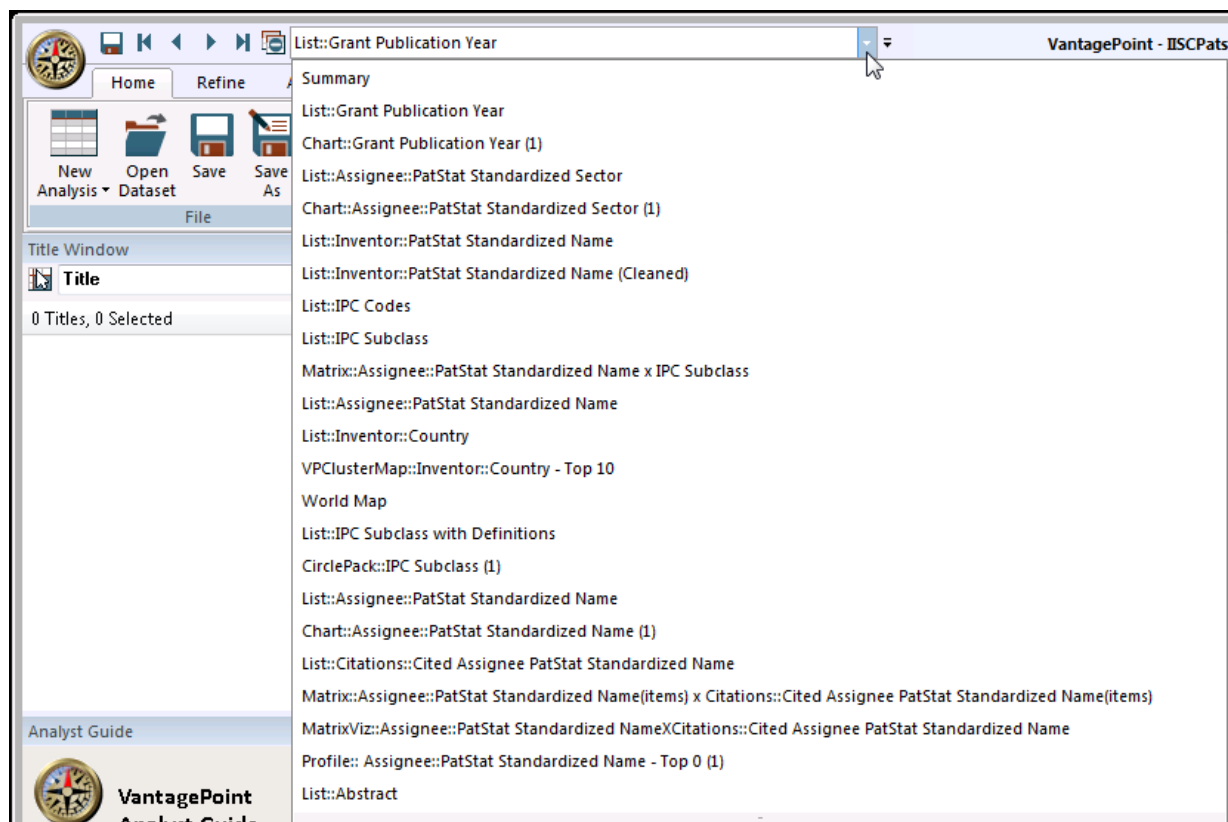
## Sheets



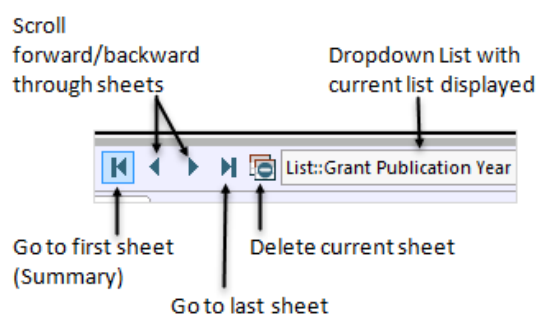
Manage Sheets (activate, move, rename) and Delete Sheets. Additional details are found in the following subtopics.

## Sheet Management

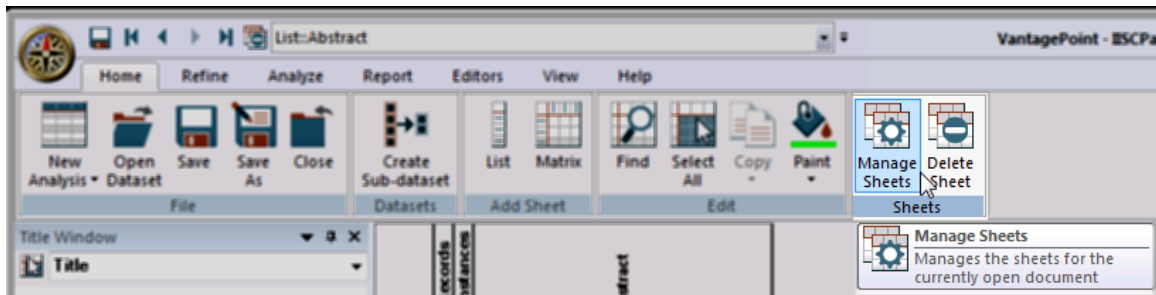
The Sheet Navigation Toolbar helps you quickly navigate the sheets within a VantagePoint file. The dropdown box lists all the sheet names in the current VantagePoint file. When you select a sheet from the dropdown box, that sheet is presented.



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

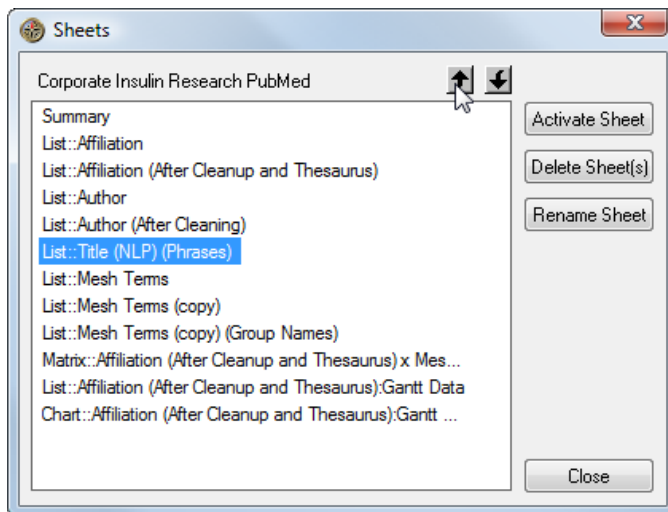


The **Sheets** Dialog is used to rename sheets and to rearrange the order of the sheets. The Sheets Dialog is accessed by selecting the **Manage Sheets** icon on the Home ribbon:



Click on a sheet name in the list to enable the up/down arrows to the right of the file name. Use the arrows to rearrange the order of the sheets.

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

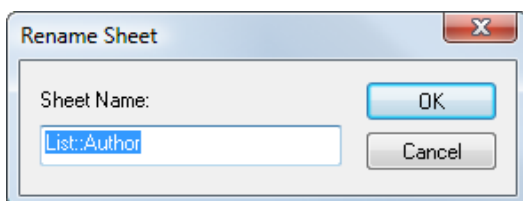


**Activate Sheet:** Activate a sheet by either double-clicking on the sheet name or by clicking on the sheet name and then clicking **Activate Sheet**.

**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. \*\*\*

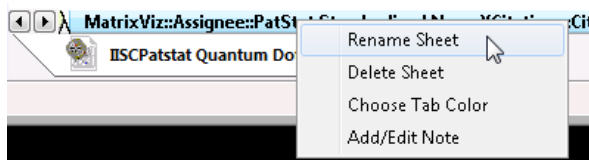
**Rename Sheet:** Select the sheet to be renamed and click **Rename Sheet**. The **Rename Sheet** dialog appears where you can enter a new name. Click **OK** to complete. See the next section, "Renaming a Sheet" for rules pertaining to Sheet names.



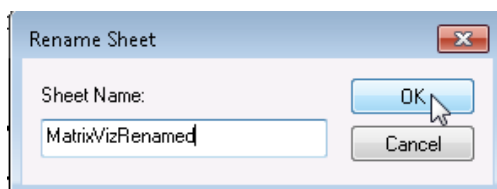


## ***Renaming a Sheet***

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



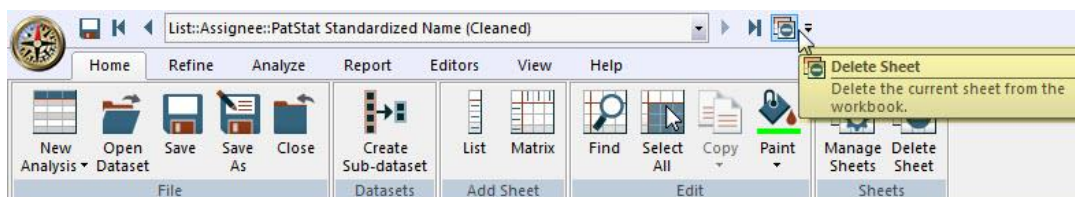
A text edit box appears where you can enter a new name for the sheet:



**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.

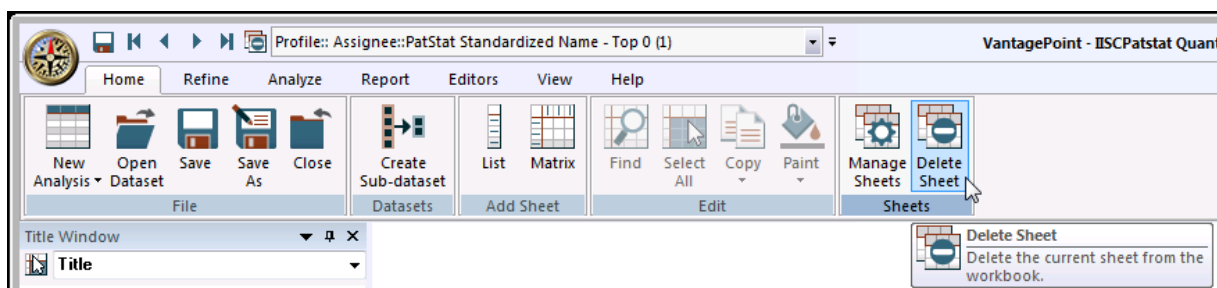
## ***Deleting the Current Sheet***

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



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

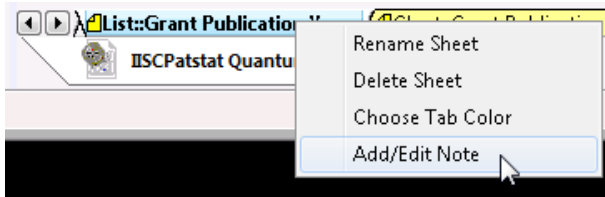
Or, click the **Delete Sheet** icon from the Home Ribbon.



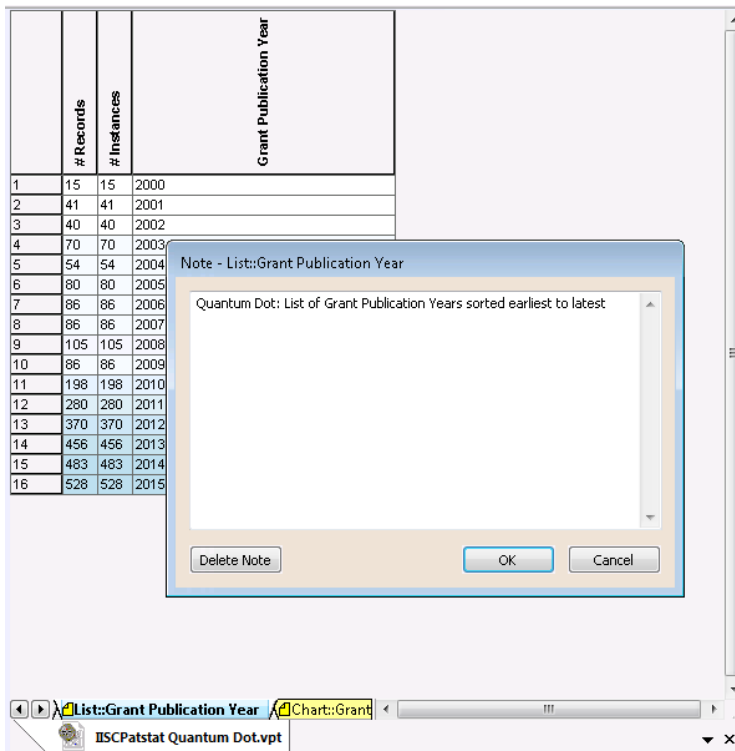
**Note:** Unless you have changed the [Confirm When Deleting](#) setting in the **Options** dialog, VantagePoint will prompt you for confirmation before the sheet is deleted.

## Add Note

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

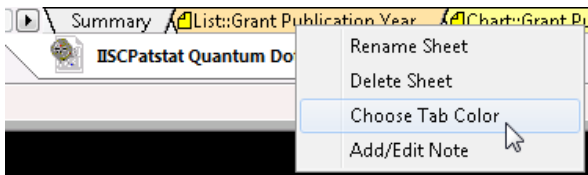


Here, the existing Note is displayed with the List:



## 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](#)

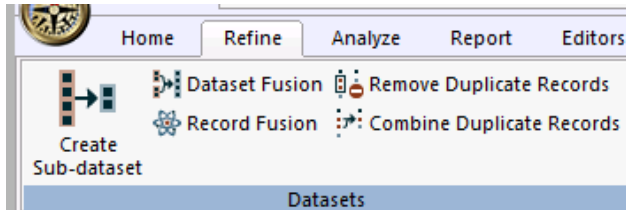
---

## REFINE

---

The Refine ribbon has many tools that help you work with Datasets, [Fields](#), and [Groups](#).

### Datasets



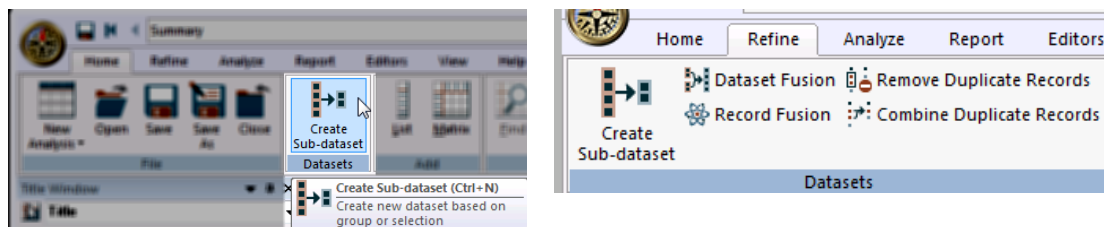
The sub-topics in this section describe these functions for working with datasets:

- 1) [Create Sub-dataset](#)
- 2) [Dataset Fusion](#) (Merge two VantagePoint files)
- 3) [Record Fusion](#)
- 4) [Remove Duplicate Records](#)
- 5) [Combine Duplicate Records](#)

### 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).

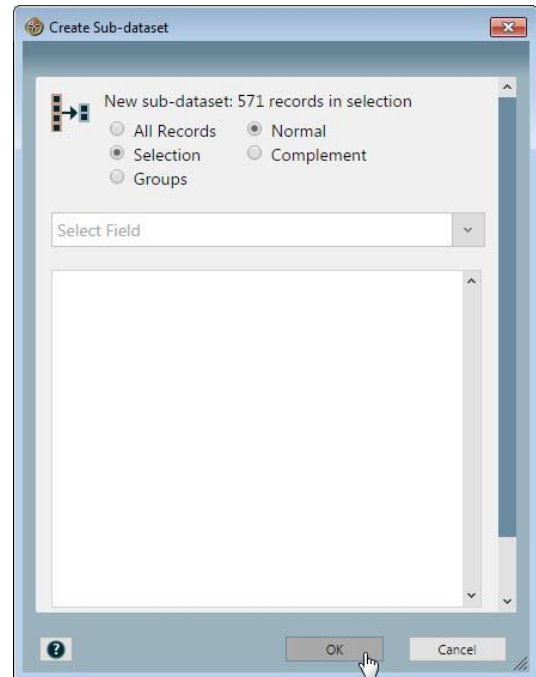
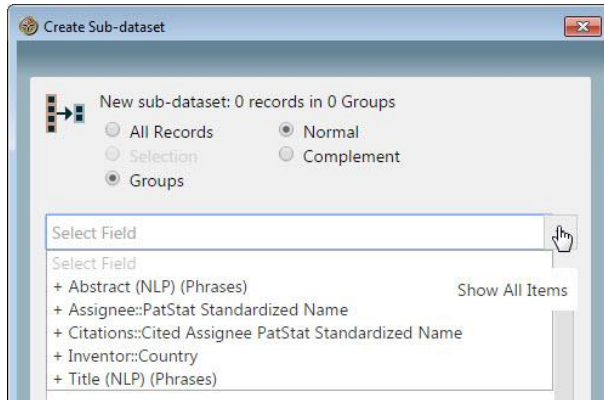
1. Select the Sheet to be used to create the new dataset. If a group is defined for extraction, continue to step 2. If no group is defined, create a selection by highlighting the selection (rows, columns, or cells) to be used to create the new dataset. If the list items are consecutive, you can "click 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**



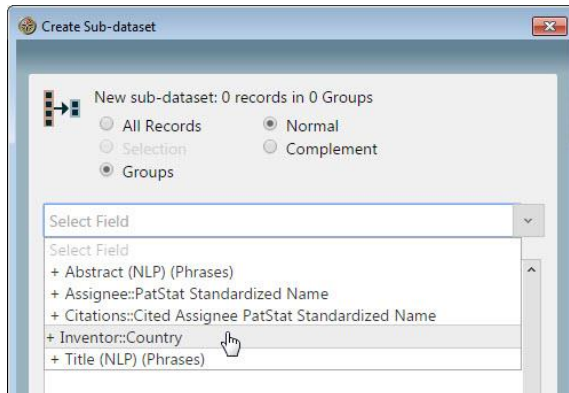
or press **Ctrl+N** on the keyboard.

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.

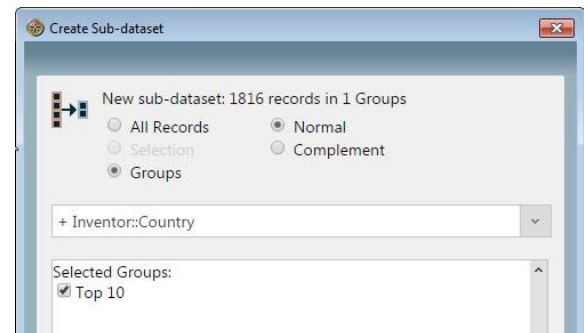
The dropdown list will display the fields containing Groups (indicated by the “+” sign).



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

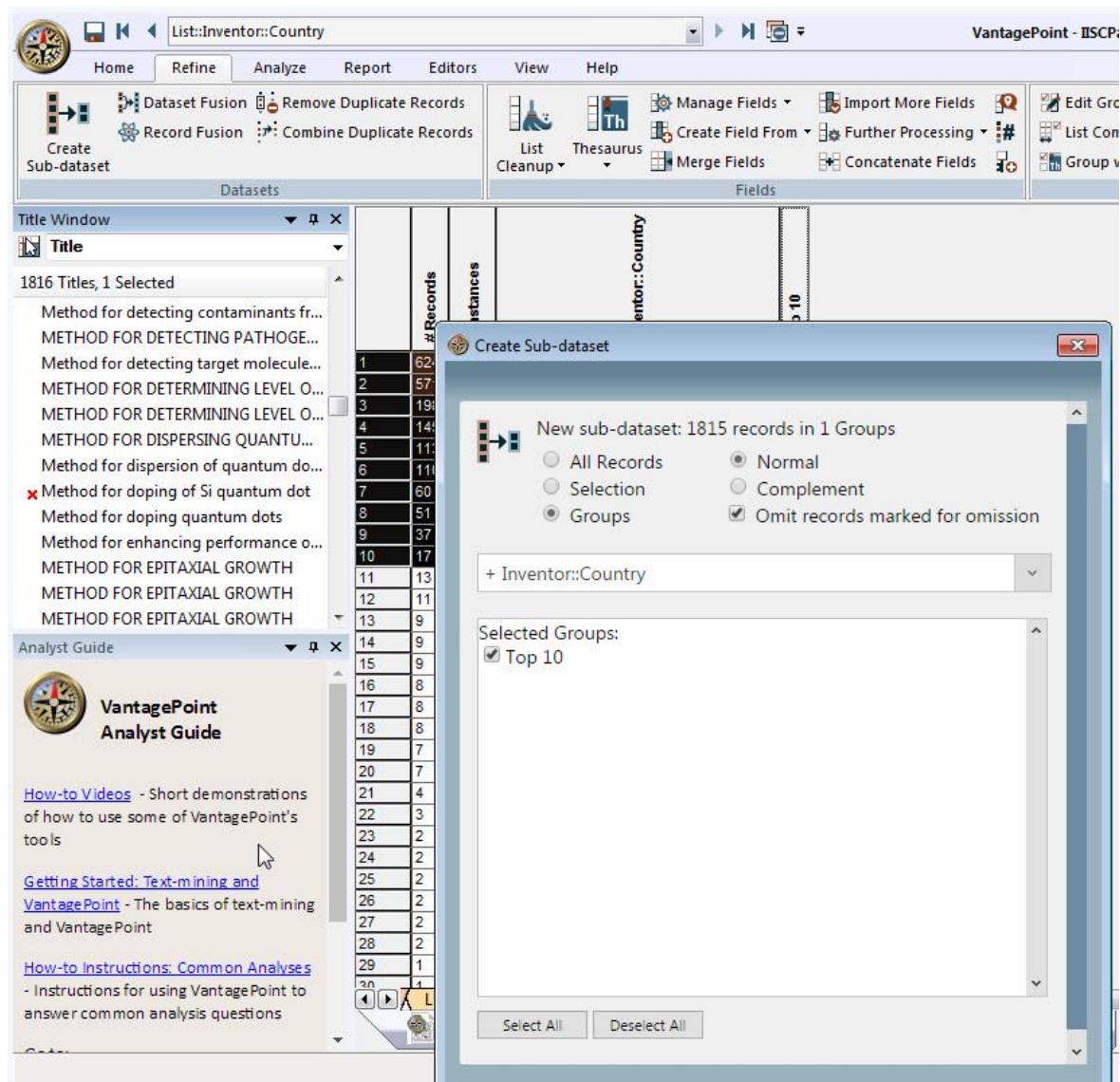


Next, the user selects the Group(s) of records to be included in the new dataset. (If a Field had more than one Group defined, all groups would be displayed.)



- 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. 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.



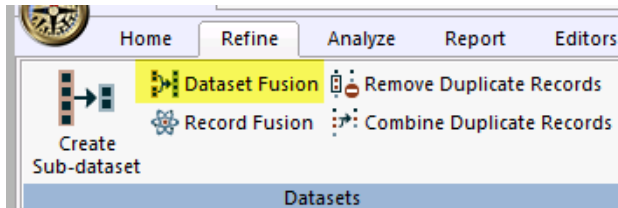
9) Click **OK** to begin the extraction process.

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.

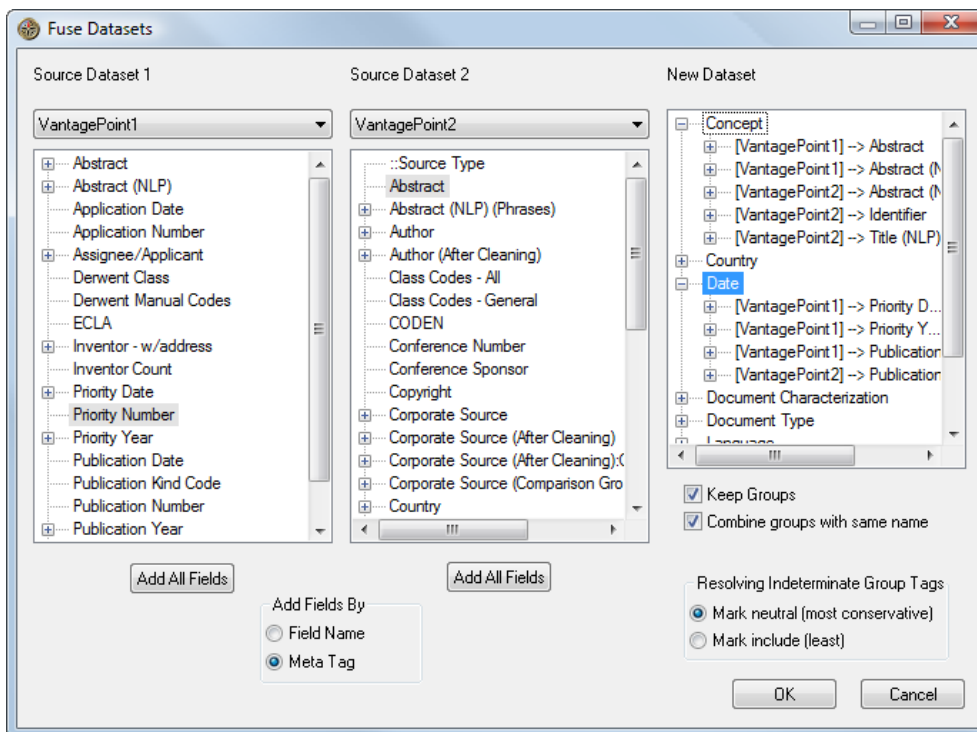
## Dataset Fusion

One of the principal reasons for meta tags is to facilitate the fusion of data from dissimilar data sources.

From the Refine ribbon, Select **Dataset Fusion**. (The datasets you want to fuse must already be open).



The following dialog box appears:



Select the Source Datasets using the drop-down lists above the left and center windows. The available fields are shown in the main window. The fields that have meta tags appear with a "+" beside the field name. Click the "+" to expand the item to show the meta tag name.

Your new dataset is "built" in the right-hand window in one of three ways:

1. Click and drag a field from the Source Dataset windows to the New Dataset window.
2. Right-click on a field name in one of the Source windows, and from the pop-up menu, select "Add Field by name" or "Add Field by Meta Tags" as desired.
3. Click **Add All Fields** under the Source Dataset windows. This adds all the fields from the Source Dataset into the New Dataset.

These operations are affected by the state of the "Add Fields By" radio buttons. If "Field Name" is selected, the field(s) will be added to the new dataset with the same name as in the Source Dataset.

If "Meta Tag" is selected, the field(s) will be added with the name of the meta tag as the field name. In the illustration above, the "Abstract [NLP][Phrases]", "Descriptors [Cleaned]", and "Identifier" fields from the first dataset and the "Abstract [NLP][Phrases]" and "Title [NLP][Phrases]" from the second dataset will be merged into a field named "Concept" (a meta tag name) in the new dataset.

Fields may be combined by either Name or Meta tag (e.g, field name "Authors" and meta tag "Concept") and the new field can be renamed by the user (right-click on the field name in the New Dataset window and **Rename Item**). Note that the "Concept" field in the New Dataset will consist of the combination of multiple fields from each of the Source Datasets.

To remove a field from the New Dataset window, right-click on the field name and **Delete Item**.

**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 with data fusion.

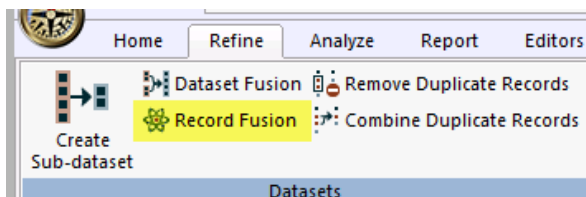
**Note:** If any of the records in your files are tagged "Omit from new datasets" (see [Record View](#)), you will see a confirmation question, "This action involves records that have been marked for omission. Do you want to omit these records?" If you answer Yes, then the tagged records will be omitted.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

---

## **Record Fusion**

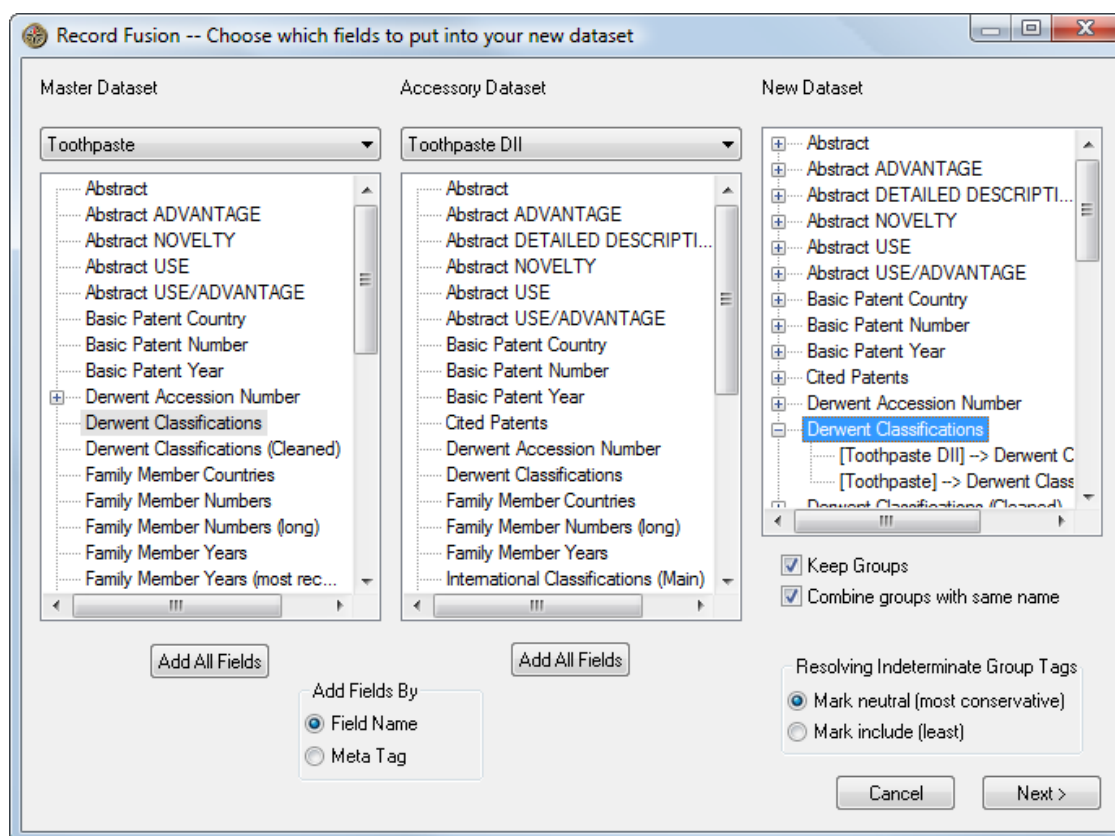
As the name implies, the Record Fusion operation takes records from two different datasets and combines them into a third dataset based on a user-defined association. One of the original datasets is designated as the "Master" and the other as "Accessory". The resulting dataset will have the same number 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.

From the Refine ribbon, Select **Record Fusion**.





The following dialog box appears:



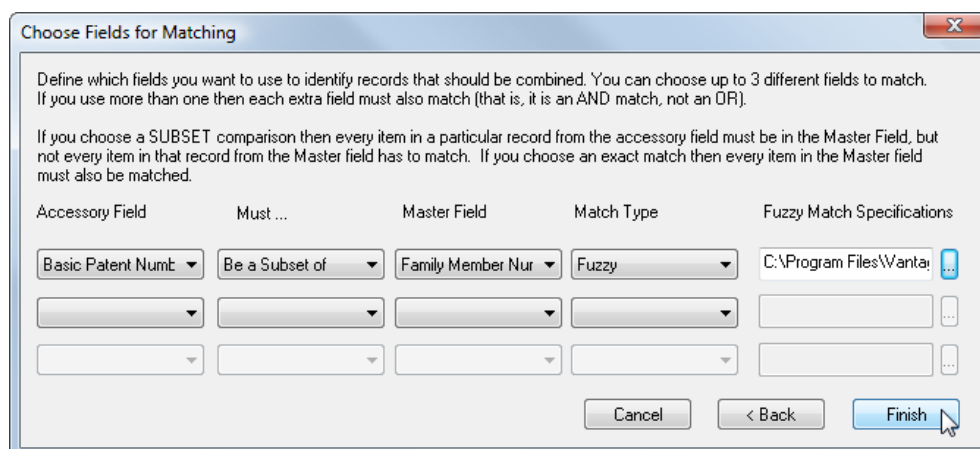
The **Record Fusion** dialog box is displayed. In this first step of the wizard, you select the Master dataset in the left-hand window, select the Accessory dataset in the middle window, and add the desired fields for the new dataset in the right-hand window.

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

**Accessory Dataset:** The “resource” records that you want to merge into the records in the Master Dataset.

All of the user interaction follows the same conventions as [Dataset Fusion](#).

Click **Next**.





The second step of the wizard specifies how to match a record in the accessory dataset to a record in the master dataset. The match is determined by “string” or “fuzzy” match between data in each record.

#### Must...

**Be a Subset of:** The field in the accessory record must match a subset of the field in the master record.

**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”.

#### Match Type

**Fuzzy:** Specifies a fuzzy match between items.

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

Click **Finish**.

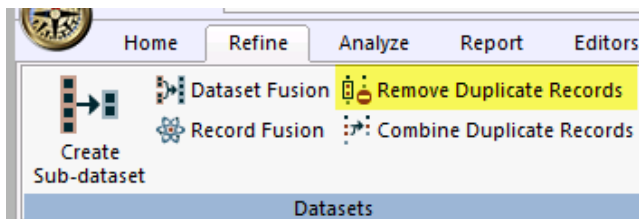
When the operation is finished, a summary is presented.

Notice that accessory records that do not “find a home” with a master record are discarded.

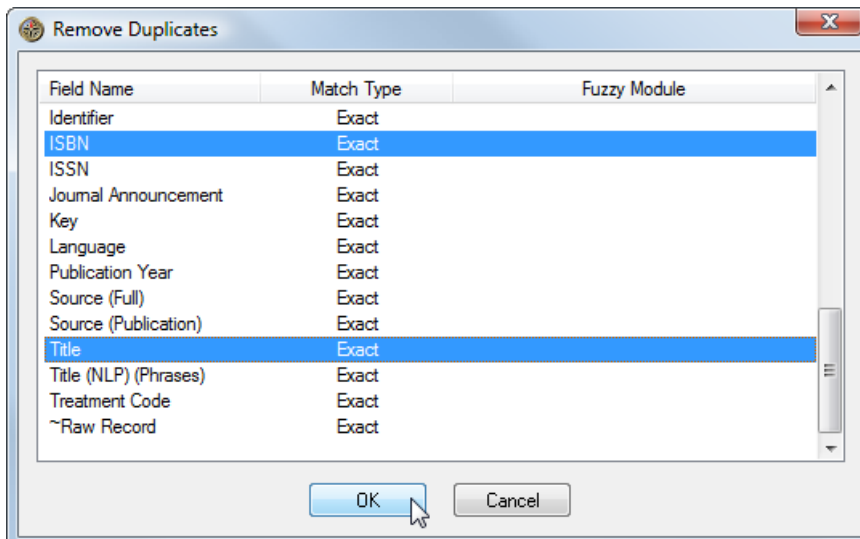
---

## Remove duplicate records

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



The following dialog box will appear:



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 "Fuzzy Module". You may change the fuzzy module to use by double-clicking on the file name under "Match Type."

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.

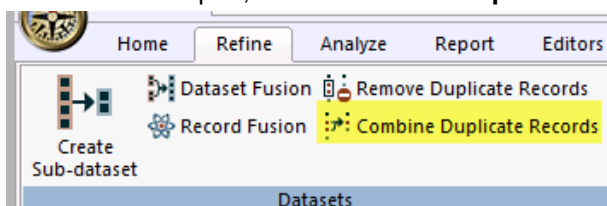
**Note:** If any of the records in your file are tagged "Omit from new datasets" (see [Record View](#)), you will see a confirmation question, "This action involves records that have been marked for omission. Do you want to omit these records?" If you answer **Yes**, then the tagged records will be omitted.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

---

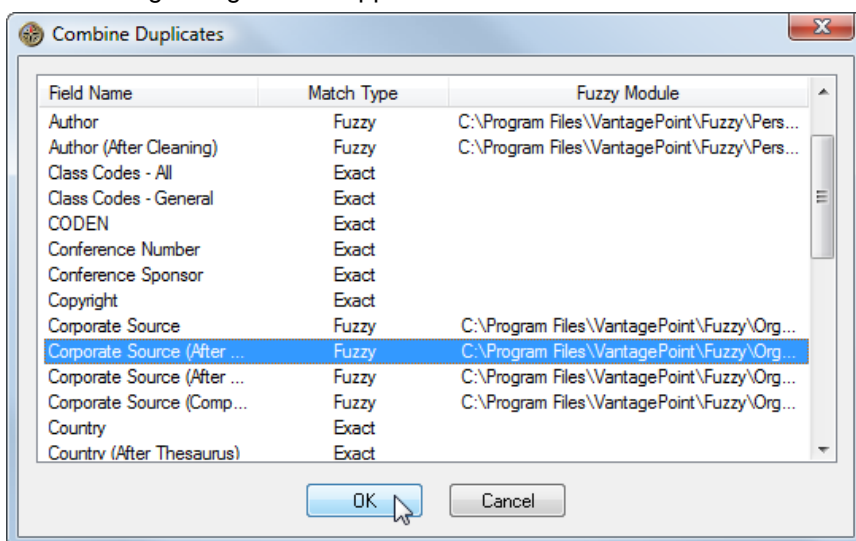
## **Combine duplicate records**

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:



As explained in [Remove Duplicate Records](#), you should specify the type of match you desire for each field ("Exact" or "Fuzzy").

Finally you may select multiple fields to use in the comparison by multi-selecting field names (click,

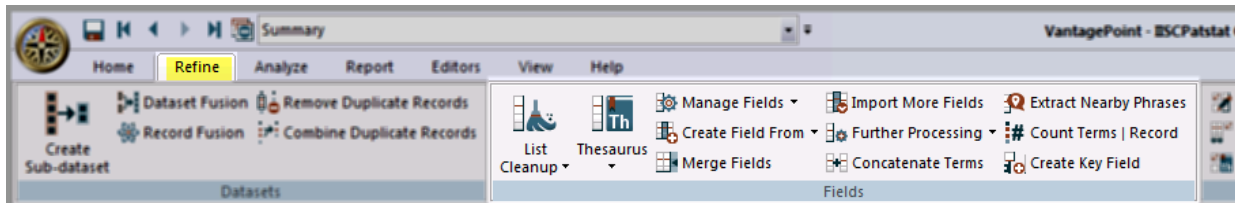
shift-click, and/or ctrl-click). Click **OK** to begin the creation of a new dataset with the duplicate records combined.

**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

Tools for working with Fields include:



**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.

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

**Create Field From** - Create Field from Group Names or Create Field From Group Items.

**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 Terms** - Concatenate two fields in a record into a new field. The second field can have multiple values per record. See the Concatenate Terms 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.

Additional details for each function are found in the individual topics.

---

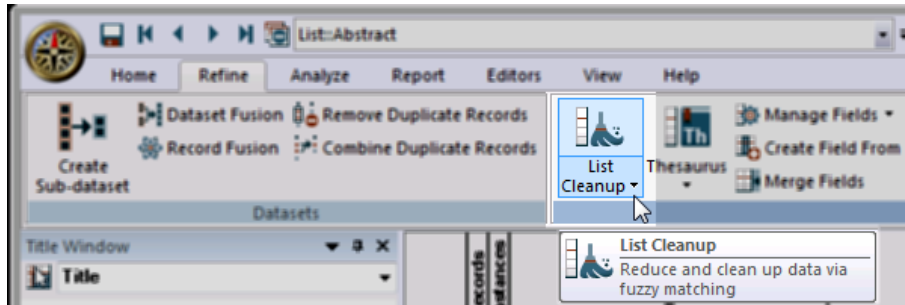
### List Cleanup (Cleaning a List)

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.

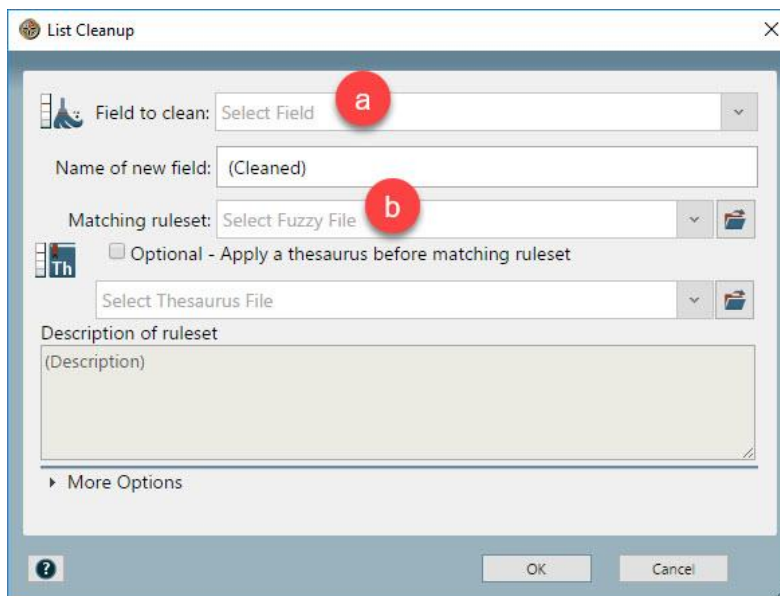
VantagePoint cleans a list by attempting to identify list items that may be equivalent. For example, the

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.



2. In the **List Cleanup** dialog, 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 display 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, a recommended one will automatically be pre-selected. 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 suggests a name for the new field that will be created. You can type in another name if you wish.

The screenshot shows the 'List Cleanup' dialog box with the following configuration:

- Field to clean:** Inventor::Name
- Name of new field:** Inventor::Name (1) (Cleaned) (Callout 3)
- Matching ruleset:** Person Names
- Optional - Apply a thesaurus before matching ruleset:** ☒ (Callout 4)
- Thesaurus:** My Inventor Name Cleanup Thesaurus
- Description of ruleset:** PERSON NAME CLEANUP. Matches initials, and requires 100% match between names based on the number of parts of the name. For example, John Michael Smith will match J. M. Smith and J. Michael Smith, but not John Smith. Result uses the name with the most letters (longest name).
- More Options:**
  - Set cleanup level:** Faster (Callout 5)
  - Show confirmation tree:** ☒
  - Verify matches with another field:** ☐
    - Verification Field:** Select Field
    - Use matching ruleset on verification field:** ☐ Select Fuzzy File

Buttons at the bottom: ? (Help), OK, Cancel.

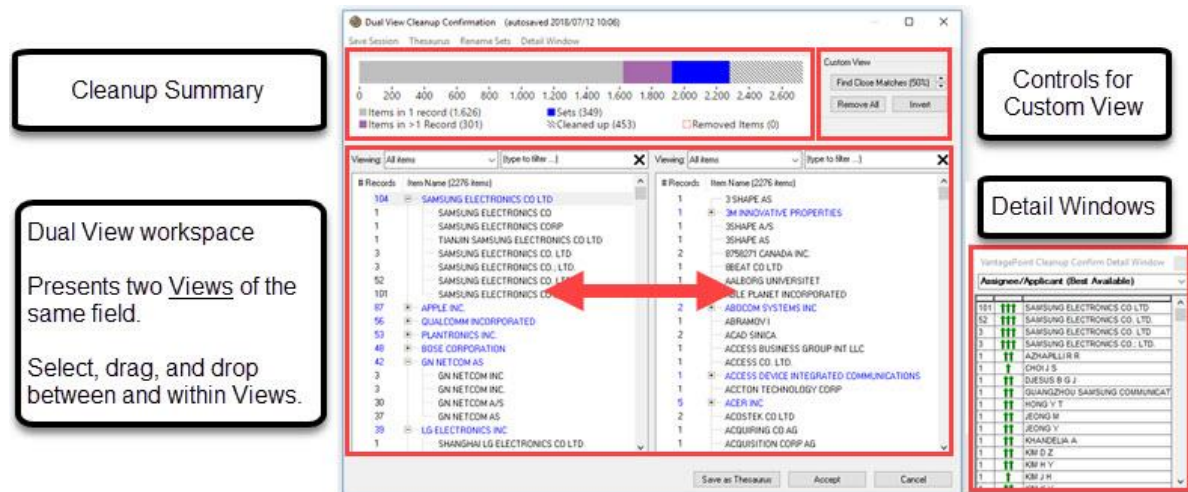
4. You have the option to apply a thesaurus before applying the fuzzy ruleset. This is useful if you have saved the result of a previous List Cleanup as a thesaurus.
5. Click "More Options" to use some more advanced tools.
  - Set the cleanup level slide to the desired setting (Faster, More Complete, 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. 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 the next Topic, [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.



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

**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](#)).

**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).

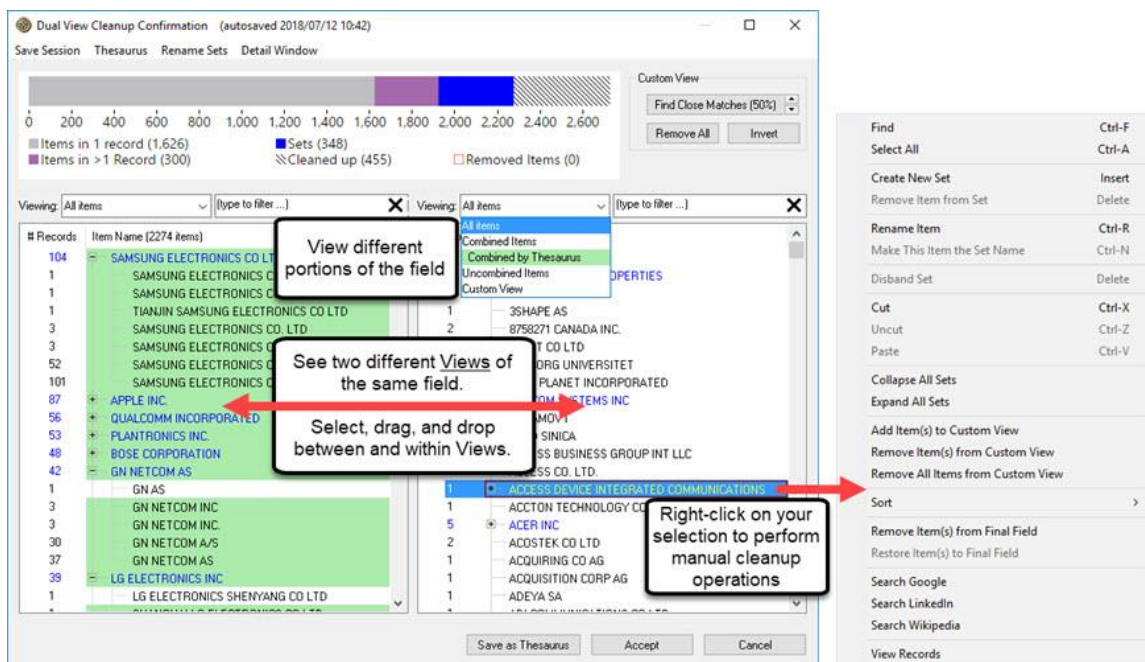


1. **Cleanup Summary.** The bar graph at the top of the window shows a summary of the cleanup process. The full bar represents the total number of unique items in the source list (in this illustration, approximately 2,700 items). VantagePoint's algorithm has identified potential matches creating 348 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.

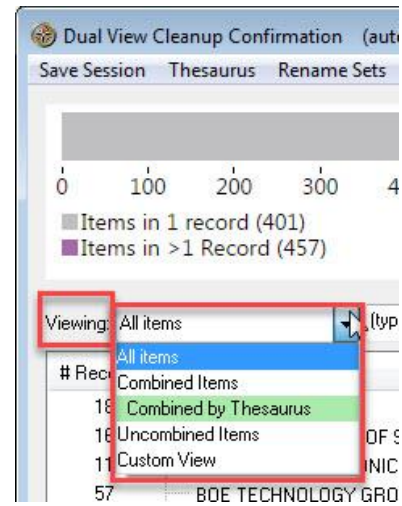
- b. The purple area represents “Items in > 1 record”: In this graph, 300 items occur in more than one record AND did not match any other items in the list.
  - c. The blue area represents “Sets”: 348 sets that VantagePoint’s algorithm created.
  - d. The gray hashed are represents the progress of the 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.



- 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.
- 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.



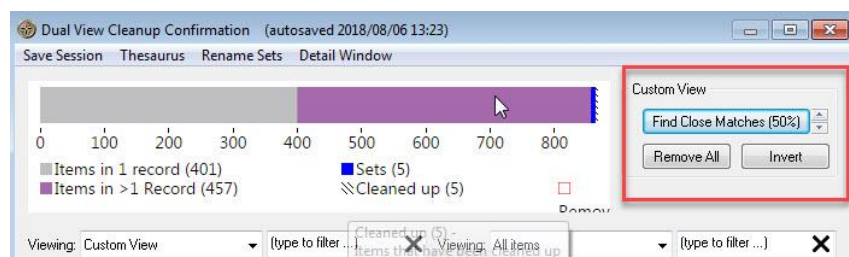
g. When you Right-Click on a list item, a pop-up menu appears. Some of the menu items will be disabled from time to time because they are not appropriate for certain operations. The pop-up menu has the following selections:

- 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.

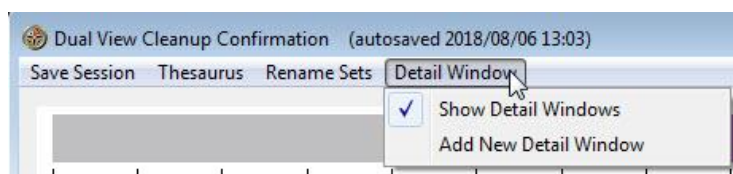
- xiv. Remove Item(s) from Custom View - Removes the selected item(s) from the Custom View.
- xv. Remove All Items from Custom View - Removes all items from the Custom View.
- xvi. Sort –
  - 1. All Items – Sort all sets and items by Name, or by Number of Records.
  - 2. Sets – Sort all Sets (only) by Name, or by Number of Records
  - 3. 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.
- 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 from the “Viewing” menu 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.

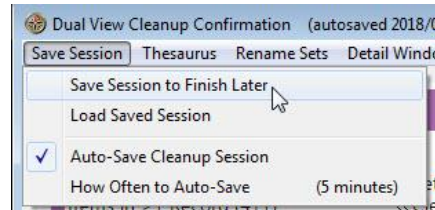
**Add New Detail Window** - Adds a new Detail Window for List Cleanup confirmation. You can have several open at a time.

---

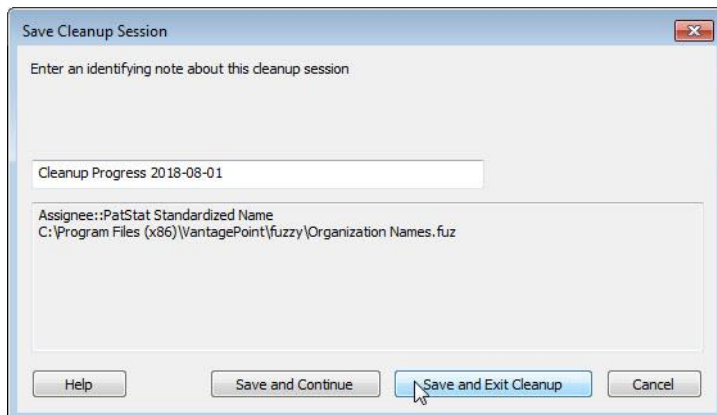
## ***Saving the Cleanup Session***

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.

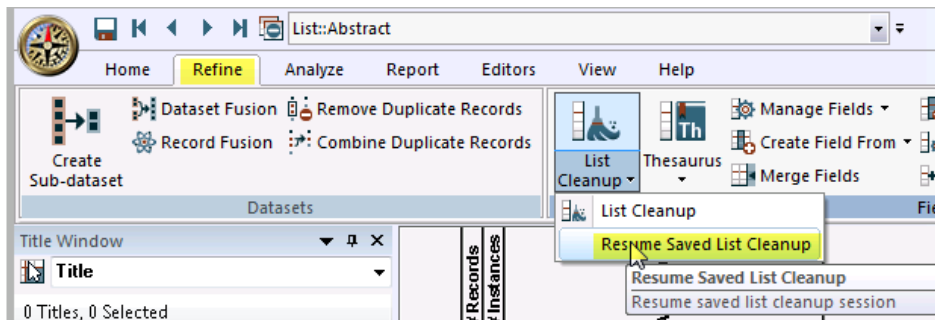
Click **OK**.

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.

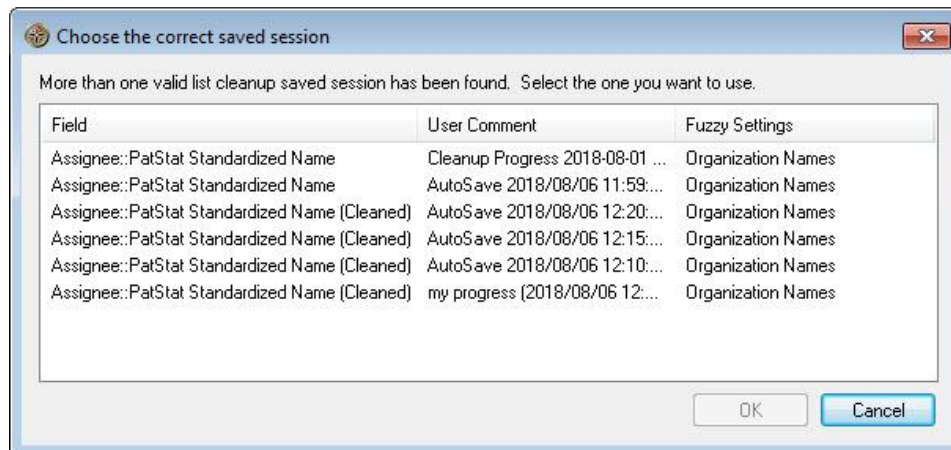
---

## Resuming the Cleanup Session

Once a session has been 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.



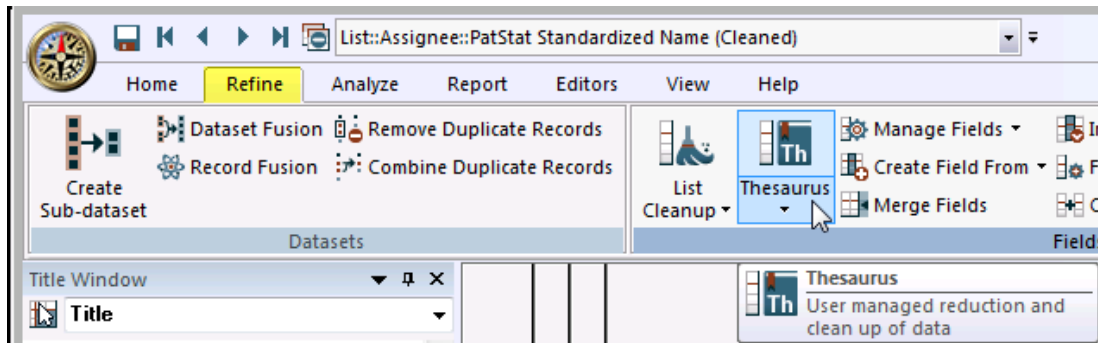
Select the session and click **OK**. You will then be presented with the [Cleanup Confirmation](#) dialog.

**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.

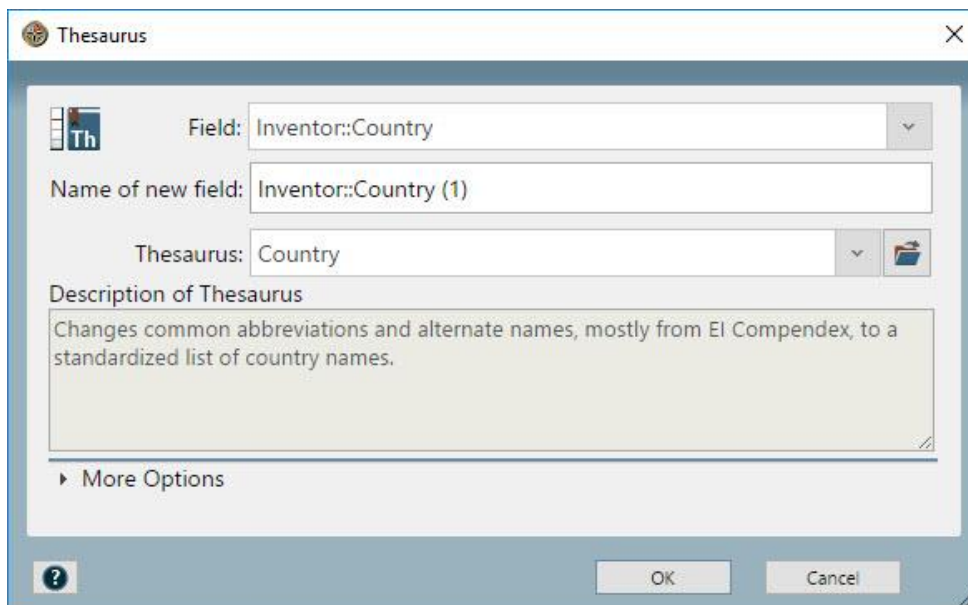
## Thesaurus - Applying a Thesaurus to a list

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**.



2. Select the field to which you want to apply a thesaurus.



In the "New Field" box, VantagePoint enters a name for the new list that will be created. You can type a new name if you wish.

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 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 next topic "Find and Replace".) (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.

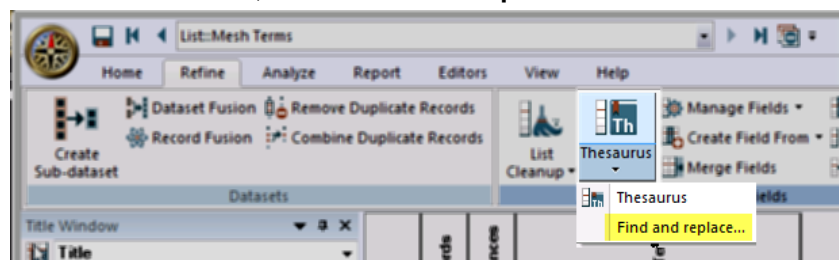
When you apply this as a "Find and Replace" thesaurus, the resulting list contains:

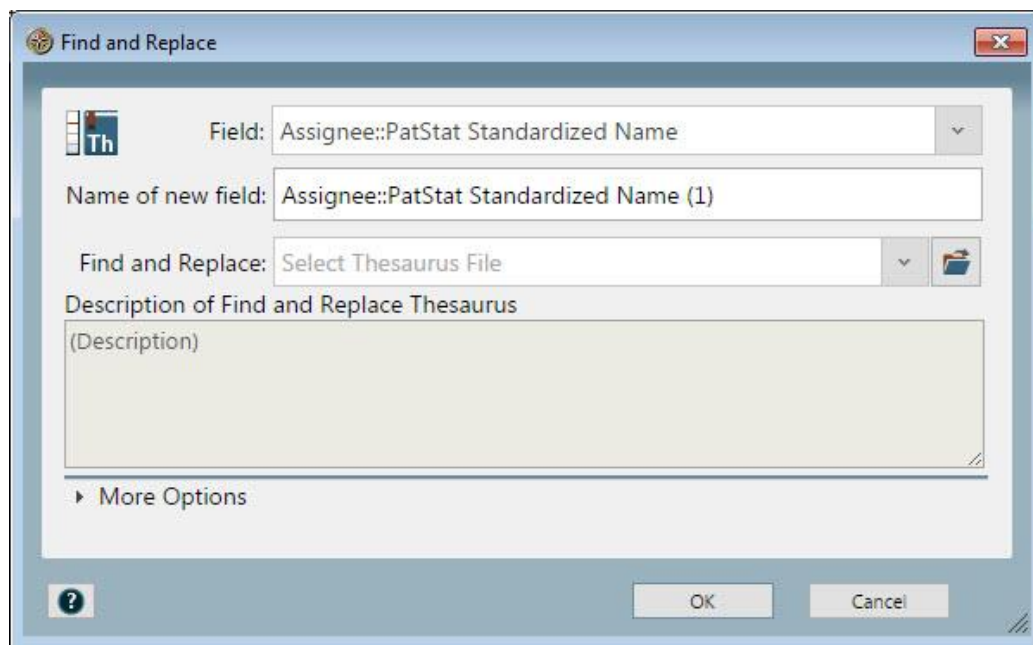
"airplane" – combining "airplane" and "aeroplane"  
"jet airplane" – combining "jet airplane" and "jet aeroplane" – and  
"turboprop airplane" – combining "turboprop aeroplanes" and "turboprop airplane."

**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 Summary View, right-click on the field name and select **Find and Replace ....**

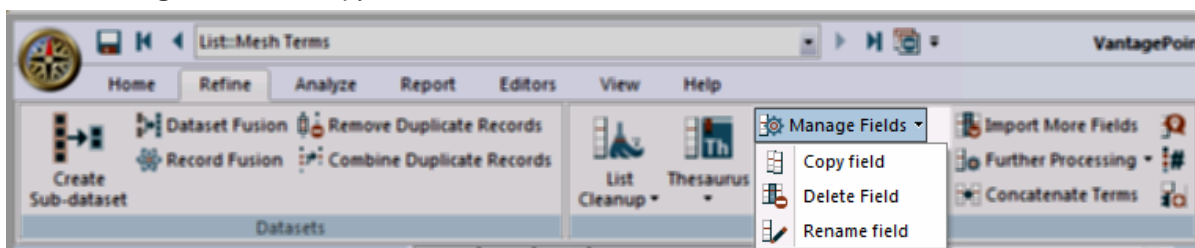




The user interaction is the same as described in the section [Thesaurus - Applying a Thesaurus to a list](#).

## **Manage Fields**

Select **Manage Fields** to Copy, Delete, and Rename a Field.

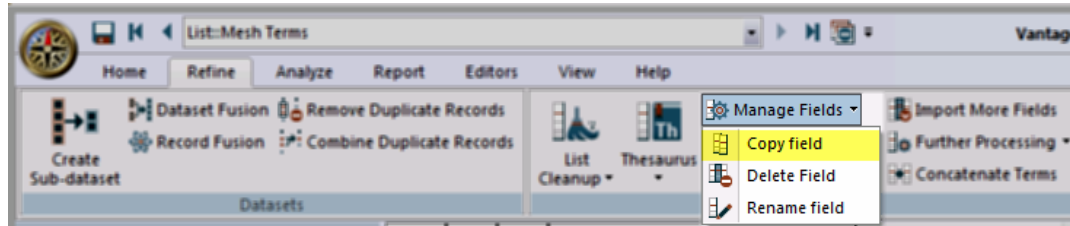




## Copying a field

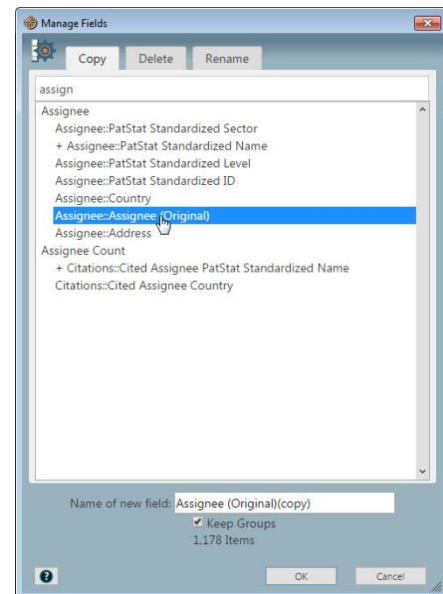
You can use VantagePoint to create a copy of a field. Copying a field does not affect the original field; VantagePoint creates a totally new field. You can elect to copy the old field's groups in the new field.

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. Select the field you want to copy. (You can also type to filter the matches, as illustrated here.)
3. In the "New field name" 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 "Copy groups".
5. Click **OK** to copy the field.

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

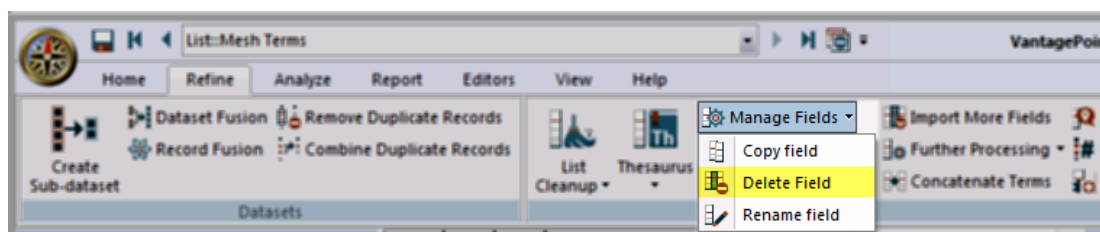




## Deleting a field

**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**.



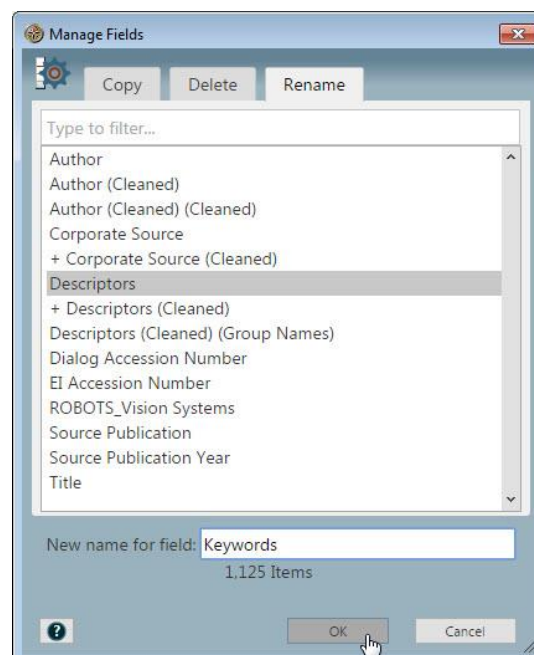
2. You are presented with a list of fields in the current dataset. Click on the field(s) you want to delete, and click **OK**. (You can delete more than one field by multi-selecting the fields to be deleted.)
3. You then must confirm the operation through a confirmation dialog box to complete the deletion.

## 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 **Manage Fields** 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

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.

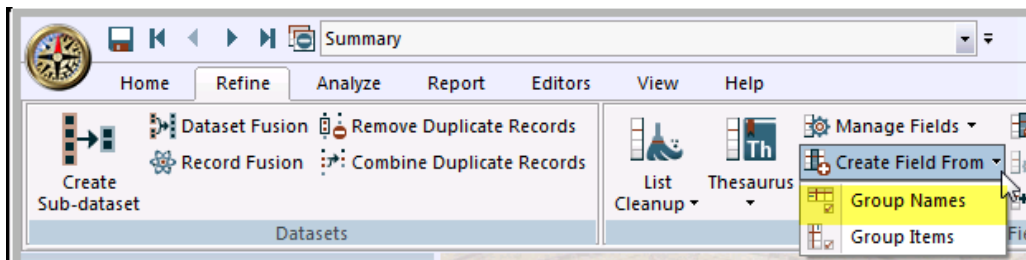
You can also create a new field that contains only the list items in a group. This is useful for confining items displayed in a detail window or a map drop-down list to a select set. For example, you can create a field that contains only the multi-word NLP phrases from the Abstracts in your dataset.

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

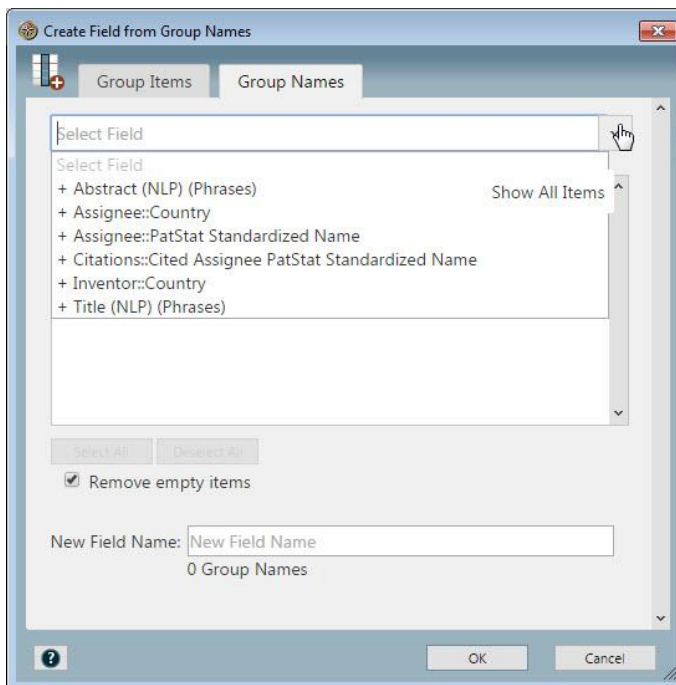
### *Create field from group names*

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** and click **Group Names**.

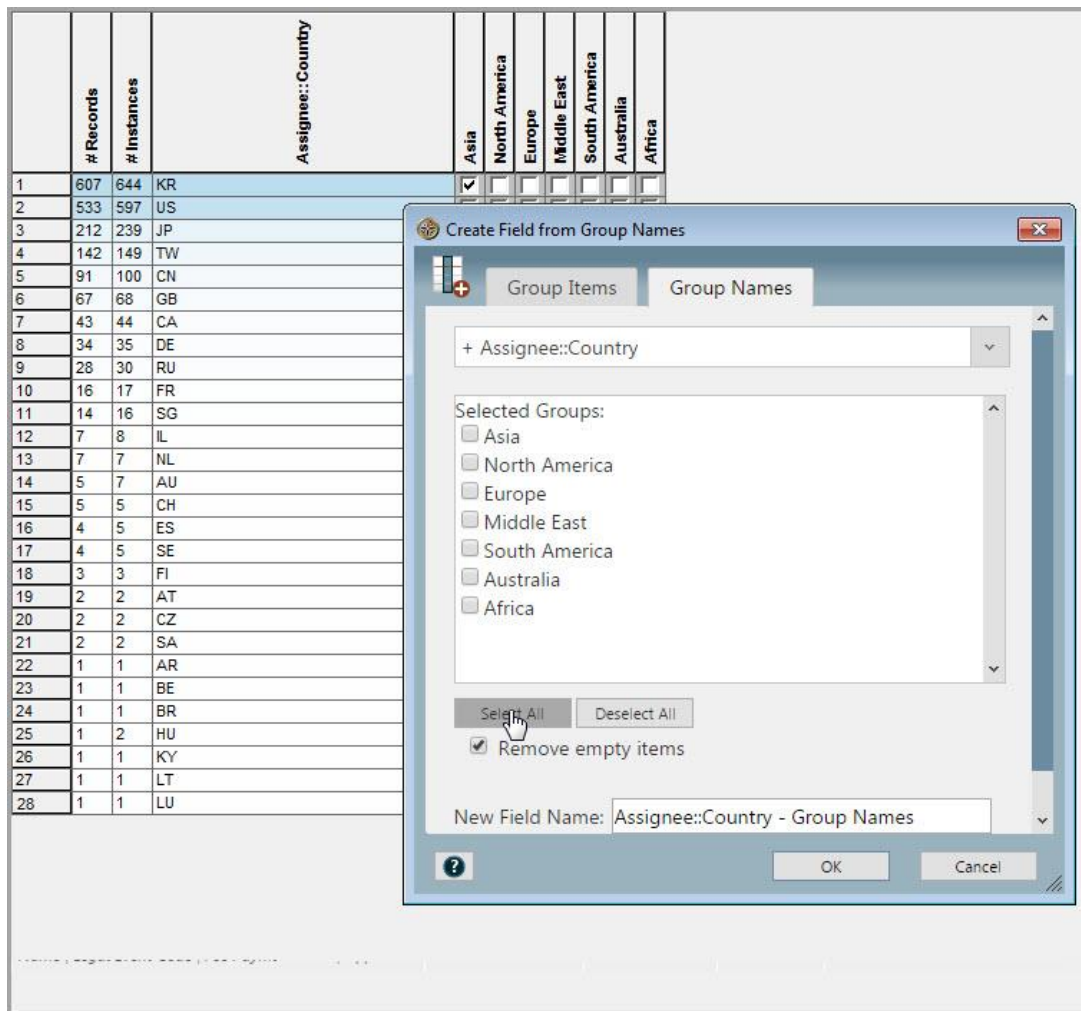


2. The following dialog box is displayed. Click the dropdown box to show fields that have groups assigned. Select the field you want to work with.



3. The Groups for that field are displayed. Select the Group(s) to use by checking the box next to the name.

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 Groups from the List being viewed. The user is choosing to "Select All" Groups.



4. VantagePoint automatically fills in the "New field name". You can accept the field name VantagePoint assigned or create your own.
5. 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 the 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

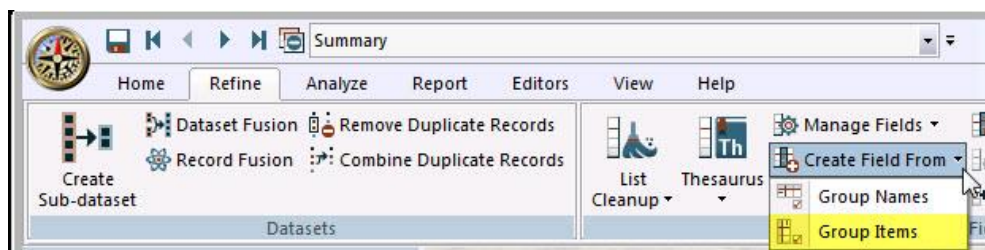
**Note:** After you have created the new field, changes to the group membership in the original field will have no effect in this new field. In other words, the new field is a "snapshot" of the groups.

---

### **Create field from group items**

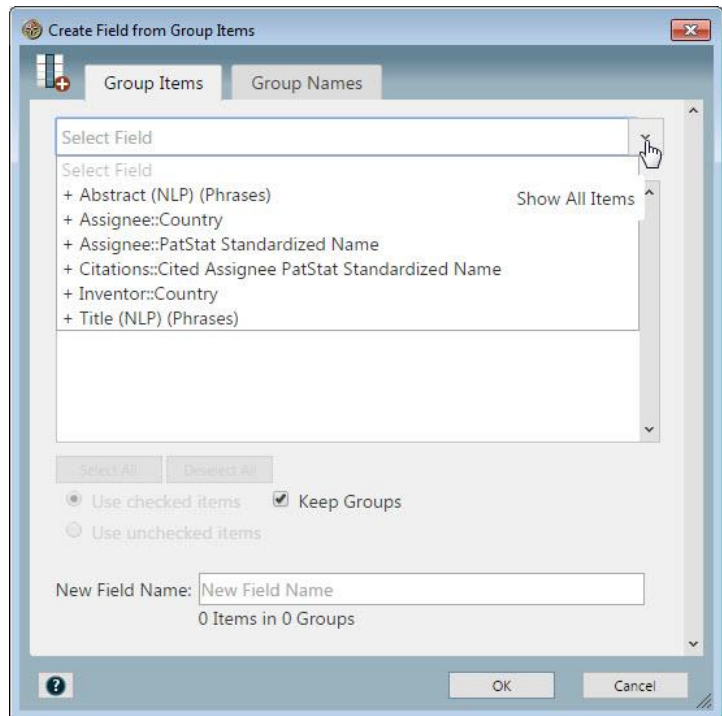
You can create a new field that contains only the list items in a group. This is useful for confining items displayed in a detail window or a map drop-down list to a select set. For example, you can create a field that contains only the multi-word NLP phrases from the Abstracts in your dataset.

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



2. 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.

3. 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.



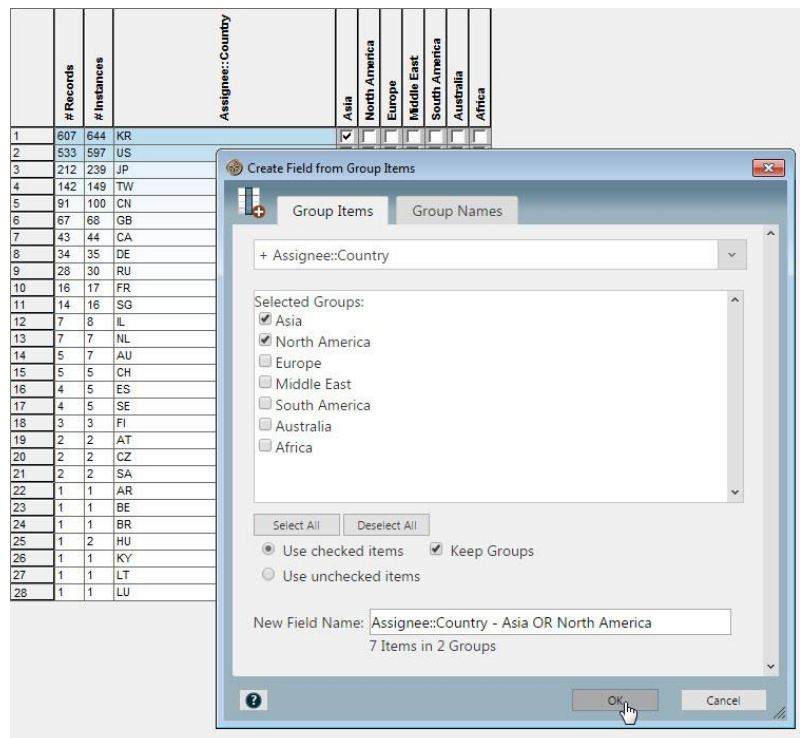
In the example below, the user was already viewing a List of Assignee:Country with groups assigned. When the user selected **Create Field From Group Items**, VantagePoint automatically presented the Groups from the List being viewed. The user is selecting the Groups "Asia" and "North America".

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 chose 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:

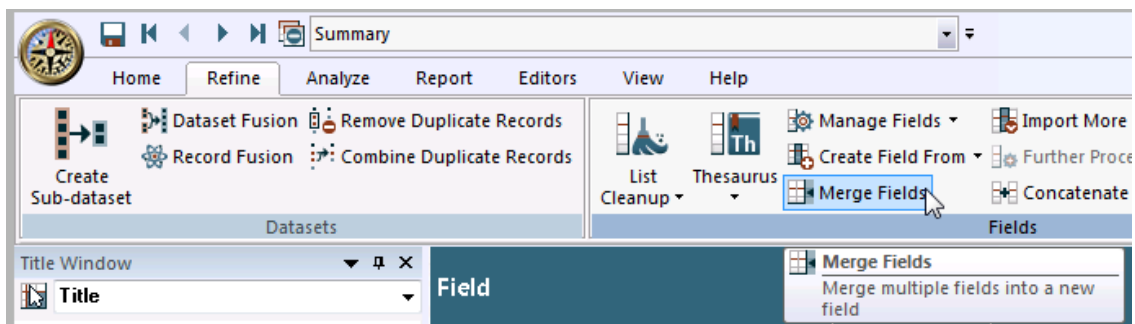
	# Records	# Instances	Assignee::Country - Asia OR North America	Asia	North America	Europe	Middle East	South America	Australia	Africa
1	607	644	KR	<						
2	533	597	US		<					
3	212	239	JP	<						
4	142	149	TW	<						
5	91	100	CN	<						
6	43	44	CA		<					
7	14	16	SG	<						

List::Assignee::Country - Asia OR North America

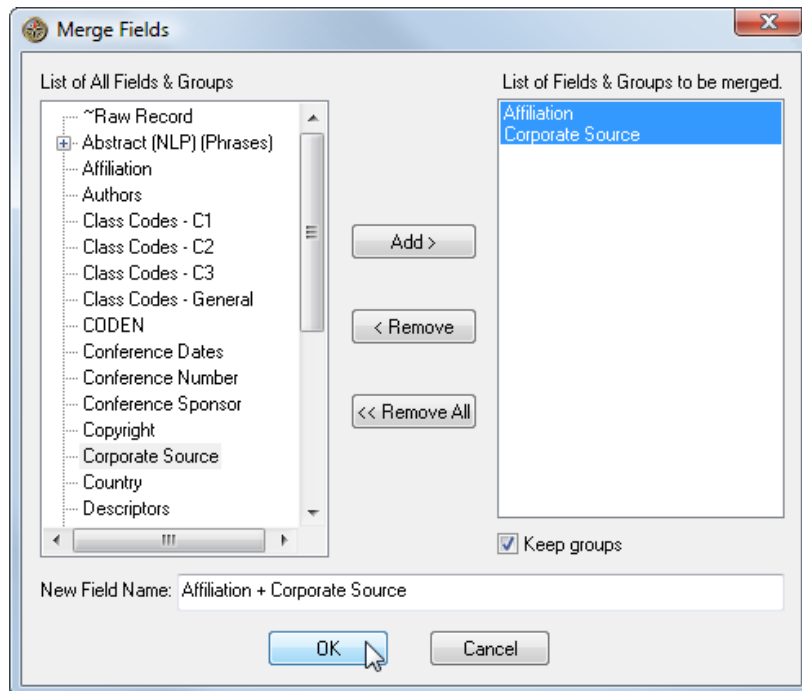
**Note:** After you have created the new field, changes to the group membership in the original field will have no effect in the new field. In other words, the new field is a "snapshot" of the items in the group in the original field.

## Merge fields

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



The **Merge Fields** dialog box appears.



Choose the fields to merge, clicking **Add** after each selection. If a field has groups, you can select a particular group, but not more than one group. The fields (and groups) appearing in the right-hand window are those that will be merged.

If you have added a field or group that should not be merged, select that field (or group) in the right-hand window and click **Remove**. **Remove All** clears the right-hand window.

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.

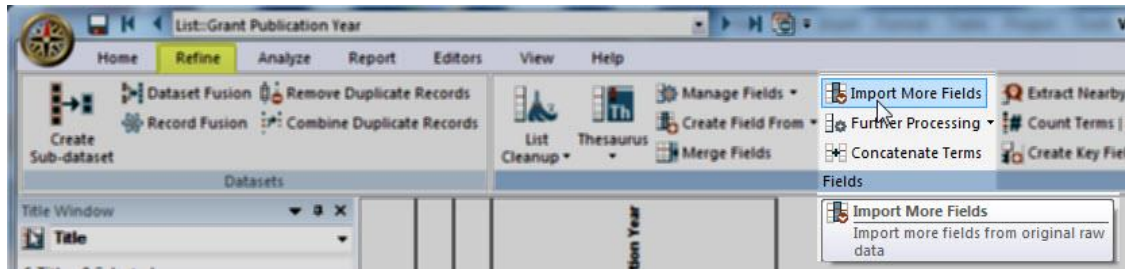
A list of the new field is created. Go to the Summary view. Notice the new field name has been added.

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

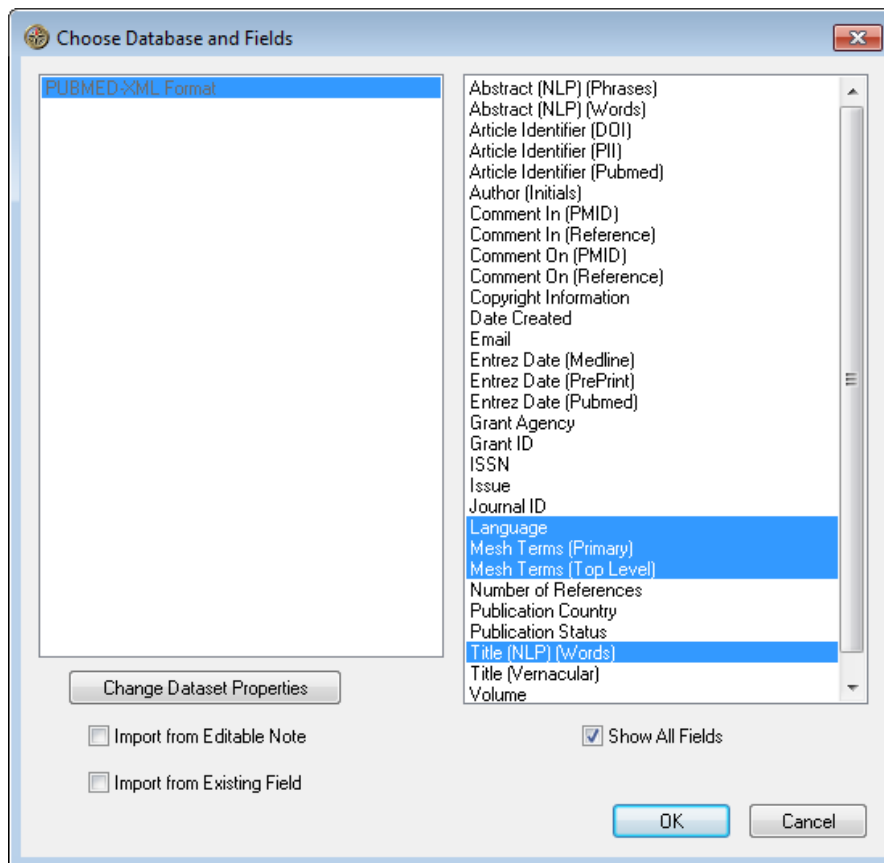


## Import more fields

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



2. In the right-hand window of the **Choose Database and Fields** dialog box, select the fields you want to import 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.



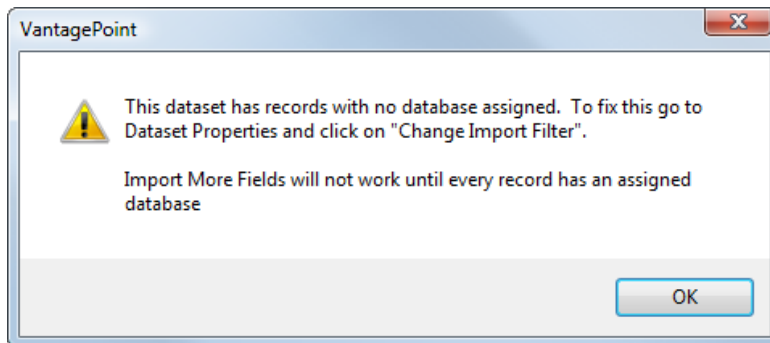
**Checkboxes:**

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 the following message:



See [Dataset Properties](#) and [Changing Database Configurations](#) for instructions on how to assign database definitions to old files.

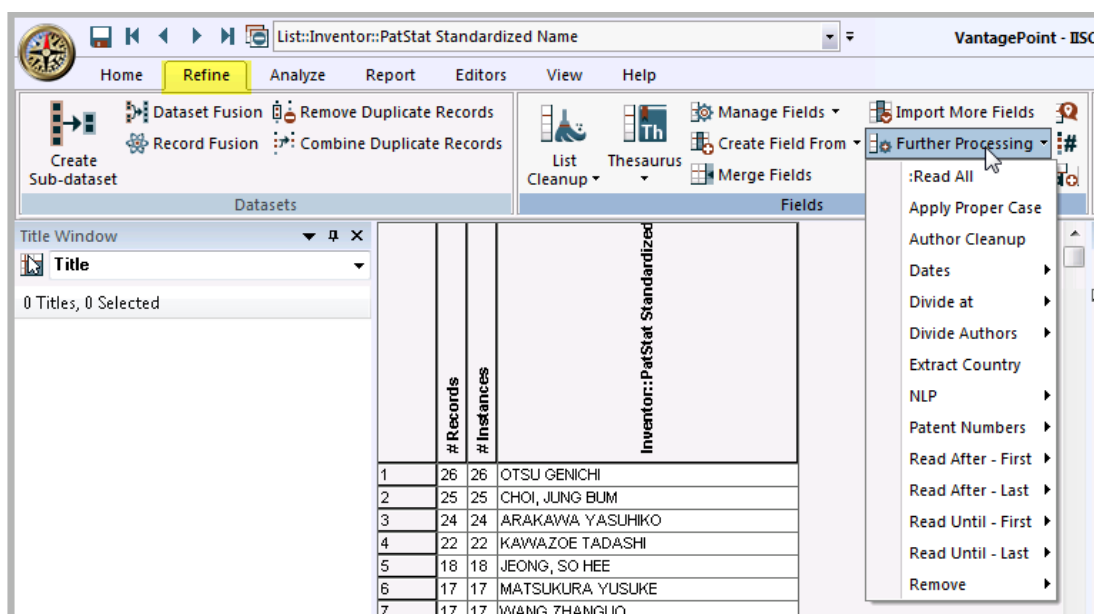
---

## 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.

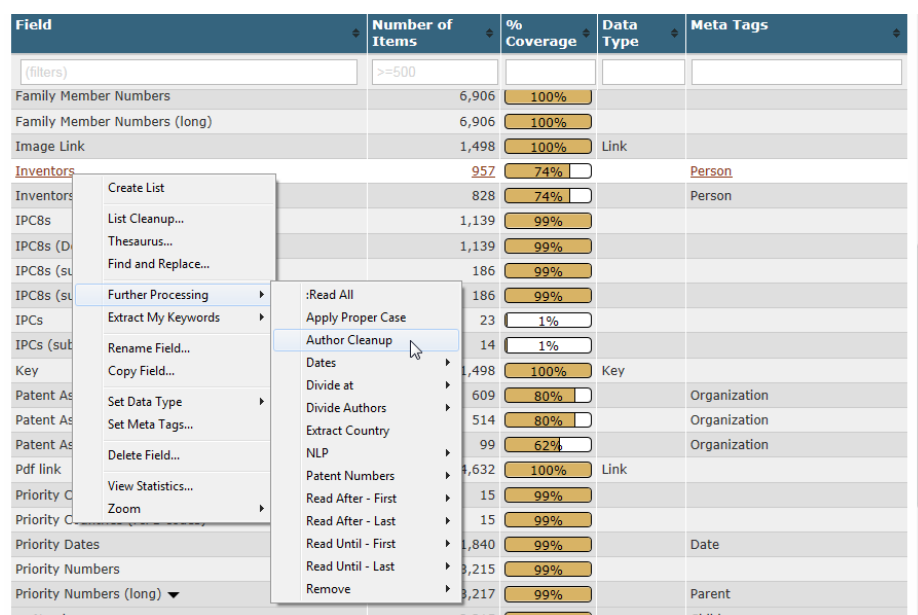
**Further Processing** can be accessed from two places:

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



or

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



After the procedure is run, a new list appears with the original field name appended by the procedure executed on it (e.g., "Inventors: Author Cleanup", or "Inventors: Apply Proper Case"). 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 [Creating or Editing Library Procedures](#) for additional information.

---

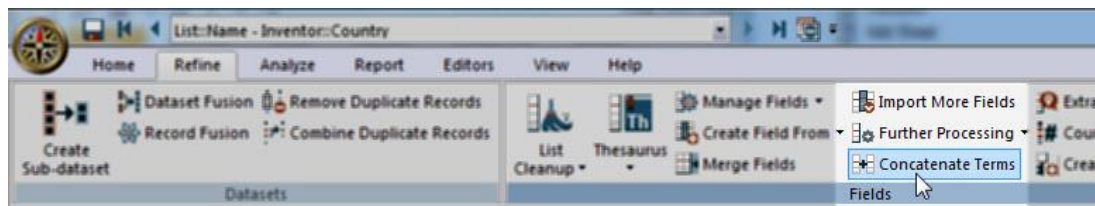
## **Concatenate Terms**

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

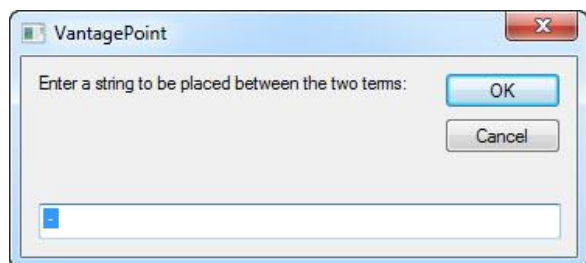
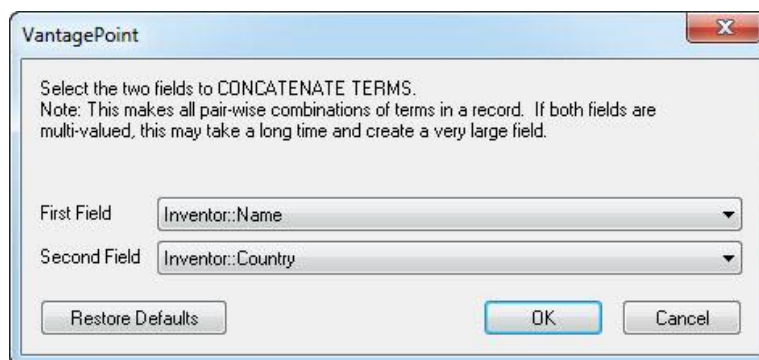
*Requirements:* The first field is a 'single' field

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

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



Follow the instructions in the dialog boxes that follow:





Result:

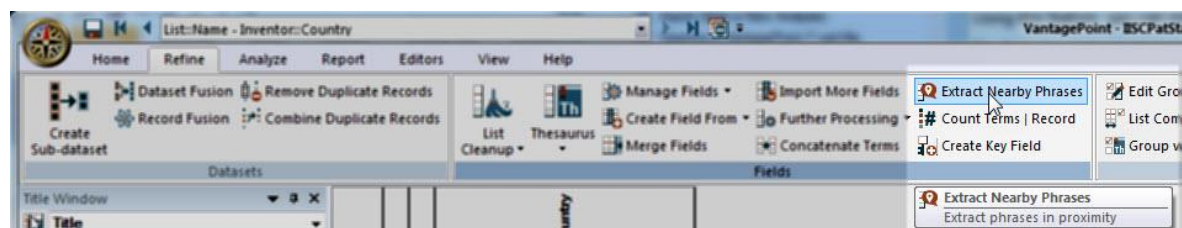
	# Records	# Instances	Name - Inventor::Country
25	10	10	CUI YIPING - NONE
26	10	10	Jensen, Klavs F. - US
27	10	10	KIM, YOUNG WOO - KR
28	10	10	LEE, CHANG KEUN - KR
29	10	10	Medintz, Igor L. - US
30	10	10	YANG, TSUN-NENG - TW
31	9	9	Ebe, Hiroji - JP
32	9	9	GU JINGXIA - NONE
33	9	9	KIM, KIBUM - KR
34	9	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

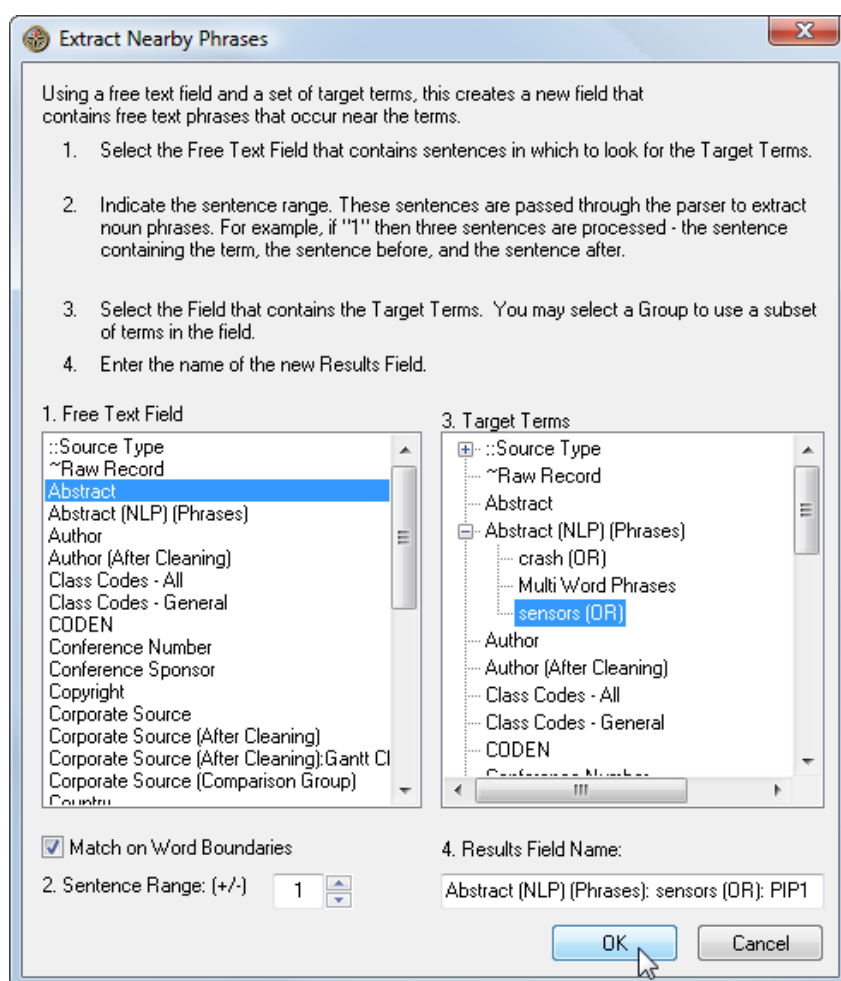
Using this feature, you can extract NLP Phrases from a free text field that occur in proximity to any of the terms in a group.

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 press **OK**, a List View of the new field name is returned.

	# Records	# Instances	Abstract (NLP) (Phrases)	Multi Word Phrase
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

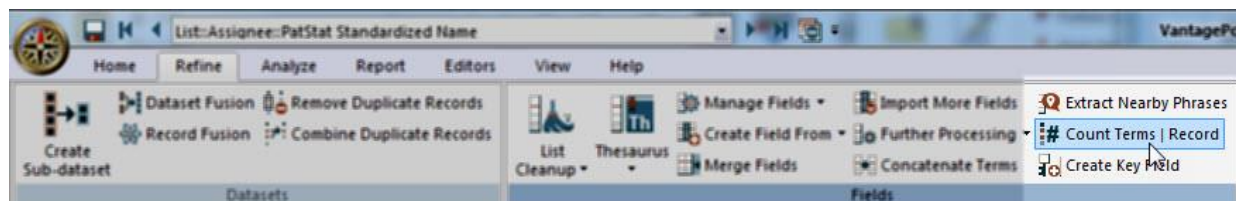
## Count Terms | Record

*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 box presented; decide whether to count Unique Terms or Instances.

The result is a new list:

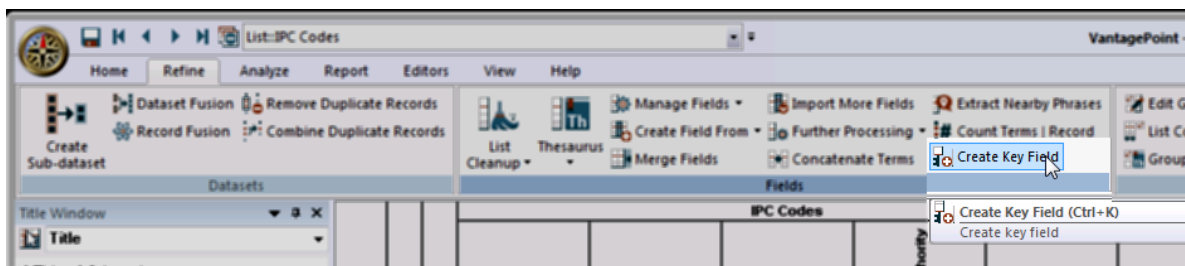
	# Records	# Instances	Inventor::Name (count unique)
1	762	762	3
2	738	738	2
3	615	615	1
4	591	591	4
5	368	368	5
6	228	228	6
7	123	123	7
8	69	69	8
9	41	41	0
10	38	38	9
11	19	19	10
12	10	10	11
13	5	5	12
14	3	3	14
15	3	3	13
16	2	2	20
17	2	2	15
18	1	1	17

## 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.



## 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 screenshot shows the 'AirBags' window with a table of corporate sources. The table has columns for '# Records', '# Instances', 'Corporate Source', and three group columns: 'Government', 'Academic', and 'Industry'. The data is as follows:

	# Records	# Instances	Corporate Source	Government	Academic	Industry
1	19	19	General Motors Corp			
2	18	18	Ford Motor Co			
3	9	9	Univ of Mich, Ann Arbor			
4	7	7	US Air Force			
5	6	6	Automotive Technologies Int Inc			
6	6	6	Chrysler Corp			
7	6	6	Natl Highway Traffic Safety Administratio			
8	5	5	Coventry (Lanchester) Polytechnic, Engl			
9	5	5	Texas Tech Univ			
10	4	4	Allied/Signal, Inc			
11	4	4	Calspan Corp			
12	4	4	GE			
13	4	4	Kyushu Inst of Technology, Kitakyushu, J			
14	4	4	Toyota Motor Corp			
15	4	4	Univ Heidelberg, Heidelberg, Ger			
16	4	4	Univ of Virginia, Charlottesville, VA, USA			

The bottom of the window shows a list titled 'List:Corporate Source (After Cleaning)'.

The illustration below 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.)



**AirBags**

Reset

**Descriptors**

**1 2 3**

**# Records** **199 86 41**

**Corporate Source (After Cleaning)**

**# Records**

Show Values  $\geq 1$  and  $\leq 93$

Cooccurrence  
# of Records

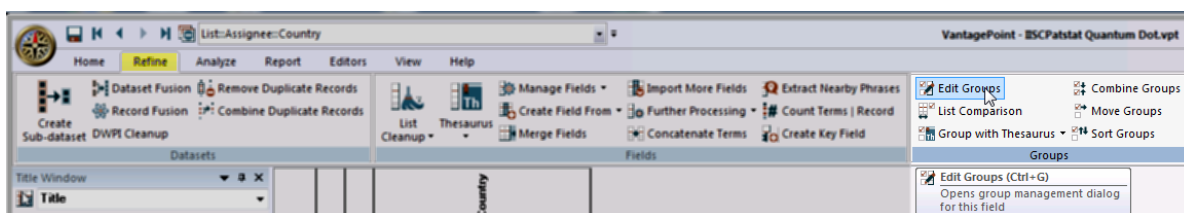
**Industry Academic Government**

	# Records		Industry	Academic	Government
1	126	AUTOMOBILES	93	17	16
2	110	Automobile air bags	61	39	8
3	84	ACCIDENT PREVENTION	45	25	12
4	70	Safety Devices	53	8	9
5	49	HIGHWAY ACCIDENTS	30	13	6
6	36	SENSORS	31	5	
7	35	Crashworthiness	22	8	4
8	30	Computer Simulation	18	10	1
9	29	Mathematical Models	16	11	2

Matrix::Descriptors x Corporate Source

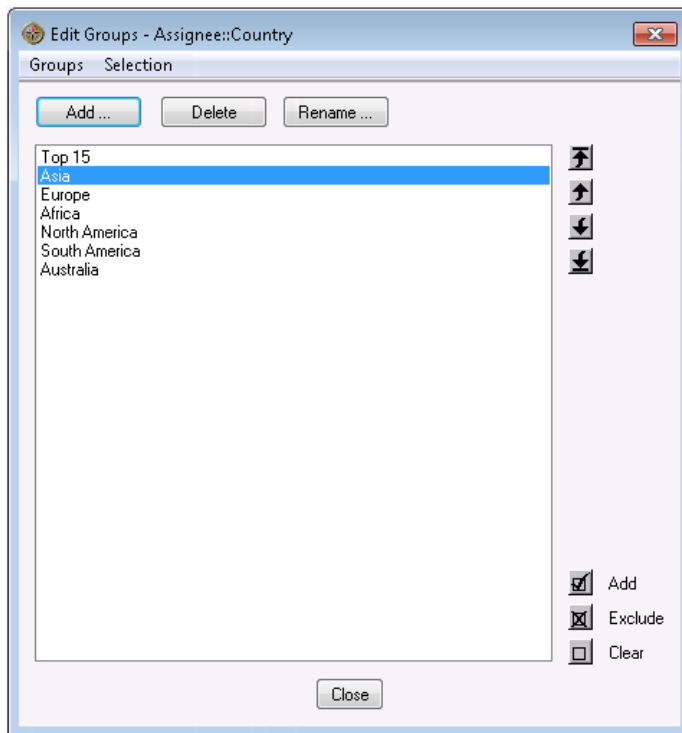
## The Edit Groups dialog box

From the Refine ribbon, choose **Edit Groups** (enabled only when viewing a List.)



The **Edit Groups** dialog is displayed. This lists the user-defined groups for the field. Click on the name of the group or groups you want to work with.

The up/down arrows to the right of the window are enabled when one or more group names are selected. They allow you to rearrange the order in which the groups are displayed in the list. The top and bottom arrows move the selected groups to the top of the list or to the bottom of the list, respectively.



Use Menu Item **Groups** to:

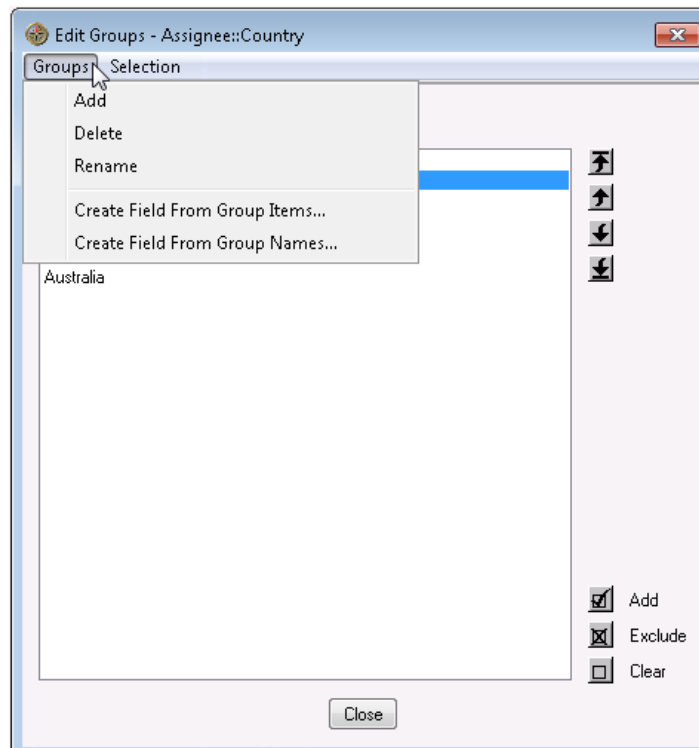
**Add:** add a new group to the list.

**Delete:** delete a selected group from the list. **Note:** Deleting the group is an action that cannot be reversed.

**Rename:** rename a selected group.

**Create Field From Group Items...** create a new field that contains only the list items in a group. (See [Create Field from Group Items](#) for the details on this operation.)

**Create Field From Group Names...** create a new field that contains only the group names in a field. (See [Create Field from Group Names](#) for the details on this operation.)



Use Menu Item **Selection** to:

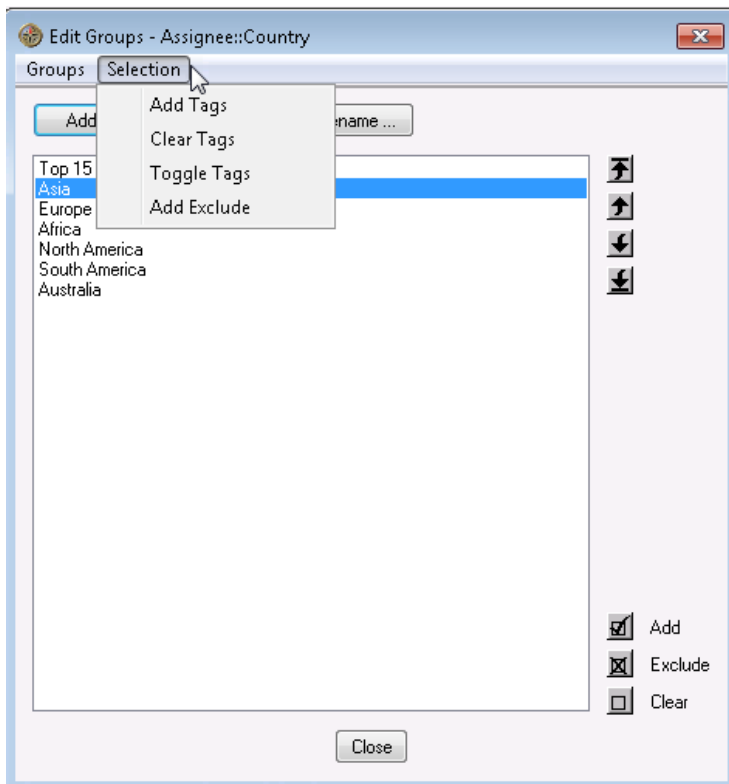
**Add tags:** add the items selected in the list view to the selected group.

**Clear tags:** remove the items selected in the list view from the selected group.

**Toggle tags:** 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.

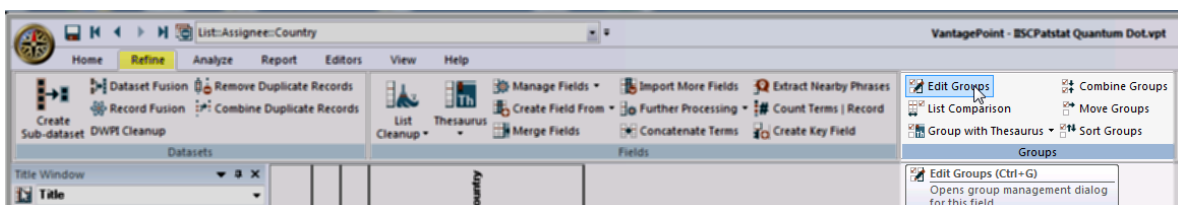
**Add Exclude:** Adds an Exclude tag to the items selected in the list view.

The buttons in the lower right corner can be used to Add/Exclude/Clear membership of the selected items in the list view for the group selected (an alternative to using Menu Item **Selection** for these actions, described above).



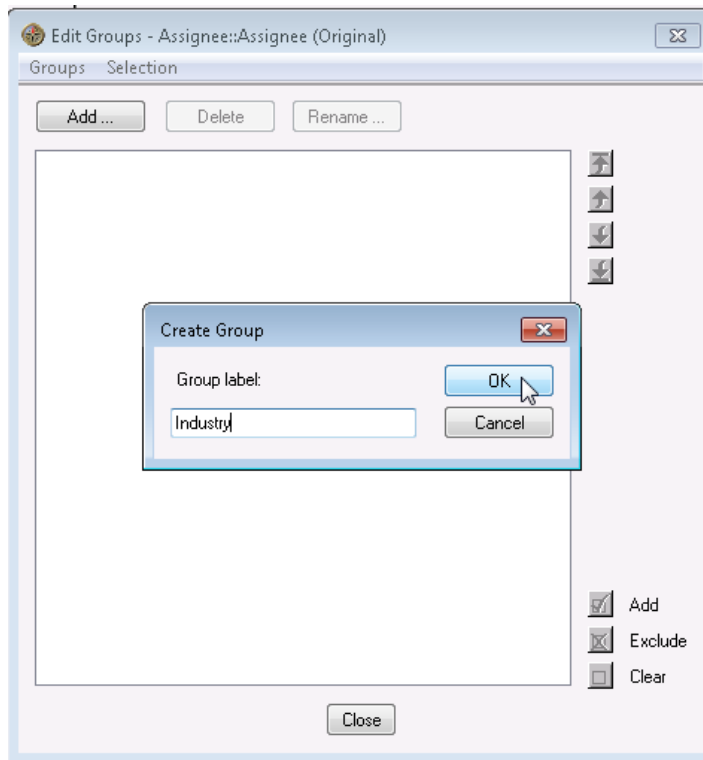
## **Creating a group**

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



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

3. On the **Edit Groups** dialog box, click **Add**.
4. Type the name of the group in the **Create Group** dialog box and then click **OK**.



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

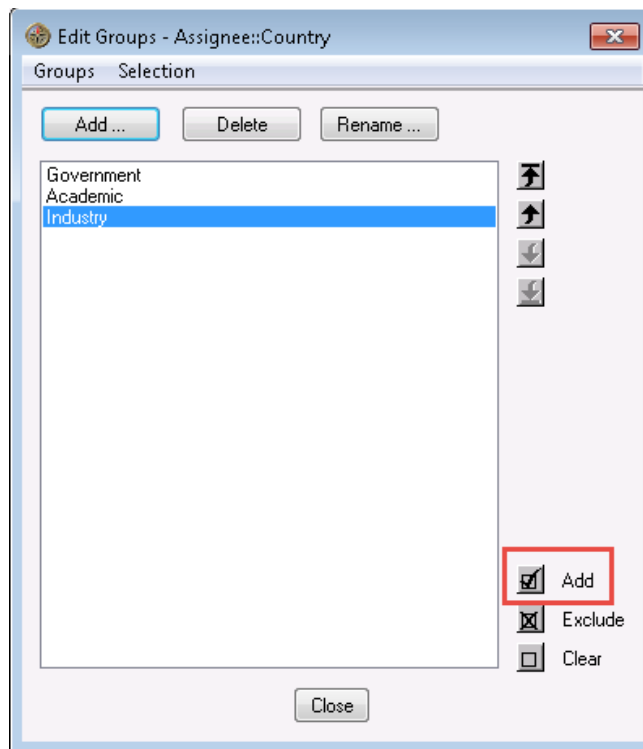
The new group shows up as a column of empty check boxes labeled with the group name. You can then check the box to add an item to the group.

	# 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 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"/>

	# 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"/>

### ***Adding items to a group in a list view***

1. Create (or open) a List View of the field containing the group (or the group to be named.)
2. Select the items to be added to the group (or multi-select using Shift key or Ctl+click).
3. From the Refine ribbon, choose **Edit Groups**.
4. In the Edit Groups dialog box, click on the group name to which the list items are to be added. Click the **Add** checkmark in the lower right corner.



If no group exists, click the **Add** button at the top. A **Create Group** box appears for you to enter a group name. Enter the group name and click **OK**. Then click the **Add** checkmark in the lower right-hand corner for the selection to be added to the new group. These steps can also be performed in the Edit Groups dialog using the Menu items **Groups** and **Selection**.

Close the Edit Groups dialog box.

---

### ***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. Use Multi-select (Shift or Ctrl and Click selections) and remove the selected items from the

group:

- 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 Tags button in the lower right-hand corner.

Alternatively, with the group name selected, choose **Selection** from the Menu and **Clear Tags**.

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

### ***Adding/clearing/toggling group membership***

You can change the group membership for selected items in a list using the **Manage Groups** dialog box.

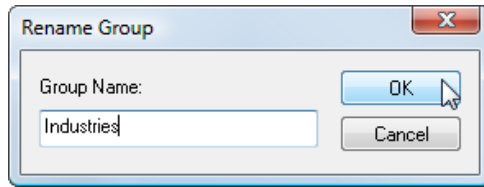
1. In a List View, select the list items you want to work with.
2. From the Refine ribbon, select **Edit Groups**  
  
or press **Ctrl+G** on the keyboard.
3. In the Edit Groups dialog box, click on the name of the group for which you want to add/clear/toggle the list items.
4. With the group name selected, select Menu item **Selection**, click **Add tags**, **Clear tags**, or **Toggle tags** (adds the selected list items that are not in the group and removes those that are in the group).

You may also use the buttons in the lower right for Adding and Clearing membership. With the group name selected, click the Add Tags button (adds the selected list items to the group), or Clear Tags button (removes the selected list items from the group).

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

### ***Renaming a group***

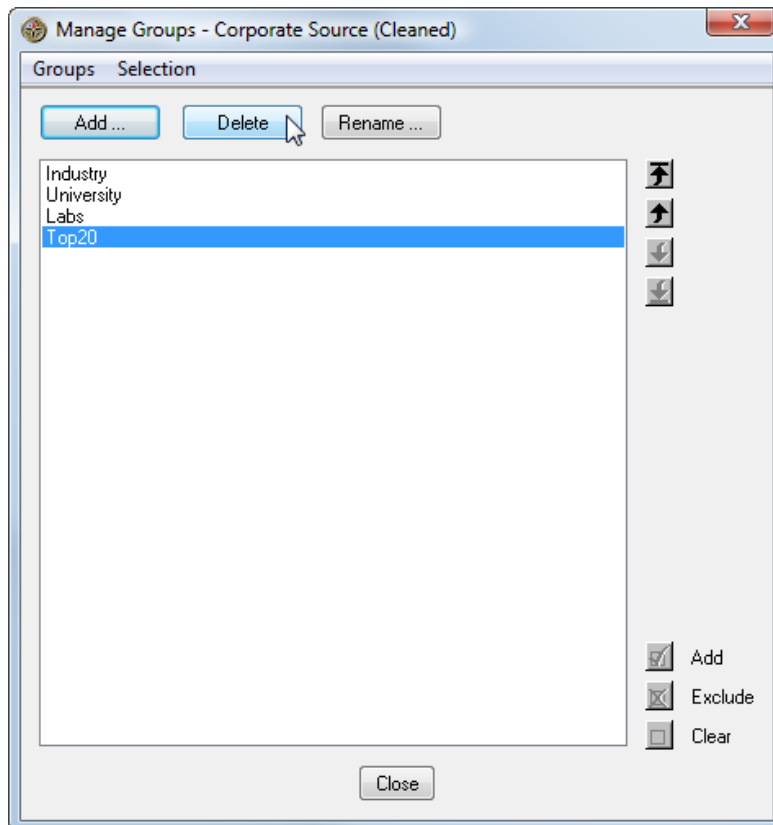
1. Create (or open) a List View of the field containing the group to be renamed.
2. From the Refine ribbon, select **Edit Groups**.  
  
or press **Ctrl+G** on the keyboard.
3. In the **Edit Groups** dialog box, click on the group name you want to change.
4. Click **Rename** (or select **Groups** from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



5. Change the name in the **Rename Group** dialog box and then click **OK**.
6. 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.
3. On the **Edit Groups** dialog box, click on the name(s) of the group(s) you want to delete.
4. Click **Delete** (or, select **Groups** from the Menu and **Delete**).
5. Click **Yes** or **Yes to All** on the **Confirm Group Delete** dialog box.
6. Close the Edit Groups dialog box.

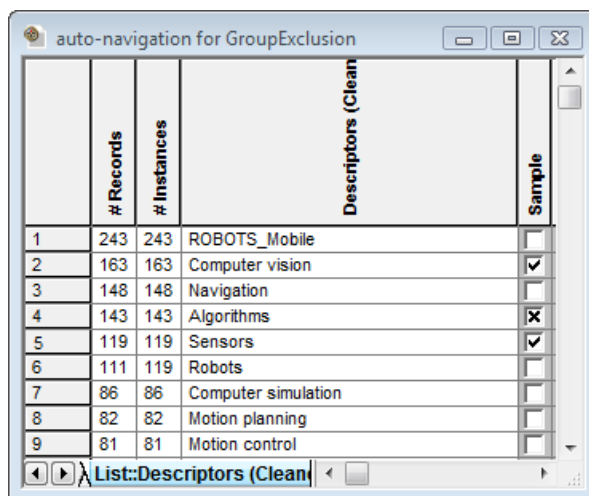




## Using Group Exclusion in new dataset operation

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")

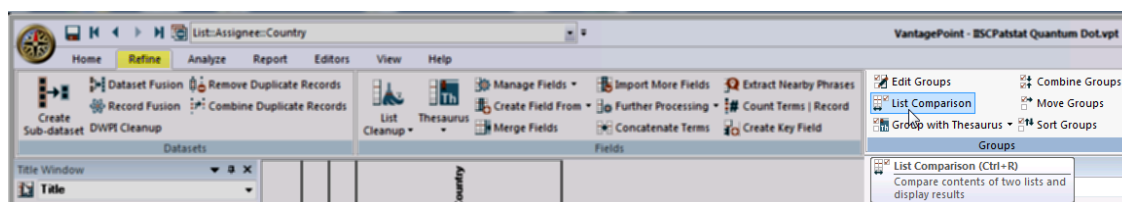


	# Records	# Instances	Descriptors (Clean)	Sample
1	243	243	ROBOTS_Mobile	<input type="checkbox"/>
2	163	163	Computer vision	<input checked="" type="checkbox"/>
3	148	148	Navigation	<input type="checkbox"/>
4	143	143	Algorithms	<input checked="" type="checkbox"/>
5	119	119	Sensors	<input checked="" type="checkbox"/>
6	111	111	Robots	<input type="checkbox"/>
7	86	86	Computer simulation	<input type="checkbox"/>
8	82	82	Motion planning	<input type="checkbox"/>
9	81	81	Motion control	<input type="checkbox"/>

## List Comparison (Creating Groups by Comparing two lists)

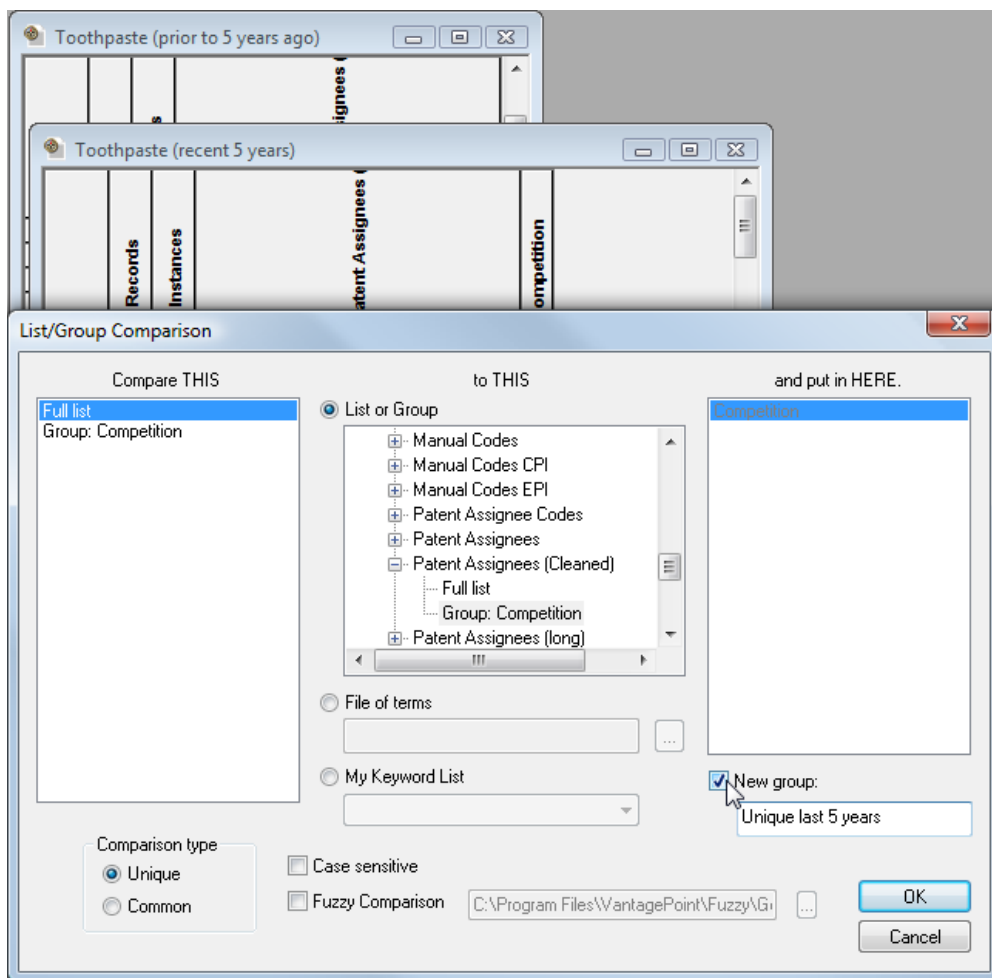
List comparison creates tags on the items in the first list that are either unique to the first list or shared in common with a second list.

1. To compare two lists, 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**



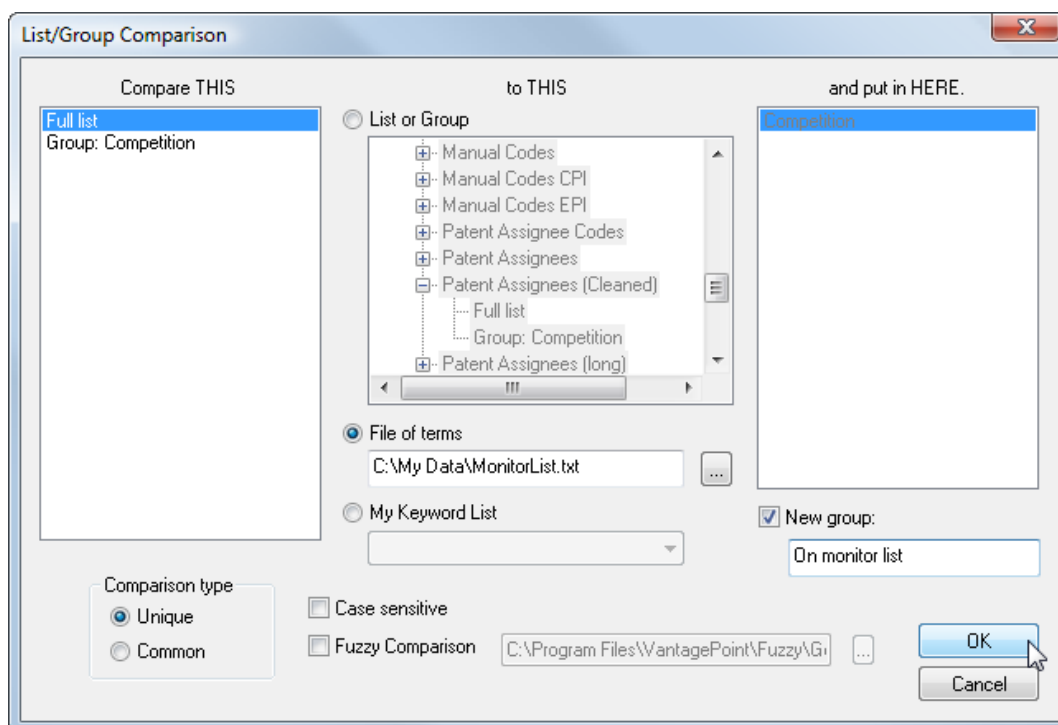
or press **Ctrl+R** on the keyboard.

4. Click on the group name you want to compare ("Compare THIS"). If you want to use the whole list, click on "Full list."

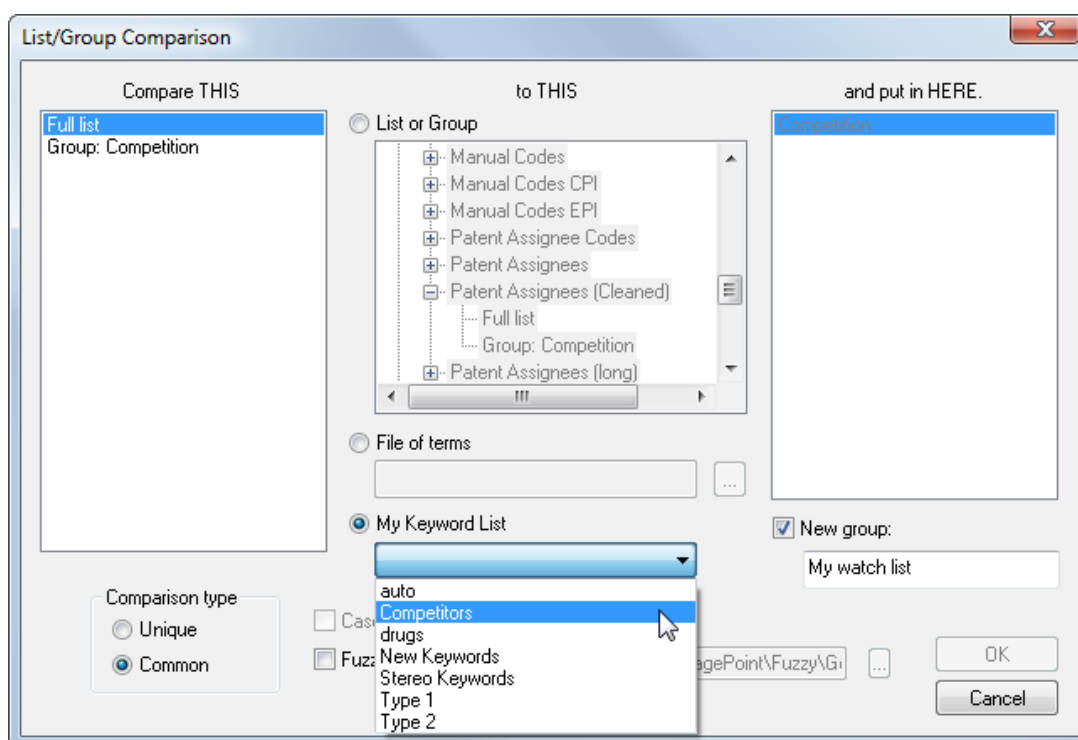


5. **List or Group** - If you want to compare to a List or Group, click on the list or group you want to compare with ("to THIS"). You may choose a list or group from the same dataset or from another open dataset.

**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 (“My Keywords”). The Keyword List is selected from the dropdown box, as shown here:



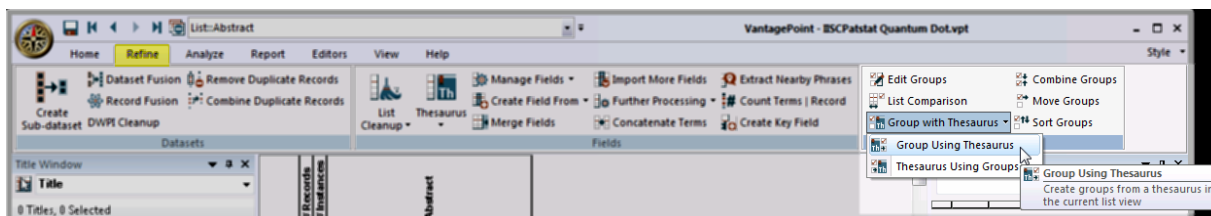
6. Determine the group name to which you want to add the tags ("and put in HERE"). By default, the tags go into a new group. You may name this group in the text box beside the "New group" checkbox. If you prefer, you can add the tags to an existing group by un-checking the "New group" checkbox and then 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

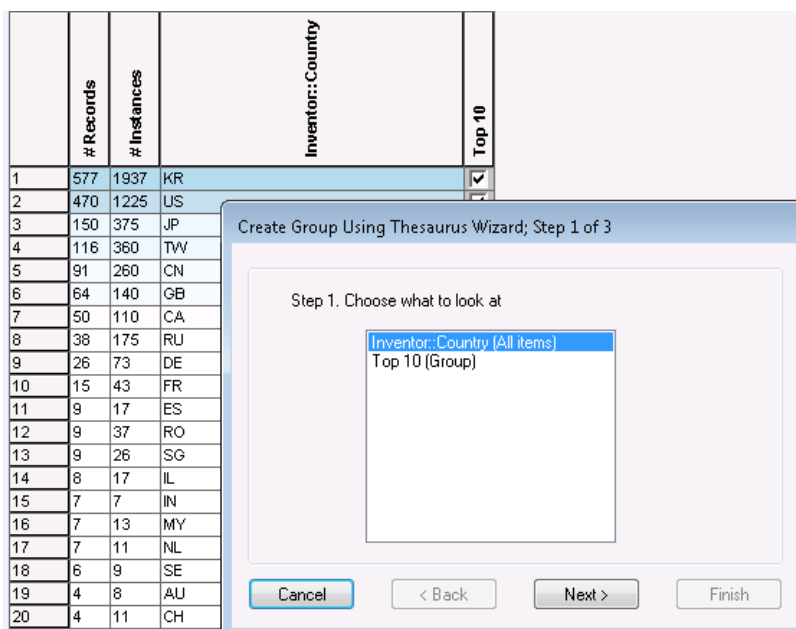
You can use thesauri to create groups in a list. This is useful for creating collections of list items using previously defined, reusable thesauri.

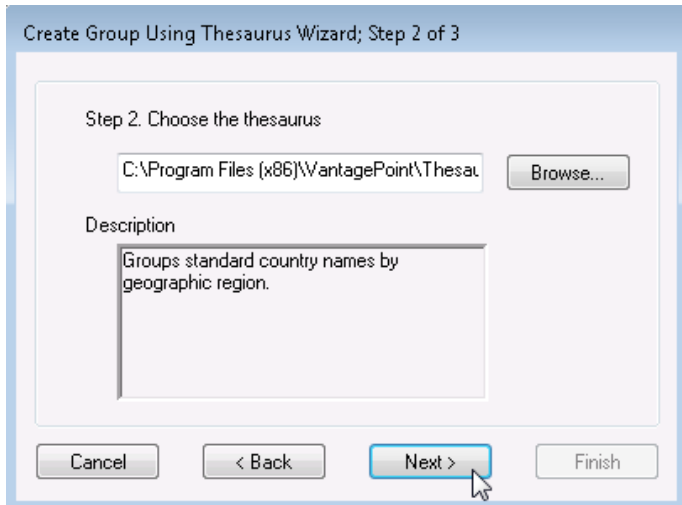
When working in a List View, from the Refine ribbon choose **Group Using Thesaurus**.



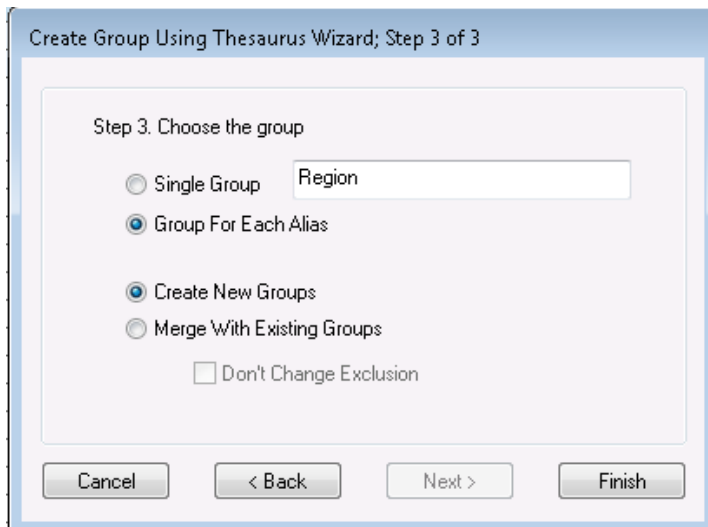
The **Create Group Using Thesaurus Wizard** dialog box appears.

In Step 1 of the wizard you specify the source list to use. The first item in the list is the full field (in this case, Inventor Country). If you have already defined some groups in the field, the group names will be shown below the field name. Choose the set of items you want to work on (either All items in the list or one of the groups) and click **Next**.





In Step 2 of the wizard, click **Browse...** to select the thesaurus you want to use to create the groups. (The Browse button opens the VantagePoint Thesaurus folder by default.) After you have selected the Thesaurus, click **Next**.



In Step 3 of the wizard you 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	TVV	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5	91	260	CN	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6	64	140	GB	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7	50	110	CA	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8	38	175	RU	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9	26	73	DE	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10	15	43	FR	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11	9	17	ES	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12	9	37	RO	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13	9	26	SG	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14	8	17	IL	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15	7	7	IN	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16	7	13	MY	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17	7	11	NL	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18	6	9	SE	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19	4	8	AU	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20	4	11	CH	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
21	3	5	AT	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
22	2	5	BE	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
23	2	5	CH	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

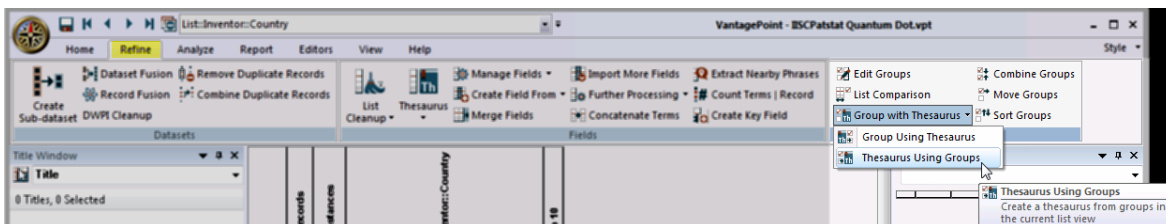
**Single Group:**

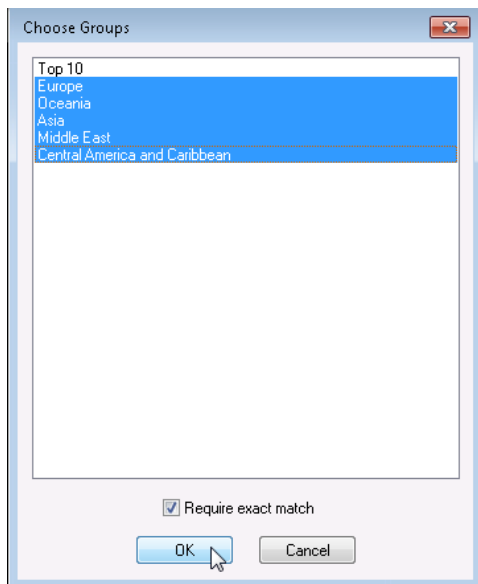
	# Records	# Instances	Inventor::Country	Top 10	Known
4	116	360	TVV	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
5	91	260	CN	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
6	64	140	GB	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
7	50	110	CA	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
8	38	175	RU	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
9	26	73	DE	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
10	15	43	FR	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
11	9	17	ES	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
12	9	37	RO	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
13	9	26	SG	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
14	8	17	IL	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
15	7	7	IN	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
16	7	13	MY	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
17	7	11	NL	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
18	6	9	SE	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
19	4	8	AU	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

## Creating a thesaurus using groups

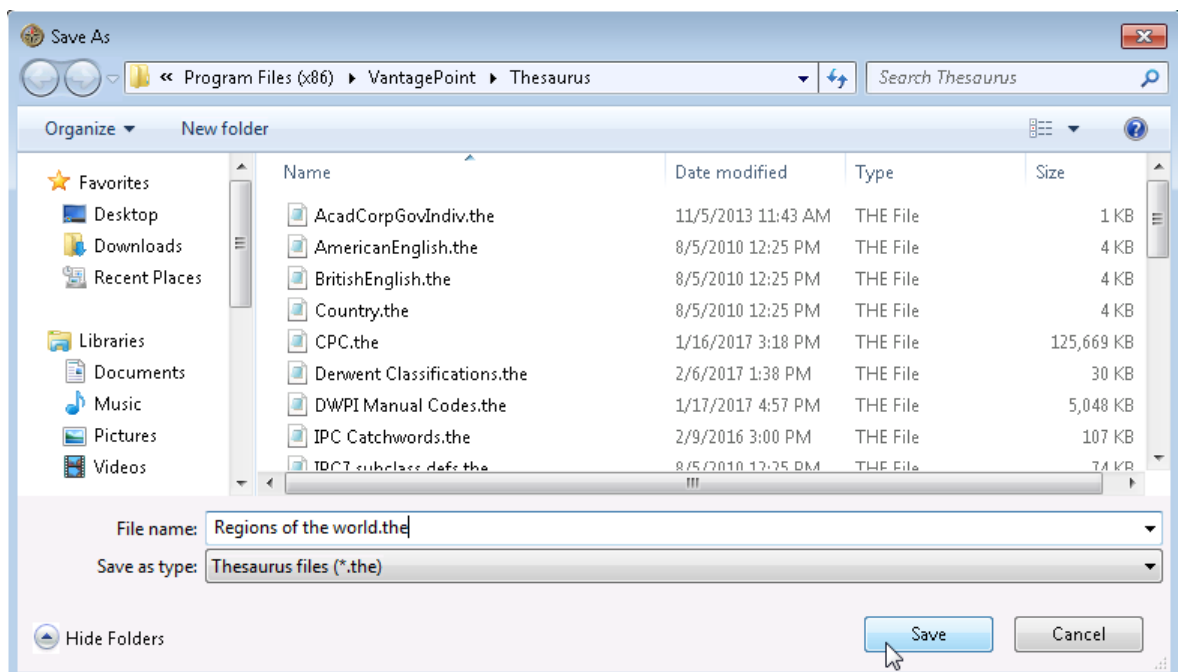
A thesaurus can be created from groups in a List View. This is useful for transferring the results of a statistical or manual grouping process from one dataset to another.

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.



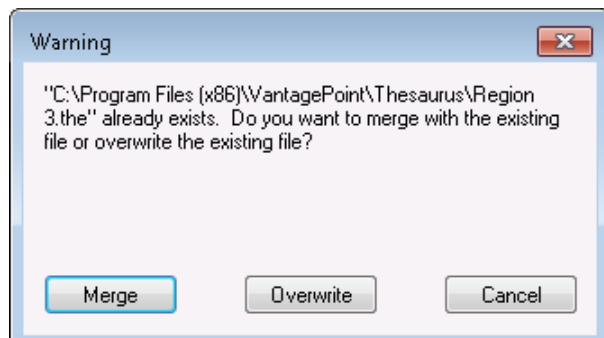
If you choose to merge the results with an existing thesaurus, refer to the next section, [“Merging into an Existing Thesaurus”](#).

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, or when you [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 next section).

**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.

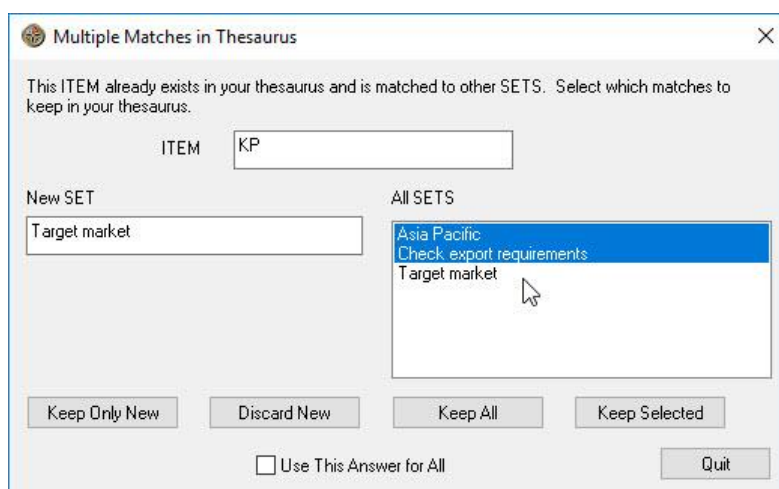
**Note:** If multiple matches exist in a thesaurus and that thesaurus is applied to a list for the purpose of list reduction (Refine ribbon and Thesaurus), currently only one entry in the thesaurus is used - the others are ignored. Therefore, allowing multiple matches in a thesaurus is only recommended for creating groups using a thesaurus.

If your "List Cleanup - Save as Thesaurus" or "Create 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.

---

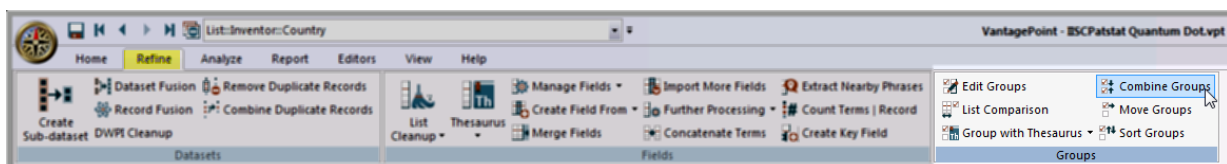
## **Combine Groups**

*Description:* Combine selected groups in a list

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

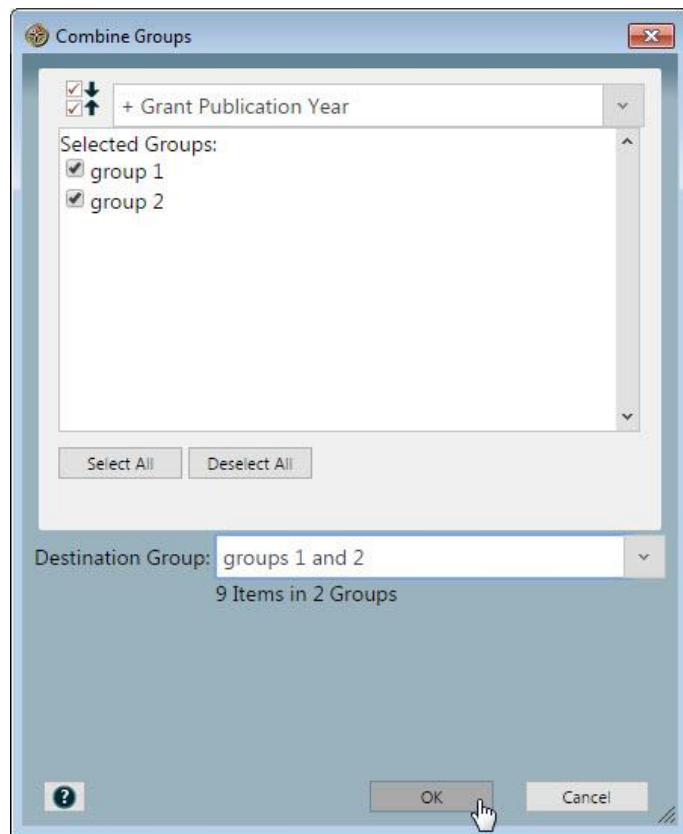
*Usage:* This operation combines existing groups and creates a new group, or adds group members from existing groups to another existing group. This is the equivalent of OR-ing groups together by using the list comparison function to identify common terms within the list.

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



You are presented with a dialog showing all the groups in the List. Check the group(s) you want to combine and identify the Destination Group. (Type in a new name or select from the dropdown list of existing group names.)

Click **OK**.



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

---

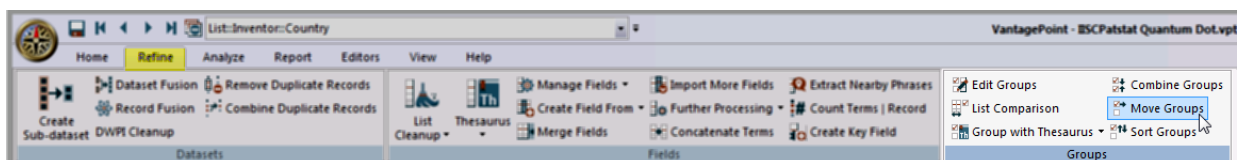
## **Move Groups**

*Description:* Move groups from one list to another.

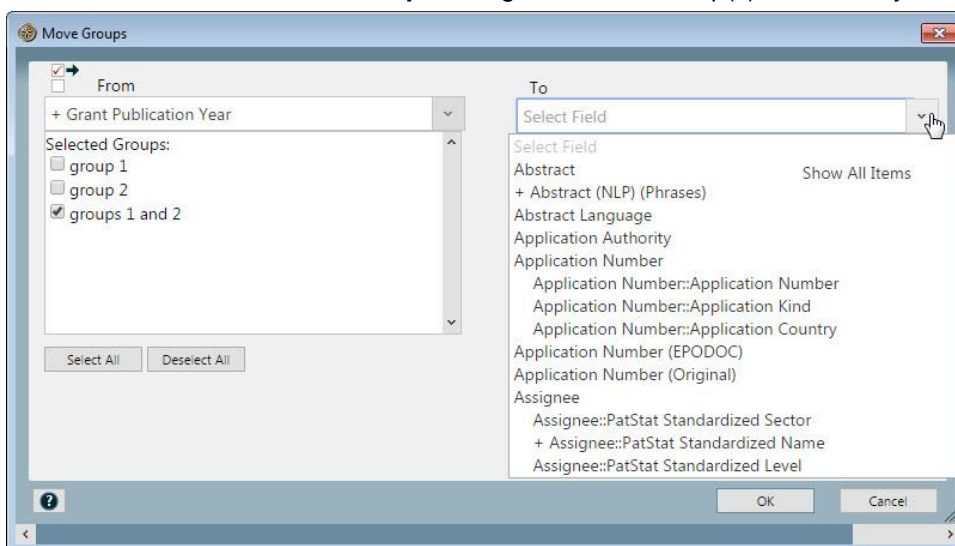
*Requirements:* List with groups is open.

*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**.



On the left side of the **Move Groups** dialog, select the Group(s) in the field you want to move **From**:



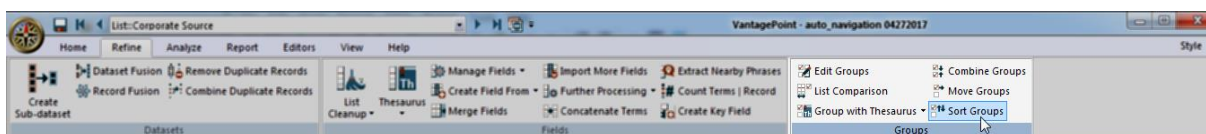
On the right side of the dialog, select the field you want to move the Group(s) **To**.

A list view of the field to which the Group(s) were moved is displayed with the group membership assigned.

## Sort Groups

Sorts the groups in a field alphabetically.

From the Refine ribbon, select **Sort Groups**.



A confirmation dialog is presented before VantagePoint proceeds with the sort.


## ANALYZE

### List View

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.

	# 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"/>

 IISCPatstat Quantum Dot.vpt

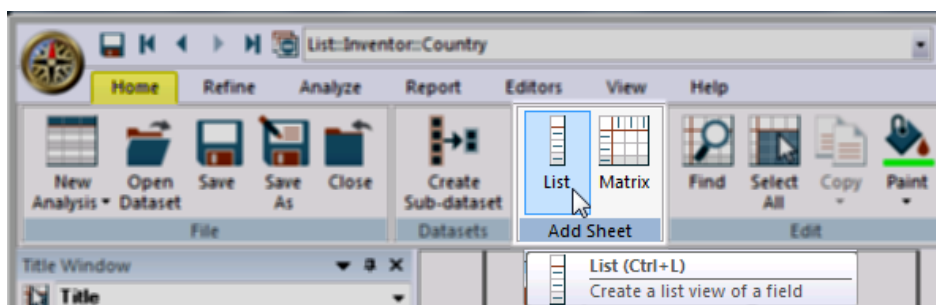
- The column heading **#Records** shows the number of records in the dataset containing that organization named in the Assignee field.
- The column heading **#Instances** shows the total number of times the organization appears in the dataset. In this example, Samsung Electronics Company appears two (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**, etc. are user-defined groups.

The List View can be magnified by selecting “Zoom” from the right-click menu. See [Zooming in a List or Matrix](#) for more details.

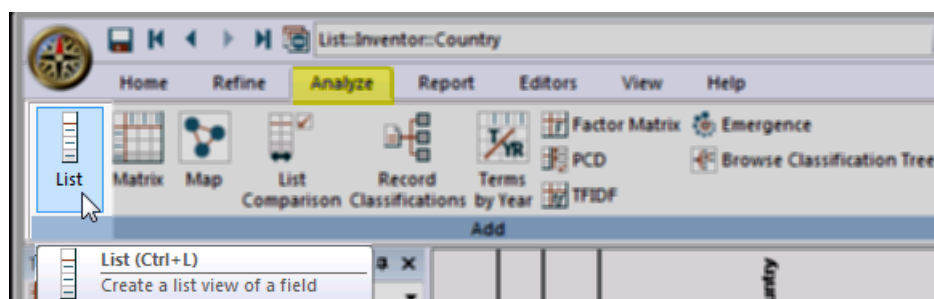
## Creating a list view

There are several ways to Create a List view:

1. From the **Home** ribbon

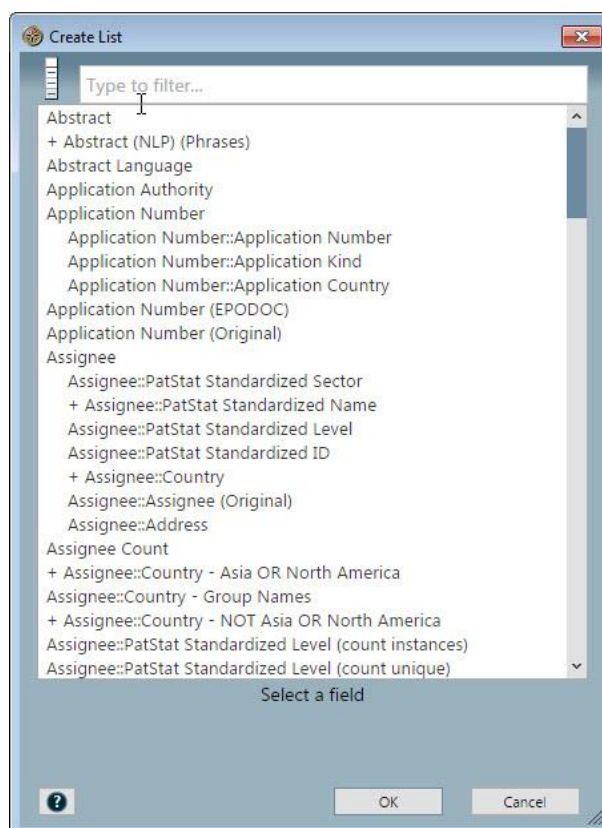


2. From the **Analyze** ribbon



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 ▼
(filters)	
Abstract	2,808
Abstract (NLP) (Phrases)	34,636
Abstract Language	6
Applicant Seq Num	13
Application Authority	19
Application	2,978
Application	2,978
Application	2,978
Application K	
Assignee C	6
Assignee	1,234
Standardized	
Address   Cou	
Citations	28,362
Authority   O	
Standardized	
Sequence Nur	
Cited Fami	11,934
Cited NPL	12,102
NPL Type   NPL Citation Sequence Number	
Continuation Type	4

☐ Show Hidden Fields

Summary
List::Grant Publication Year
Chart::Grant Publication Year (1)
List::Assig

IISCPatstat Quantum Dot.vpt

## **Working with a List**

### ***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).

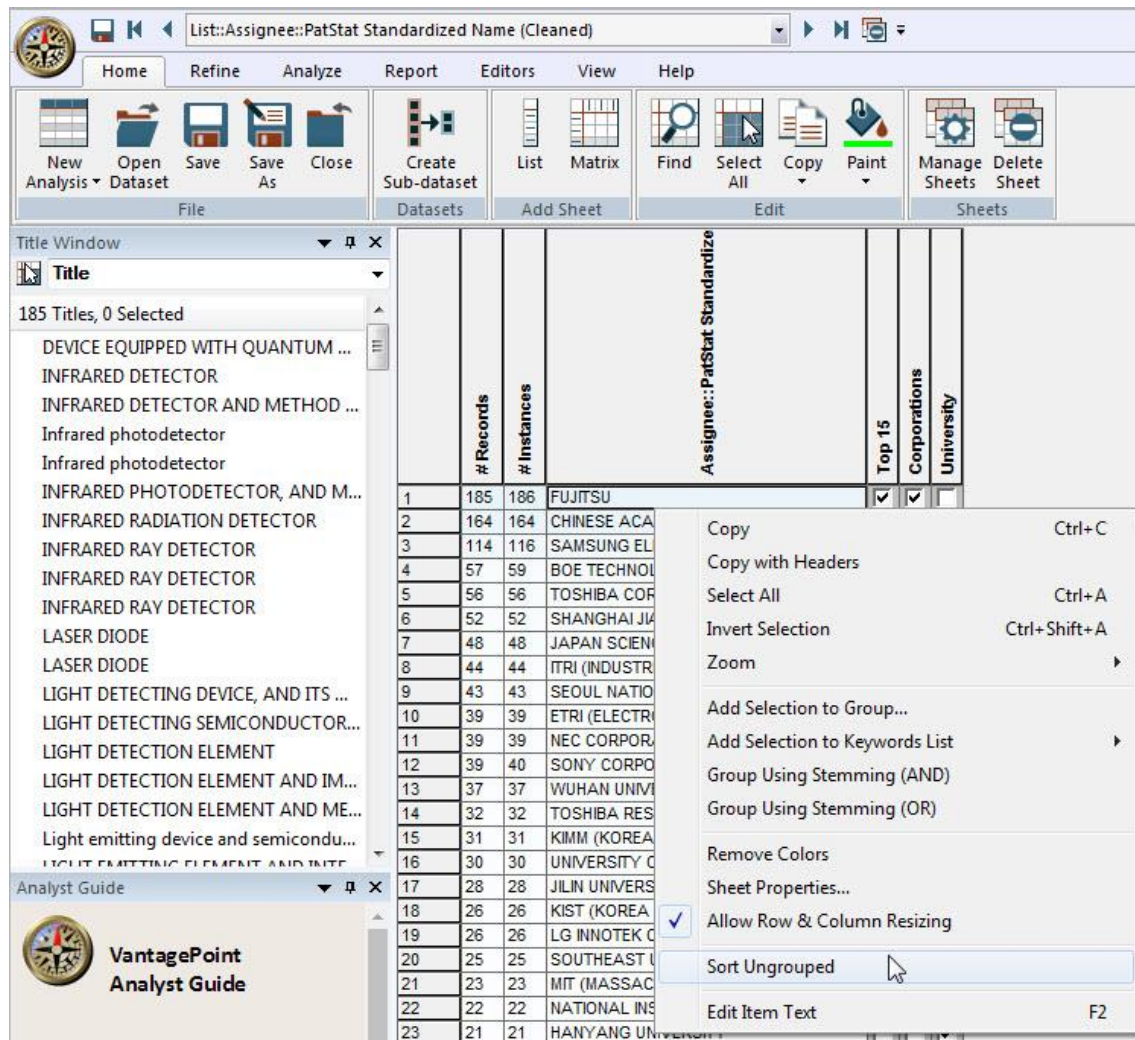


2. Double-click on the column again to reverse the order of the previous sort (i.e., to sort in reverse alphabetical order or increasing numeric order).

### 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.

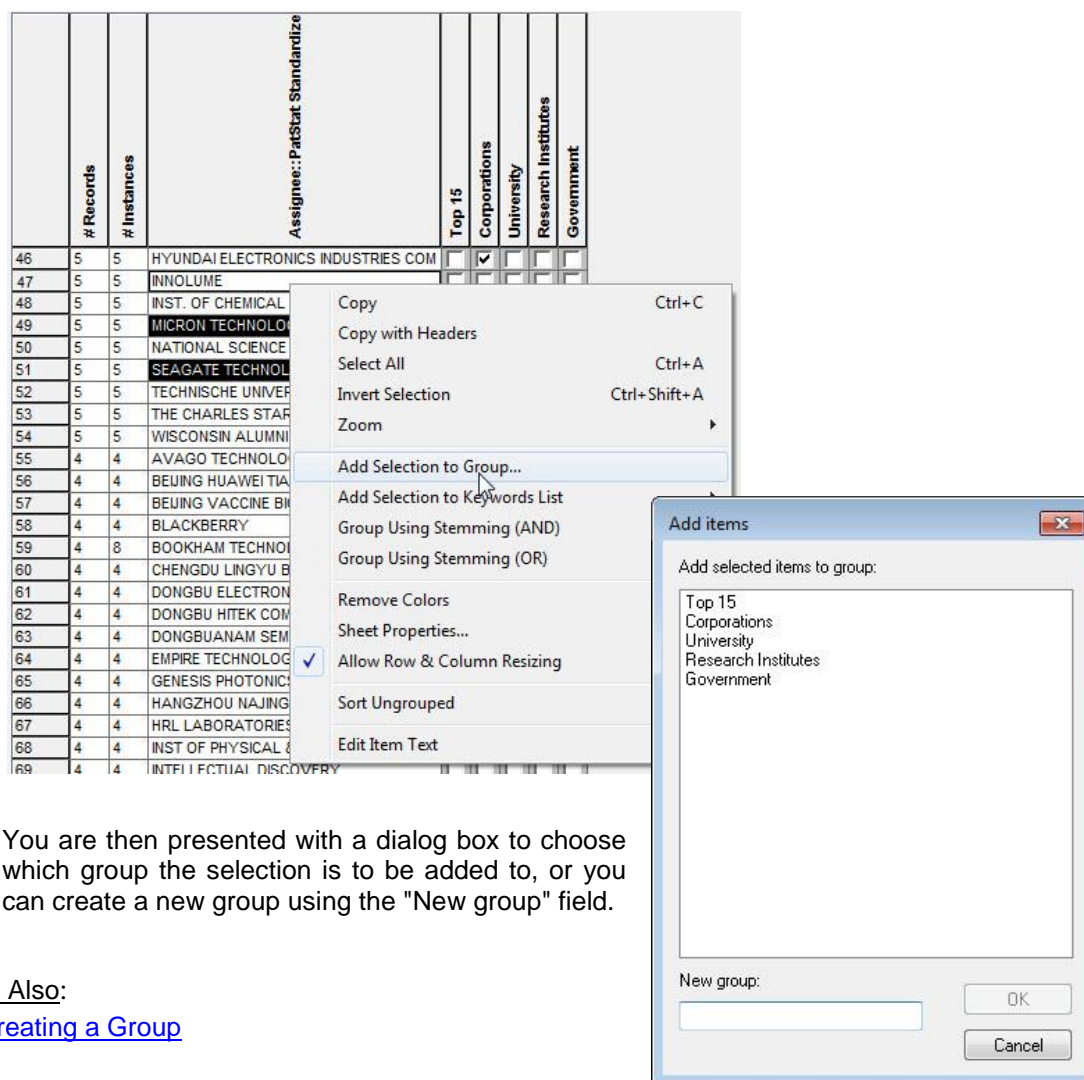
## Adding list items to a group

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.

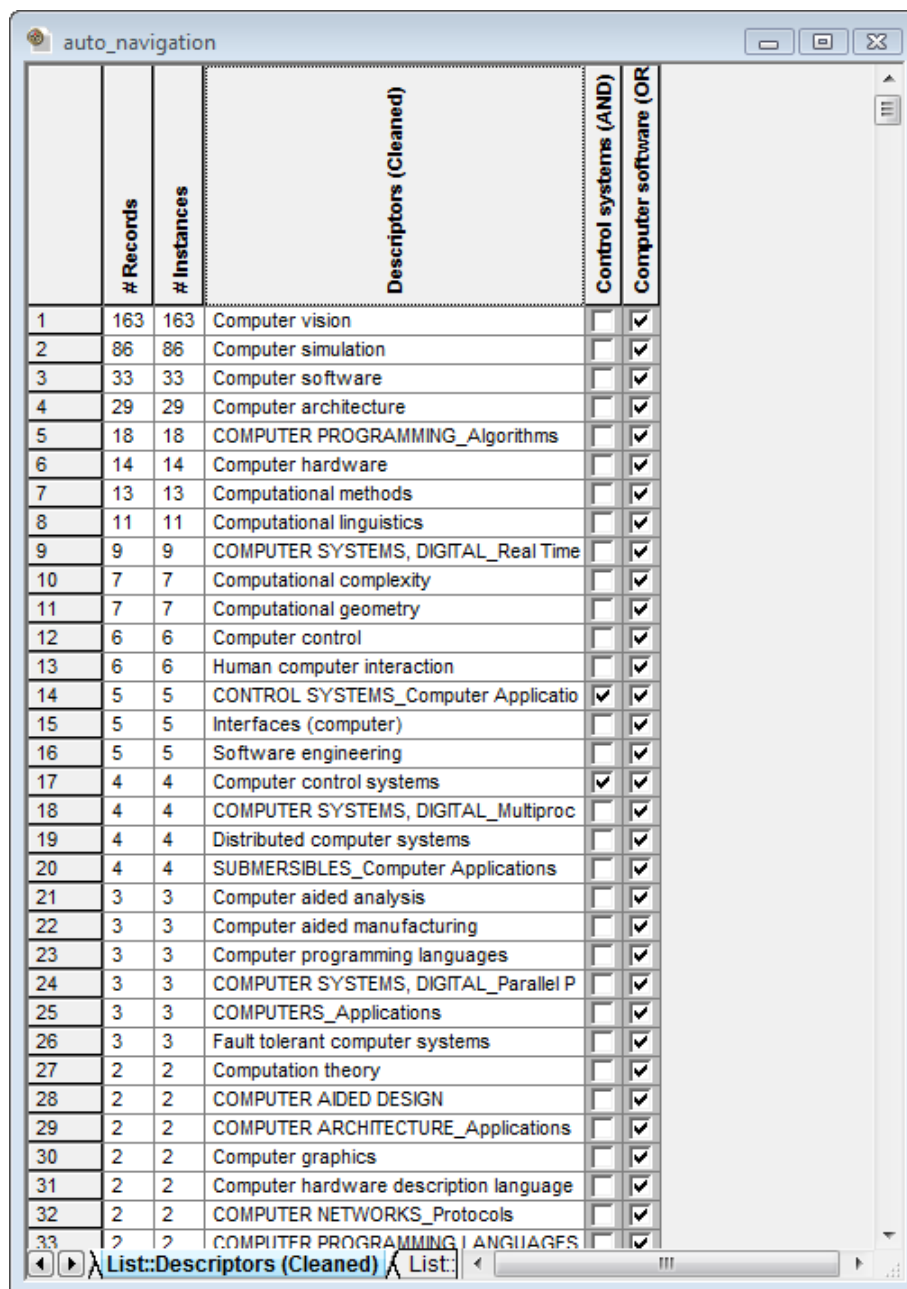
To create a group using stemming:

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 screenshot displays two overlapping windows from a software application. The background window shows a list of items with columns for ID, Name, and a third column. The foreground window shows a context menu for a selected item, with options like 'Copy', 'Select All', 'Zoom', 'Add Selection to Group...', 'Add Selection to Keywords List', 'Group Using Stemming (AND)', 'Group Using Stemming (OR)', 'Remove Colors', and 'Sheet Properties...'. The 'Group Using Stemming (OR)' option is highlighted in the foreground menu.

ID	Name	Third Column
9	81	81
10	79	79
11	77	77
12	77	77
13	75	75
14	74	74
15	62	62
16	59	59
17	57	57
18	52	52
19	50	50
20	50	50
21	48	48
22	45	45
23	44	44
24	44	44
25	43	43
26	42	42
27	39	39
28	37	37
29	35	35
30	35	35
31	34	34
32	33	33
33	32	32
34	30	30
35	30	30
36	30	30
37	29	29
38	29	30
39	29	29
40	28	28
41	24	24
42	24	24
43	23	23
44	23	23
45	23	23
46	23	23
47	22	22
48	22	22
49	22	22
50	21	21
51	20	20
52	19	19
53	19	19
54	19	19

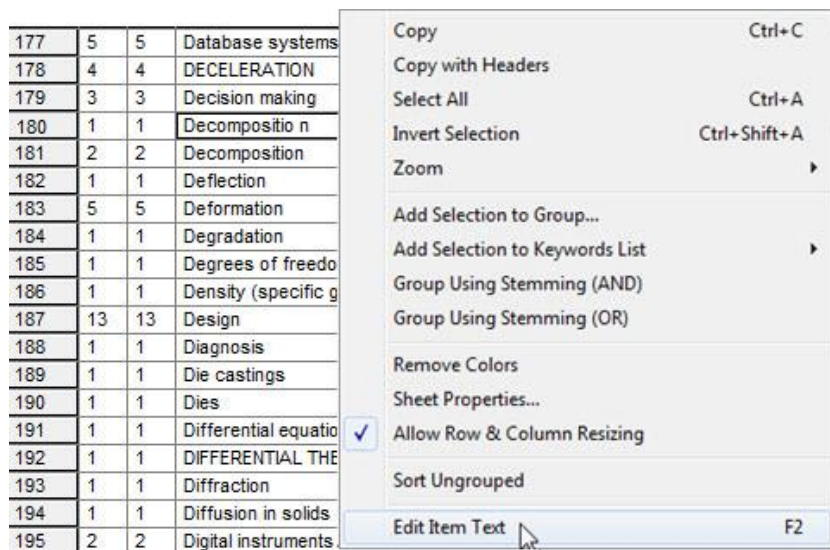
The following illustrations show the results. The first group "Control systems" was created using "AND," and the second group "Computer software" was created using "OR."



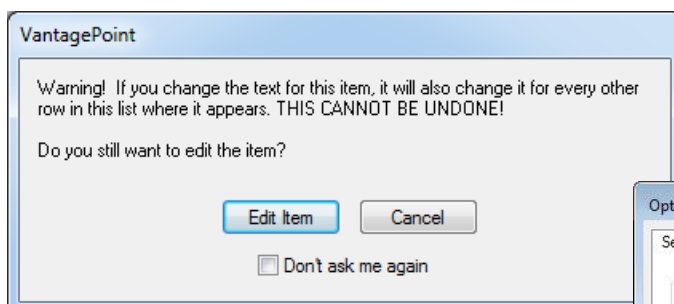
	# Records	# Instances	Descriptors (Cleaned)	Control systems (AND)	Computer software (OR)
1	163	163	Computer vision	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2	86	86	Computer simulation	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3	33	33	Computer software	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4	29	29	Computer architecture	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5	18	18	COMPUTER PROGRAMMING_Algorithms	<input type="checkbox"/>	<input checked="" type="checkbox"/>
6	14	14	Computer hardware	<input type="checkbox"/>	<input checked="" type="checkbox"/>
7	13	13	Computational methods	<input type="checkbox"/>	<input checked="" type="checkbox"/>
8	11	11	Computational linguistics	<input type="checkbox"/>	<input checked="" type="checkbox"/>
9	9	9	COMPUTER SYSTEMS, DIGITAL_Real Time	<input type="checkbox"/>	<input checked="" type="checkbox"/>
10	7	7	Computational complexity	<input type="checkbox"/>	<input checked="" type="checkbox"/>
11	7	7	Computational geometry	<input type="checkbox"/>	<input checked="" type="checkbox"/>
12	6	6	Computer control	<input type="checkbox"/>	<input checked="" type="checkbox"/>
13	6	6	Human computer interaction	<input type="checkbox"/>	<input checked="" type="checkbox"/>
14	5	5	CONTROL SYSTEMS_Computer Applicatio	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
15	5	5	Interfaces (computer)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
16	5	5	Software engineering	<input type="checkbox"/>	<input checked="" type="checkbox"/>
17	4	4	Computer control systems	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
18	4	4	COMPUTER SYSTEMS, DIGITAL_Multiproc	<input type="checkbox"/>	<input checked="" type="checkbox"/>
19	4	4	Distributed computer systems	<input type="checkbox"/>	<input checked="" type="checkbox"/>
20	4	4	SUBMERSIBLES_Computer Applications	<input type="checkbox"/>	<input checked="" type="checkbox"/>
21	3	3	Computer aided analysis	<input type="checkbox"/>	<input checked="" type="checkbox"/>
22	3	3	Computer aided manufacturing	<input type="checkbox"/>	<input checked="" type="checkbox"/>
23	3	3	Computer programming languages	<input type="checkbox"/>	<input checked="" type="checkbox"/>
24	3	3	COMPUTER SYSTEMS, DIGITAL_Parallel P	<input type="checkbox"/>	<input checked="" type="checkbox"/>
25	3	3	COMPUTERS_Applications	<input type="checkbox"/>	<input checked="" type="checkbox"/>
26	3	3	Fault tolerant computer systems	<input type="checkbox"/>	<input checked="" type="checkbox"/>
27	2	2	Computation theory	<input type="checkbox"/>	<input checked="" type="checkbox"/>
28	2	2	COMPUTER AIDED DESIGN	<input type="checkbox"/>	<input checked="" type="checkbox"/>
29	2	2	COMPUTER ARCHITECTURE_Applications	<input type="checkbox"/>	<input checked="" type="checkbox"/>
30	2	2	Computer graphics	<input type="checkbox"/>	<input checked="" type="checkbox"/>
31	2	2	Computer hardware description language	<input type="checkbox"/>	<input checked="" type="checkbox"/>
32	2	2	COMPUTER NETWORKS_Protocols	<input type="checkbox"/>	<input checked="" type="checkbox"/>
33	2	2	COMPUTER PROGRAMMING_LANGUAGES	<input type="checkbox"/>	<input checked="" type="checkbox"/>

## Edit Item Text

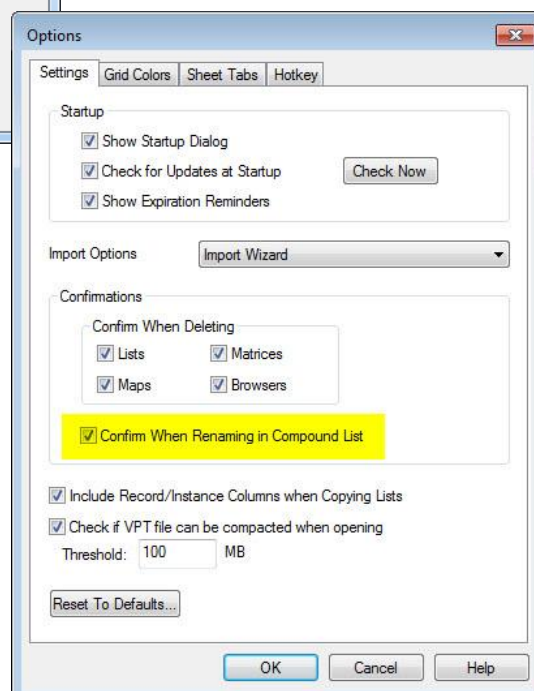
You can change the text of an item in a List View by right-clicking the selected item and choosing **Edit Item Text** from the menu. You may use this to correct simple misspellings or other errors that occur in your data.



**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:





## 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.

The screenshot displays a software interface with a context menu open over a matrix view. The menu includes the following options:

- Copy (Ctrl+C)
- Select All (Ctrl+A)
- Zoom (highlighted)
- Add Row Selections to Group
- Add Column Selections to Group
- List Cells In Matrix
- Remove Colors
- Sheet Properties...
- Allow Row & Column Resizing (checked)
- Reset Matrix
- Sort Row

The Zoom submenu is open, showing the following zoom levels:

- Restore
- 50%
- 60%
- 70%
- 80%
- 90%
- 100%
- 110%
- 120%
- 130% (selected)
- 140%

The background shows a matrix view with columns labeled H01L, C09K, G01N, B82Y, H01S, G02F, C01B, B82B, G02B, A61K, C12Q, F21V, C01G, B01J, and a column for # Records. The rows are labeled with IPC Subclass and Assignee names, such as FUJITSU, CHINESE ACADEMY OF SCIENCES, SAMSUNG ELECTRONICS COMPANY, BOE TECHNOLOGY GROUP COMPANY, TOSHIBA CORPORATION, SHANGHAI JIAO TONG UNIVERSITY, JAPAN SCIENCE AND TECHNOLOGY AG, ITRI (INDUSTRIAL TECHNOLOGY RESEARCH), and SEOUL NATIONAL UNIVERSITY.

Within Lists and Matrices, you can also zoom in and out using a wheel mouse. While holding down the Ctrl key, scroll the wheel away from you to enlarge the view; scroll toward you to shrink the view.

To restore to 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	▼ ▲ Show Values >= 1 and <= 135 Cooccurrence # 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	33	24	15	11	17	6	15	4
		4 57 BOE TECHNOLOGICAL CO.				5		25			9
		5 56 TOSHIBA ELECTRONIC COMPONENTS CORP.				7	15	19	1	1	7
		6 52 SHANGHAI JIAO TONG UNIVERSITY							16		
		7 48 JAPAN SCIENCE AND TECHNOLOGY AGENCY								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 ELECTRONIC COMPONENTS CORP.									2
		15 31 KIMM (KOREAN INSTITUTE OF MATERIALS)							3	13	
		16 30 UNIVERSITY OF ULSAN							1		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	

Copy  
Select All  
Zoom  
Add Row Selections to Group  
Add Column Selections to Group  
List Cells In Matrix  
Remove Colors  
Sheet Properties...  
Allow Row & Column Resizing  
Reset Matrix  
Sort Row

Ctrl+C  
Ctrl+A  
Restore  
50%  
60%  
70%  
80%  
90%  
100%  
110%  
120%  
130%  
140%  
150%  
200%

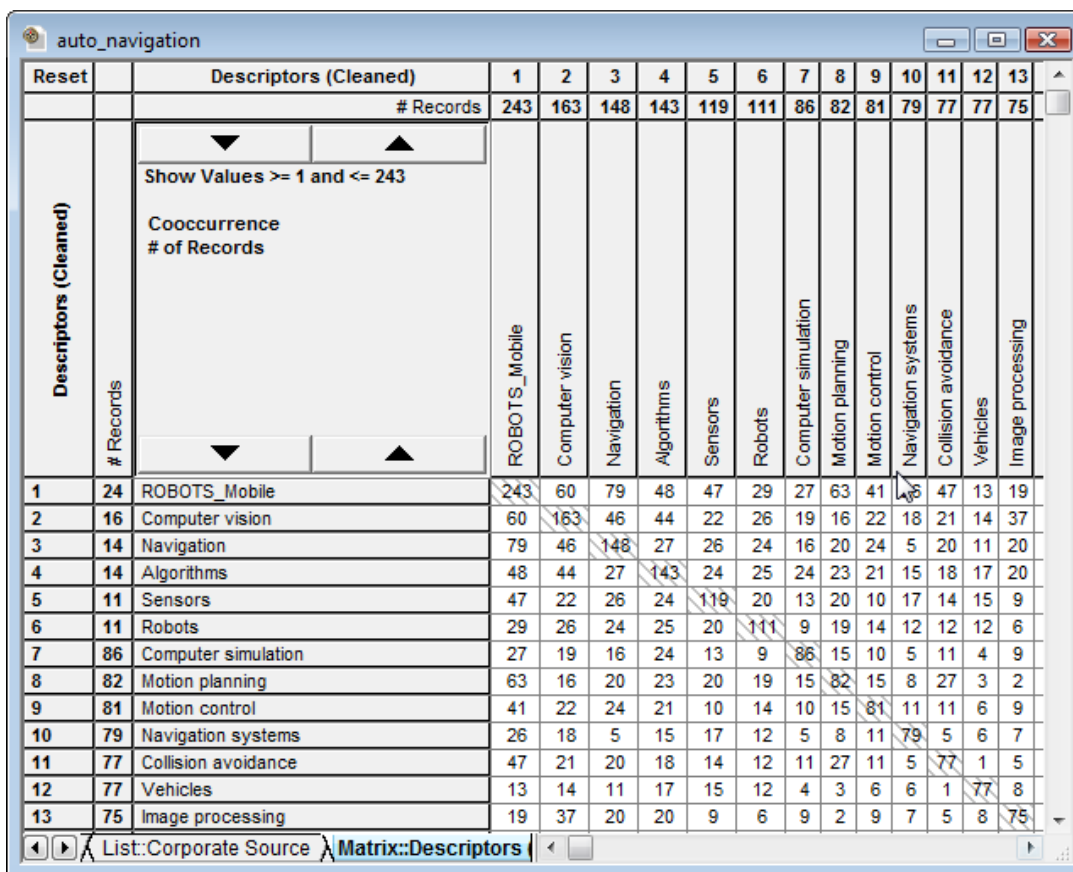
## Matrix

In VantagePoint, you can create a Co-occurrence, Auto-correlation or Cross-Correlation Matrix.

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.

### 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.



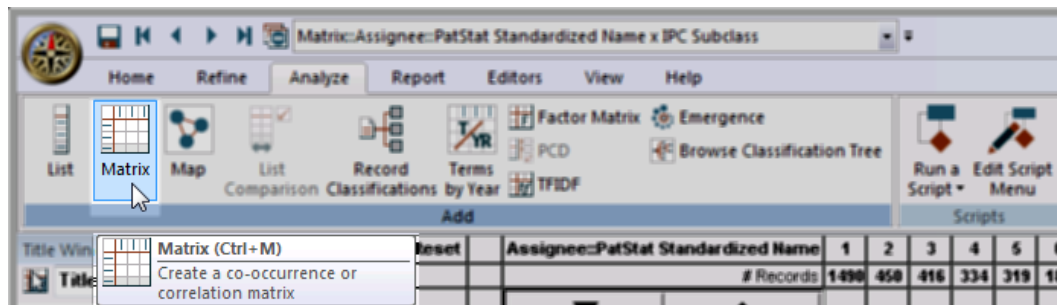
The list items (in this example, Descriptors) are listed as the column and row headings (e.g., *ROBOTS\_Mobile*, *Computer vision*, etc.). The column and row heading **# Records** shows the number of records in the dataset containing the associated list item. The numbers in the matrix show the number 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.

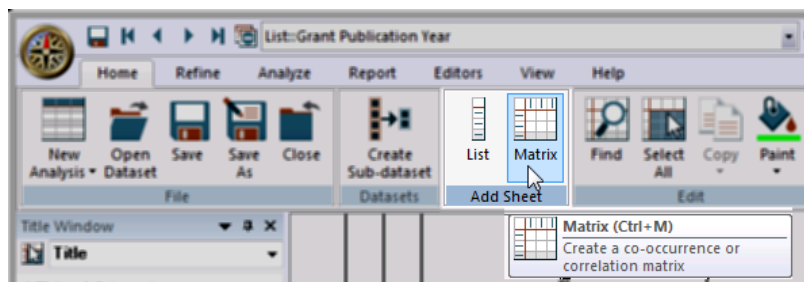
Within a co-occurrence matrix, you can: [Zoom](#), [Sort](#), [Make Heat Map](#), [Paint cells](#), ["Flood" the matrix](#), [Select multiple cells](#), [Find a string](#), or [List Cells in the Matrix](#).

## Creating a co-occurrence matrix

1. Open the Create Matrix dialog box by selecting **Matrix** from the **Analyze** ribbon.

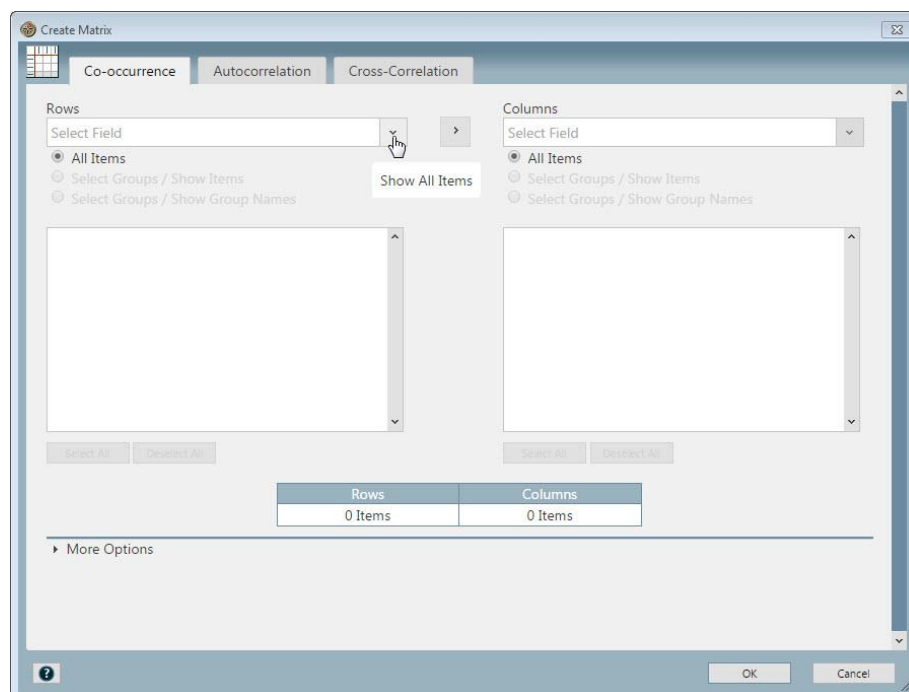


or from the **Home** ribbon:



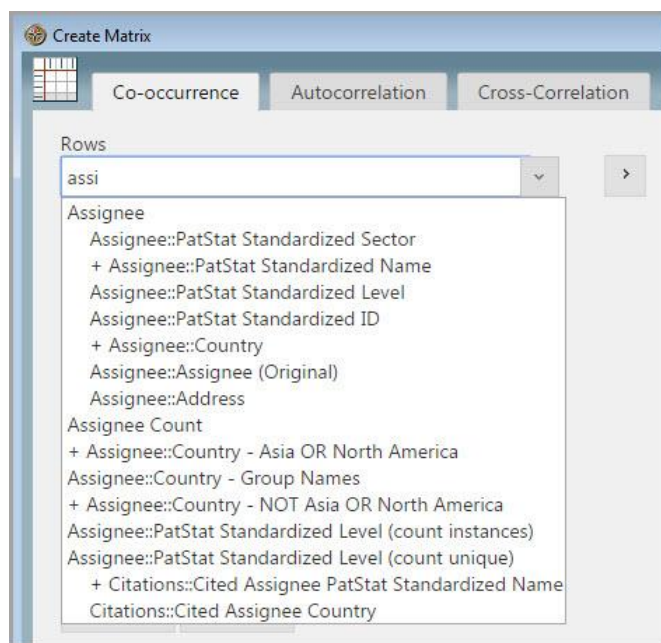
or press **Ctrl+M** on the keyboard.

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 using the dropdown box.





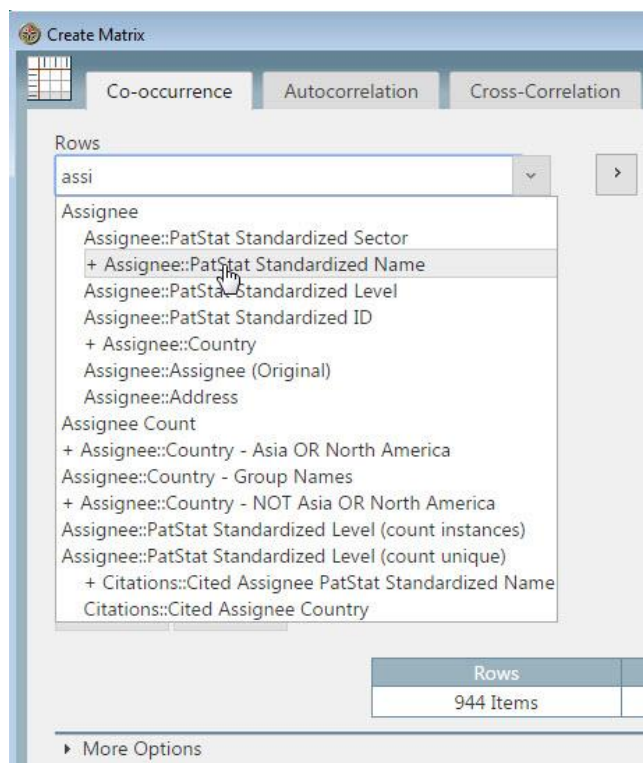
Another option is to type the field name in the "Select Field" box. As you type, the matches appear for selection.

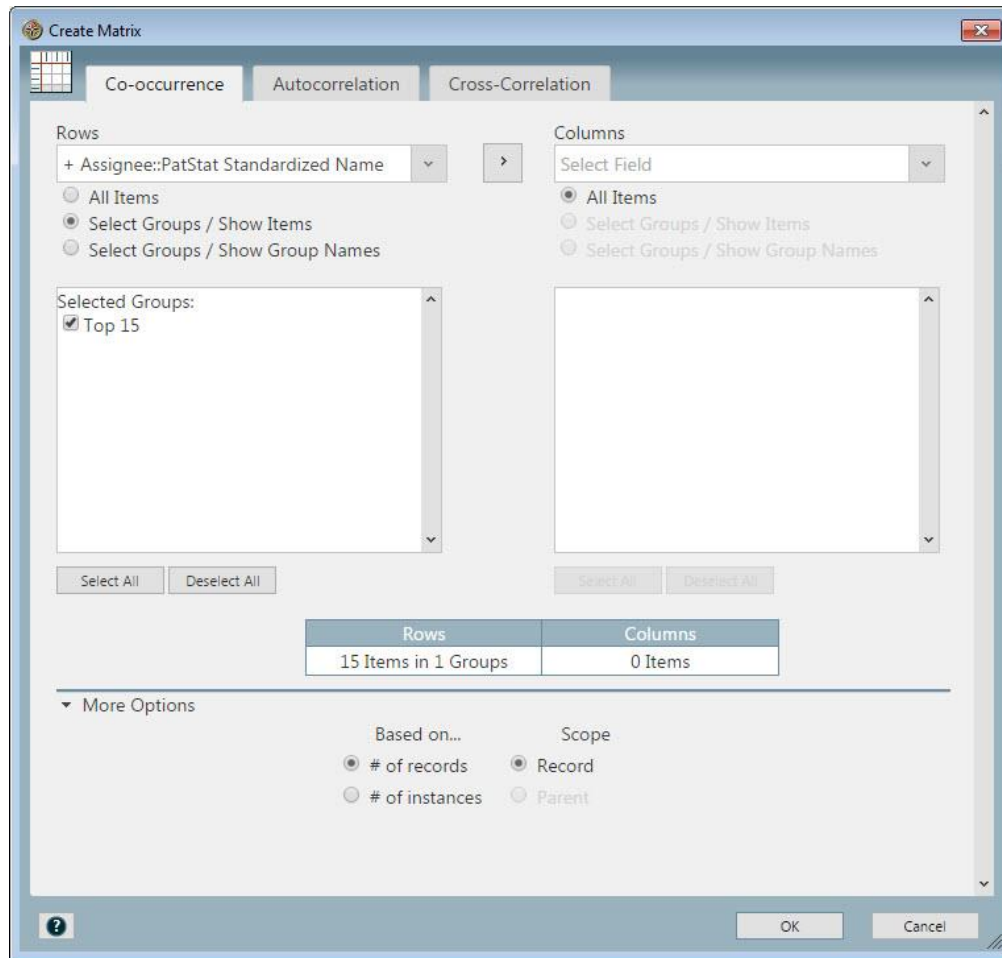


Clicking on the field name selects "All Items" as the default. A field name beginning with "+" indicates the field has groups.

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 on the right-pointing arrow between the windows allows you to quickly move the Row selections to the Columns selection.)

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	Columns
15 Items in 1 Groups	36 Items

▼ More Options

Based on...

☒ # of records  
☐ # of instances

Scope

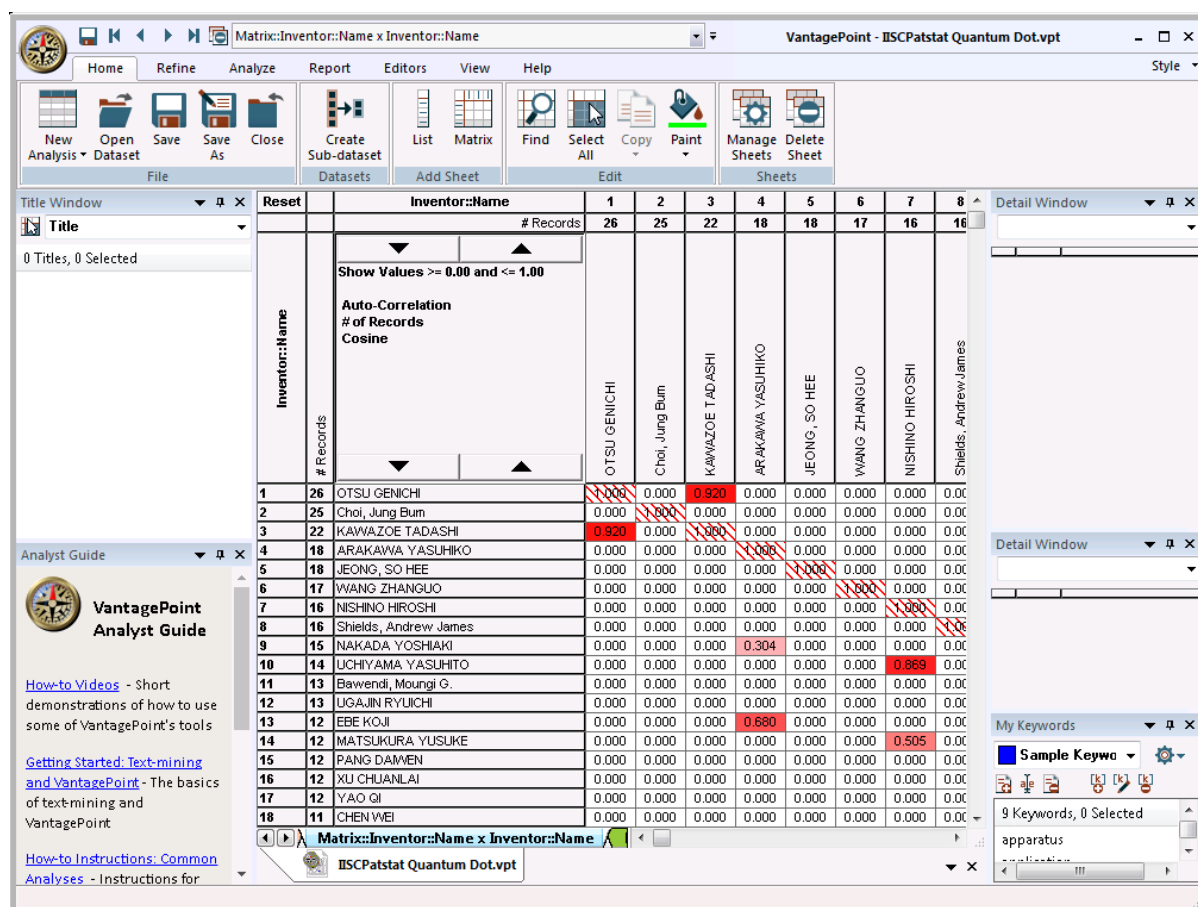
☒ Record  
☐ Parent

Help OK

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.



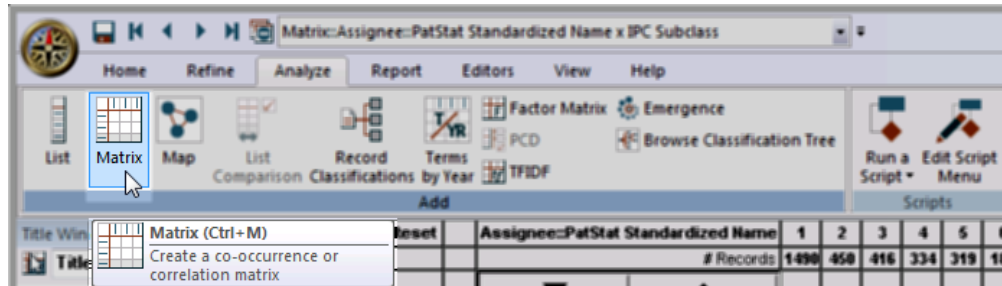
An Auto-Correlation Matrix of Descriptors will show descriptors that have a high degree of correlation by virtue of being used in the same records. In this illustration, the default "Heat Map" is used to identify Inventors with high correlation.

**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.

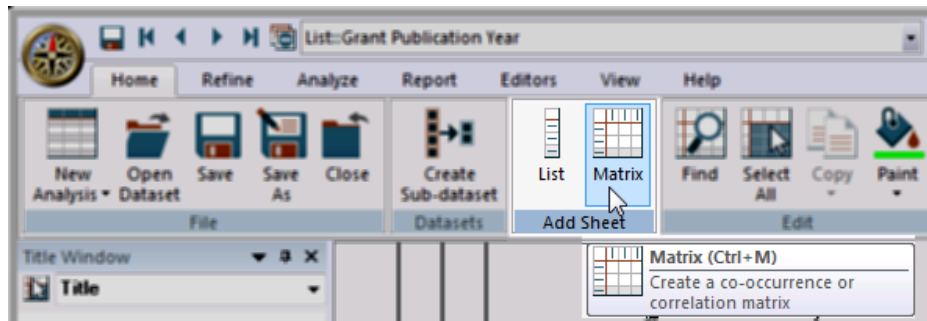
Within an Auto-Correlation matrix, you can: [Zoom](#), [Sort](#), [Make Heat Map](#), [Paint cells](#), ["Flood" the matrix](#), [Select multiple cells](#), [Find a string](#), or [List Cells in the Matrix](#).

## Creating an auto-correlation matrix

1. Open the **Create Matrix** dialog box by selecting **Matrix** from the **Analyze** ribbon:



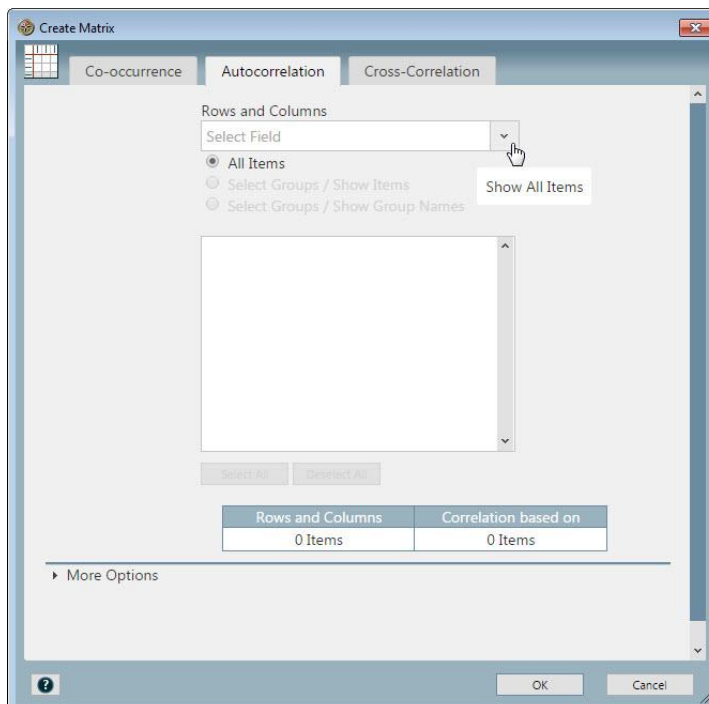
or from the **Home** Ribbon:



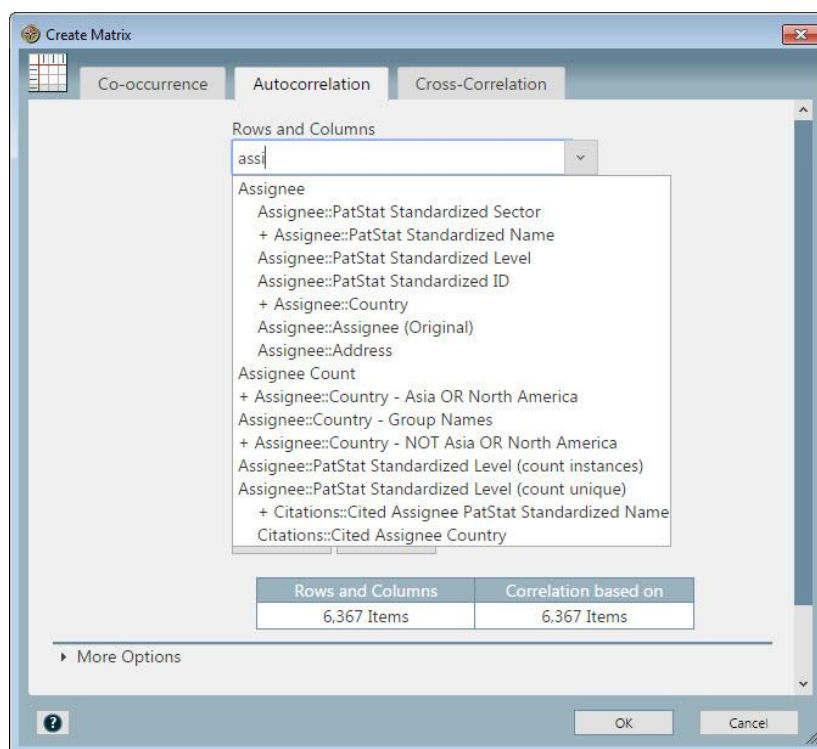
or press **Ctrl+M** on the keyboard.

You are presented with the **Create Matrix** dialog.

2. Click the **Auto-Correlation** tab.

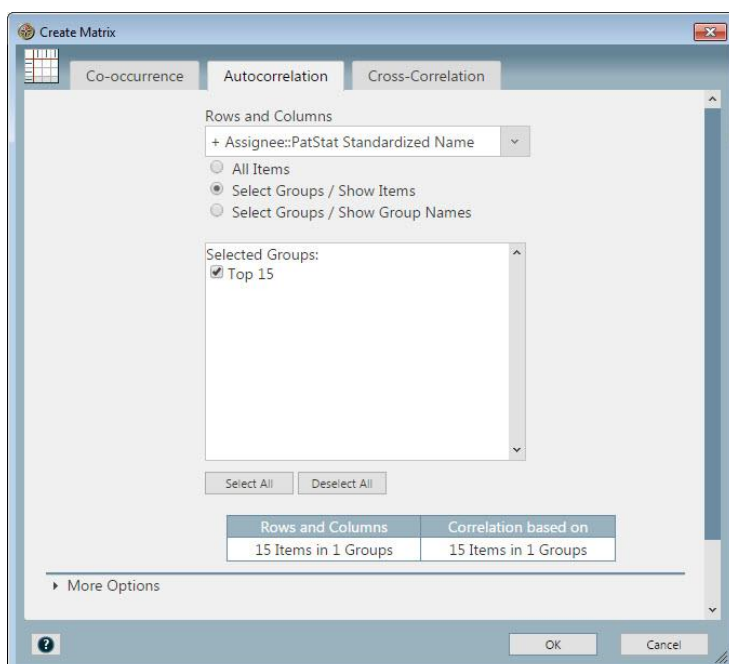


- From the Rows and Columns dropdown, choose the field and/or groups for which you want to show correlations. Another option is to type the field name in the "Select Field" box. As you type, the matches appear for selection. These items will appear on the **Row** and **Column** headers on the matrix. (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.



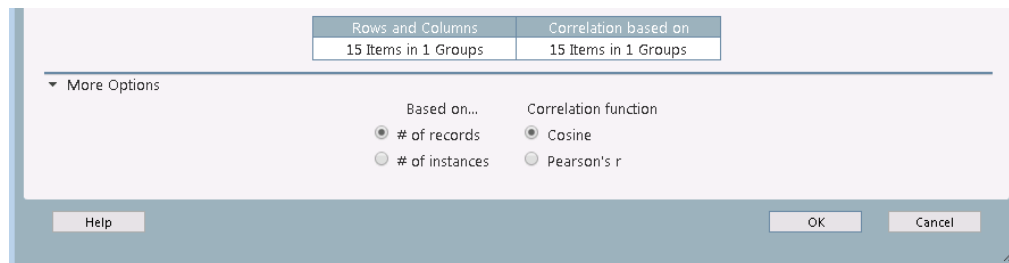
Selection choices include:

- **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**:

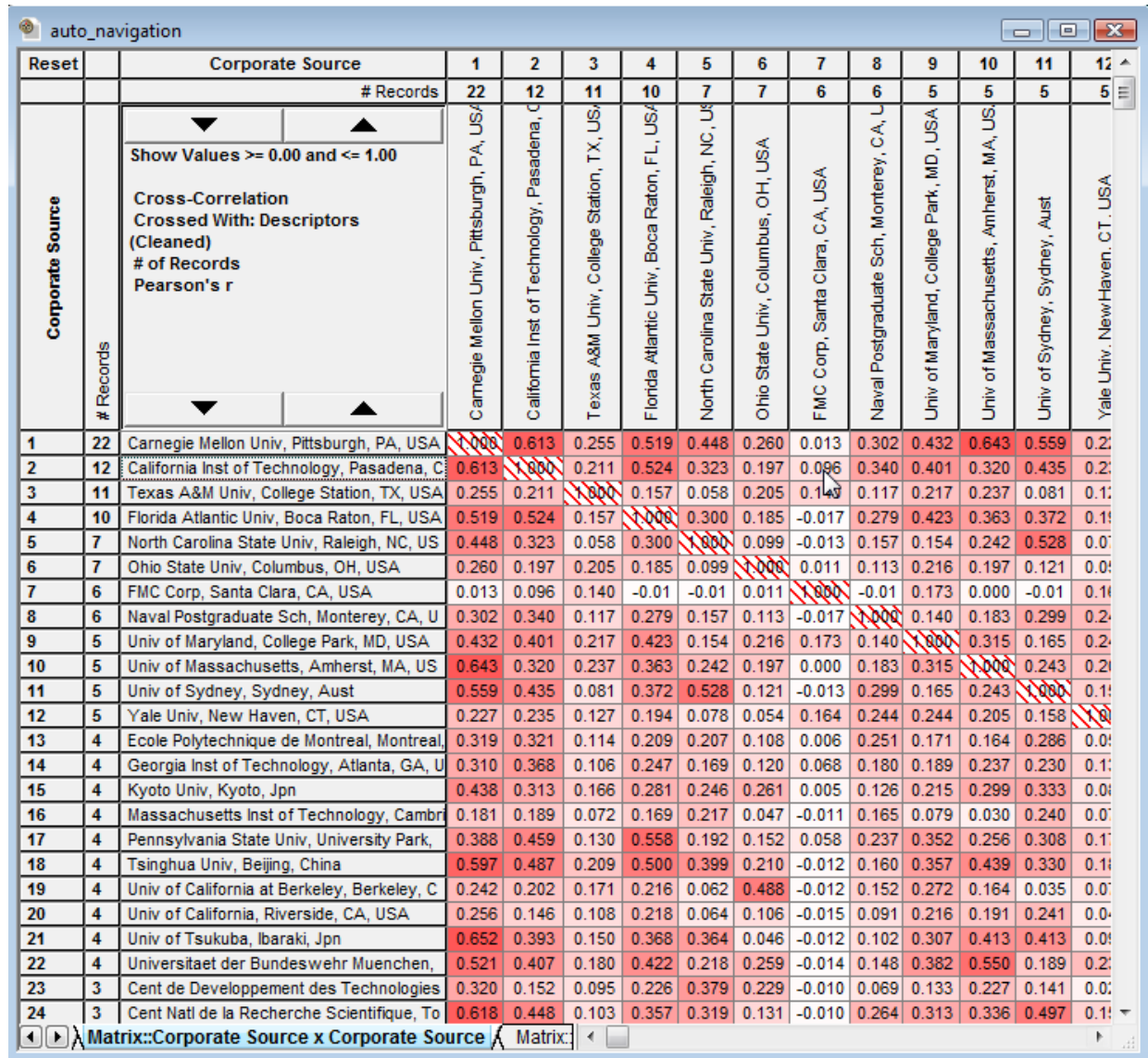


4. Select the Basis for the Matrix - either **# of Records** or **# of Instances**. For most “index” terms, **# of Records** is the correct choice. For fields that may have more than one instance of a given item in a record, **# of Instances** may be appropriate (e.g., NLP words or phrases).
  5. Correlation 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.



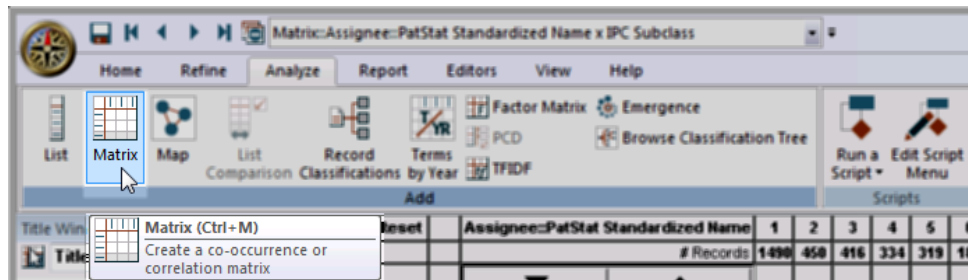
Creation of a Cross-Correlation Matrix requires you to select two fields. The first choice is for the items that will actually appear as row and column items in the matrix - usually a field or a smaller group of items you define in a List View. The second field you choose is the basis of the analysis of the relationships among the row and column items.

In the example above, the default "Make Heat Map" was used to identify items with high correlation.

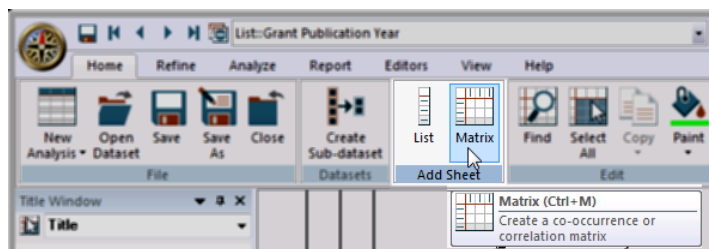
Within a Cross-Correlation matrix, you can: [Zoom](#), [Sort](#), [Make Heat Map](#), [Paint cells](#), ["Flood" the matrix](#), [Select multiple cells](#), [Find a string](#), or [List Cells in the Matrix](#).

## Creating a cross-correlation matrix

1. Open the **Create Matrix** dialog box by selecting **Matrix** from the **Analyze** ribbon:



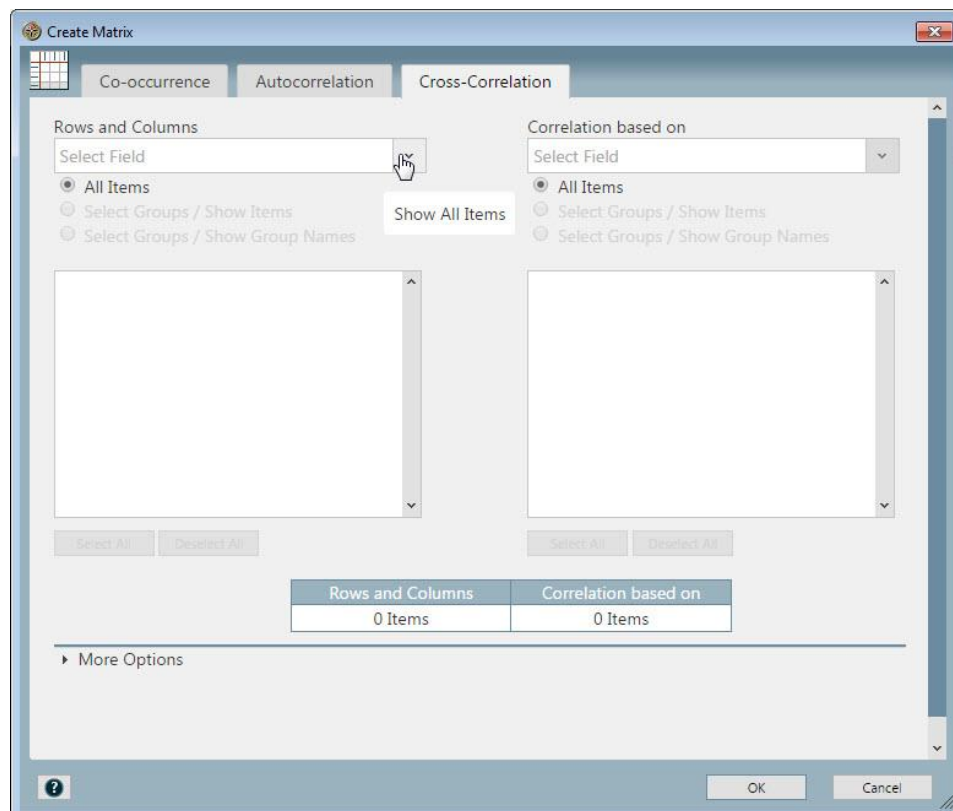
or from the **Home** Ribbon:



or press **Ctrl+M** on the keyboard.

You are presented with the **Create Matrix** dialog.

2. 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.

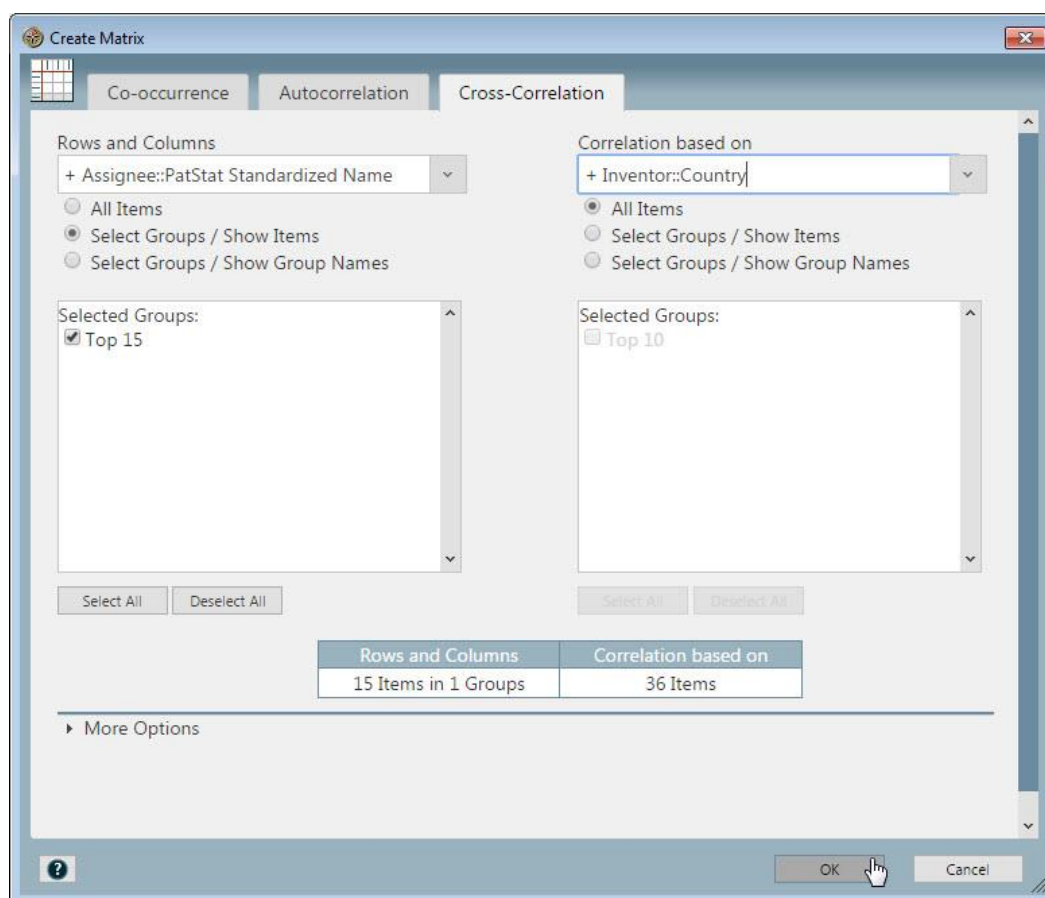
Clicking on the field name selects "All Items" as the default. A field name beginning with "+" indicates the field has groups. Selecting a field with groups enables you to select a smaller set within the field by clicking the box next to the Group name.

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**.

The screenshot shows a dialog box with a light blue header and a white body. At the top, there are two tabs: 'Rows and Columns' and 'Correlation based on'. Both tabs show '15 Items in 1 Groups'. Below the tabs is a section titled 'More Options' with a downward arrow. Inside this section, there are two columns of radio buttons. The first column is labeled 'Based on...' and contains two options: '# of records' (which is selected) and '# of instances'. The second column is labeled 'Correlation function' and contains two options: 'Cosine' (which is selected) and 'Pearson's r'. At the bottom of the dialog box, there are three buttons: 'Help', 'OK', and 'Cancel'.

Rows and Columns	Correlation based on
15 Items in 1 Groups	15 Items in 1 Groups

▼ More Options

Based on...

☒ # of records

☐ # of instances

Correlation function

☒ Cosine

☐ 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

### 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.
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.

The screenshot shows a software window titled 'auto\_navigation' containing a matrix view. The window has a 'Reset' button in the top-left corner. The matrix has a header row labeled 'Descriptors (Cleaned)' and a header column labeled 'Corporate Source (Cleaned)'. The header row contains 15 numbered cells (1-15) and a '# Records' column. The header column contains 13 numbered cells (1-13) and a '# Records' row. The main data area contains a grid of numbers. Callout 1 points to the '1' in the top-left data cell (row 1, column 1). Callout 2 points to the 'Corporate Source (Cleaned)' header. Callout 3 points to the 'Descriptors (Cleaned)' header. Callout 4 points to the 'Reset' button.

			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
		# Records	31	14	13	11	10	9	9	8	7	7	7	7	6	6	6
1	163	Computer vision	8	3	3	7	4	2		1	2	3	1	2			
2	42	Cameras	1	2	1	4			1	1							1
3	22	Three dimensional				4							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		1	
12	50	Fuzzy sets		2	1	2			3						3		1
13	35	Image analysis	1	1	1	2			1								



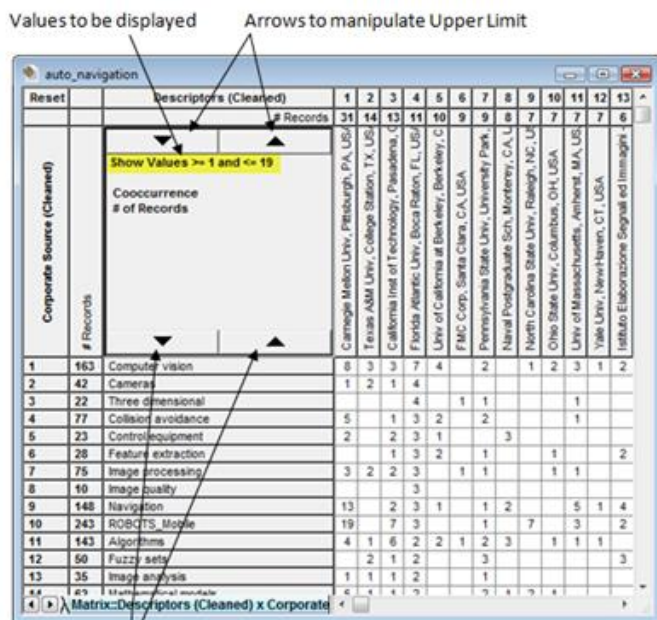
## Flooding a matrix

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.

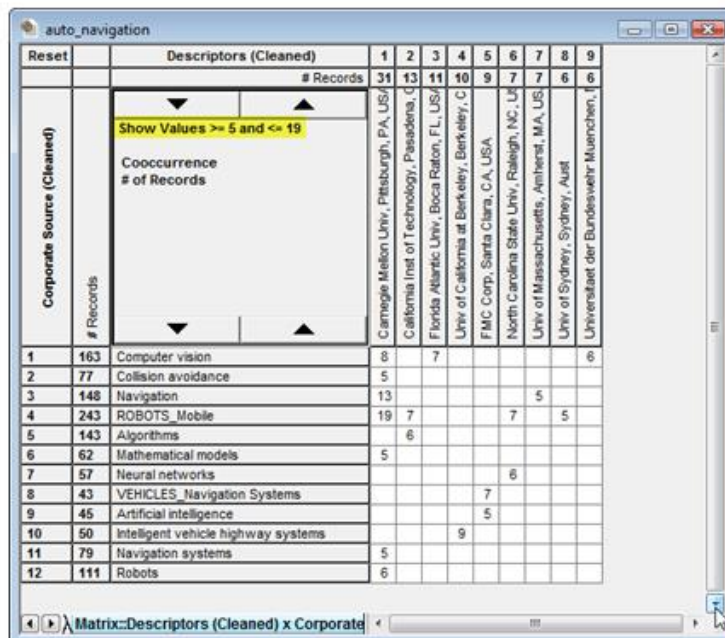
The "After" matrix (bottom picture) is a result of changing the lower limit to "5". Any entries with values of less than five were removed.

Before



After

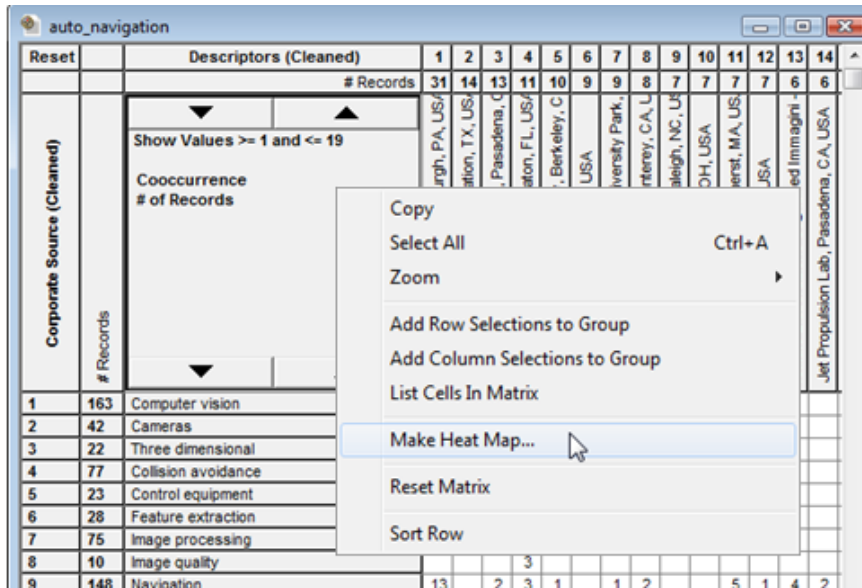
Arrows to manipulate Lower Limit



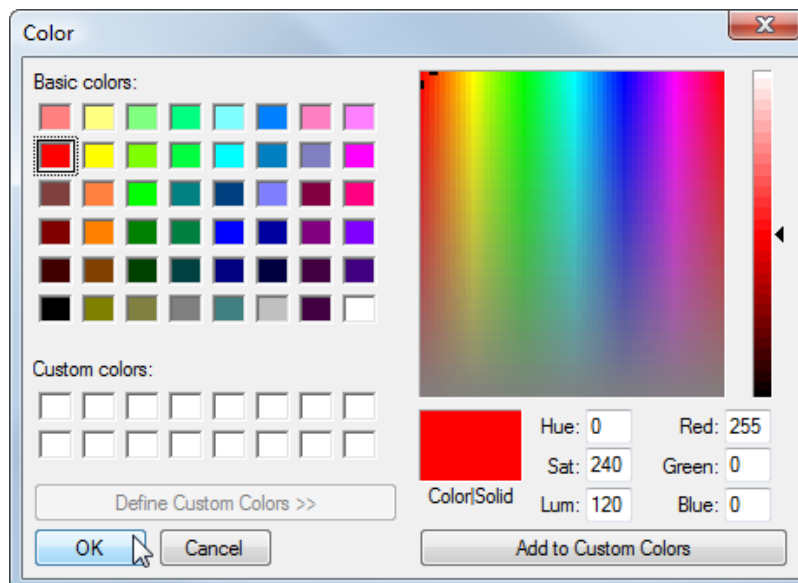
## Make Heat Map

Now you can 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.

To begin, right-click in a 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)	1	2	3	4	5	6	7	8	9	10	11	12	13	14
		# Records	31	14	13	11	10	9	9	8	7	7	7	7	6	6
Corporate Source (Cleaned)	# Records	▼ ▲														
		Show Values >= 1 and <= 19														
		Cooccurrence # of Records														
		▼ ▲														
1	163	Computer vision	8	3	3	7	4		2		1	2	3	1	2	
2	42	Cameras	1	2	1	4										
3	22	Three dimensional				4		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
11	143	Algorithms	4	1	6	2	2	1	2	3		1	1	1		1
12	50	Fuzzy sets		2	1	2			3						3	
13	35	Image analysis	1	1	1	2			1							
14	62	Mathematical models	5	1	1	2			2	1	2	1				
15	57	Neural networks	3	1		2				1	6	1	1			
16	23	Parameter estimation	1	1	1	2			2						1	
17	44	Position control	1			2	1		1	1	1					
18	39	Sensor data fusion				2	1		3		4					2
19	119	Sensors	3		1	2	1		2	3	1	1		1	1	1
20	14	Underwater equipment			2	2				1						
21	77	Vehicles	1	1	1	2	1			2						
22	7	Calibration			2	1										
23	13	Computational methods		1	1	1			1							
24	4	Costs				1										

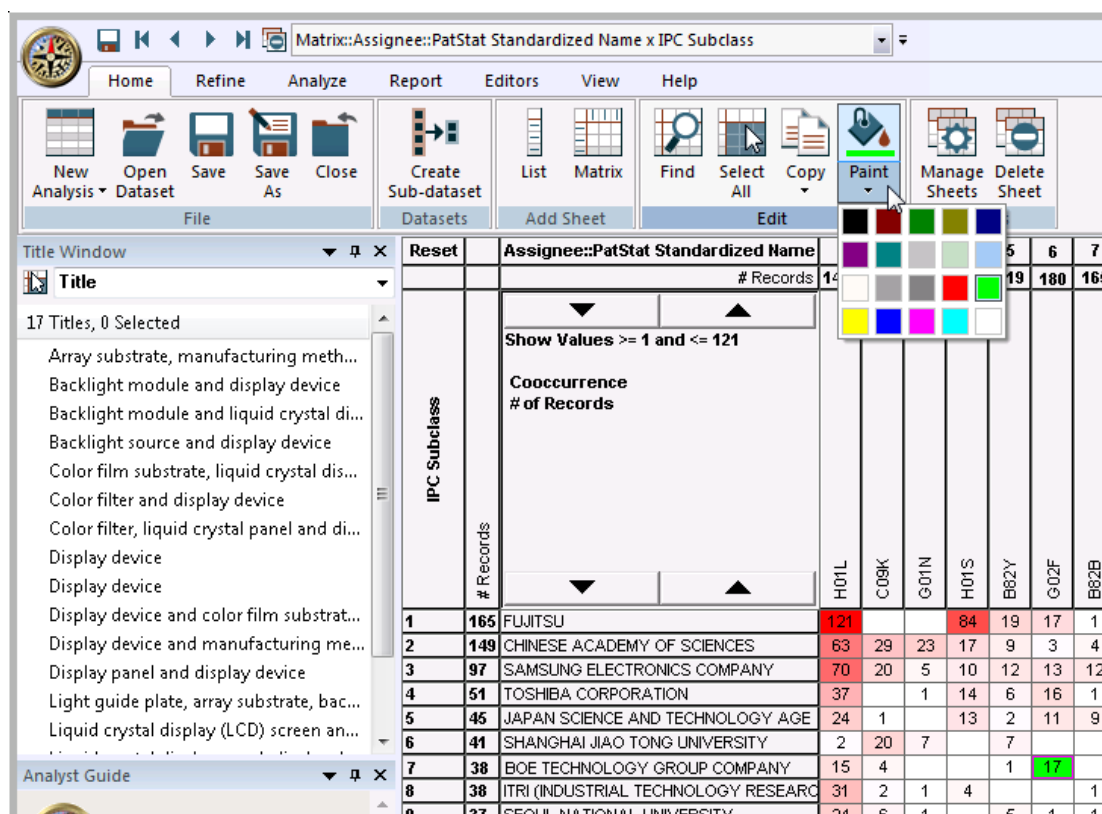
Matrix::Descriptors (Cleaned) x Corporate S

To remove the colors, simply right-click and select **Remove Colors**.

## 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.



3. Paint other cells by clicking the cell to be painted, then clicking the **Paint** icon.

## 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

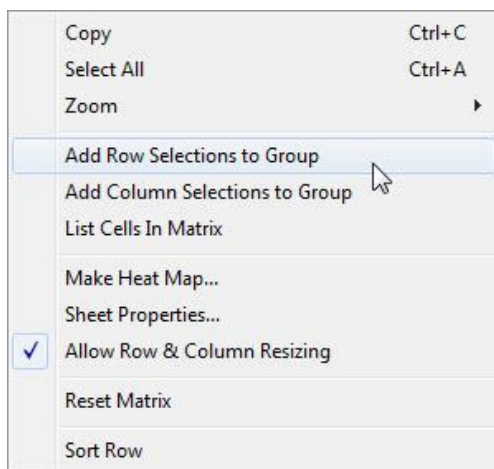
Use a "click and drag" method to highlight multiple adjacent cells to be selected.

### ***Finding a string in a matrix***

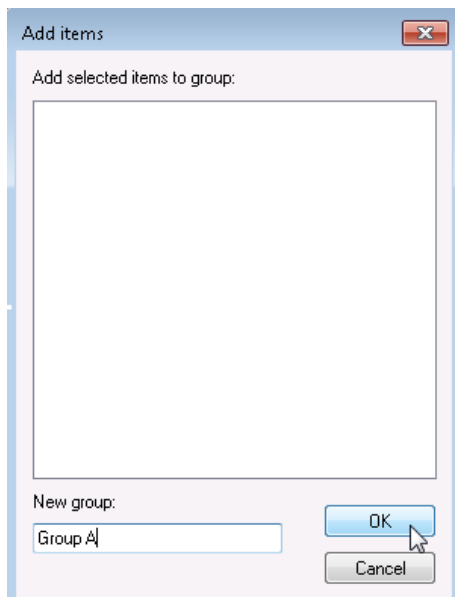
1. From the Main Menu, select **Edit** and **Find...**  
or press **Ctrl+F** on the keyboard.
  2. In the **Find** dialog box, type in the string of characters you want to find.
  3. Click **Find** to search for the string.
- 

### ***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.



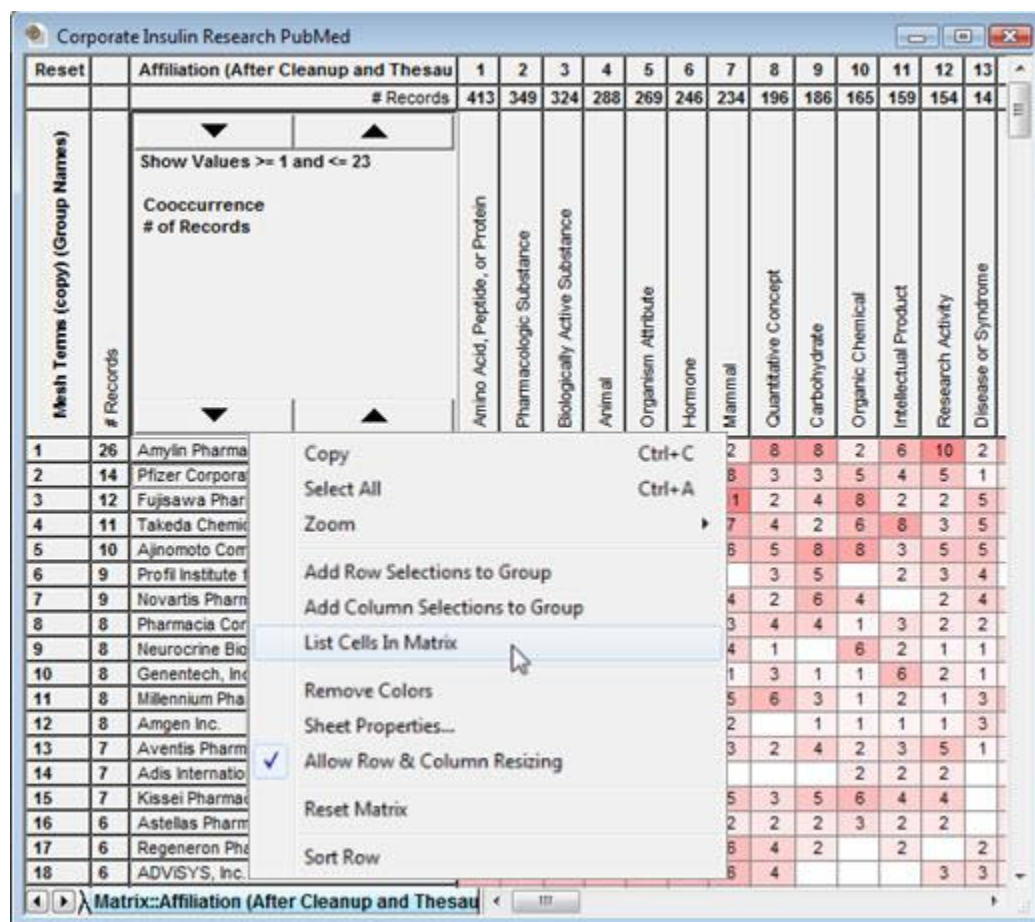
When you Create a List of the Field Name, the new Group will appear.

## 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.

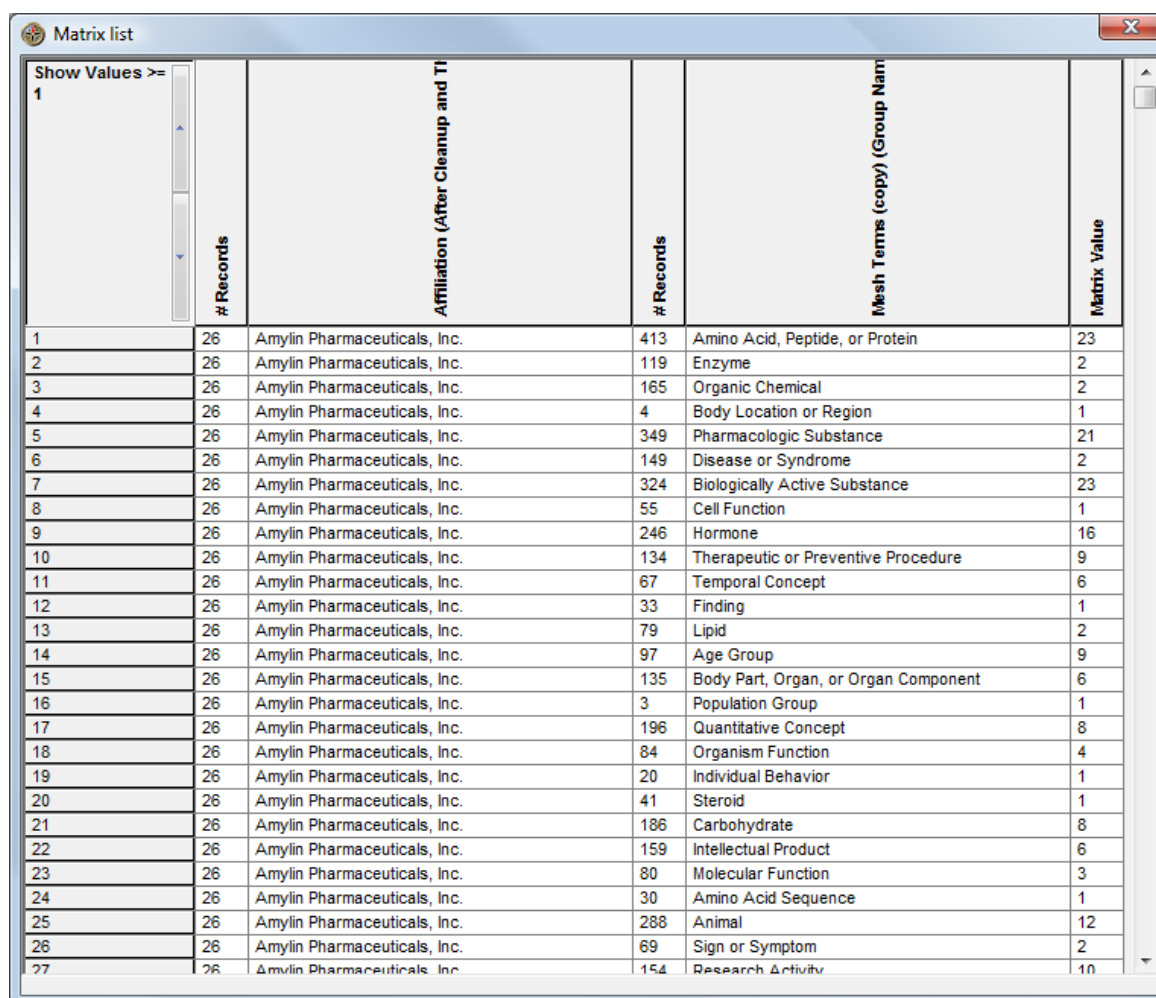
**Note:** The Matrix List is a temporary view of the matrix. It is not saved with the \*.vpt file. If you switch to another VantagePoint sheet or another application, the Matrix List is closed.

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 TI)	# 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.

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
Mesh Terms (copy) (Group Names)	<div>▼▲</div>	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
	<div>▼▲</div>													
# Records	Show Values >= 1 and <= 23  Cooccurrence # of Records													
1	26 Amylin Pharmaceuticals, Inc.	23	21	23	12	12	16	2	8	8	2	6	10	2
2	14 Pfizer Corporation	11	11	6	8	7	7	8	3	3	5	4	5	1
3	12 Fujisawa Pharmaceutical Co., Ltd.	8	10	9	11	4	3	11	2	4	8	2	2	5
4	11 Takeda Chemical Industries Ltd.	9	8	8	10	5	6	7	4	2	6	8	3	5
5														
6														

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	Amvlin 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 displays the VantagePoint software interface. The main window shows a Matrix List with columns for Corporate Source and rows for Descriptors. The Matrix List is filtered to show values between 0.00 and 1.00. The Detail Window on the right, titled "Descriptors (Cleaned)", lists the descriptors and their corresponding values. The descriptors are color-coded: yellow for column selections only, blue for row selections only, and green for both row and column selections.

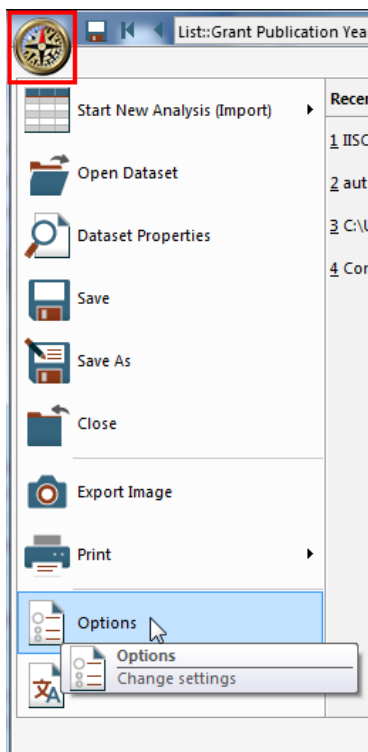
Corporate Source	# Records	1	2	3	4	5	6	7	8
1	22	Carnegie Mellon Univ, Pittsburgh, PA, USA	1.000	0.613	0.255	0.519	0.448	0.260	0.013
2	12	California Inst of Technology, Pasadena, CA, USA	0.613	1.000	0.211	0.524	0.323	0.197	0.096
3	11	Texas A&M Univ, College Station, TX, USA	0.255	0.211	1.000	0.157	0.058	0.205	0.140
4	10	Florida Atlantic Univ, Boca Raton, FL, USA	0.519	0.524	0.157	1.000	0.300	0.185	-0.01
5	7	North Carolina State Univ, Raleigh, NC, USA	0.448	0.323	0.058	0.300	1.000	0.099	-0.01
6	7	Ohio State Univ, Columbus, OH, USA	0.260	0.197	0.205	0.185	0.099	1.000	0.011
7	6	FMC Corp, Santa Clara, CA, USA	0.013	0.096	0.140	-0.01	-0.01	0.011	1.000
8	6	Naval Postgraduate Sch, Monterey, CA, USA	0.302	0.340	0.117	0.279	0.157	0.113	-0.01
9	5	Univ of Maryland, College Park, MD, USA	0.432	0.401	0.217	0.423	0.154	0.216	0.173
10	5	Univ of Massachusetts, Amherst, MA, USA	0.643	0.320	0.237	0.363	0.242	0.197	0.000
11	5	Univ of Sydney, Sydney, Aust	0.559	0.435	0.081	0.372	0.528	0.121	-0.01
12	5	Yale Univ, New Haven, CT, USA	0.227	0.235	0.127	0.194	0.078	0.054	0.164
13	4	Ecole Polytechnique de Montreal, Montreal, QC, Canada	0.319	0.321	0.114	0.209	0.207	0.108	0.006
14	4	Georgia Inst of Technology, Atlanta, GA, USA	0.310	0.368	0.106	0.247	0.169	0.120	0.068
15	4	Kyoto Univ, Kyoto, Jpn	0.438	0.313	0.166	0.281	0.246	0.261	0.005
16	4	Massachusetts Inst of Technology, Cambridge, MA, USA	0.181	0.189	0.072	0.169	0.217	0.047	-0.01
17	4	Pennsylvania State Univ, University Park, PA, USA	0.388	0.459	0.130	0.558	0.192	0.152	0.058

Descriptors (Cleaned)

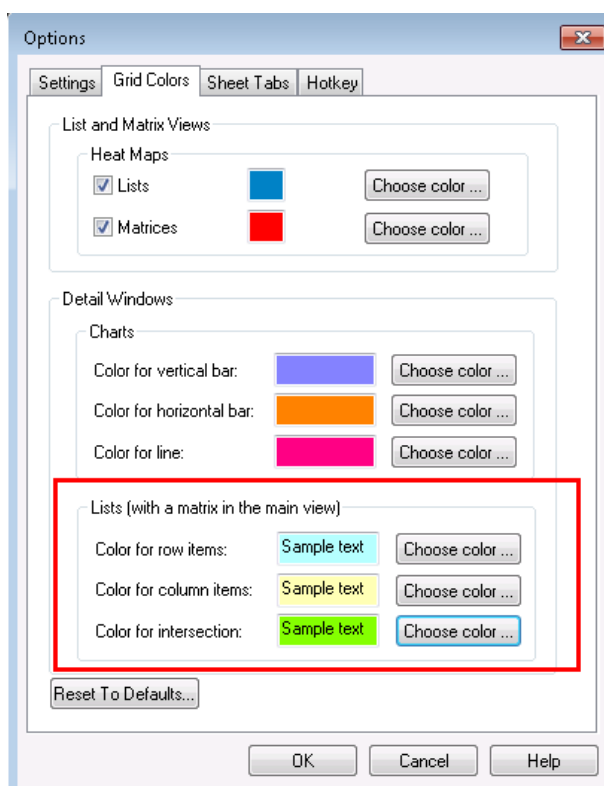
Descriptor	Value
Neural networks	7
ROBOTS_Mobile	7
Sensor data fusion	4
Sonar	4
Algorithms	3
Mathematical models	3
Optical character recognition	3
Sensors	3
Control equipment	2
Control system synthesis	2
Dynamics	2
Kalman filtering	2
Motion control	2
Motion planning	2
Navigation	2
Nonlinear control systems	2
Position control	2
ROBOTS_Intelligent	2
Robustness (control systems)	2
Time varying control systems	2
Tracking (position)	2
Velocity	2
Acoustic imaging	1
Actuators	1
Aircraft	1
Backpropagation	1
Character recognition	1
Computer vision	1
Constraint theory	1
Data acquisition	1
Data communication systems	1
Distributed parameter control systems	1
Docking	1



The colors can be defined by the user by clicking the App button and choosing **Options**.



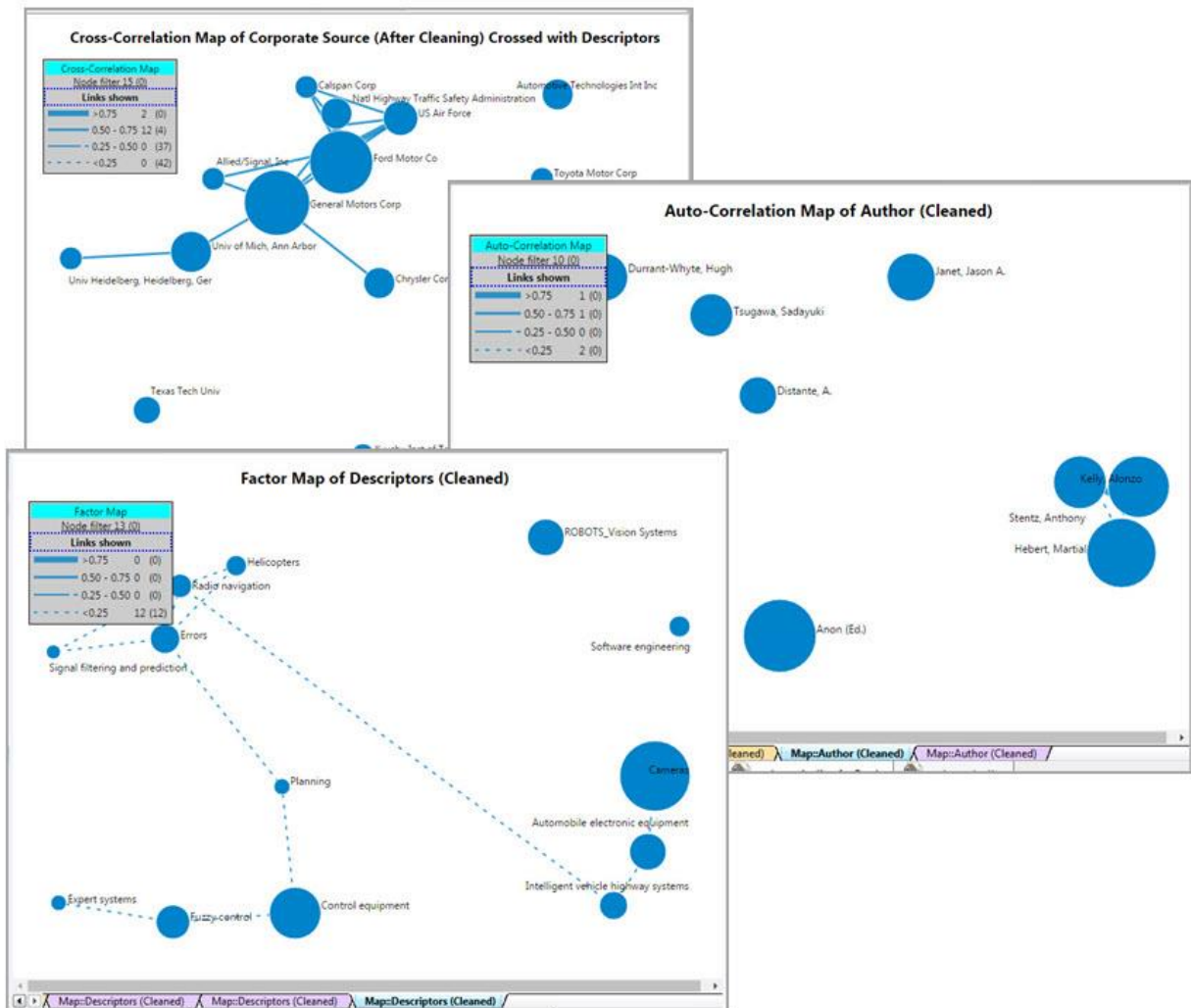
On the Grid Colors tab: The lower half of the dialog box controls colors displayed in a Detail Window list for a matrix view.



## Maps

VantagePoint can be used to create visual maps of data. There are three types of maps offered in VantagePoint: [Cross-Correlation Map](#), [Auto-correlation Map](#), and [Factor Map](#).

Follow the links of each type for additional details.



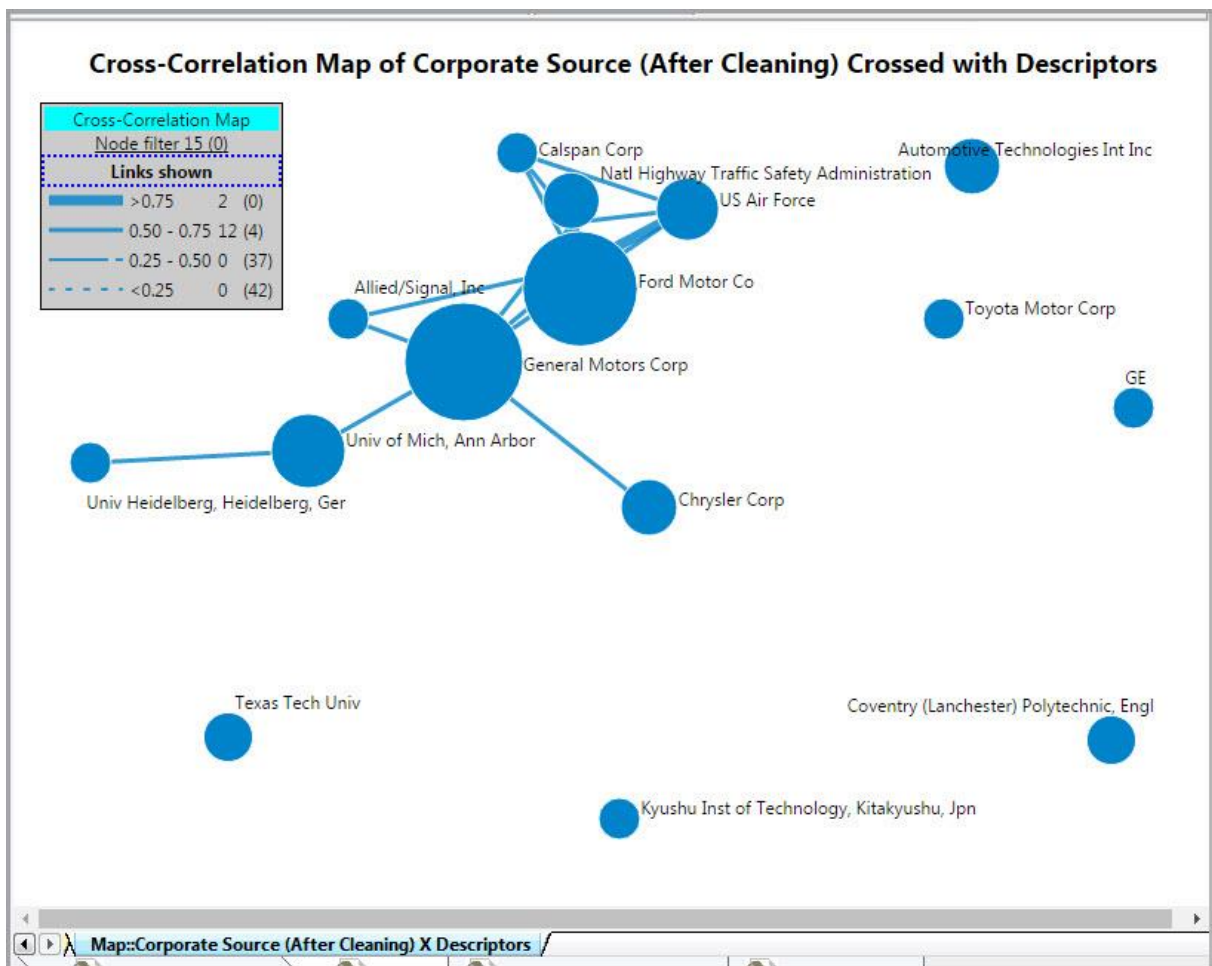
## Cross-correlation maps

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.

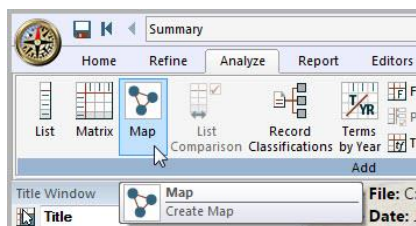
The following is an example of a Cross-Correlation Map of the top Corporate Sources in a dataset based on the Descriptors they used. The relationships in the illustration show organizations that are working on similar topics (as defined by the Descriptors field in their publications). To reduce visual clutter, only the strongest of the entire set of possible similarities are shown.



## Creating a Cross-Correlation Map

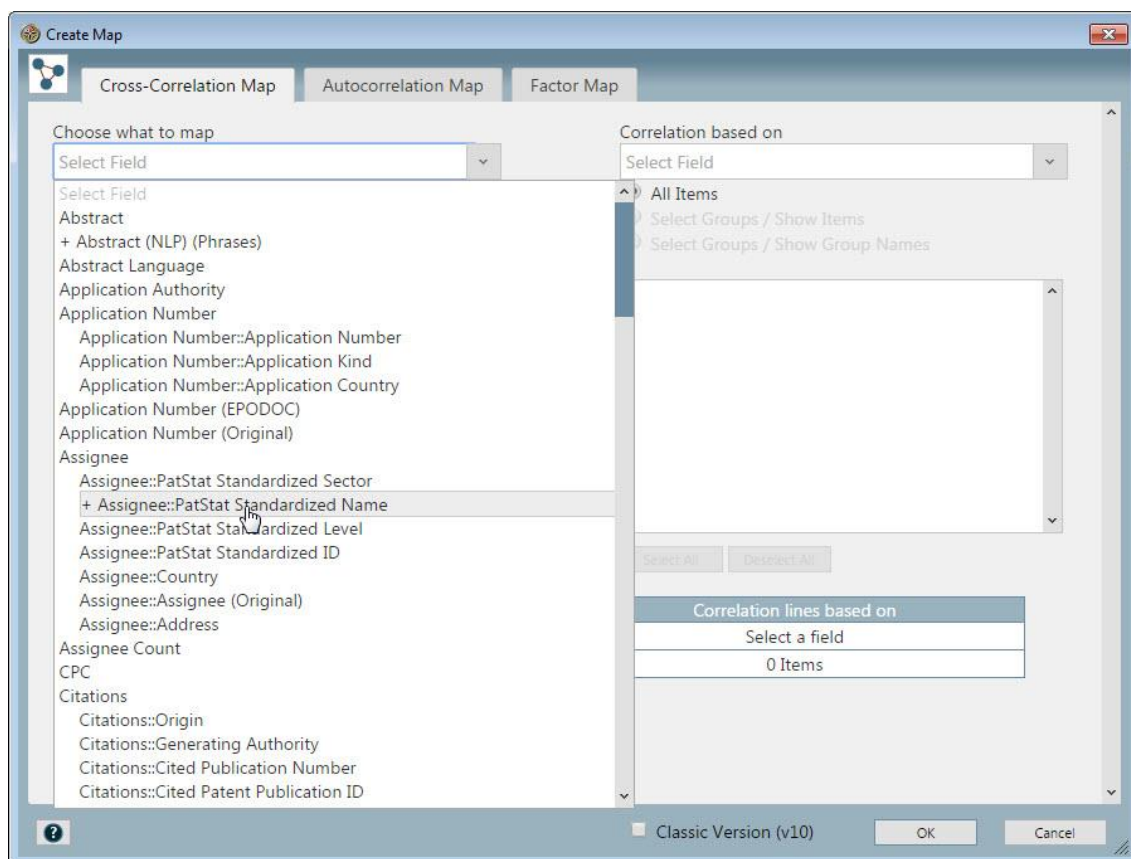
To create a Cross-Correlation Map:

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**

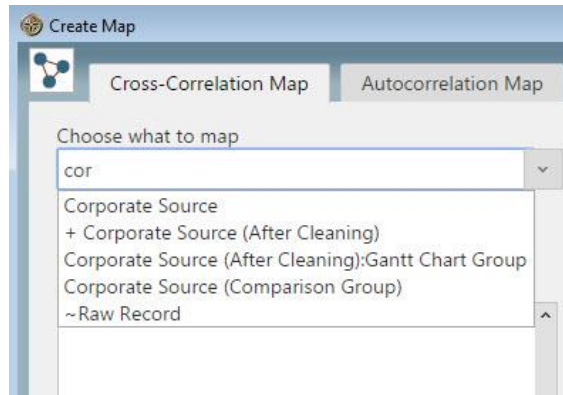


The **Cross-Correlation Map** tab is presented in the **Create Map** dialog box.

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.



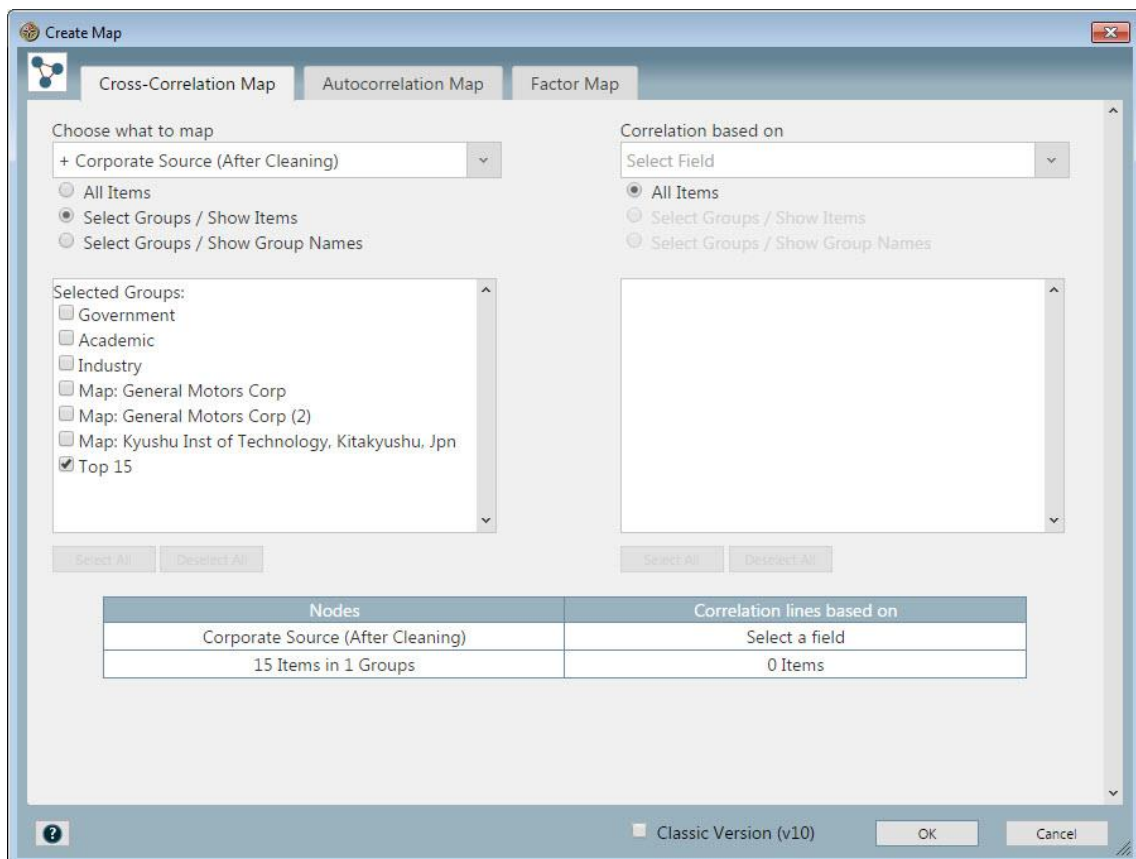
Another option is to type the field name in the "Select Field" box. As you type, the matches appear for selection.



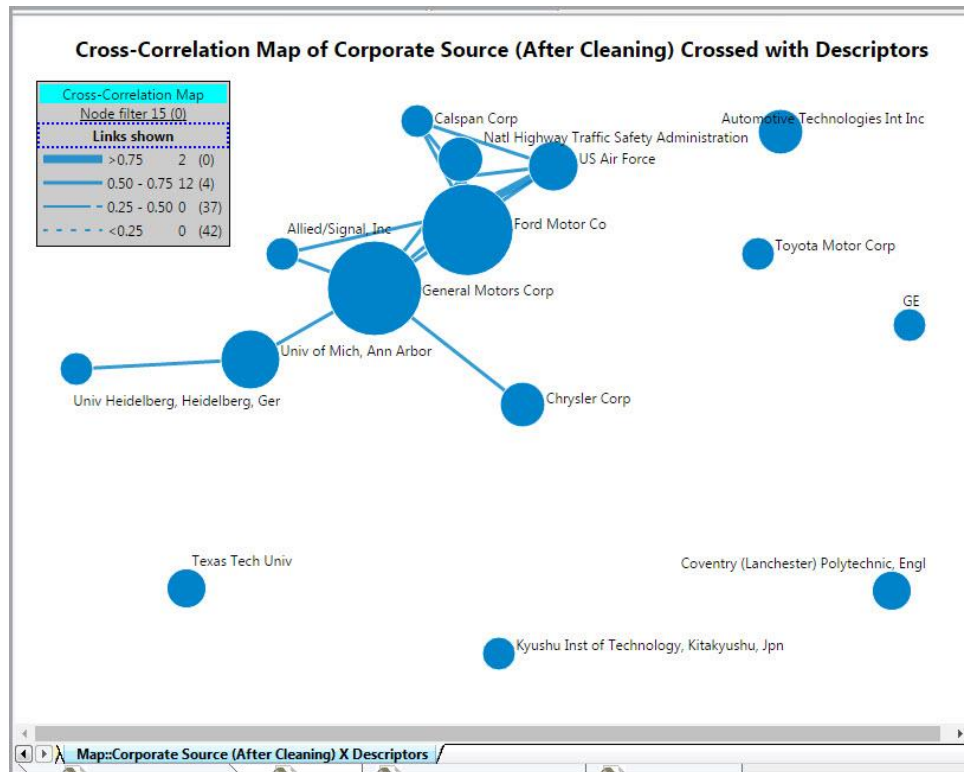
Clicking on the field name selects "All Items" as the default. A field name beginning with "+" indicates the field has groups. The groups within the selected field are displayed. Check the box next to the group name for selection.

Selection choices include:

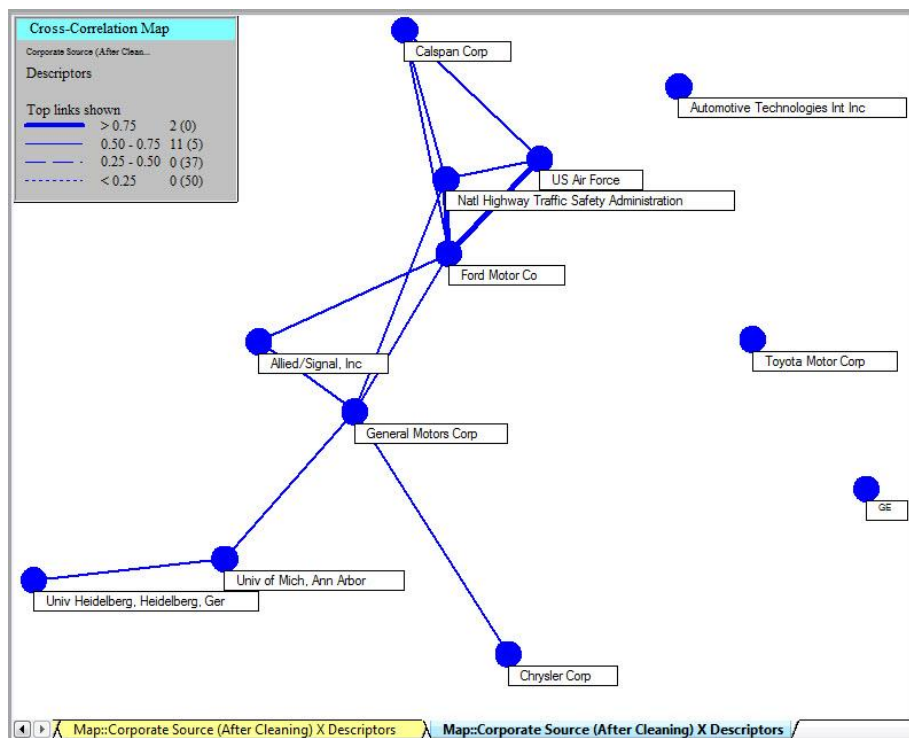
- **All Items** – this selects all of the list items
- **Select Groups / Show Items** – Select Group using list items as labels. After selecting the field and this option, the groups in that field appear in the Selected Groups window. Check the box next to the desired group name for selection.
- **Select 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.



- 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.
- Click **OK** to create your map. The result appears below.



Notice the option (in the **Create Map** dialog) to choose the “Classic Version (v10)”. Here is that result:



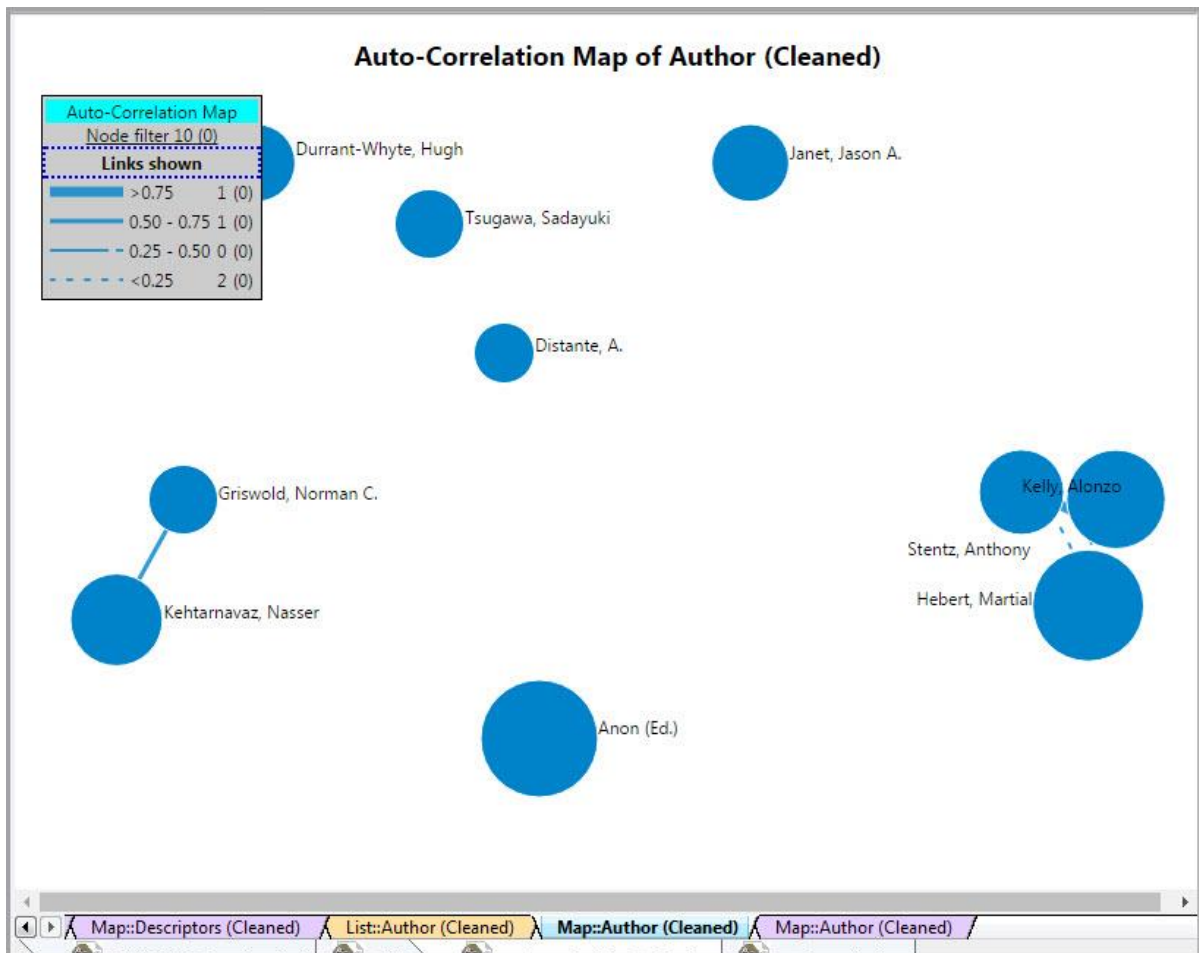


## Auto-Correlation Maps

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 a group of Authors in a dataset. Each node represents one author. The size of the node reflects the number of records associated with the author. These nodes are all the same because the 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.





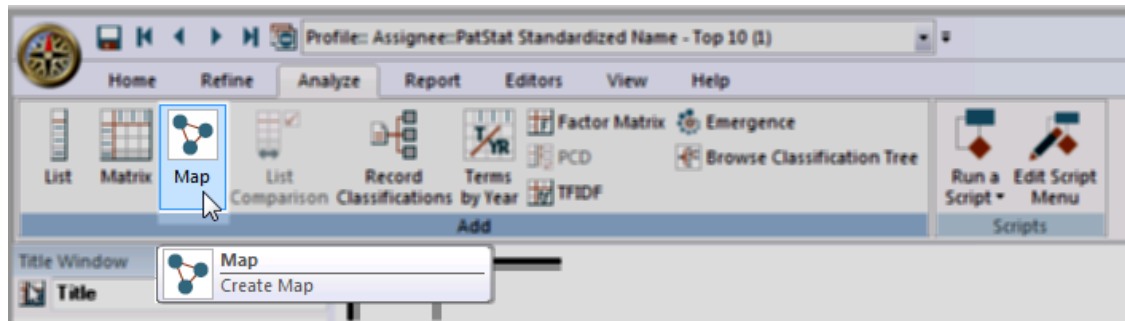
## Creating an Auto-Correlation Map

To create an Auto-Correlation Map:

1. Create a group in the list you wish to map.

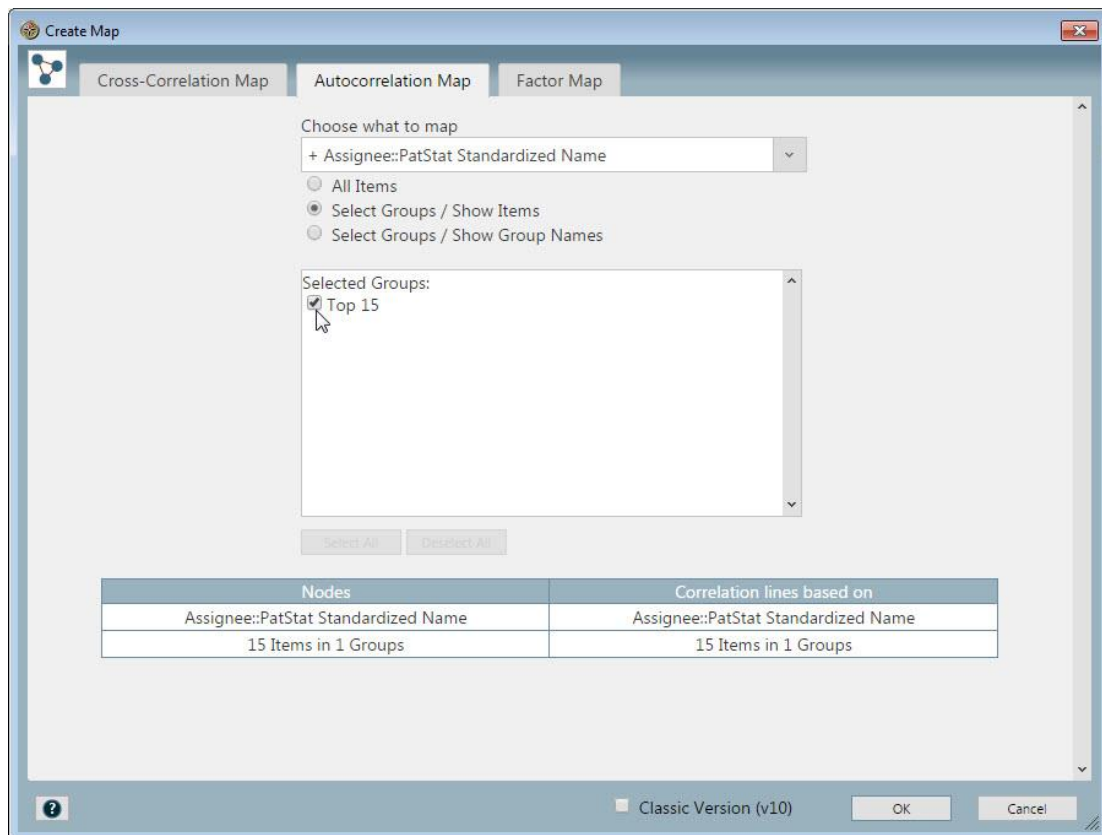
**Note:** Include enough terms in your map, but not too many. Unlike the Factor Map, all of the items you select will appear on the Autocorrelation Map. Typically, 15 to 20 terms is the most that can fit on a map and still be readable.

2. From the **Analyze** Ribbon, select **Map**

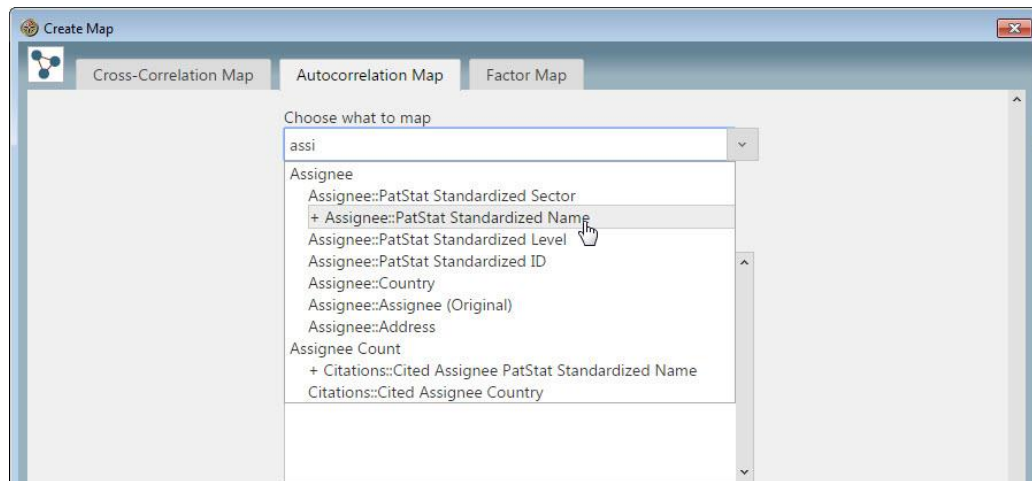


From the **Create Map** dialog box, select the **Autocorrelation Map** tab.

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.

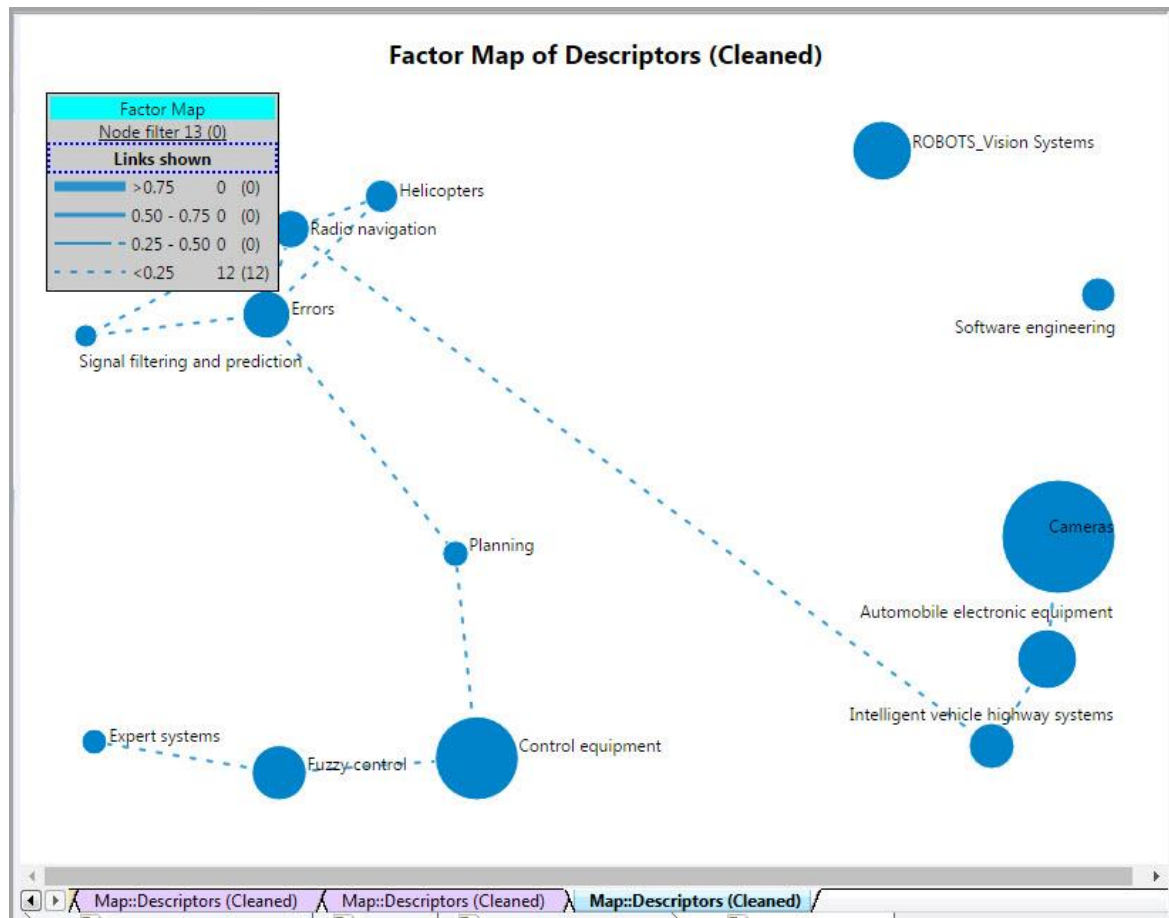
Notice the Map definition below the two windows (shown in the illustration on the previous page) is built as choices are made. This gives you an idea of the size of the map you are creating.

4. Click **OK** to create your map.

## 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 in the Classic v10 style.



## Creating a Factor Map

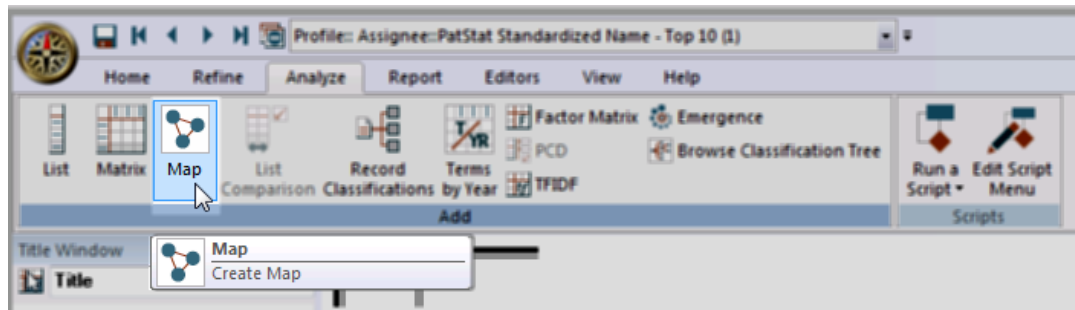
To create a Factor Map:

1. Create a group in the list you wish to analyze.

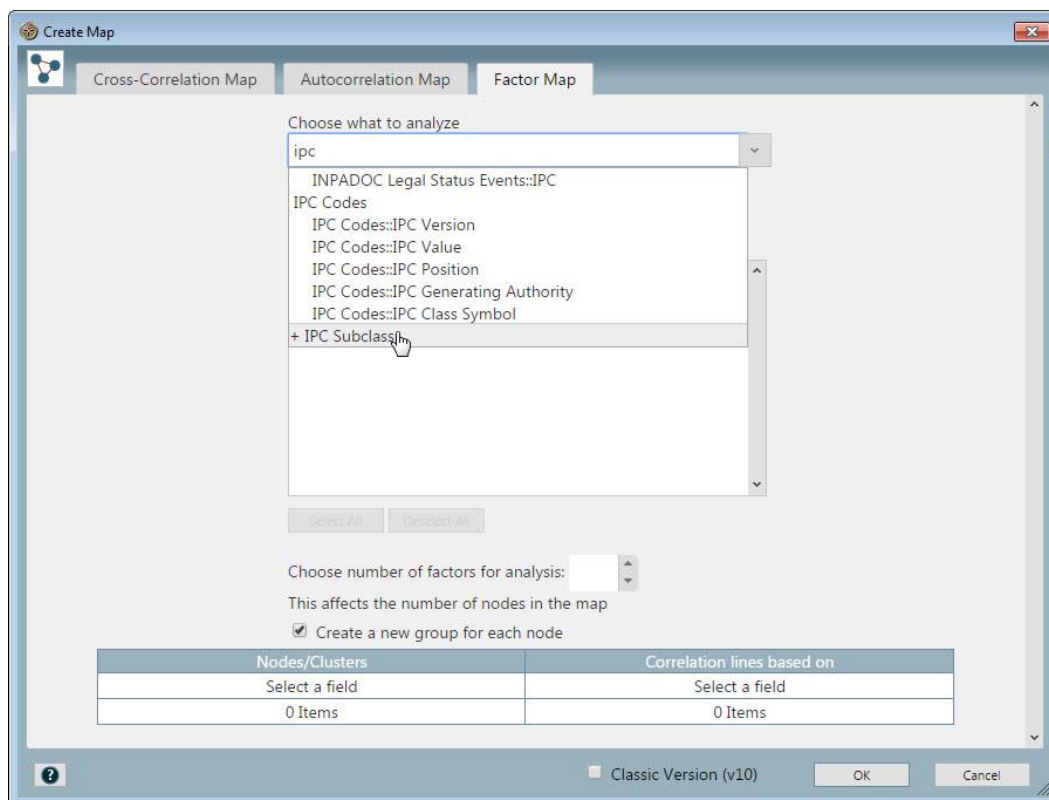
**Note:** Do not include in your analysis group any list items that occur only a few times. A general rule of thumb is to include only list items that occur in ten (10) or more records. Including list items that occur less frequently may cause the analysis to fail. As another rule of thumb, do not include 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**



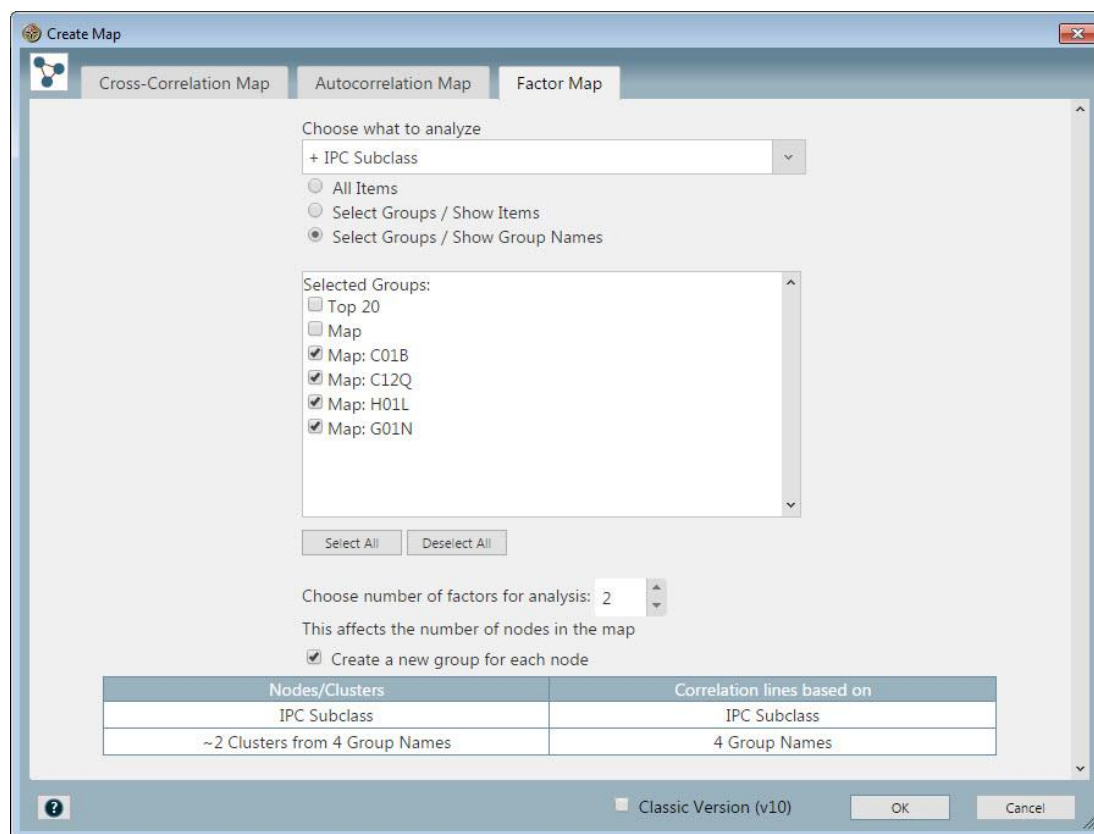
3. From the **Create Map** dialog box, select the **Factor Map** tab.
4. Under "Choose what to analyze", select the field containing the group you created for this map. The dropdown box would display all the fields available. In this illustration, the user has typed "ipc", and the fields containing that string are presented. The user has selected 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 (see next illustration).

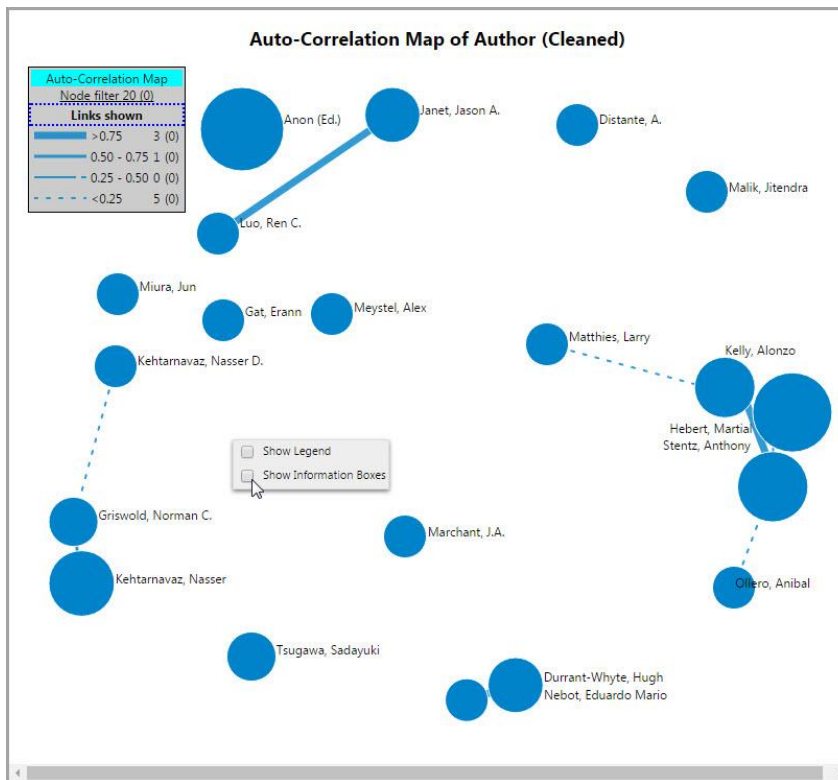
Selection choices include:

- **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.



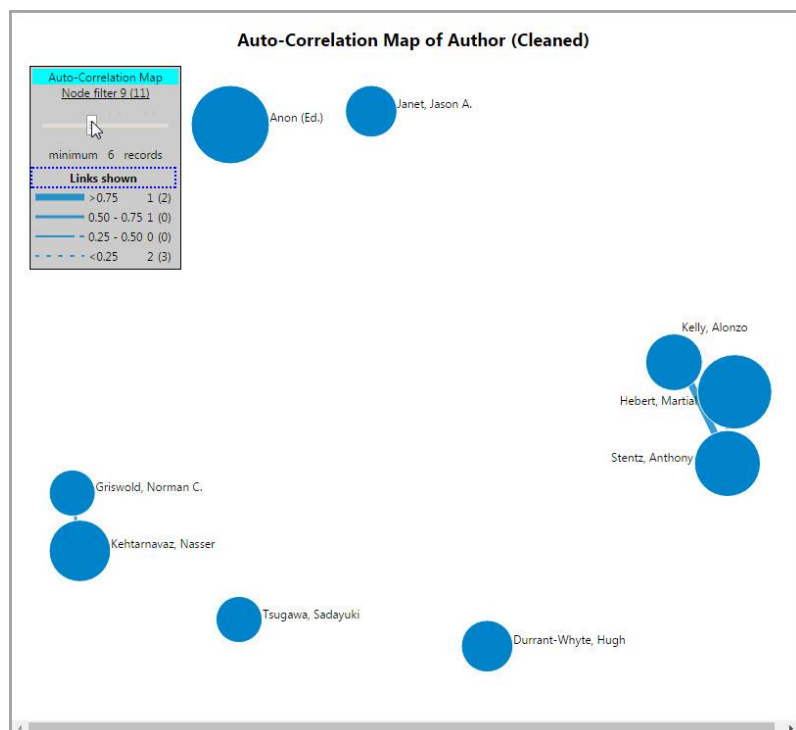
5. Next, specify the **Number of factors** to use in the analysis. This affects the number of nodes that are displayed on your map. A beginning rule of thumb is the square root of the number of terms in your analysis. This is the default value when the group is selected.
6. Finally, check **Create a new group for each node** if you would like to create a group for each node on the map.
7. Click **OK** to create your map.

## Using Maps



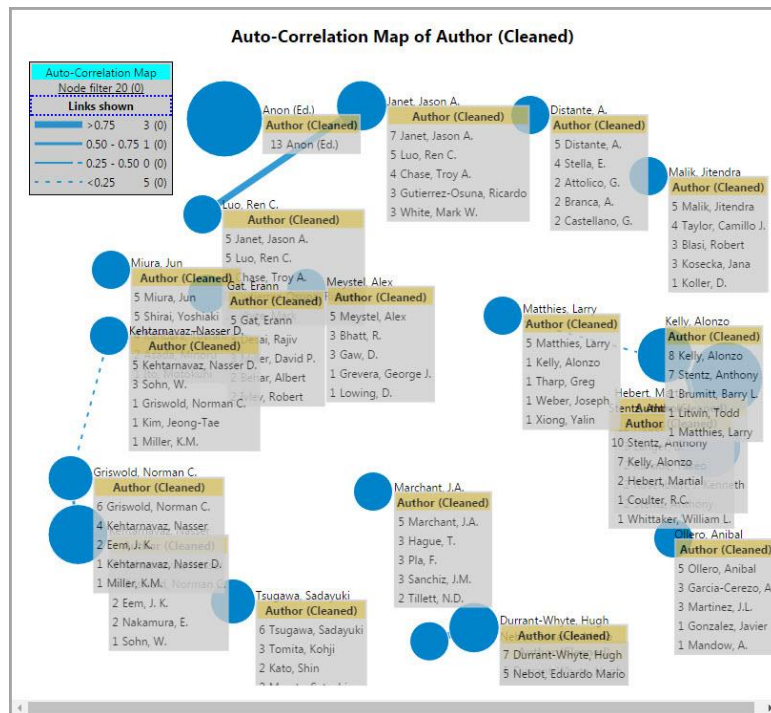
In the Map above, the Legend shows the number of links shown for each range, and in parenthesis the number of links in that range but not shown on the map. The sum of these two numbers is the total number of links in that range for the map. By clicking on the Legend's link ranges, you can change the map display. Clicking the >0.75 (thick line in the Legend) causes all links in smaller ranges to disappear. Clicking a smaller range displays links for that range and higher ranges.

Clicking on the Node filter in the Legend 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 "6". The nodes with fewer records are hidden. Now the Legend shows 1 link displayed in the >0.75 range with (2) hidden, and 2 with <0.25 with (3) hidden.

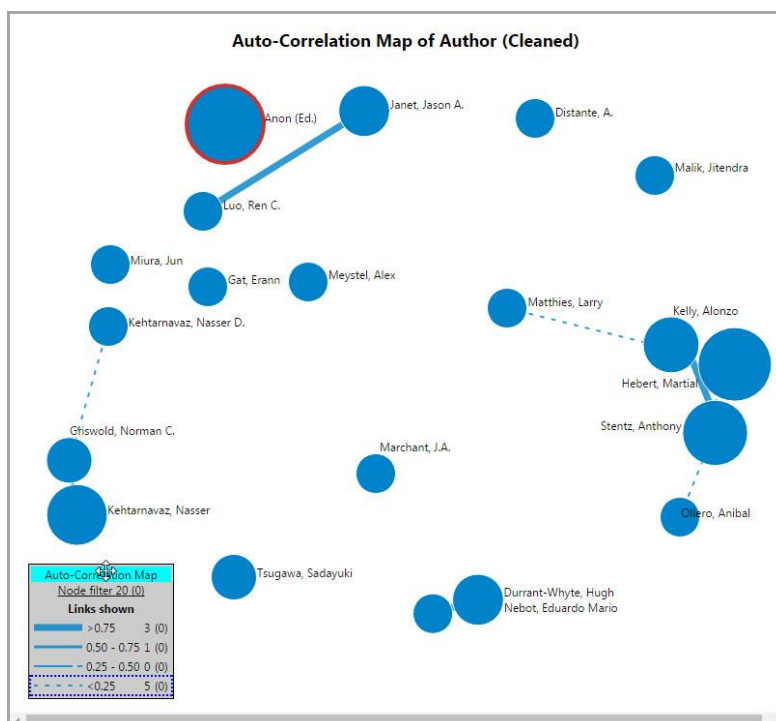


Clicking on a node selects it and highlights the links to that node. Information boxes for the nodes are shown when you hover on or click on a node. You can “stick” an information box by double-clicking on the node. Double-click on the node again to hide the information box.

Users can display information boxes for all of the nodes by right-clicking on the map and choosing “Show Information Boxes”.



The Legend can be shown or hidden. The Legend can also be moved by clicking on the blue banner and dragging it to the desired location.

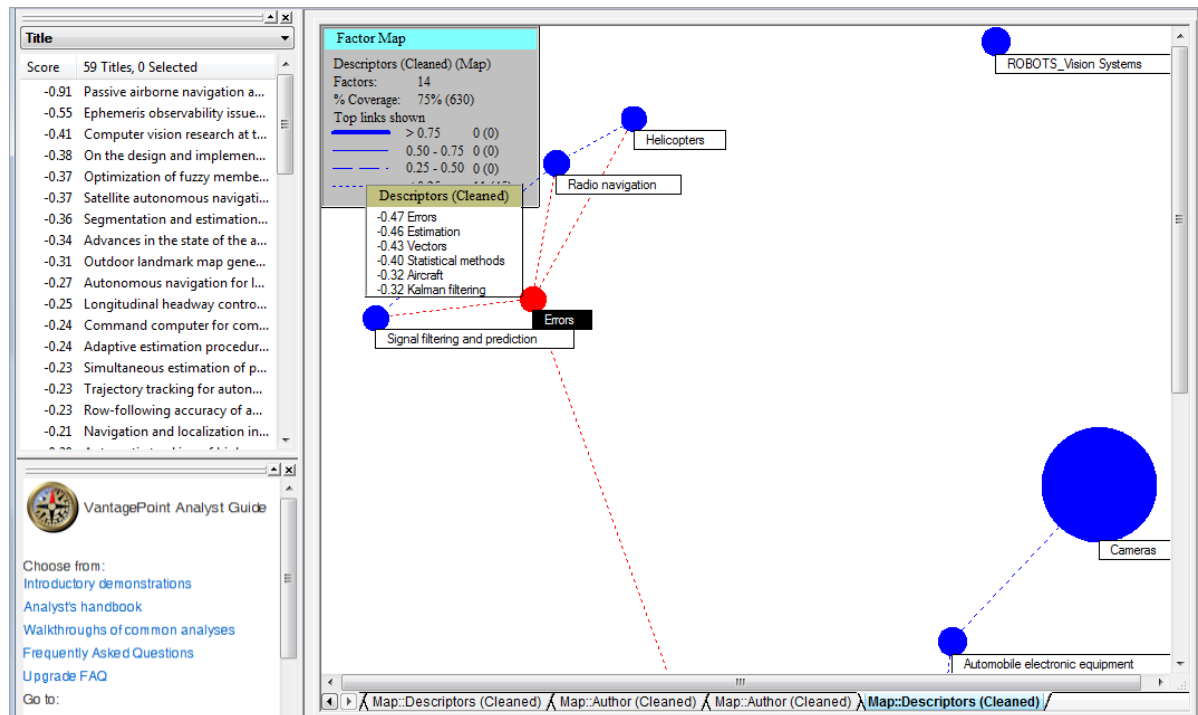




## Using Maps – Classic Version (v10)

### NOTE: THESE INSTRUCTIONS APPLY ONLY TO CLASSIC VERSION (v10) MAPS.

As you move the cursor across the face of a map, drop-down lists appear as you cross nodes. These lists show information about the node or about the records associated with that node. The following illustration shows one example of a Factor Map with the factor terms and loadings. You can make the drop-down lists "stick" by double-clicking the node. To "unstick" the drop-down list, double-click on the node again. **Note:** if the drop-down list fails to "stick", see the special note under Node Highlighting in Changing Preferences for map display.



When you click on a node, the Title window is updated with the titles for that node. For Factor Maps, the relative scores for each of the records are also shown. The larger the magnitude (absolute value) of the score, the more the record is related to the factor. You can sort the records alphabetically by title or numerically by score -- click on the banner ("Score" or "# Items, # Selected").

The Legend shows the following information about the map:

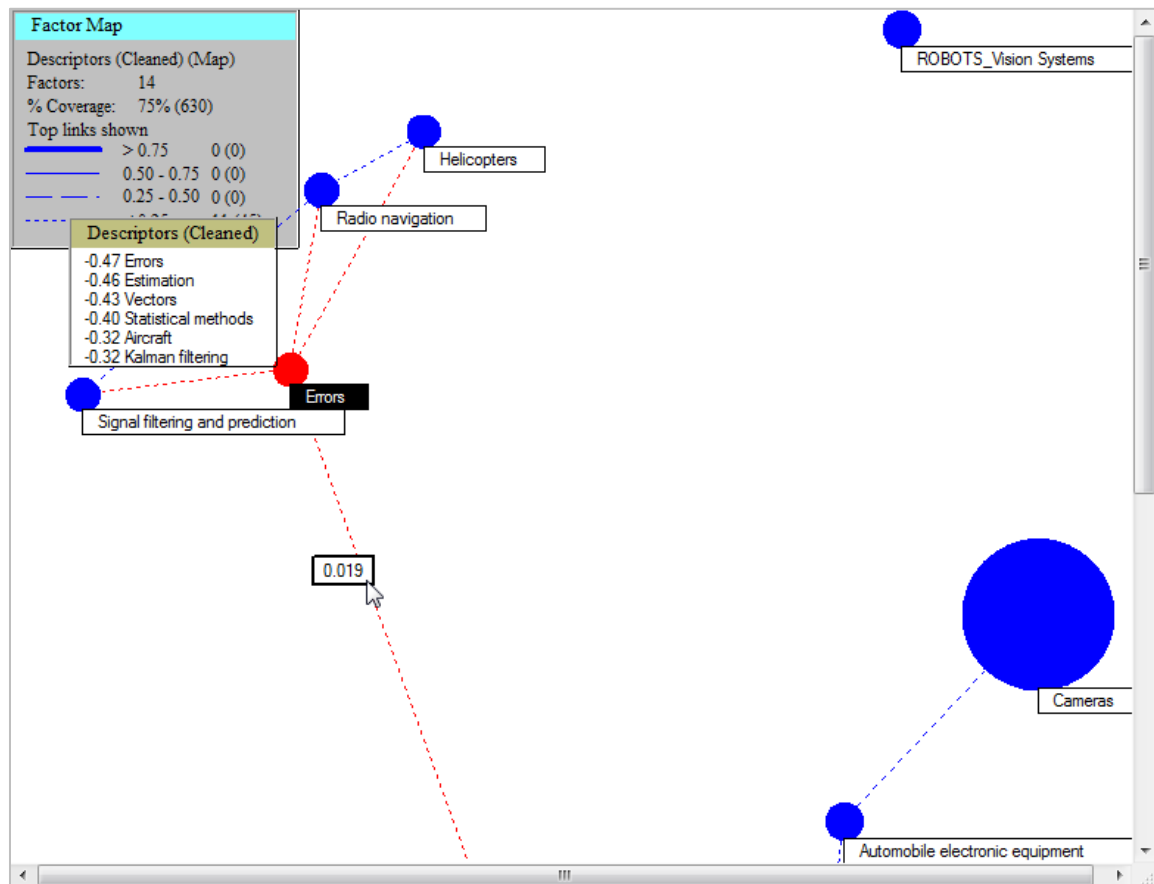
- The banner shows the type of map: Factor Map, Auto-Correlation Map, Cross-Correlation Map, or PCD Map
- The first line shows the first field (and group) used
- The second line shows the second field (and group) used (for Cross-Correlation maps) OR the number of factors (for Factor and PCD maps).
- The third line shows the percent coverage. This indicates the percentage of your dataset that is covered by the nodes in the map. The balance (i.e., 100% minus the % coverage) of the records do not contain any of the terms clustered in your analysis.
- The fourth line shows the approach the user chose for Number of Links displayed.

**NOTE: THESE INSTRUCTIONS APPLY ONLY TO CLASSIC VERSION (v10) MAPS**

The link legend shows the number of similarity links shown for each range, and in parenthesis the number of links in the similarity class but not shown on the map. The sum of these two numbers is the total number of links in the similarity class for the map.

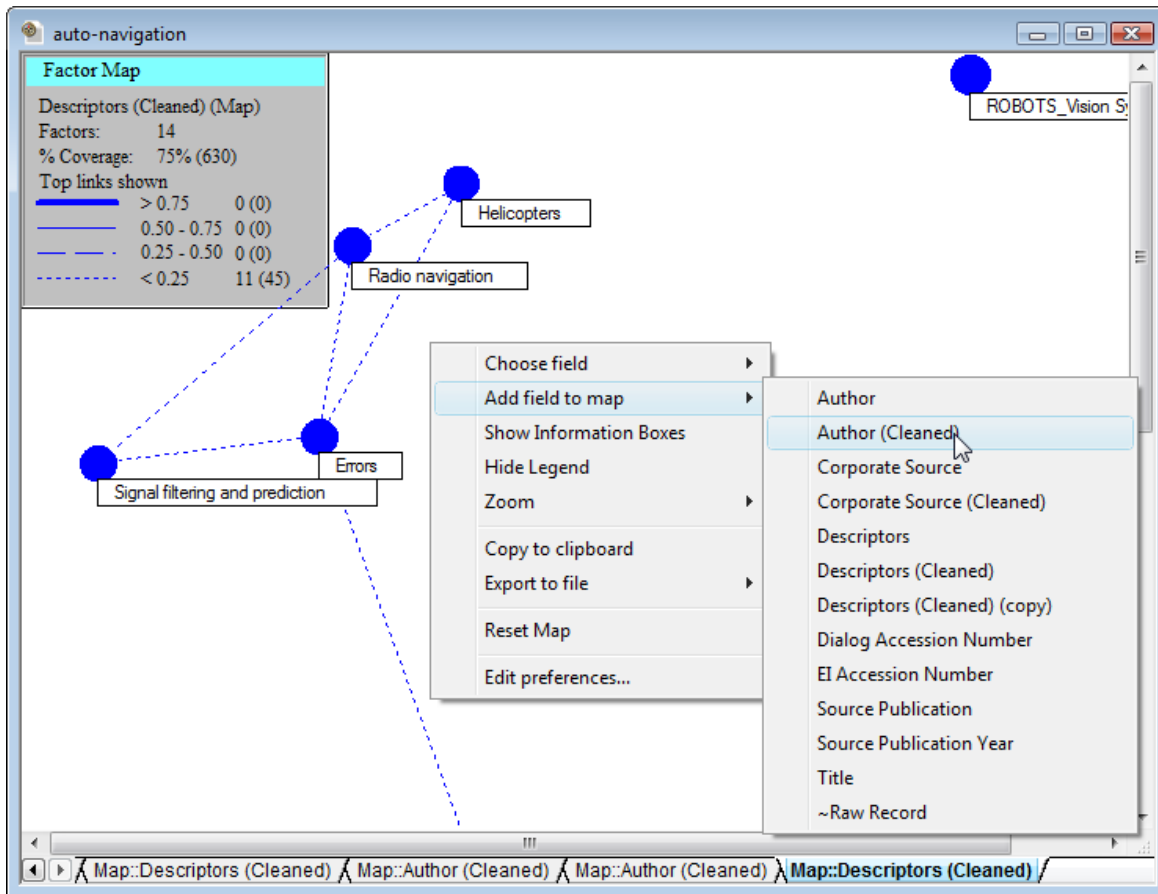
Factor Map			Cross-Correlation Map		
Descriptors (Cleaned) (Group ...			Corporate Source (Cleaned) (G...		
Factors: 13			Descriptors (Cleaned)		
% Coverage: 66% (553)			Links > 0.5 shown		
Top links shown			Links > 0.5 shown		
	> 0.75	0 (0)		> 0.75	0 (0)
	0.50 - 0.75	0 (0)		0.50 - 0.75	6 (0)
	0.25 - 0.50	0 (0)		0.25 - 0.50	0 (27)
	< 0.25	10 (37)		< 0.25	0 (33)

The similarity is shown when you "hover" the cursor over a link, as shown in this illustration:



**NOTE: THESE INSTRUCTIONS APPLY ONLY TO CLASSIC VERSION (v10) MAPS**

When you right-click on the map, a pop-up menu appears.



**Choose Field:** After a field has been added to a map (see next menu selection), this allows you to choose what field appears in the node's drop-down list.

**Add Field to Map:** At first, only the field that defines similarity is available for display on the map. Here you select other fields to add to the map. Whatever field you choose will appear for selection in the "Choose Field" menu item. Whatever field is last selected is automatically set for display in the drop-down list for each node.

**Show Information Boxes:** Displays all drop-down boxes (lists) for every node.

**Hide Legend:** Hides the legend from the map. (Changes to "Show Legend" after hiding.)

**Zoom:** Zooms into or out of a map. Can also select a magnification percentage, choose "fit" to display entire map in window, or customize the setting by entering your own magnification percentage.

**Copy to clipboard:** This menu choice copies the map to the clipboard. It can then be pasted to another application (e.g., Microsoft Excel, Word, or PowerPoint).

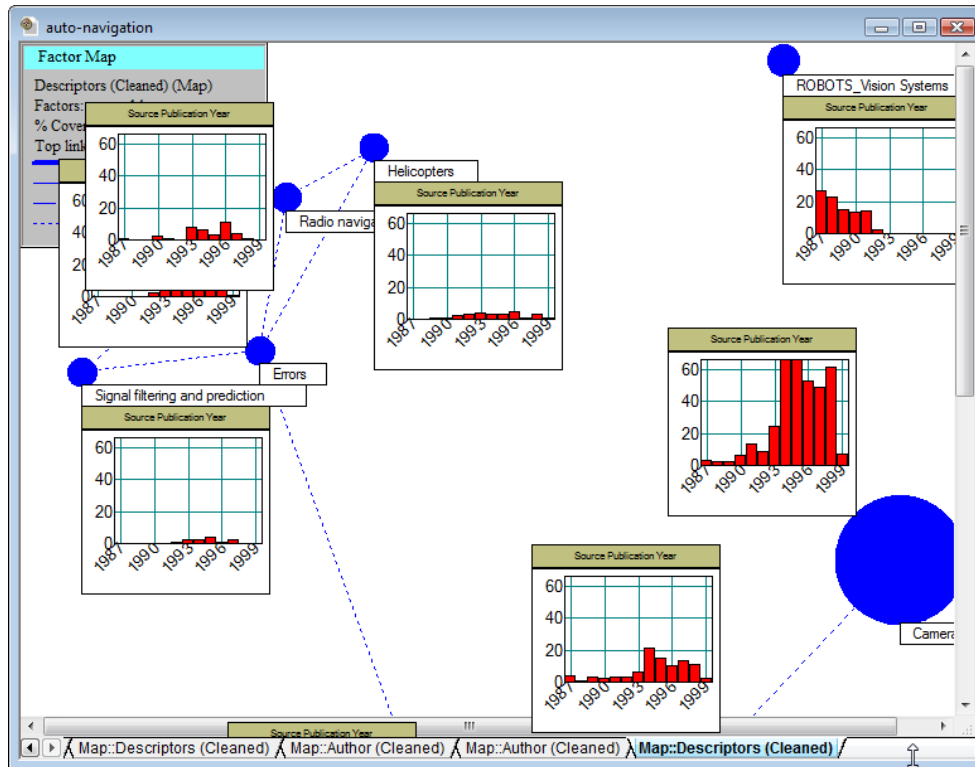
**Export to File:** This allows you to create a Bitmap, JPEG, TGA or TIFF file.

**Reset Map** - Redraws map using VantagePoint defaults.

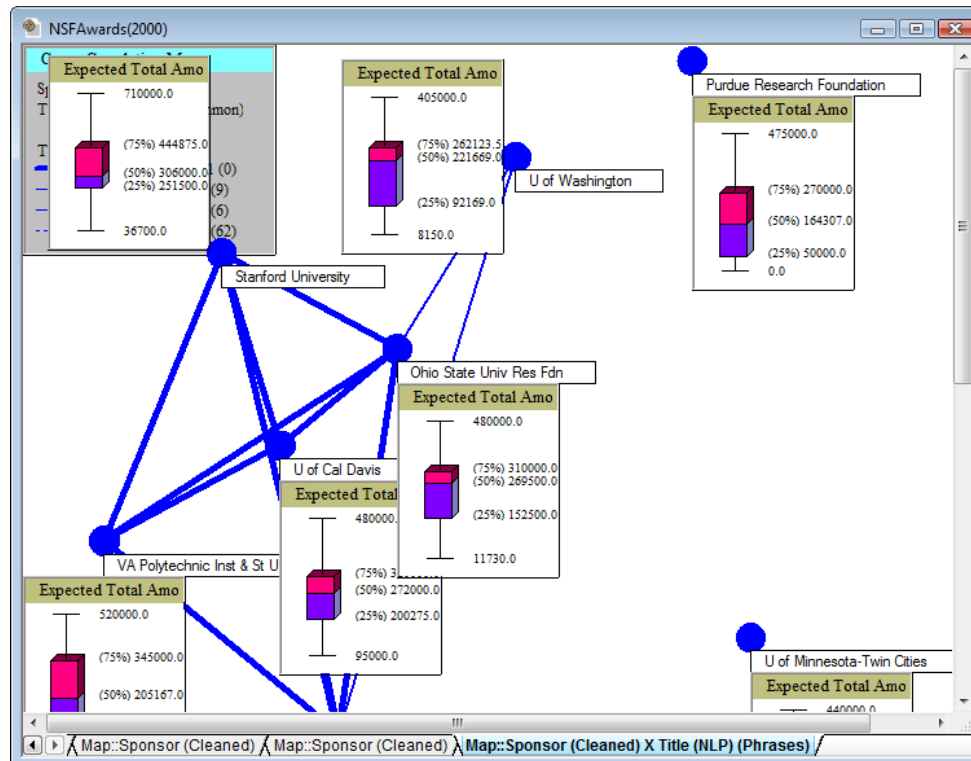
**Edit Preferences:** This allows you to change the appearance of the map by selecting the font sizes, canvas sizes, and other attributes. This also provides a mechanism for spreading the nodes vertically and horizontally. See [Changing preferences for map display](#) for details on this topic.

**NOTE: THESE INSTRUCTIONS APPLY ONLY TO CLASSIC VERSION (v10) MAPS**

When you choose to display a field of type "Year", a histogram of the data is shown, as in this illustration:



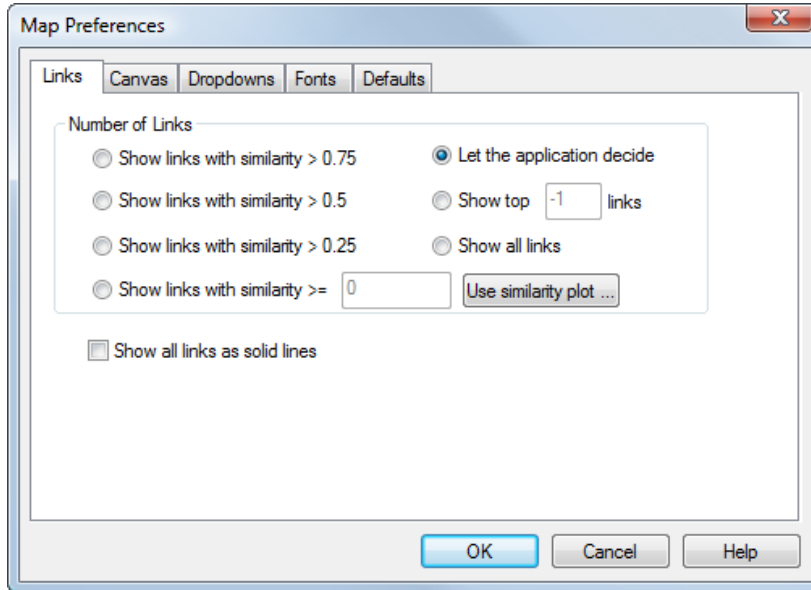
When you choose to display a field of type "Number", a box-plot of the data is shown, as in this illustration:



### **Changing preferences for map display**

The **Map Display Preferences** dialog box is accessed by right-clicking in the Map area, and selecting **Edit Preferences...**

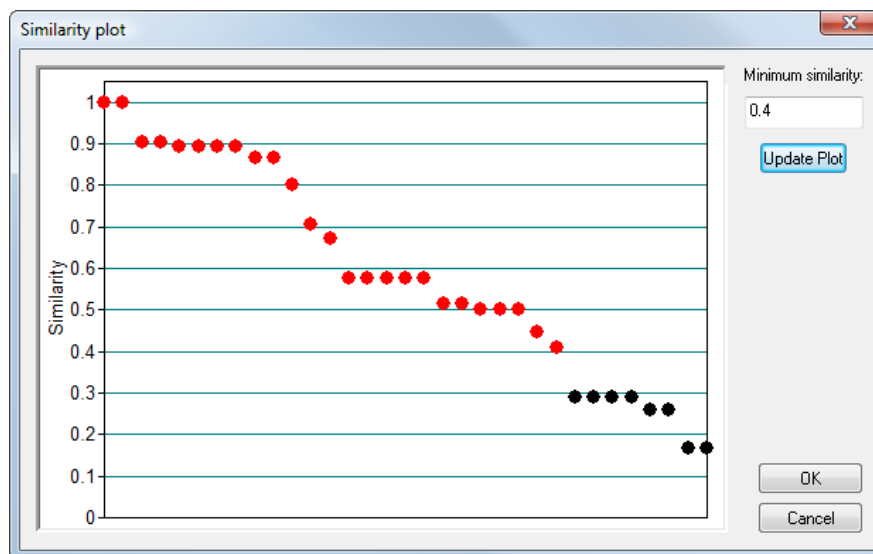
Under the **Links** tab:



**Number of Links** - *VantagePoint* calculates the similarity between nodes, and this choice indicates the threshold for displayed links.

**Show links with similarity > (value)** Click the desired radio button or click the last radio button in the group and enter a number.

**Use similarity plot...** The break in color represents the minimum similarity value. The black data points to the right will not be drawn. You can click on any point in the plot and change the minimum value. The plot interacts with the number in the "Minimum similarity" box.



**NOTE: THESE INSTRUCTIONS APPLY ONLY TO CLASSIC VERSION (v10) MAPS**

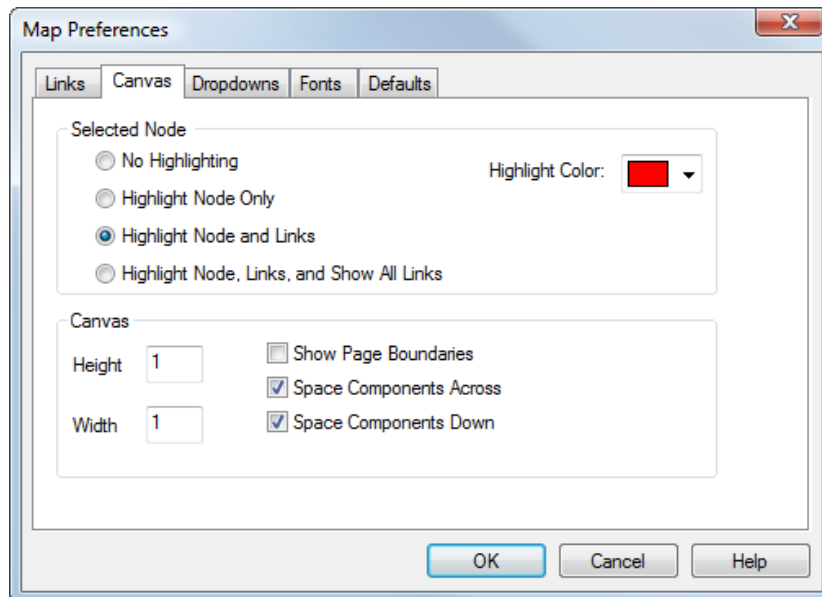
**Let the application decide** - Use VantagePoint's internal algorithm for determining the number of links to show. This shows the top N links, where N depends on the map.

**Show top (value) links** - Allows the user to specify the number of top links shown.

**Show all links**

**Show all links as solid lines** - When checked, the degree of similarity is distinguished only by line thickness. When unchecked, the lines also have patterns (dotted and dashed).

Under the **Canvas** tab:



Selected Node

**No Highlighting** – This is the default, with no highlighting when selecting nodes.

**Highlight Node only** – Highlights the selected node

**Highlight Node and Links** – Highlights the selected node and its displayed links

**Highlight Node, Links and Show All Links** – Highlights the selected node, its links and further shows all links for the selected node. **Note:** With this selection, only one drop-down list can be displayed at a time.

**Highlight Color** – Choose from the drop-down box to change the highlight color.

Canvas

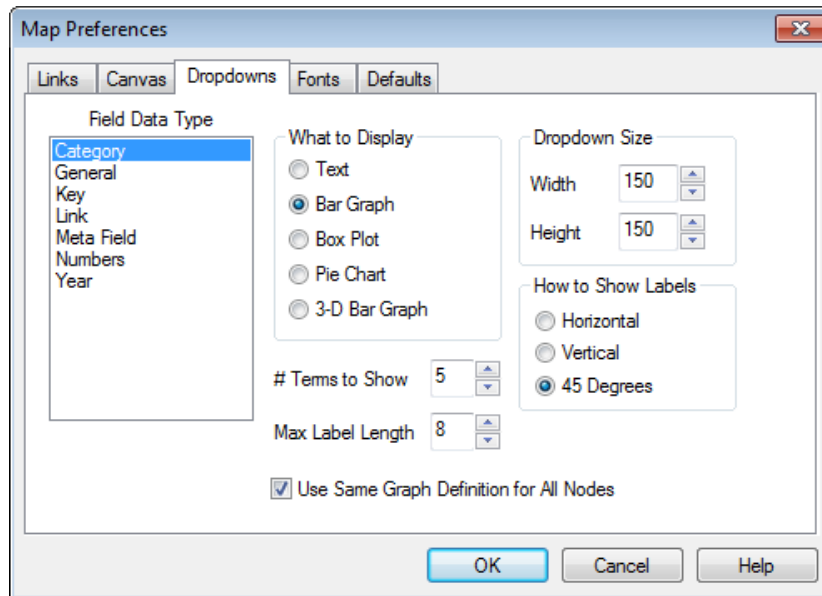
**Height/Width** - Changes the number of pages up-and-down or side-to-side across which a map is spread. For example, a canvas size of two-high and two-wide will print on four pages.

**Show Page Boundaries** - Displays the page boundaries on the map.

**Space Components Across/Down** - Spreads the nodes on a map across and/or down the page, reducing the overlap of nodes.

**NOTE: THESE INSTRUCTIONS APPLY ONLY TO CLASSIC VERSION (v10) MAPS**

Under the **Dropdowns** tab:



**Field Data Type:** Select the data type for the field to be displayed.

**What to Display:** Defines what will display in the drop-down list for each node.

**# Terms to Show:** Defines the number of terms that will display in the drop-down list for each node (disabled for Numeric Field Data Type).

**Max Label Length:** Limits the label length to number of characters set here. Any word or phrase exceeding the amount will be truncated (disabled for Numeric Field Data Type).

**Use Same Graph Definition for All Nodes** - Makes the X and Y ranges of "Year" histograms the same for all new graphs. When this is unchecked, the Y range of a histogram is determined by the data in the node. When checked (default), all graphs use the maximum X and Y across all nodes. This is useful for comparing data across nodes.

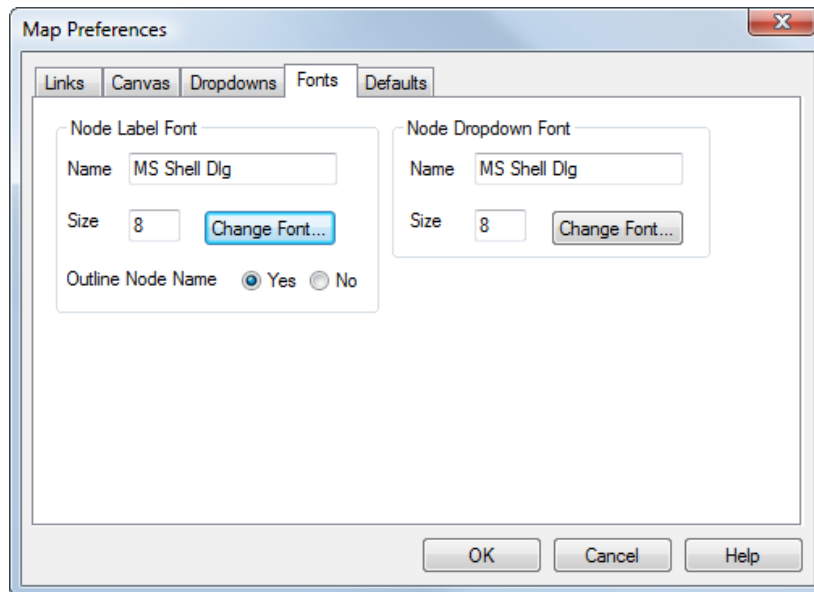
**Dropdown Size** – defines the size of the drop-down box in pixels.

**How to Show Labels** – Enabled only when Bar Graph is selected, defines the orientation of the labels on the X axis.



**NOTE: THESE INSTRUCTIONS APPLY ONLY TO CLASSIC VERSION (v10) MAPS**

Under the **Fonts** tab:

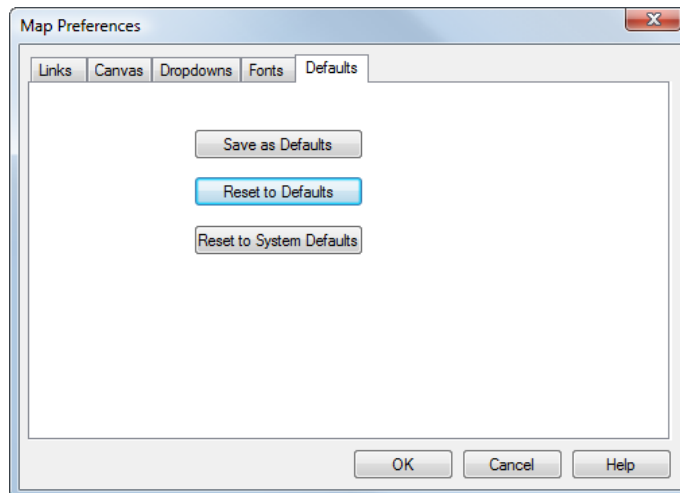


**Node Label Font** - The text font for the primary name of the nodes. To change, click the **Change Font...** button.

*Outline Node Name* - Affects the display of the node name.

**Node Dropdown Font** - The text font for the dropdown information box for each node. To change, click the **Change Font...** button.

Under the **Defaults** tab:



**Save as Defaults** - This saves the current settings as the defaults for your computer.

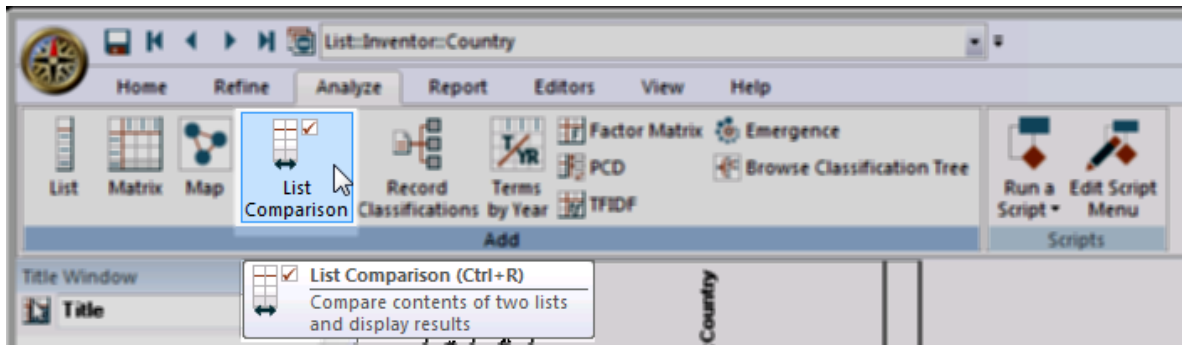
**Reset to Defaults** - This resets the map preferences for the current map to the saved defaults for your computer.

**Reset to System Defaults** - This resets the map preferences for the current map to VantagePoint's original installation defaults.

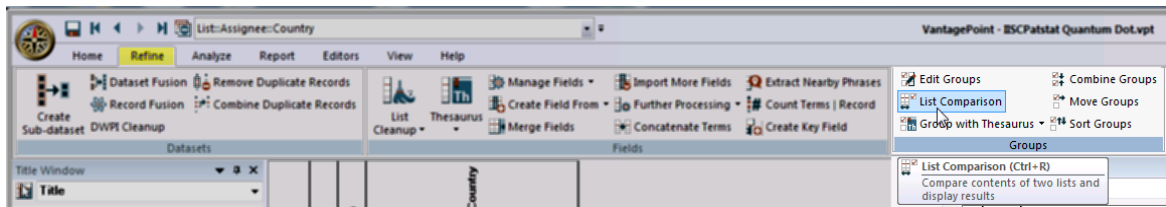
## List Comparison

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**:

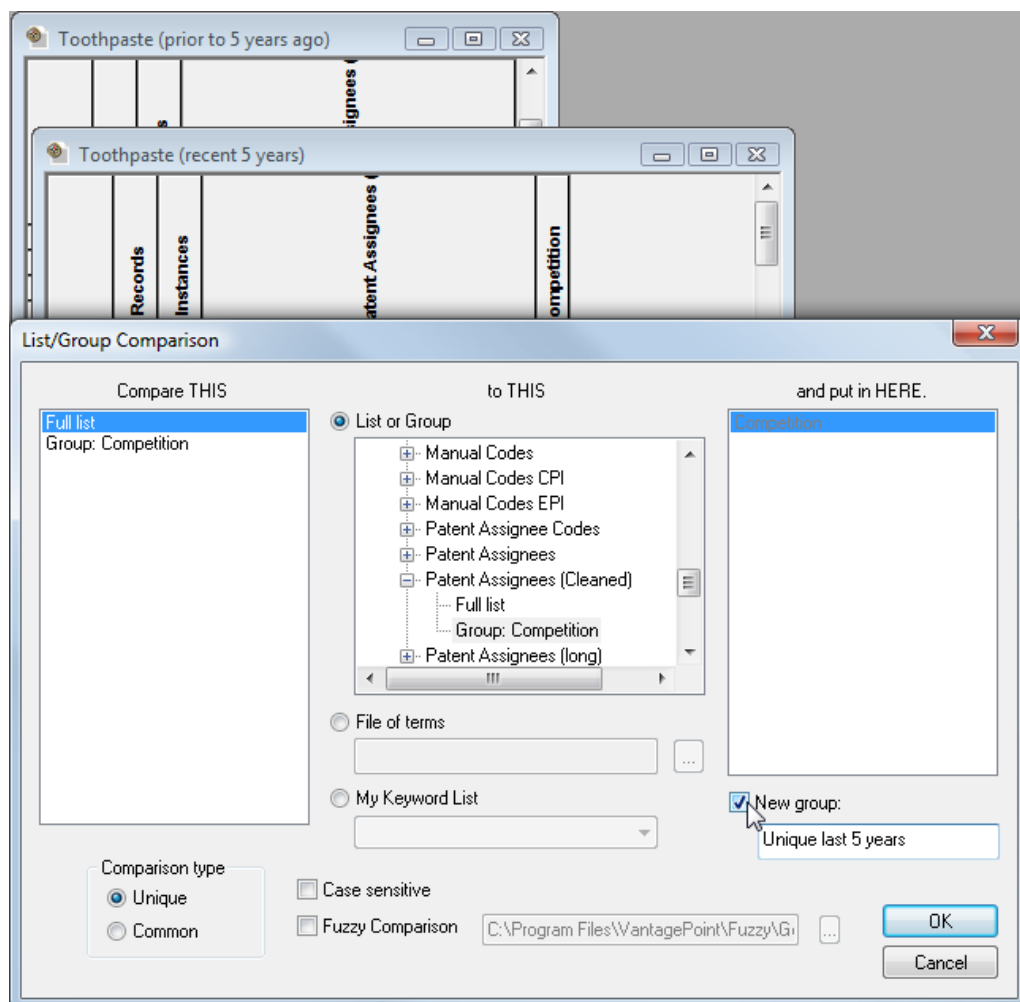


or, from the **Refine** ribbon, select **List Comparison**:



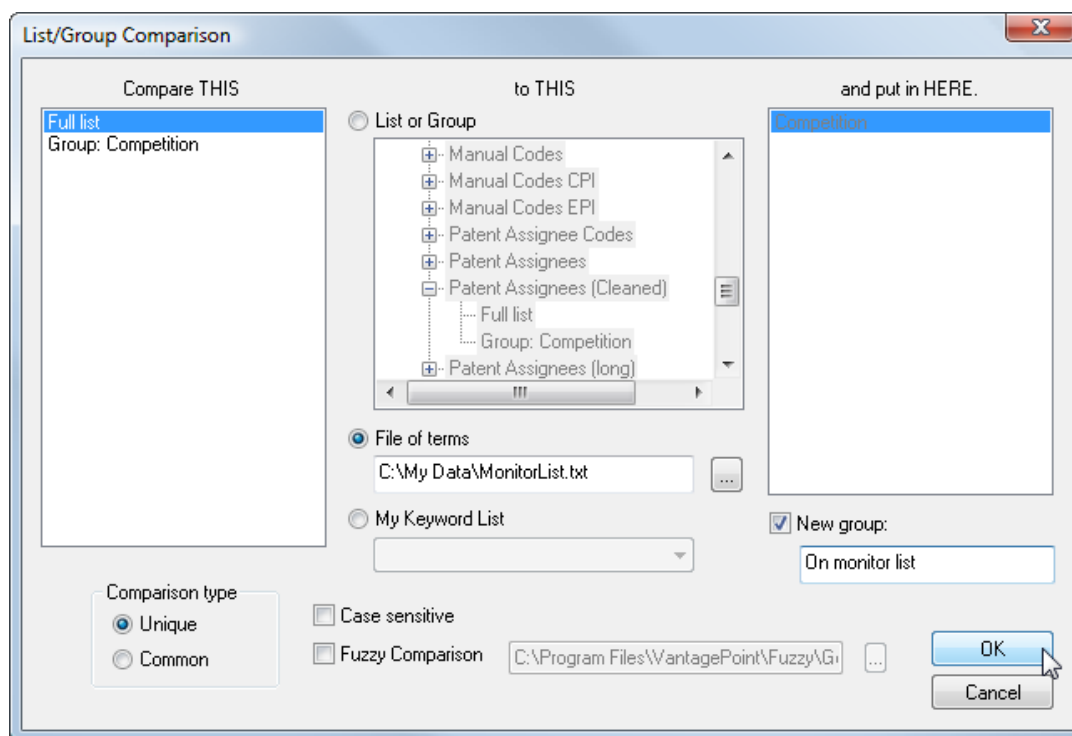
or press **Ctrl+R** on the keyboard.

- Click on the group name you want to compare ("Compare THIS"). If you want to use the whole list, click on "Full list."

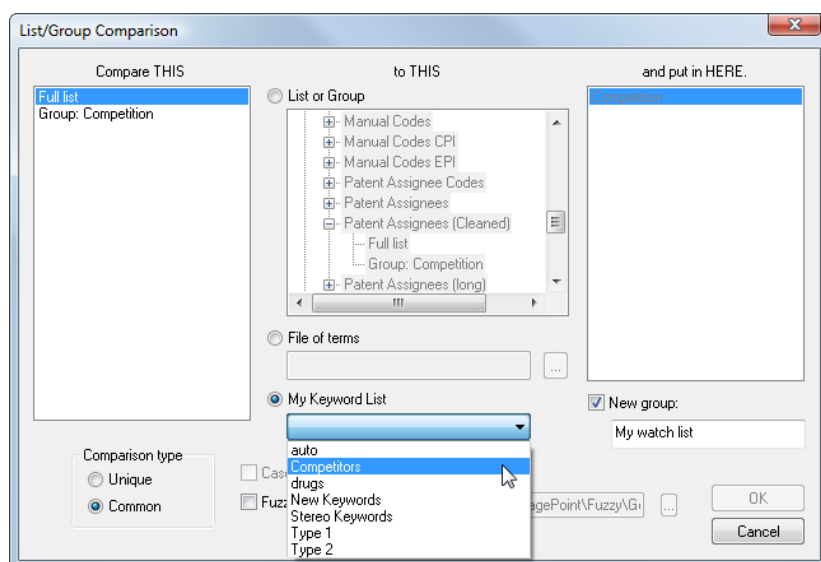


- List or Group** - If you want to compare to a List or Group, click on the list or group you want to compare with ("to THIS"). You may choose a list or group from the same dataset or from another open dataset.

**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:



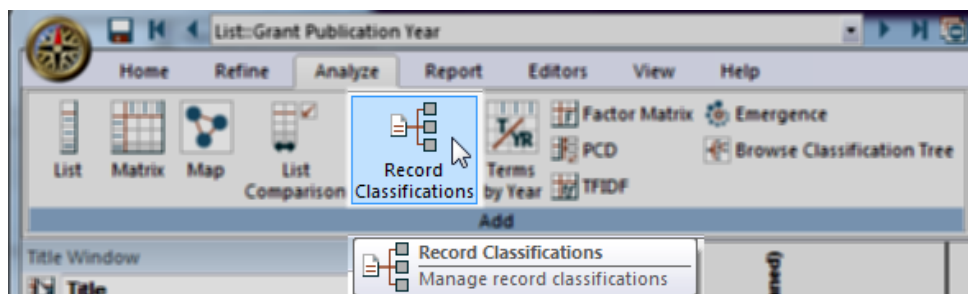
6. Determine the group name to which you want to add the tags ("and put in HERE"). By default, the tags go into a new group. You may name this group in the text box beside the "New group" checkbox. If you prefer, you can add the tags to an existing group by un-checking the "New group" checkbox and then 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.
-

## Record Classifications

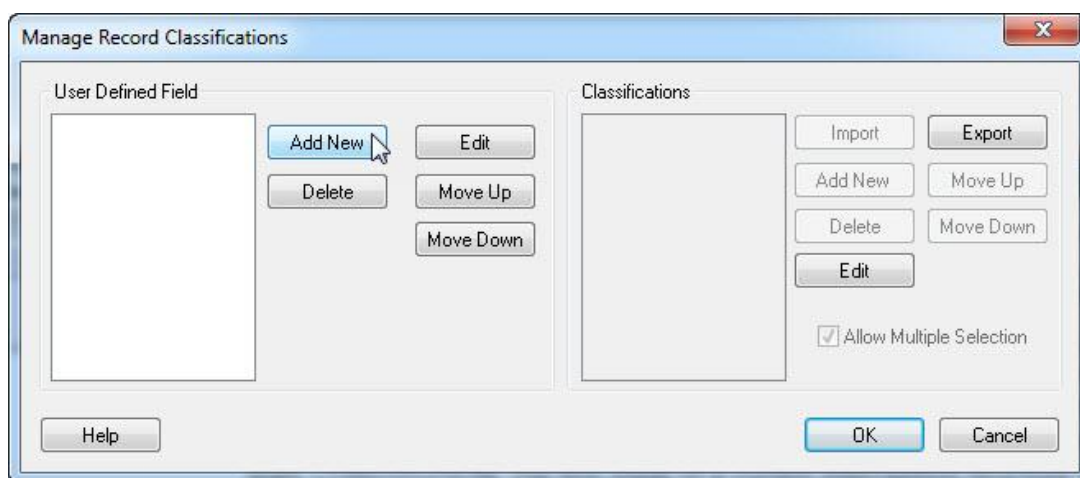
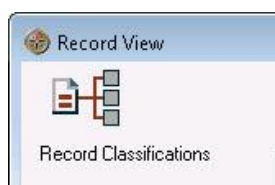
You can use Record Classifications to create, manage, and apply your own classification system to your data. When you add a new category of classification, a new field is created in your dataset. This field is a type of "key" field where each item in the field is a unique record key. Typically there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

Access the Manage Record Classifications dialog by selecting **Record Classifications** from the **Analyze** ribbon.



or

Access the Manage Record Classifications dialog by selecting **Record Classifications** from the Record View.



Under **User Defined Fields**:

**Add New** - Add a new category of classification (effectively also adds a new field to your dataset).

**Edit** - Edit the selected category of classification

**Delete** - Delete the selected category of classification

**Move Up / Move Down** - Move the selected User Defined Field up or down in the list.

Under **Classifications**:

**Import** - Import a list of classifications from a text file

**Export** - Export the list of classifications to a text file

**Add New** - Add a new classification

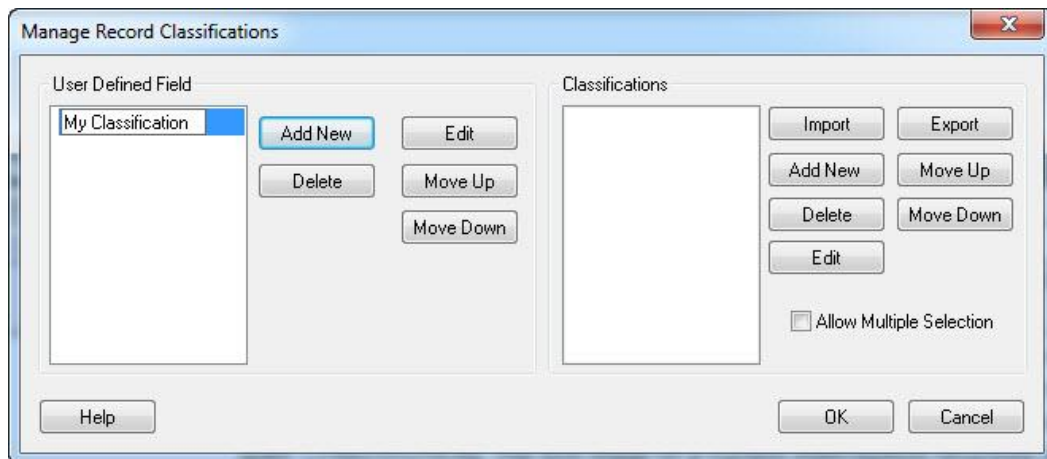
**Delete** - Delete the selected classification

**Edit** - Edit the selected classification

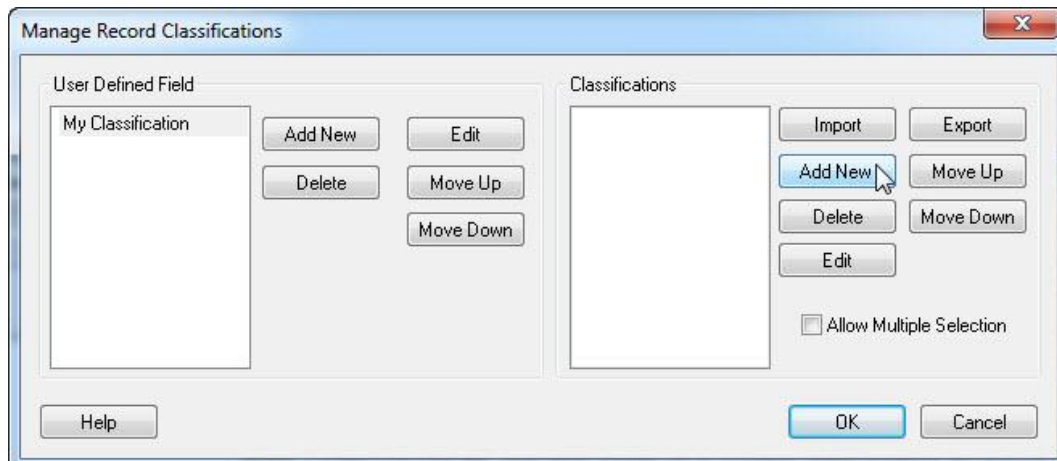
**Move Up / Move Down** - Move the selected classification up or down in the list

**Allow Multiple Selection** - if checked, a record may be assigned to more than one of the classifications. Otherwise, selecting a new classification removes assignment of any other classification. Note: The Auto Classifier assigns a single selection only.

Click **Add New** to begin. An editable field is presented. Here, the user is adding the fieldname "My Classification".

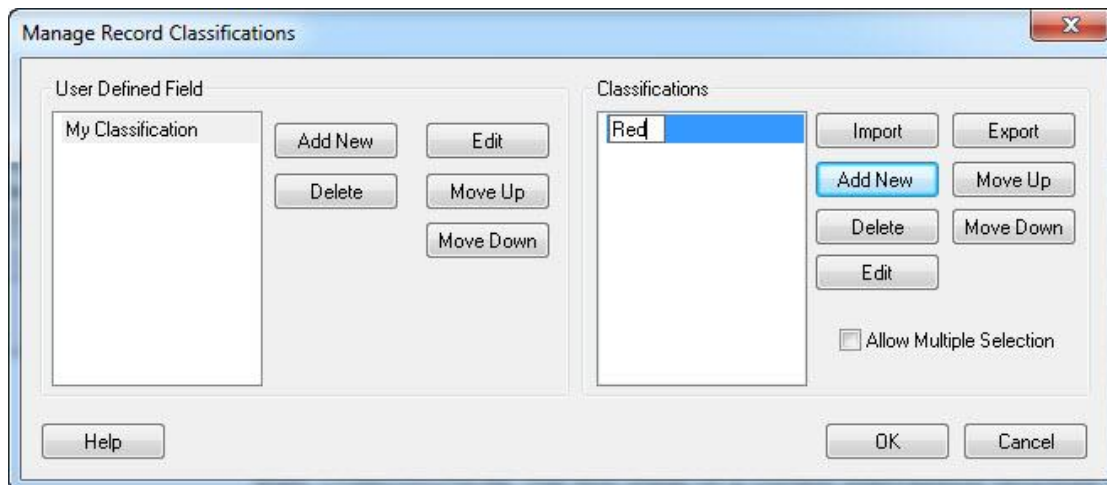


Next, under the Classifications section (window on the right), click **Add New**.

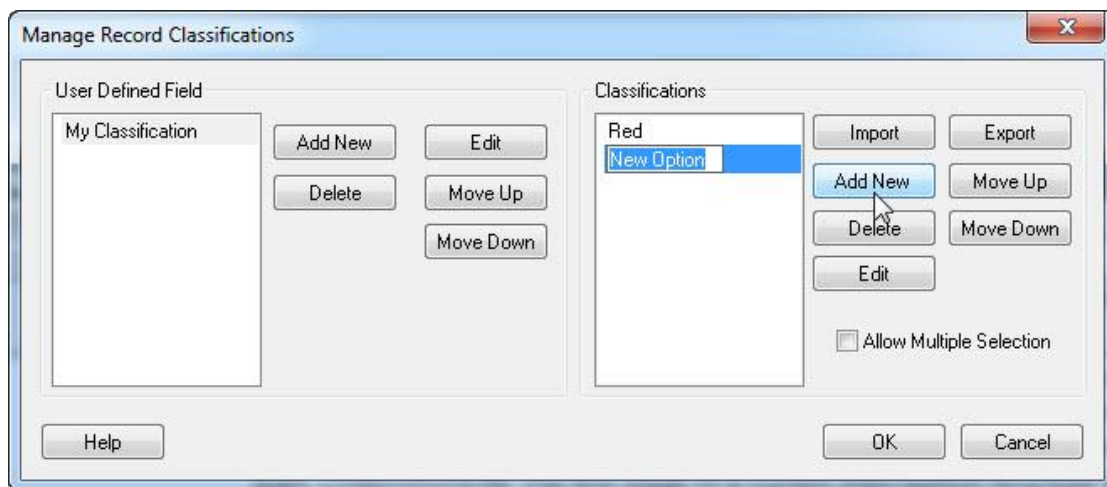




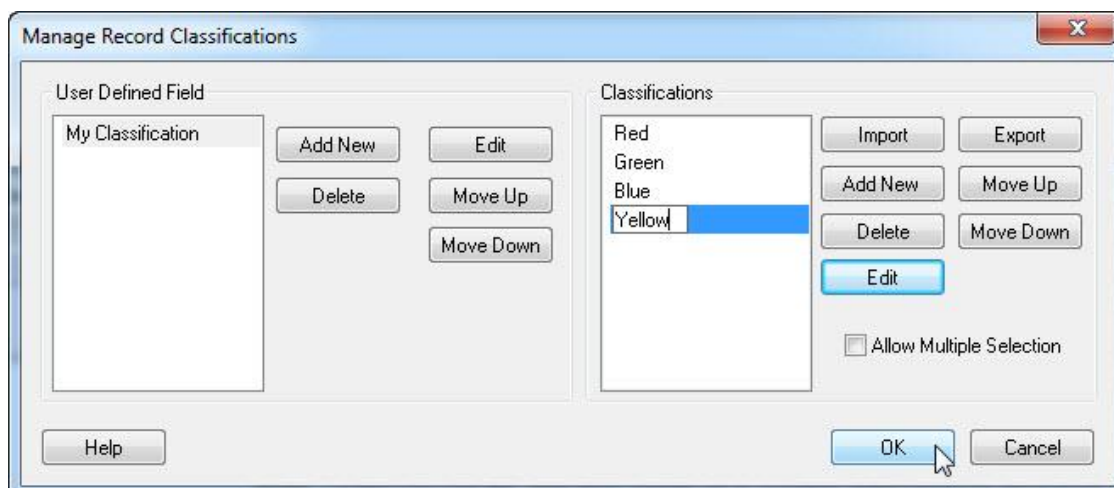
An editable field is presented. Here, the user is typing the Classification name. Press "Enter" on your keyboard to finish the entry.



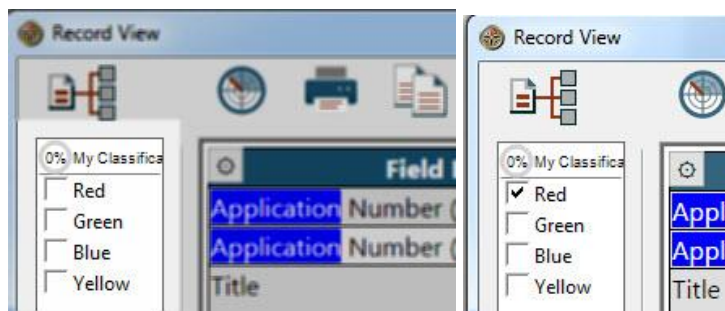
In this case, the user has more Classifications to add. Click the **Add New** button for each addition.



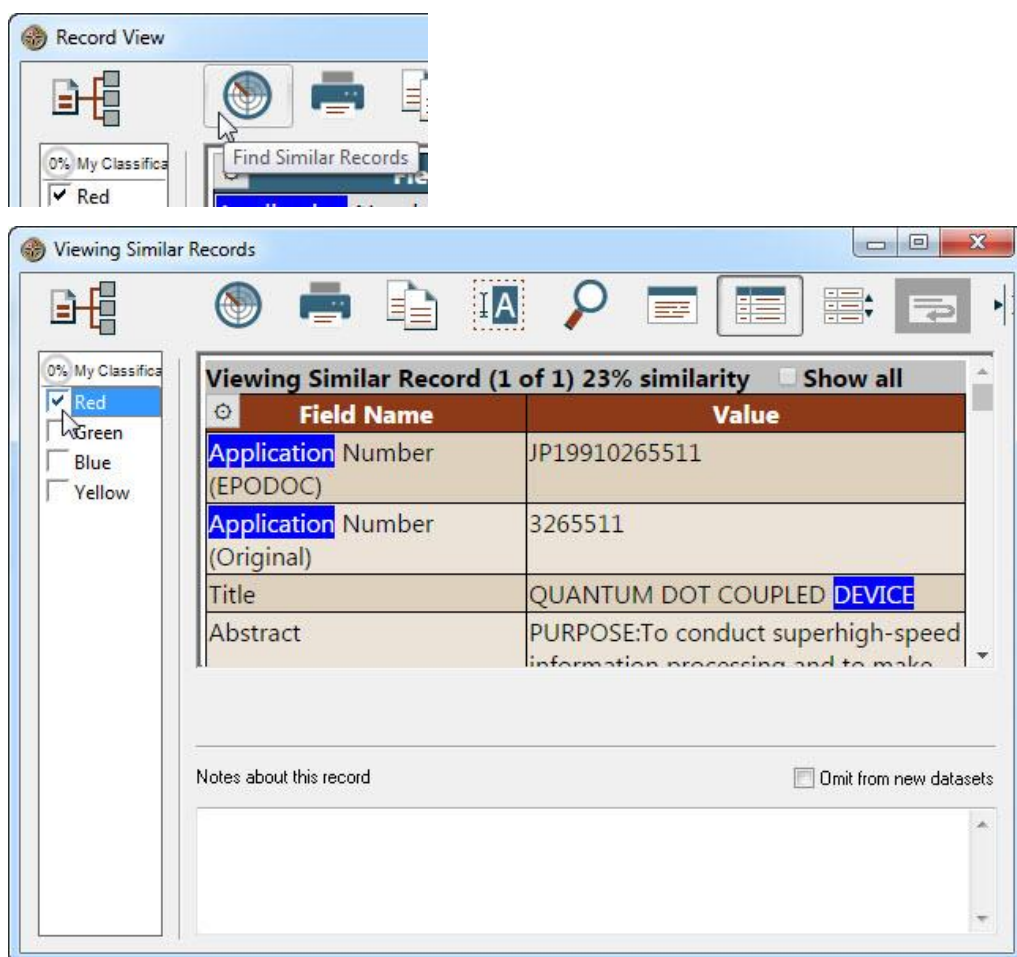
When you have finished creating the Classifications, click **OK**.



Now you are ready to assign Classifications. When viewing a Record in the Record View, the Record Classification appears in the Record View. Assign membership by clicking the box for the appropriate classification.



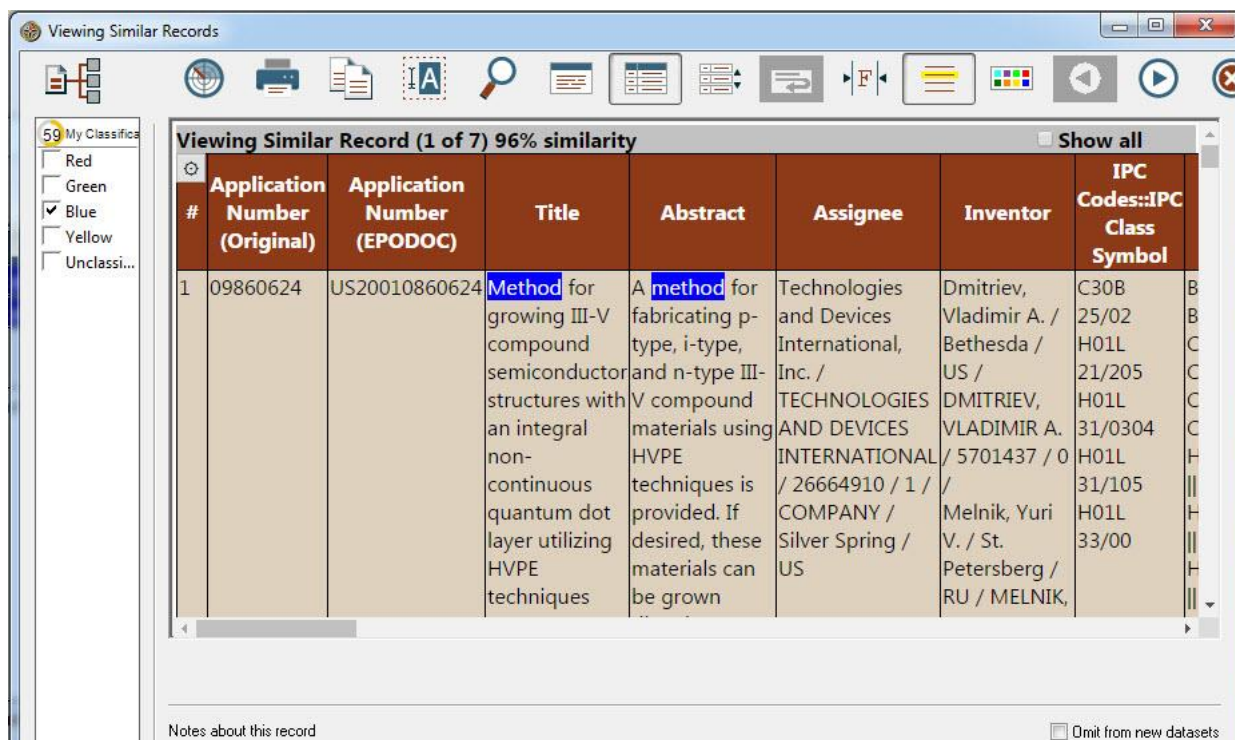
The user clicks "Find Similar Records", and in this case, one record is returned, allowing the user to assign Classification to that record, if desired:



If several records were returned (as seen in the next illustration), they would be 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 the records.



With every classification assigned, you are "teaching" VantagePoint, which is necessary for the Auto Classifier function. As more classifications are assigned, the percentage in the Progress Dial (circle next to "My Classifications") will change. The percentage indicates the amount of expected "accuracy" VantagePoint has to assign classification to similar records.

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.

Source File: C:\Work\WWW\SearchData\Viz\969\684ac2a4-eac6-4f37-a598-b37f17b998ed.xml  
Source Date: Feb 07 2017 14:58  
Source Database: PatStat

### Summary Sheet

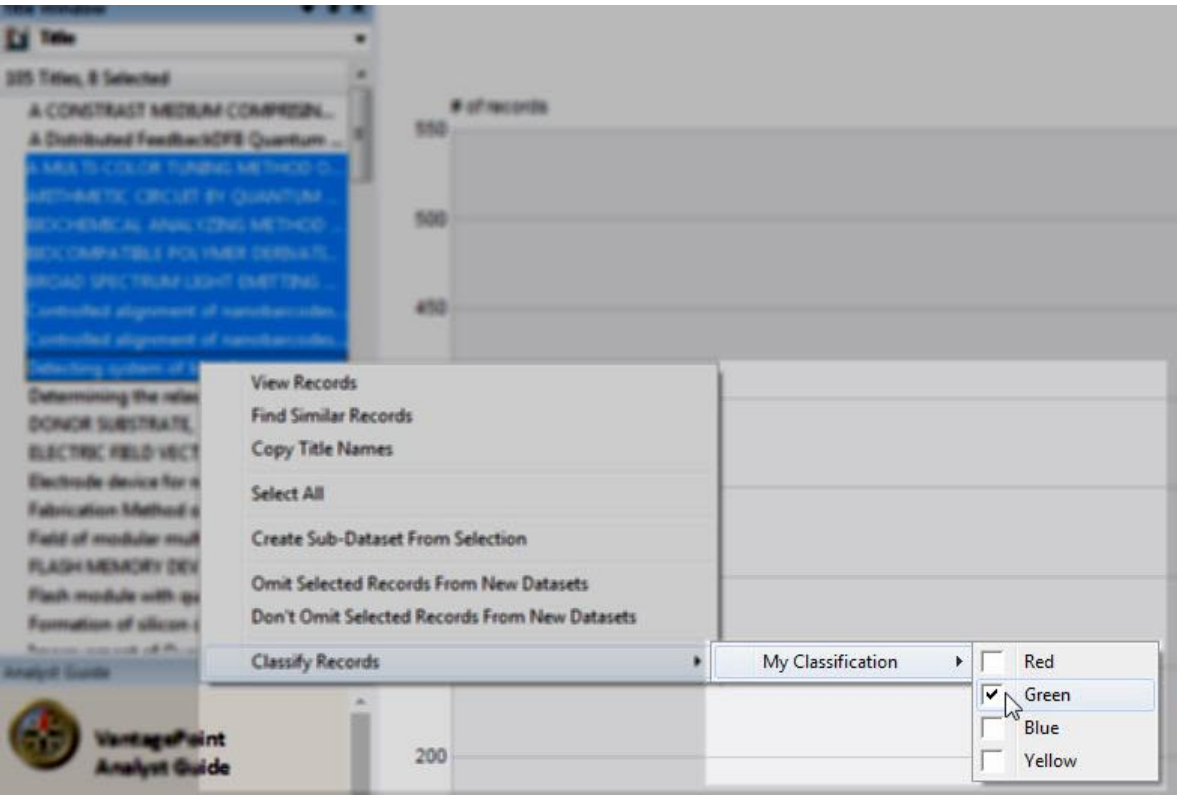
Number of Records: 2,978

Field	Number of Items	% Coverage	Data Type	Meta Tags
(filters)				
::My Classifications	2,978	100%	Record Classification	
Abstract	2,808	100%		
Abstract (NLP) (Phrases)	34,636	99%		
Abstract Language	6	100%		Language
Applicant Seq Num	13	99%	Number	
Application Authority	19	100%		Country

Each classification category field has a group name for each classification, as shown here:

	# Records	# Instances	My Classifications	Red	Green	Blue	Yellow
1	1	1	004e6j266o5w1g61k21416b	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2	1	1	01e3c255472wf6j4d6h3i333	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3	1	1	01x1c6c2r266x2yl20b245r4	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4	1	1	02jth0114bg1zd6jp2zh1c5n	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5	1	1	02k2a5o1z6g3i3q6z481771	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6	1	1	02y6g4p5a6775o3u1u6p2v2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
7	1	1	03m3w21253y4q53405z70x	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
8	1	1	04b4w693gc653c3k611c5s	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
9	1	1	04w6g246f394z5j1p6p4j6s3	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10	1	1	05i2i2n475g2m195x546g5z6	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11	1	1	0691c486a5t431y38271265	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Records can also be assigned to a classification in the Title Window. Select (or multi-select) records in the Title Window. Right-click on the selected records, and select **Classify Records** from the right-click menu. Then place a check in the box next to the desired classification(s).





## Auto Classifier

The Auto Classifier learns from your classification assignments using Fields with the "Training Field" Meta Tag. See [Adding Meta Tags for Fields](#) for instructions on assigning a Meta Tag to a Field.

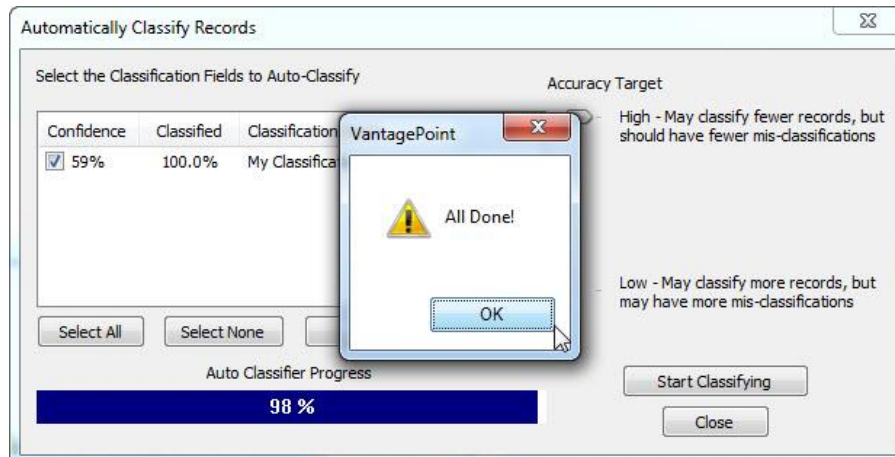
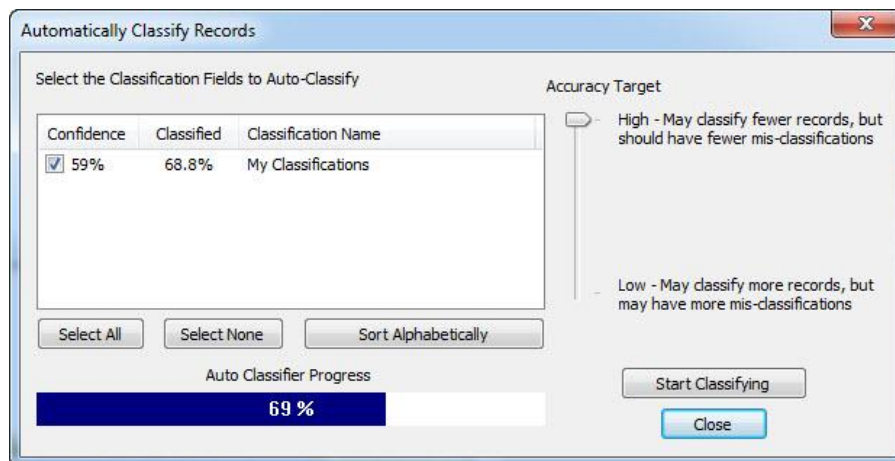
After assigning classifications to a sufficient number of records, VantagePoint can assign Classification to the remaining records.

To begin, double-click the Progress Dial.



If more than one Classification exists, they will be presented. Check the box relating to the Classification Name you want to run.

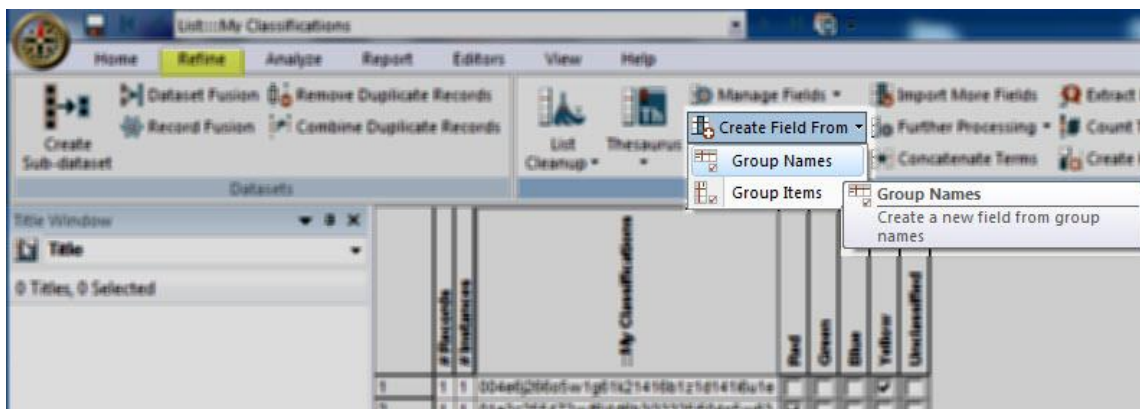
You may also adjust the Accuracy Target level by dragging the lever, as desired. Click **Start Classifying**.



This results in a List View. The "Unclassified" group contains records that VantagePoint was not confident enough to classify.

		# Records	# Instances		Red	Green	Blue	Yellow	Unclassified
				My Classifications					
1	1	1	004e6j266o5w1g61k21416b1z1d1416u1e						
2	1	1	01e3c255472wf6j4d6h3i3325i504p5w63						
3	1	1	01x1c6c2r266x2y120b245r4os1b456p2t2e						
4	1	1	02jth0114bg1zd6jp2zh1c5n2i3z53f						
5	1	1	02k2a5o1z6g3i3q6z4817716z1z6g1o92z7						
6	1	1	02y6g4p5a6775o3u1u6p2v25351t574n6fk						
7	1	1	03m3w21253y4q53405z70x5wc38a39f10						
8	1	1	04b4w693gc653c3k611c5s564x4l2nc4m3						
9	1	1	04w6g246f394z5j1p6p4j6s335m3h5y154i						
10	1	1	05l2l2n475g2m195x546g5z6r603yi2g1f4y						

The next step is to Create Field from Group Names (on the Refine ribbon):



Here is the result:

	# Records	# Instances	
			My Classifications - Group Names
1	975	975	Blue
2	809	809	Red
3	773	773	Yellow
4	371	371	Green
5	50	50	Unclassified

You can now view the Unclassified records and assign them to a Classification, if desired.

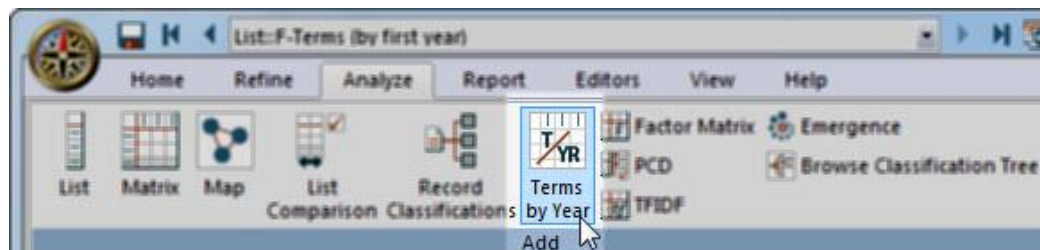
## Terms by Year

**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:  
PatStat Standardized Name

Pick the year field:  
Publication Year

Create groups

☒ by First Year  
☐ by Last Year  
☐ by All Years

☐ Summary report in Excel  
☐ Include terms for each Year

Go

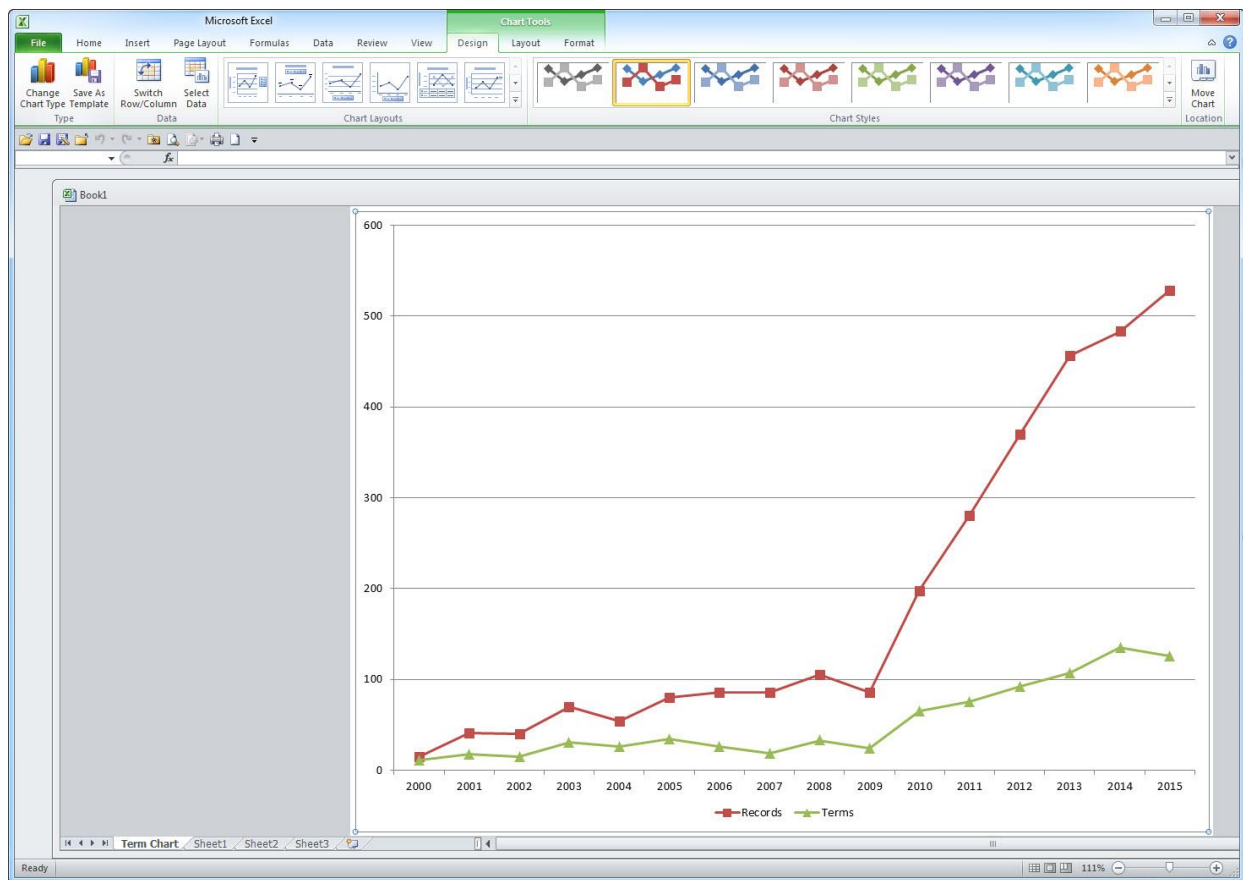
	# Records	# Instances	Assignee: PatStat Standardize	New in 1993	New in 1994	New in 1995	New in 1996	New in 1997	New in 1998	New in 1999	New in 2000	New in 2001	New in 2002	New in 2003	New in 2004
1	2	2	-NOT AVAILABLE-												
2	1	1	3GSOLAR PHOTOVOLTAICS												
3	1	1	3M INNOVATIVE PROPERTIES COMPANY (												
4	1	1	ABL IP HOLDING												
5	7	7	ABZYMO 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												

Result:



Output can also be in Excel as a Summary Chart:

The screenshot shows a web application window titled "Terms by Year". It features the "vantagepoint" logo and a background image of a globe. The interface includes two dropdown menus: "Pick a field to be sorted by year appearing:" with "PatStat Standardized Name" selected, and "Pick the year field:" with "Publication Year" selected. Below these are radio buttons for "Create groups": "by First Year", "by Last Year", "by All Years", and "Summary report in Excel" (which is selected). There is also a checkbox for "Include terms for each Year" which is unchecked. A "Go" button is at the bottom left.



## 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.

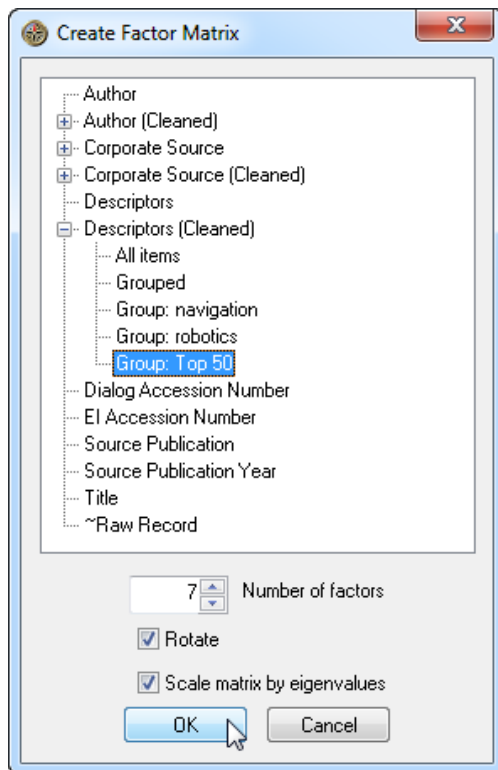
### Notes:

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](#), [Sort](#), [Make Heat Map](#), [Select multiple cells](#), or [Find a string](#).

## 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.

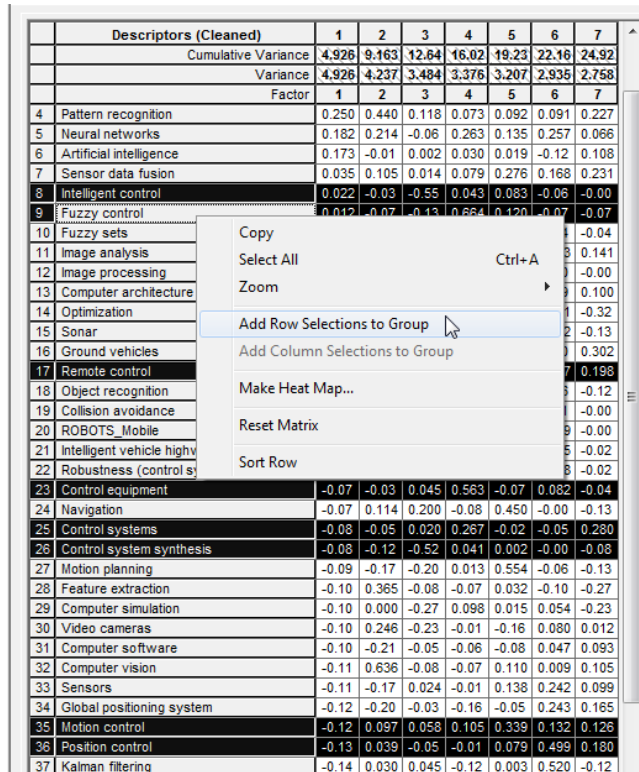
## Sorting rows and columns in a factor matrix

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

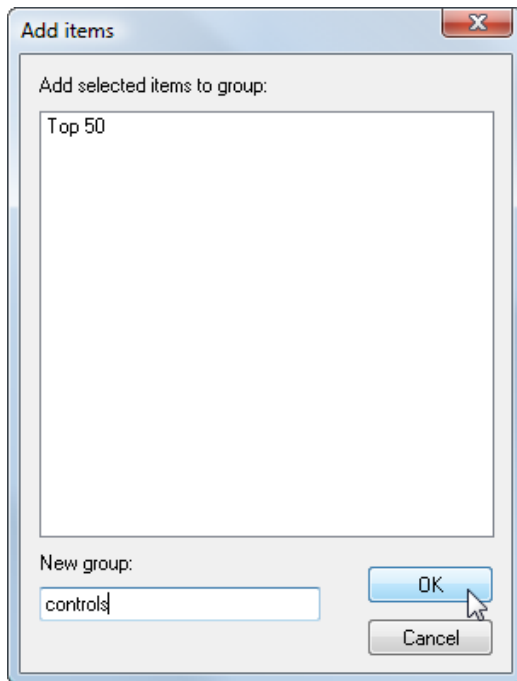
One of the purposes of creating a Factor Matrix is to find which list items tend to group together in the data. For this reason, you can also manually create groups of list items from the Factor Matrix.

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
Cumulative Variance	4.926	9.163	12.64	16.02	19.23	22.16	24.92
Variance	4.926	4.237	3.484	3.376	3.207	2.935	2.758
Factor	1	2	3	4	5	6	7
4 Pattern recognition	0.250	0.440	0.118	0.073	0.092	0.091	0.227
5 Neural networks	0.182	0.214	-0.06	0.263	0.135	0.257	0.066
6 Artificial intelligence	0.173	-0.01	0.002	0.030	0.019	-0.12	0.108
7 Sensor data fusion	0.035	0.105	0.014	0.079	0.276	0.168	0.231
8 Intelligent control	0.022	-0.03	-0.55	0.043	0.083	-0.06	-0.00
9 Fuzzy control	0.012	-0.07	-0.13	0.054	0.120	-0.07	-0.07
10 Fuzzy sets							-0.04
11 Image analysis							0.141
12 Image processing							-0.00
13 Computer architecture							0.100
14 Optimization							-0.32
15 Sonar							-0.13
16 Ground vehicles							0.302
17 Remote control							0.198
18 Object recognition							-0.12
19 Collision avoidance							-0.00
20 ROBOTS_Mobile							-0.00
21 Intelligent vehicle highv							-0.02
22 Robustness (control s)							-0.02
23 Control equipment	-0.07	-0.03	0.045	0.563	-0.07	0.082	-0.04
24 Navigation	-0.07	0.114	0.200	-0.08	0.450	-0.00	-0.13
25 Control systems	-0.08	-0.05	0.020	0.267	-0.02	-0.05	0.280
26 Control system synthesis	-0.08	-0.12	-0.52	0.041	0.002	-0.00	-0.08
27 Motion planning	-0.09	-0.17	-0.20	0.013	0.554	-0.06	-0.13
28 Feature extraction	-0.10	0.365	-0.08	-0.07	0.032	-0.10	-0.27
29 Computer simulation	-0.10	0.000	-0.27	0.098	0.015	0.054	-0.23
30 Video cameras	-0.10	0.246	-0.23	-0.01	-0.16	0.080	0.012
31 Computer software	-0.10	-0.21	-0.05	-0.06	-0.08	0.047	0.093
32 Computer vision	-0.11	0.636	-0.08	-0.07	0.110	0.009	0.105
33 Sensors	-0.11	-0.17	0.024	-0.01	0.138	0.242	0.099
34 Global positioning system	-0.12	-0.20	-0.03	-0.16	-0.05	0.243	0.165
35 Motion control	-0.12	0.097	0.058	0.105	0.339	0.132	0.126
36 Position control	-0.13	0.039	-0.05	-0.01	0.079	0.499	0.180
37 Kalman filtering	-0.14	0.030	0.045	-0.12	0.003	0.520	-0.12

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.

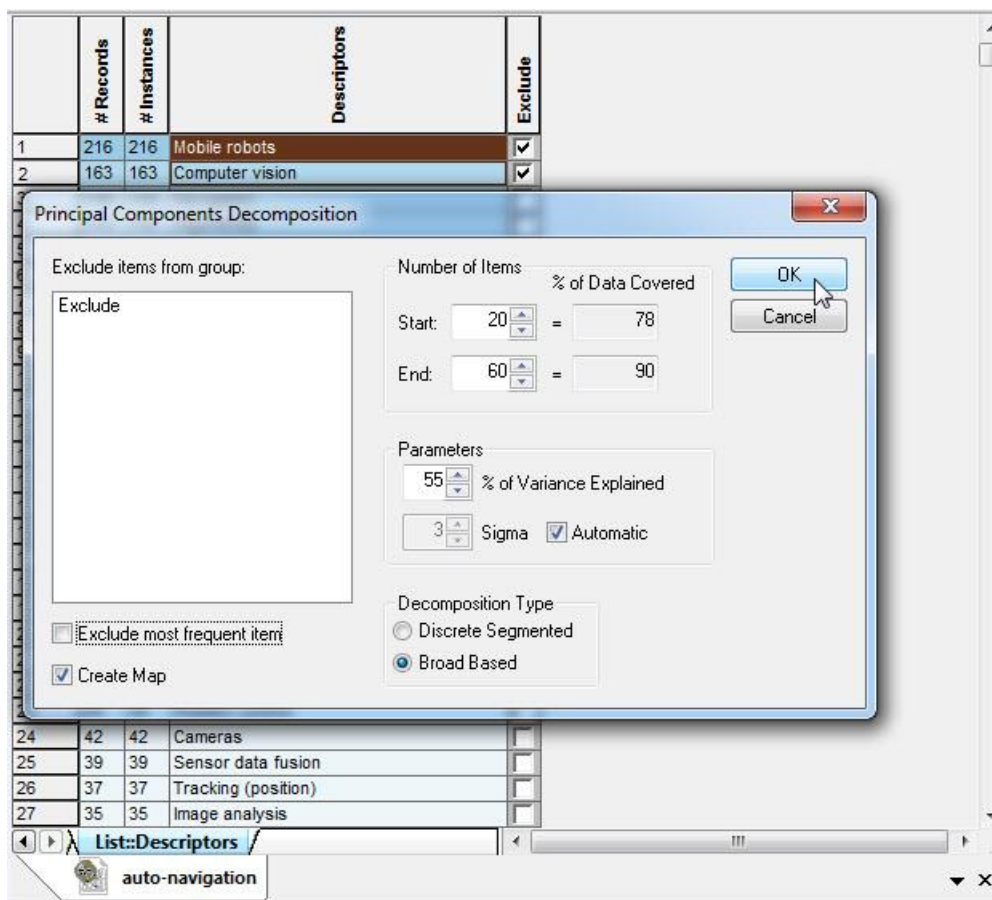
## Creating a Principal Components Decomposition

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.
- If you also want to create a Map, check the **Create Map** checkbox.
- 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.

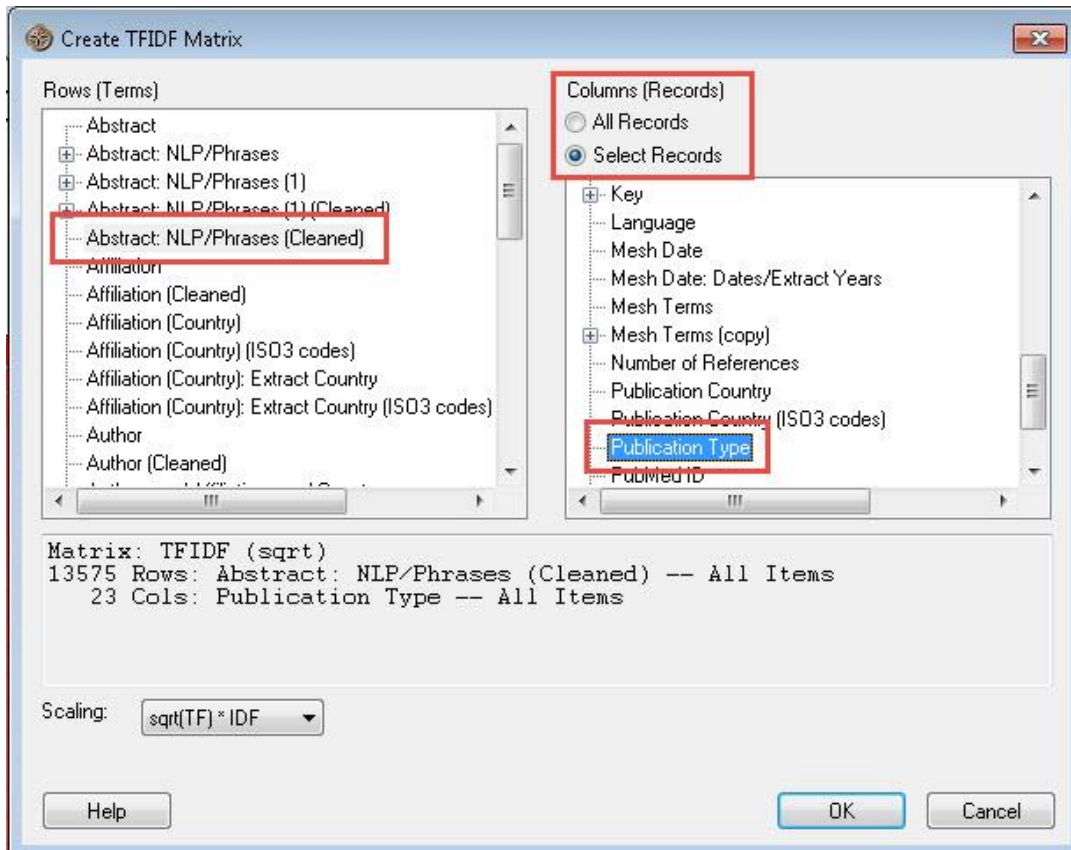
	# Records	# Instances	Descriptors	Exclude	PCD: *OTHER*	PCD: Mobile robots	PCD: Motion control	PCD: Robotics	PCD: Sensors	PCD: Neural networks	PCD: Navigation	PCD: Computer simulation	PCD: Artificial intelligence	PCD: Computer vision	PCD: Vehicles	PCD: Intelligent vehicle highway systems	PCD: Real time systems
1	216	216	Mobile robots	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	163	163	Computer vision	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3	148	148	Navigation	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4	143	143	Algorithms	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5	119	119	Sensors	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6	91	91	Robotics	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7	86	86	Computer simulation	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8	82	82	Motion planning	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9	81	81	Motion control	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10	79	79	Navigation systems	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11	77	77	Collision avoidance	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12	77	77	Vehicles	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13	75	75	Image processing	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14	74	74	Control systems	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15	62	62	Mathematical models	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16	59	59	Real time systems	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
17	57	57	Neural networks	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18	52	52	Automation	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19	50	50	Fuzzy sets	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20	50	50	Intelligent vehicle highway systems	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
21	48	48	Pattern recognition	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
22	45	45	Artificial intelligence	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input 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 tab, or by using the hot-key combination of **Ctrl T**:



In the **Rows (Terms)** window, select the field to be analyzed. In this example, the user has chosen the field "Abstract: NLP/Phrases (Cleaned)". For the **Columns (Records)**, select the record sets to be analyzed. You can choose to analyze across "All Records", or you can choose from a field that has #Records equal to #Instances for every item in the field. You can also use a group within the field. In this example, the user has chosen "Publication Type", consisting of a classification of the records by type of article.

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):

- $TF * IDF$  - emphasizes Term Frequency - useful on relatively short text segments without a high number of instances of a term per record, such as titles.
- $\log(TF) * IDF$  - de-emphasizes Term Frequency - useful on relatively long text segments that contain highly repetitive terms per record.
- $\sqrt{TF} * IDF$  - an in-between approach, useful for concise paragraph-size segments of text,

such as abstracts.

- Term Ratio \* IDF - uses the ratio (a/b) of (a) the number of *instances* of the term to (b) the number of *records* containing the term. This method emphasizes terms that appear frequently in the subset of records containing the term.
- Set Ratio \* IDF - uses the ratio (a/b) of (a) the number of *instances* of the term to (b) the total number of *records* in the record set or subset. This method emphasizes terms that appear broadly in the set or subset of records being addressed.

The picture below illustrates the calculations. The TFIDF matrix has been created using Publication years as the columns.

134 = the number of records with Publication Year 2014.

14 = the number of records in 2014 that contain the term "extract" one or more times. Notice "14 titles" in the Title Window.

IDF =  $\text{Log}(134/14) = 0.98$ . In the 134 records with Publication Year of 2014, the term "extract" occurs in 14 records. In all variants of the calculation, IDF is the same.

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.

With these parameters, here are the five calculations:

1.  $\text{TF} * \text{IDF} = 42 * 0.98 = 41.20$
2.  $\log(\text{TF}) * \text{IDF} = \log(42) * 0.98 = 1.59$
3.  $\text{sqrt}(\text{TF}) * \text{IDF} = \text{sqrt}(42) * 0.98 = 6.36$  (see the illustration)
4.  $\text{Term Ratio} * \text{IDF} = (42/14) * 0.98 = 2.94$
5.  $\text{Set Ratio} * \text{IDF} = (42/134) * 0.98 = 0.31$

Reset	Title (Best Available) (NLP) (Words) (Clear)	1	2	3	4	5	6	7	8	9	10	11
	# Records	134	404	500	521	448	548	450	497	385	380	353
	TFIDF (sqrt)											
	2014		2013									
1	373 extract	6.36							8.45	7.03	6.47	4.33
2	99 layer	5.53	8.1						5.36	4.60	4.59	4.78
3	342 polymer	5.19	7.48						7.44	6.26	6.17	5.09
4	69 essential	4.82	5.90						6.4	5.27	5.25	3.60
5	83 sweetener	4.67	8.65									2.55
6	292 oil	4.54	6.37									5.30
7	20 menthane	4.52	4.61									0.00
8	256 deriv	4.47	5.64									5.24
9	28 face	4.47	7.76									0.00
10	442 component	4.41	7.85									7.38
11	465 prepare	4.33	6.68									6.07
12	20 shielding	4.31	5.67									0.00
13	380 specific	4.23	5.46									6.01
14	1645 care	4.20	5.28									5.98
15	870 dental	4.18	6.68									5.99
16	1438 agent	4.13	6.65									6.06
17	255 flavor	4.06	6.77									5.91
18	441 particle	4.06	6.67									5.95
19	38 period	4.04	5.67									0.00
20	143 fatty	4.04	5.48									4.35

Reset	Title (Best Available) (NLP) (Words) (Clear)	1	2
	# Records	134	404
	Cooccurrence # of Instances		
	2014		2013
46	377 calcium	0	26
47	373 extract	42	87
48	369 gingival	0	51
49	366 new	4	3
50	349 form	2	28

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:

**Corporate Insulin Research PubMed.vpt**

Reset	Abstract: NLP/Phrases (Cleaned)	1
	# Records	806
	Show Values >= 0.00 and <= 14.83	
	TFIDF (sqrt)	
	# Records	All Records
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 tasoglutide	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 >= 0.00 and <= 14.82								
	TFIDF (sqrt)								
	# Records	JOURNAL ARTICLE	Research Support, Non-U.S.	Review	Randomized Controlled Trial	Comparative Study	Research Support, N.I.H., ES	Multicenter Study	Evaluation Studies
1	19 vildagliptin	14.82	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	2.66	1.0
6	53 hypoglycemia	11.39	7.64	3.60	3.30	4.15	3.76	2.23	1.0
7	3 tasoglutide	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

## Calculate Emergence Indicators

*Description:* Creates a group of emerging terms.

*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”;

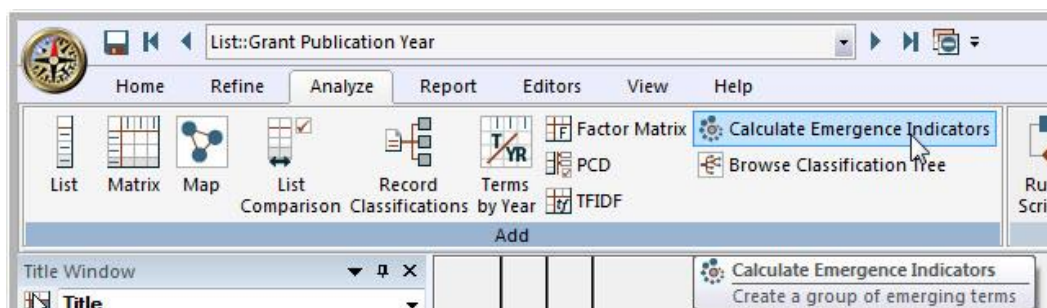
Organization field looks for Meta Tag: Organization

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”

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:

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**, Emergence Scores (*Patent Pending*) will be generated for terms, people, organizations, countries.

	# Records	# Instances	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

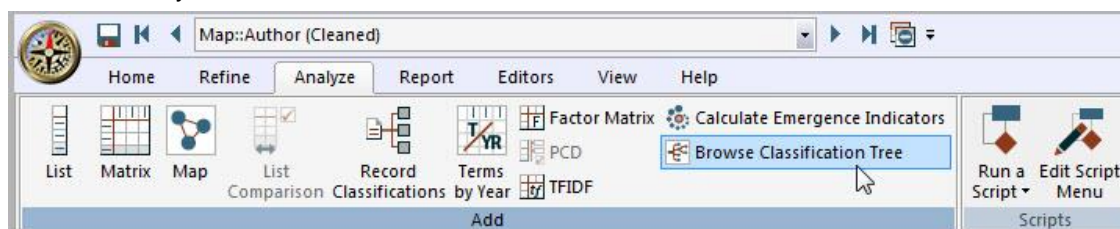


## Browse Classification Tree

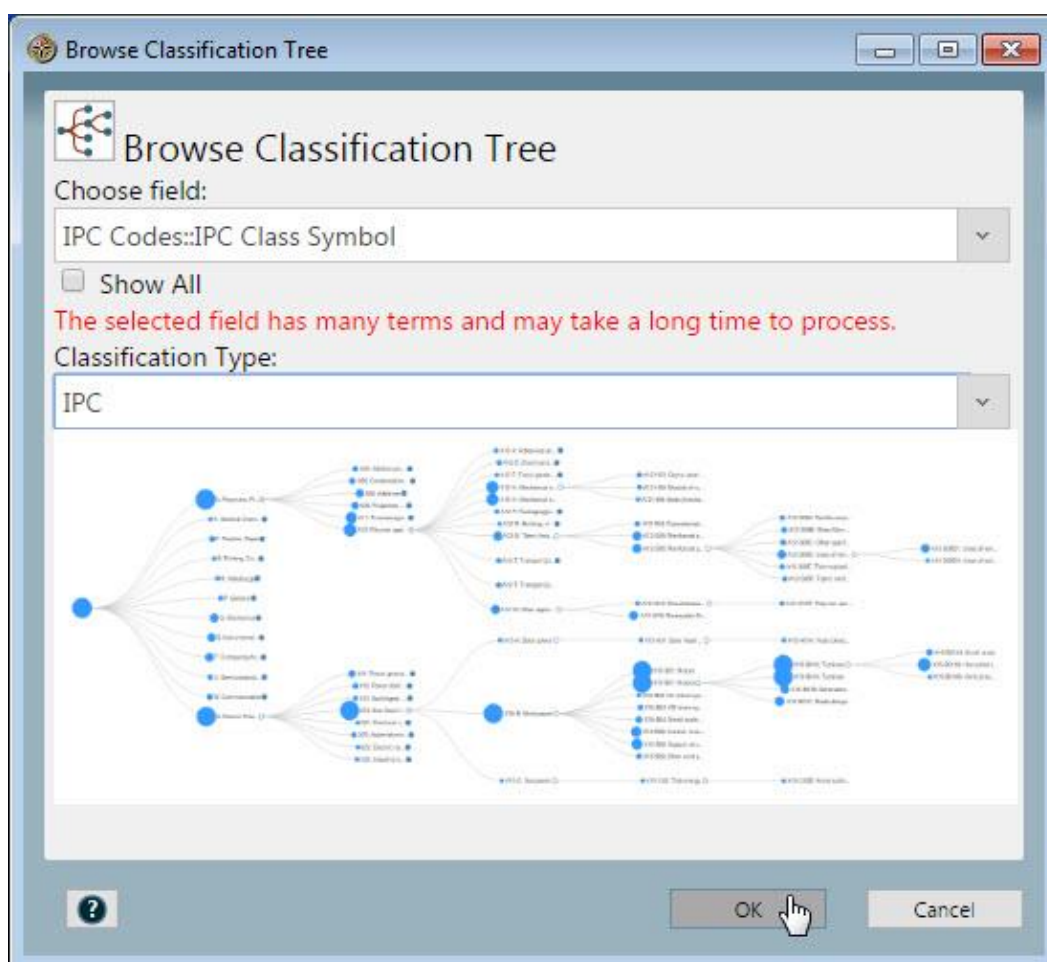
*Description:* Create a Tree Diagram of a CPC, IPC, or Derwent Classification code field.

*Requirements:* Classification field should have "Classification" metatag.

From the Analyze ribbon, choose **Browse Classification Tree**:

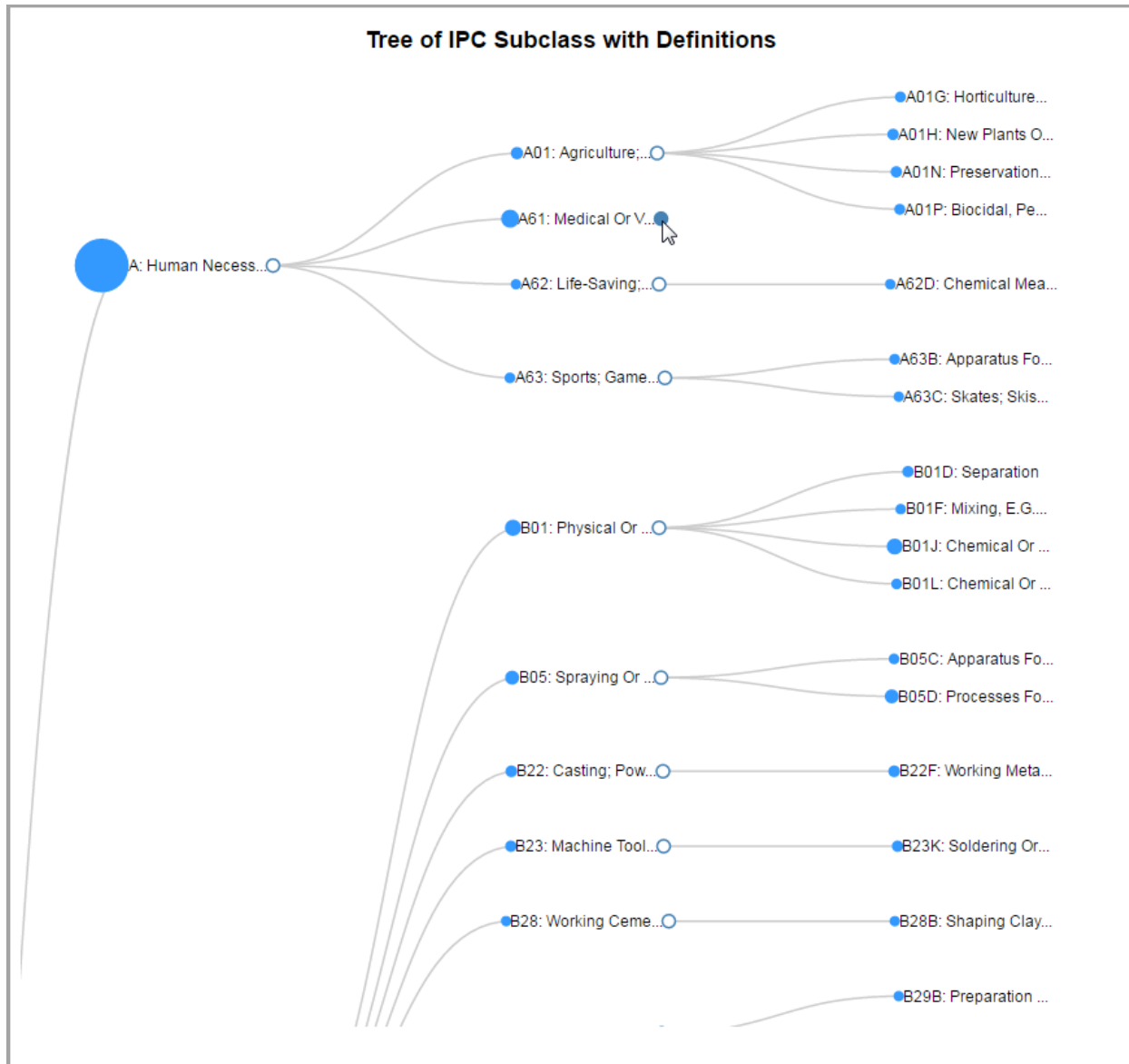


Choose the fields (report works on patent information only) and click **OK**.



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.

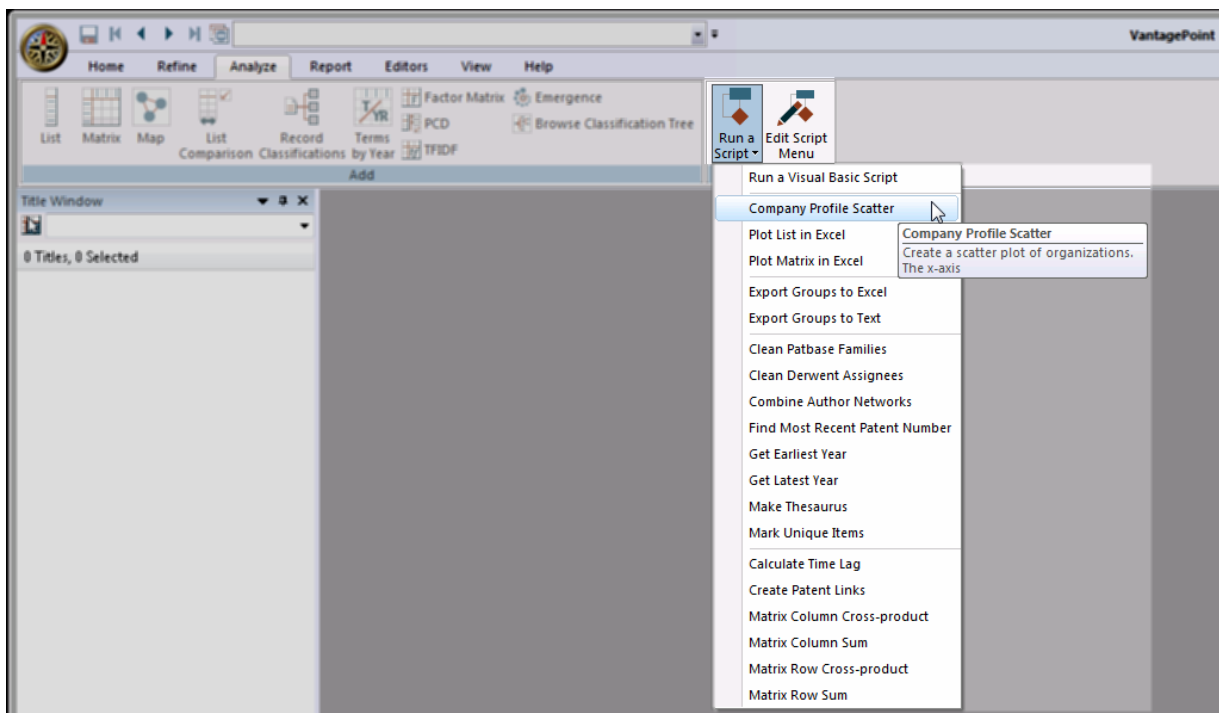


## Scripts

VantagePoint can run Visual Basic Scripts to automate repetitive functions. VantagePoint uses Visual Basic (Scripting Edition) from Microsoft Corporation.

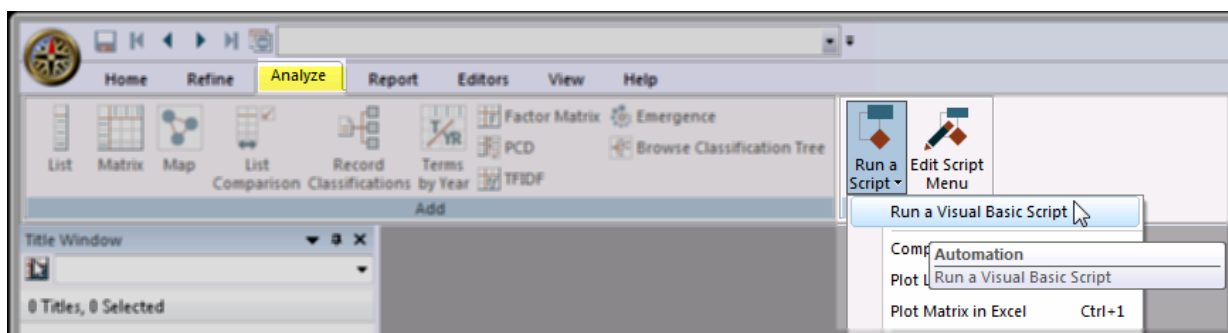
The VantagePoint installation includes the scripts shown in the dropdown menu. A description of each appears in the tooltip box when the mouse hovers over the script name.

From the **Analyze** ribbon, select **Run a Script** to display the scripts included in the VantagePoint Installation.



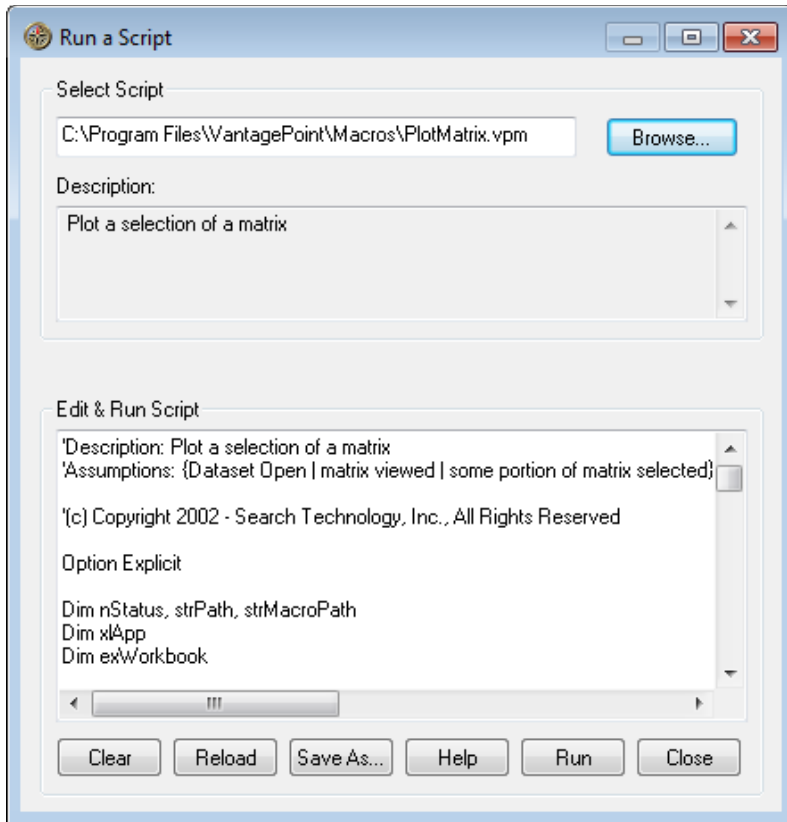
## Running scripts

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\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.

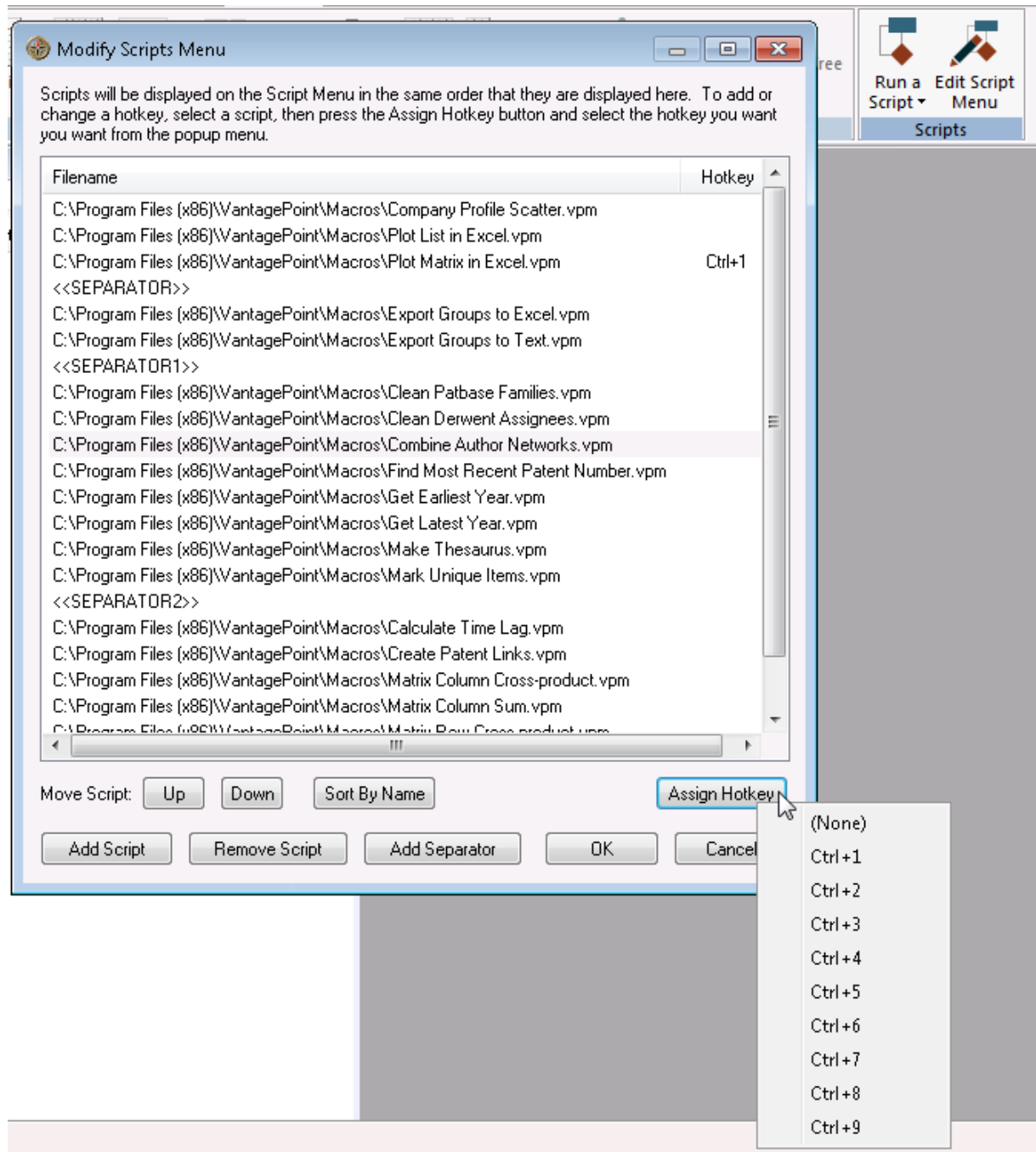
**Reload:** If you have edited and saved the selected script using a text editor outside of VantagePoint, you can load the updated script by simply clicking **Reload**. This is very useful when developing scripts.

**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:

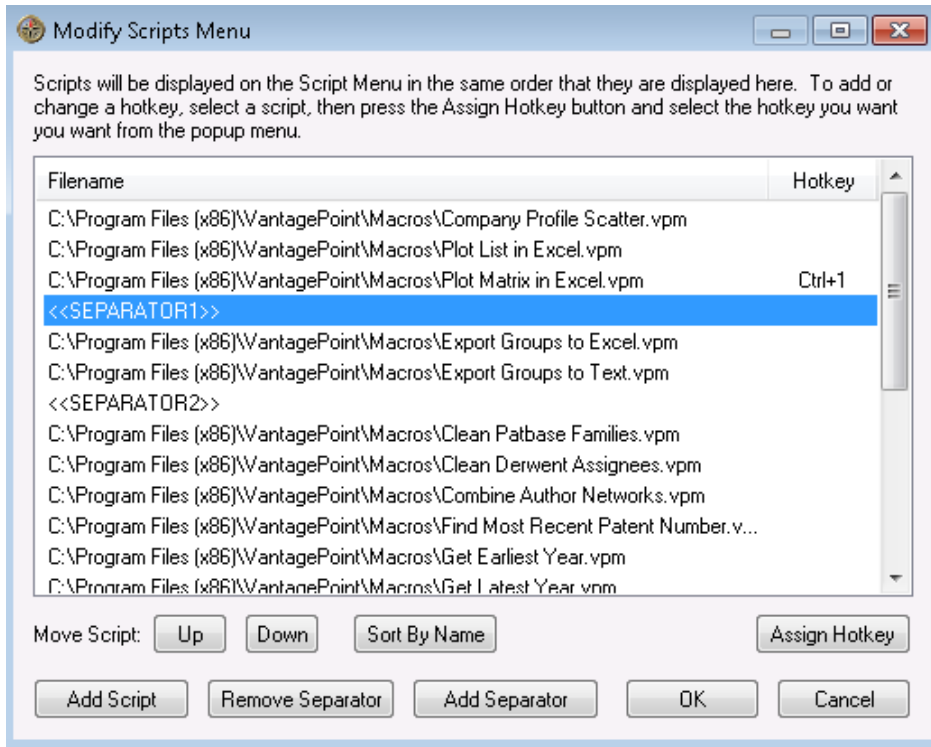
Before

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

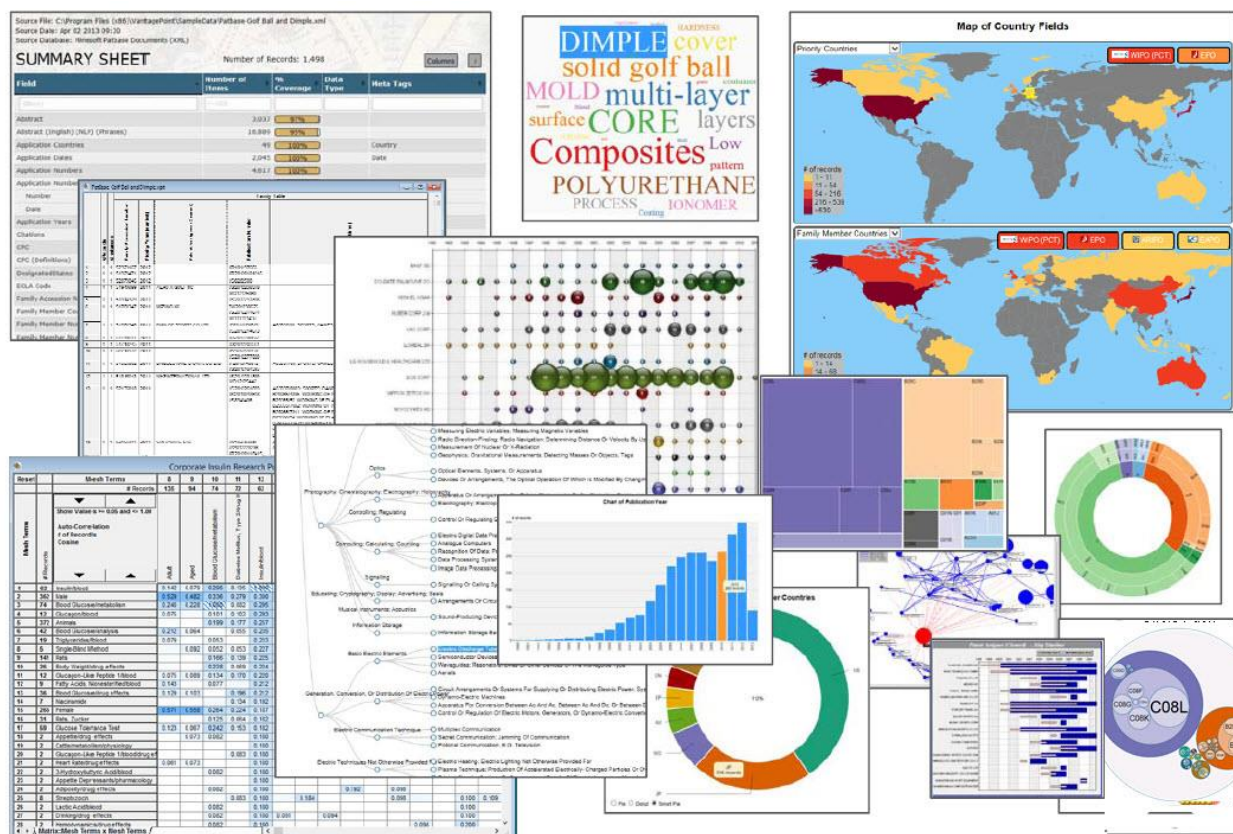
When you click **Add Separator**, <<SEPARATOR>> appears at the bottom of the list in the "Filename" window. Click on <<SEPARATOR>> and use the **Up** / **Down** buttons to move the Separator to the desired location. (The **Remove Script** button changes to **Remove Separator** when a <<SEPARATOR>> is selected in the Filename list.)



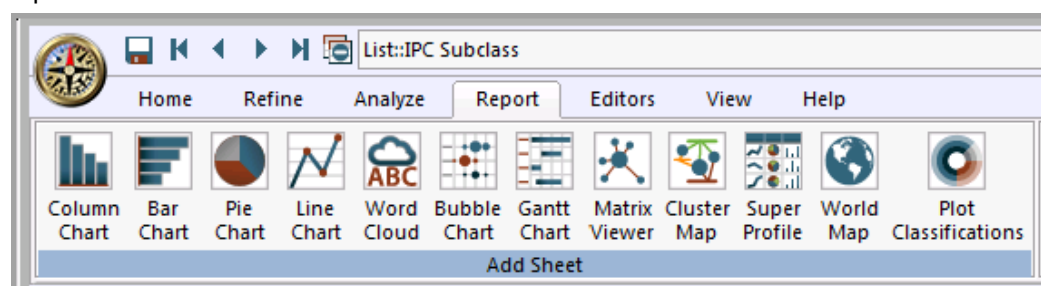
**Assign Hotkey** – Up to nine scripts can be assigned to run when a single "hot key" is pressed on the keyboard or toolbar. These can be assigned to Ctrl-1 through Ctrl-9. To assign a script to a "hot key," first select the script in the menu, and then click the **Assign Hotkey** button. Select the 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



The following Reports are available from the **Report** ribbon. Each is illustrated and described in a sub-topic.



Quick Links:

[Column Chart](#)  
[Bar Chart](#)  
[Pie Chart](#)  
[Line Chart](#)

[Word Cloud](#)  
[Bubble Chart](#)  
[Gantt Chart](#)  
[Matrix Viewer](#)

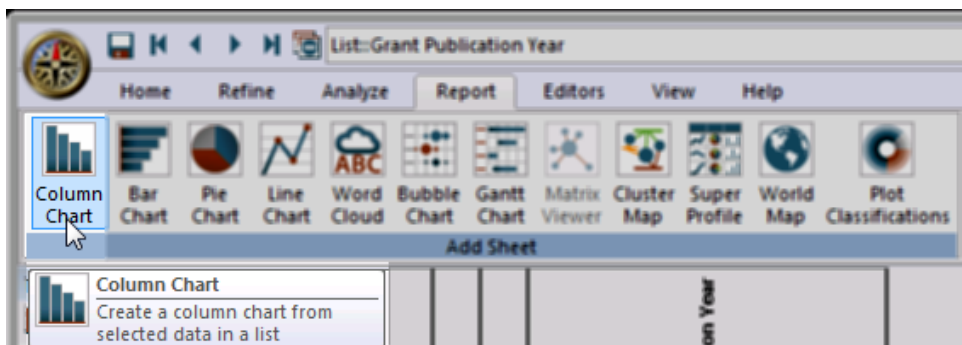
[Cluster Map](#)  
[Super Profile](#)  
[World Map](#)  
[Plot Classifications](#)

## Column Chart

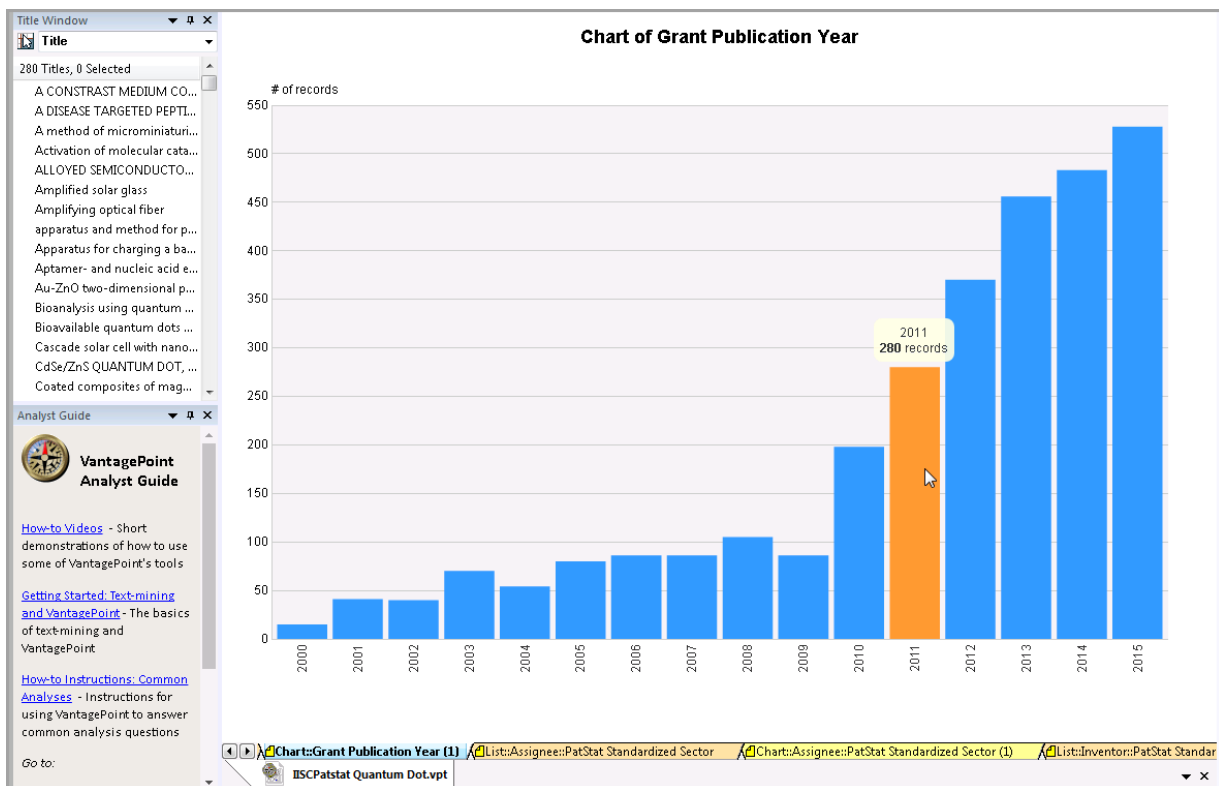
*Description:* Create a column chart from selected data in list.

*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.

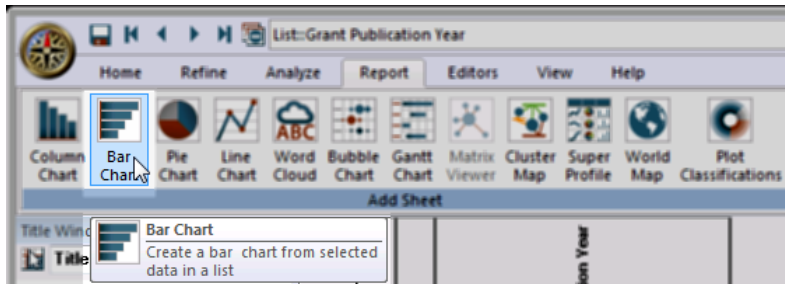


## Bar Chart

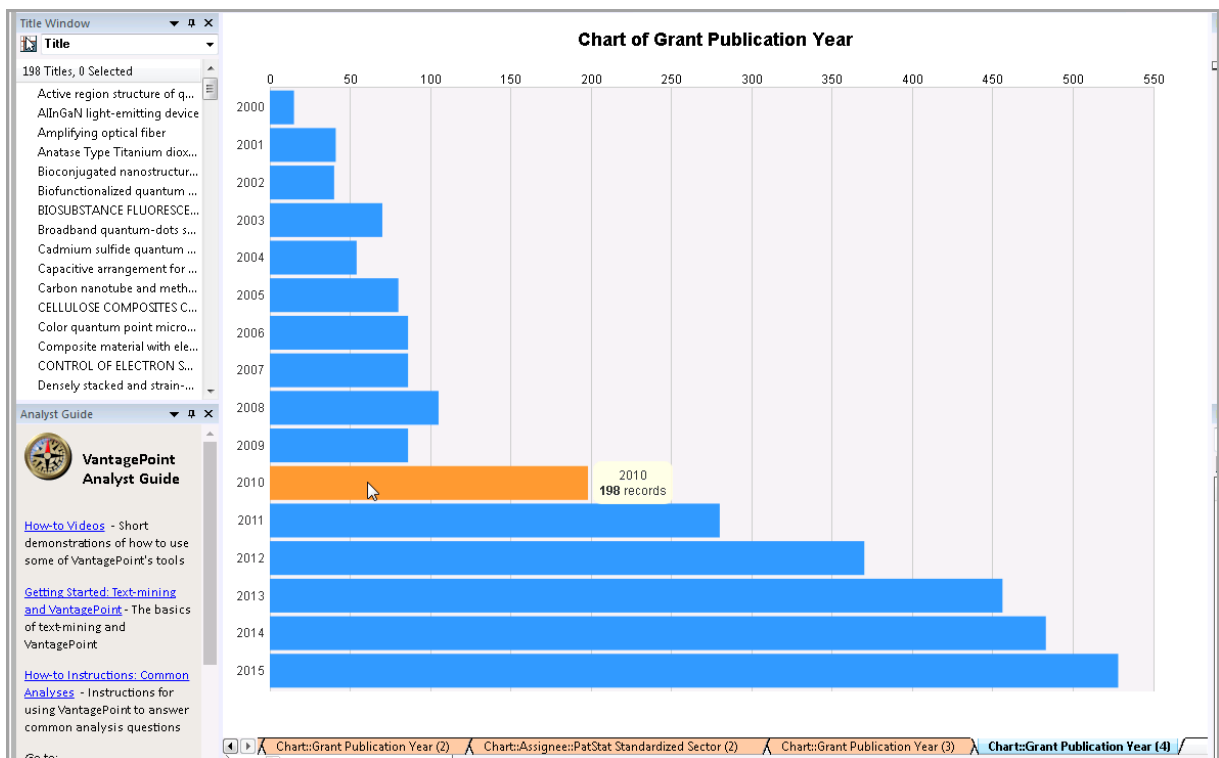
*Description:* Create a horizontal bar chart from selected data in list.

*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.



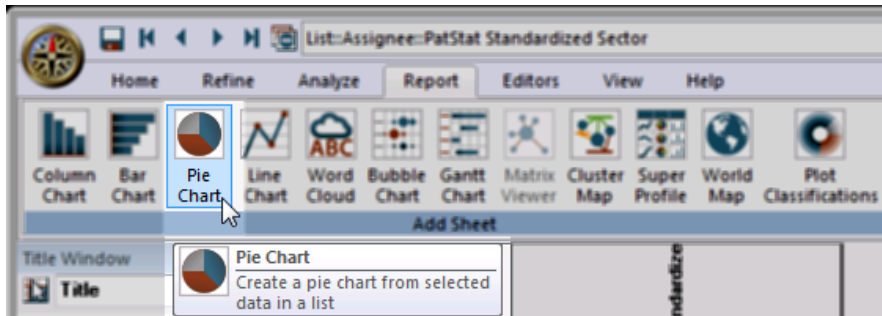


## Pie Chart

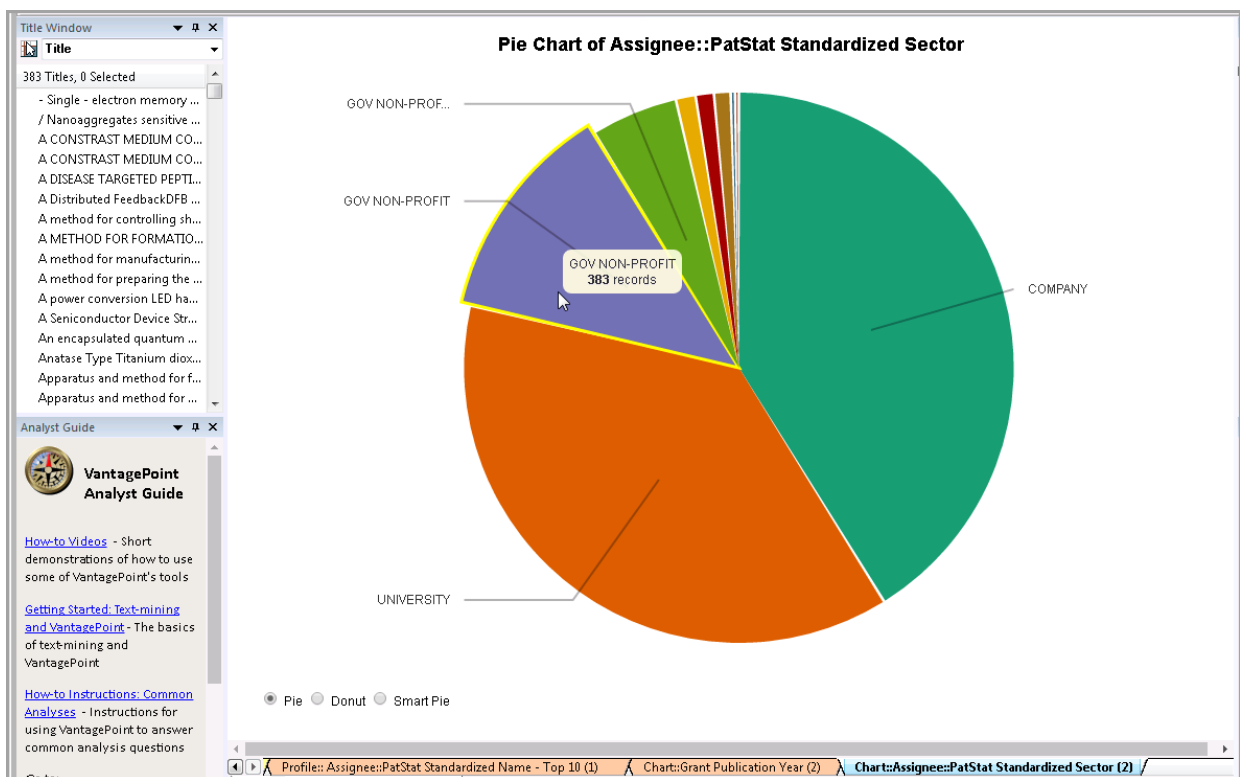
*Description:* Create a pie chart from selected data in list.

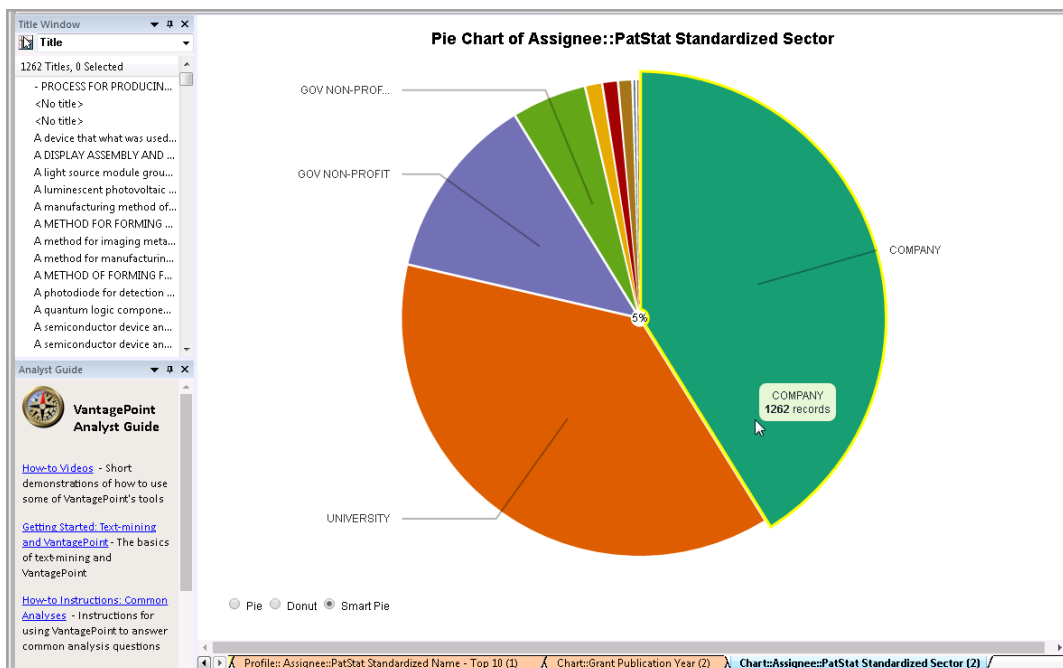
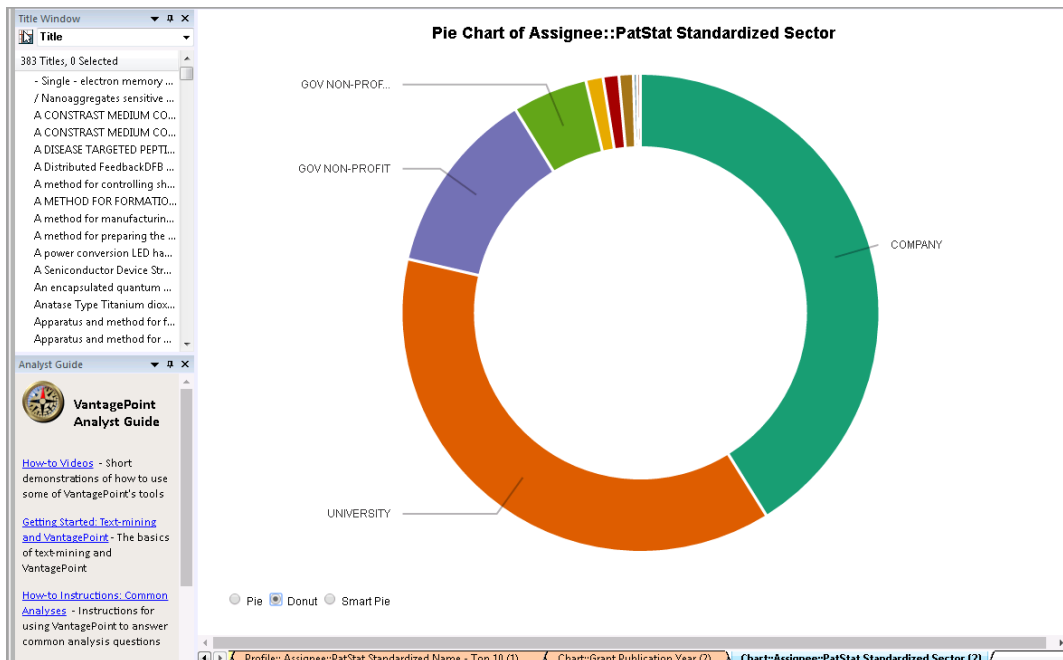
*Requirements:* A dataset is open with the current view being a list. A set of cells must be selected. The "Smart Pie" view shows the total percent overlap between the pie sections.

From a List view, select **Pie Chart** from the **Report** ribbon:

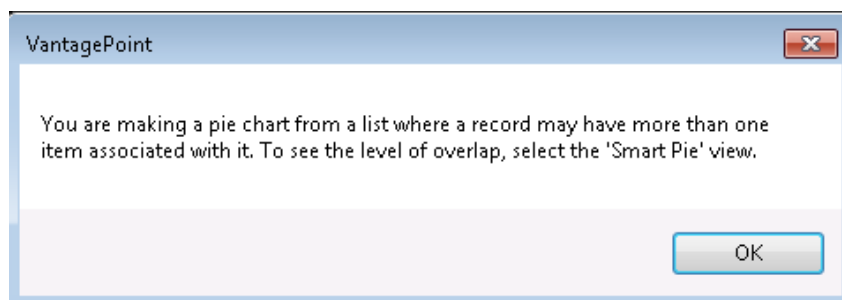


The following pictures illustrate the choices of Pie Chart, Donut, Smart Pie.





The "Smart Pie" view (above) shows the total percent overlap between the pie sections (5%, in this illustration).

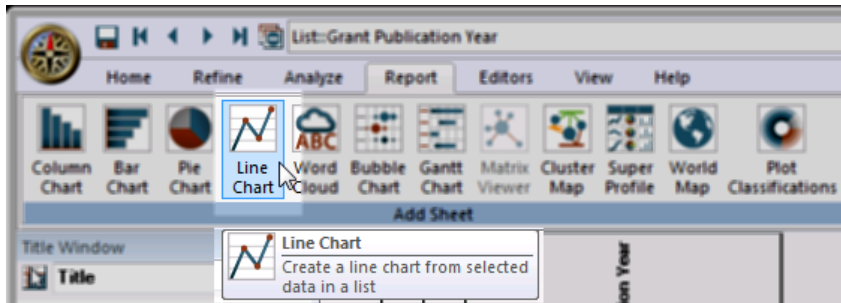


## Line Chart

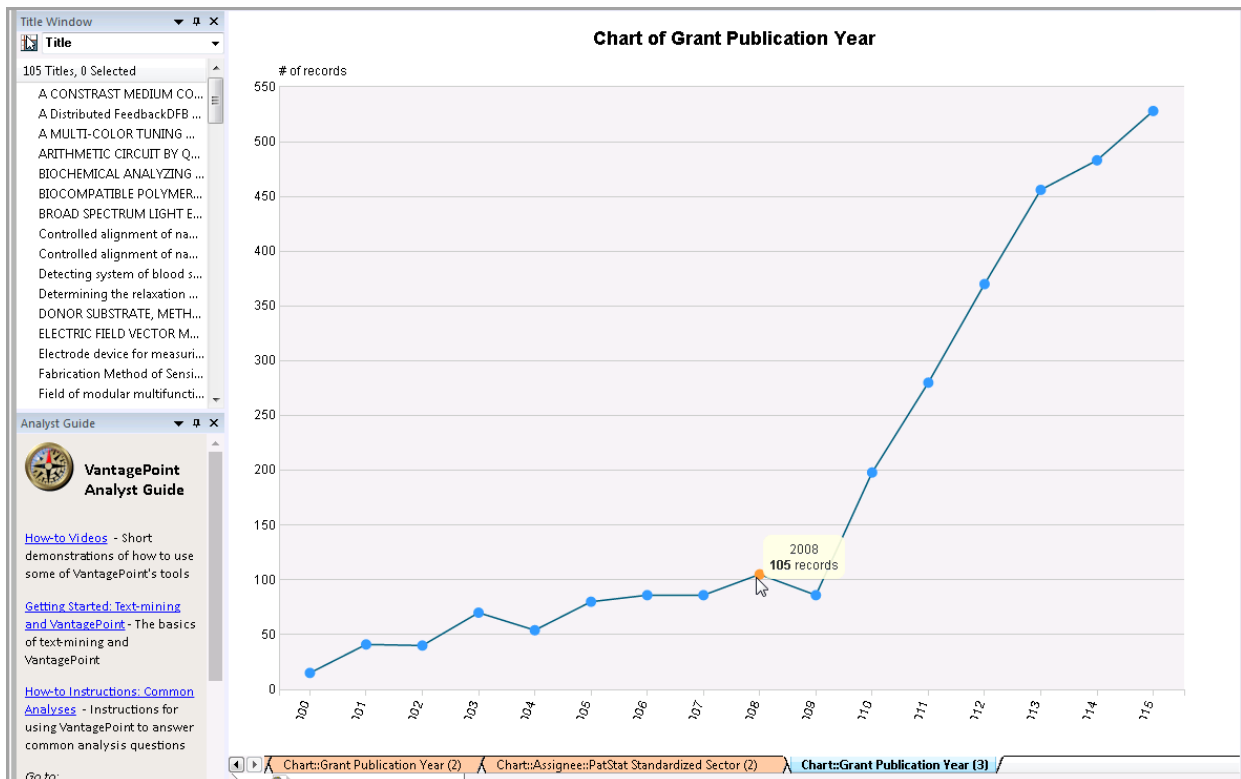
*Description:* Create a line chart from selected data in list.

*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.

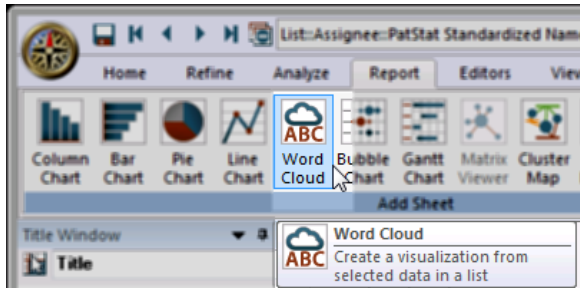


## Word Cloud

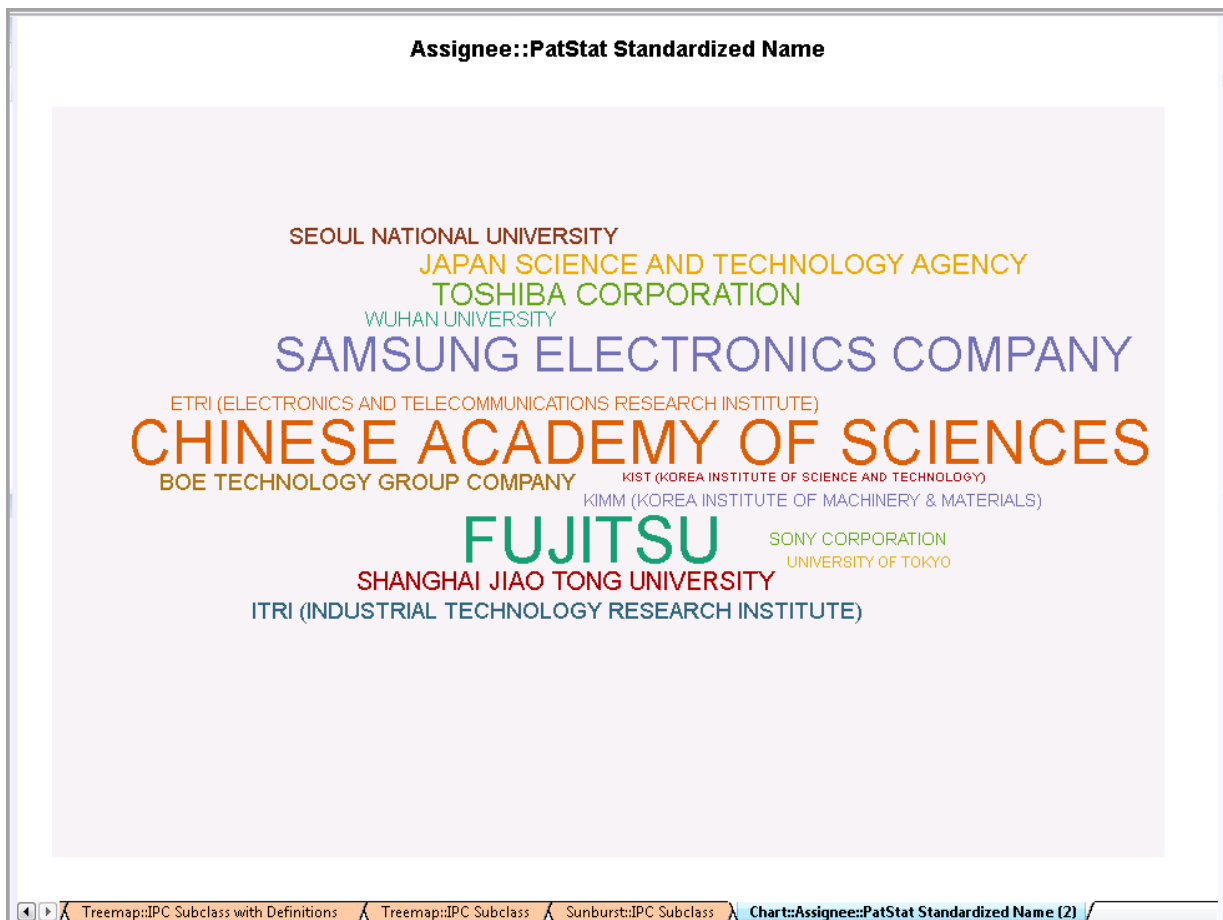
*Description:* Makes a Word Cloud of the selected list items.

*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 Word Cloud 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.



## Bubble Chart

**Description:** Represents terms over time as bubbles along a string.

**Requirements:** A dataset is open with year fields

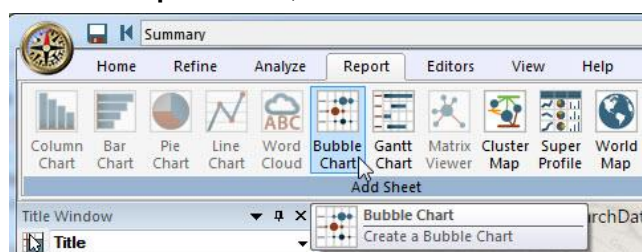
**Usage:** You can save and Load templates for common field selections.

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.
- 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).
- Toggle showing/hiding the number of records on the bubbles by clicking on the "#" button.
- 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:

**Bubble Chart**

Select a Template:  
No Template

Step 1: Select Field for Rows:  
+ Assignee::PatStat Standardized Name (Cleaned)  
☒ Select a group ☐ All groups in field ☐ All items in field  
Top 10

Step 2: Select Field for Columns:  
+ Grant Publication Year  
☒ Select a group ☐ All groups in field ☐ All items in field  
Recent 10 years

Step 3: Run / Save Template Template name:

? Run Save Template and Run Save Cancel

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. 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**.

## Gantt Chart

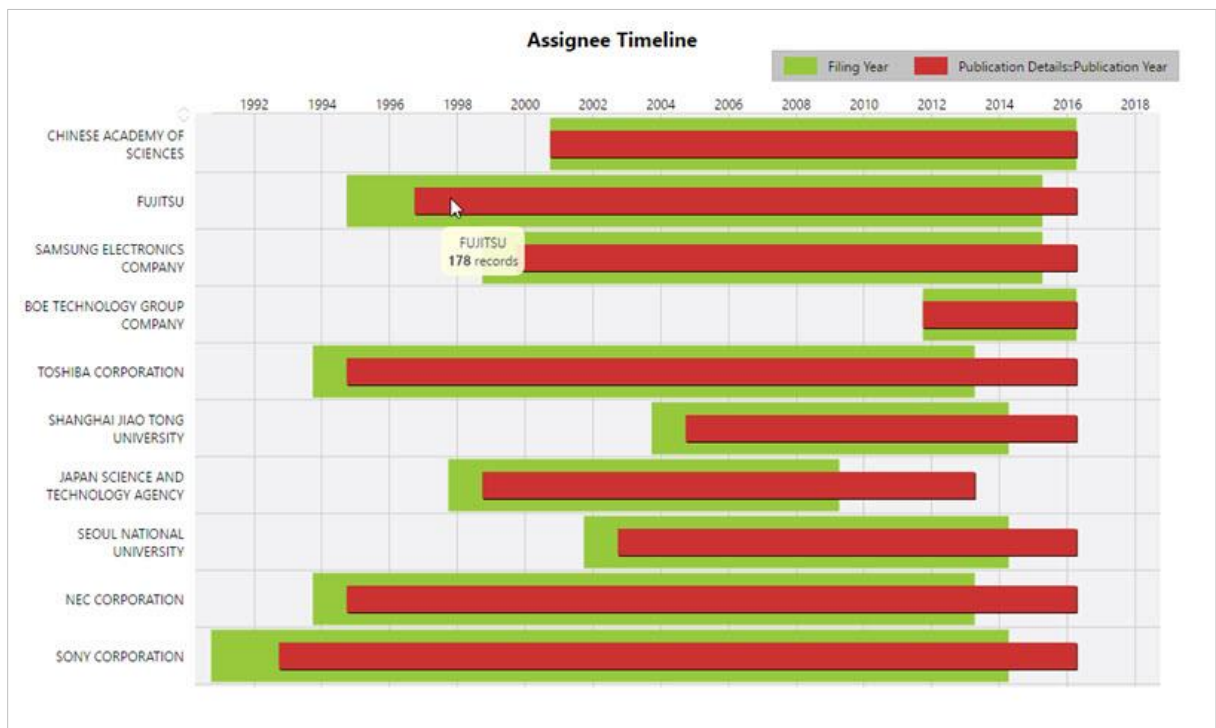
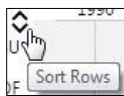
**Notes:** Create a Gantt chart of company's active years. Can plot 2 year fields (e.g., priority and publication)

**Requirements:** A dataset is open with organization and Data Type: Year fields.

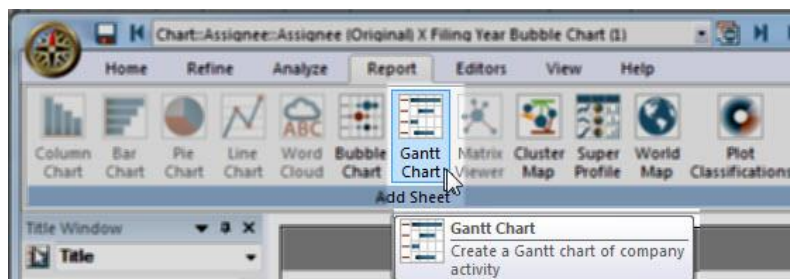
**Usage:** Quickly compare the range of active years across multiple organizations.

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:

The screenshot shows a window titled "Company Activity Gantt" with standard Windows window controls (minimize, maximize, close). Inside the window, there is a header section with a small icon and the title "Company Activity Gantt". Below this, the configuration is divided into two steps:

**Step 1: Select a field to use for Organization:**

- A dropdown menu shows the selected field: "+ Assignee::PatStat Standardized Name (Cleaned)".
- Three radio buttons are present: "Select a group" (which is selected), "All groups in field", and "All items in field".
- A dropdown menu below the radio buttons shows "Top 10".

**Step 2: Select fields to use for Years**

- Two radio buttons are present: "Use one year field:" and "Use two year fields:" (which is selected).
- Next to "Use one year field:" is a dropdown menu showing "Filing Year".
- Next to "Use two year fields:" is a dropdown menu showing "Publication Details::Publication Year".

At the bottom of the window, there is a help icon (question mark in a circle), an "OK" button with a mouse cursor hovering over it, and a "Cancel" button.

## Matrix Viewer

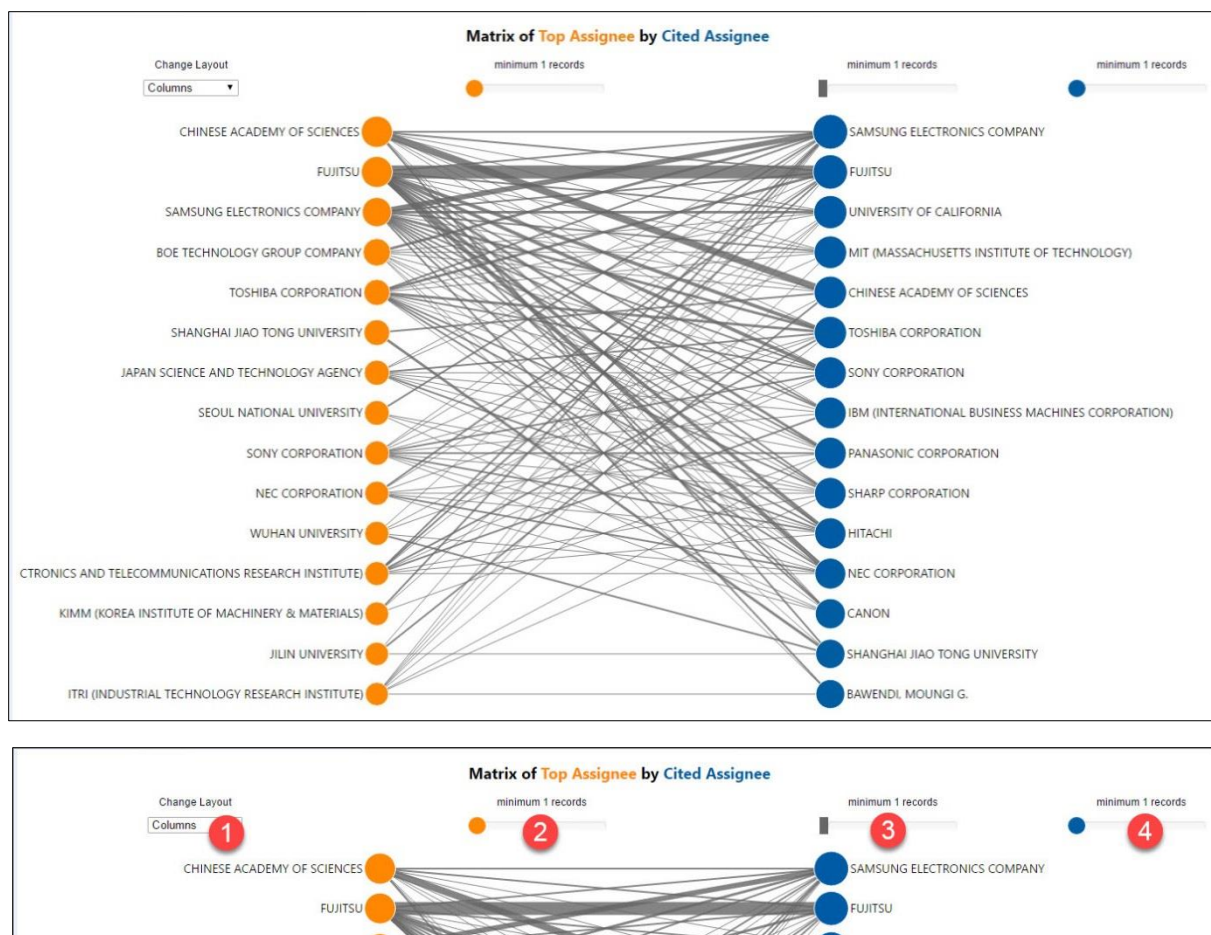
**Description:** View a node-edge representation of a matrix in a browser sheet.

**Requirements:** A matrix must be open.

**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 drop-down at the top of the sheet. Use the sliders at the top to set minimum “number of records” and/or “correlation” values for the displayed nodes and links.

**Warning:** In force-directed (animated) layout, map may continuously update and use processor power unless paused, even if you switch to another sheet.

This Report was created using the Co-occurrence Matrix shown on the next page. The orange nodes represent the rows of the matrix; the blue nodes represent the columns:



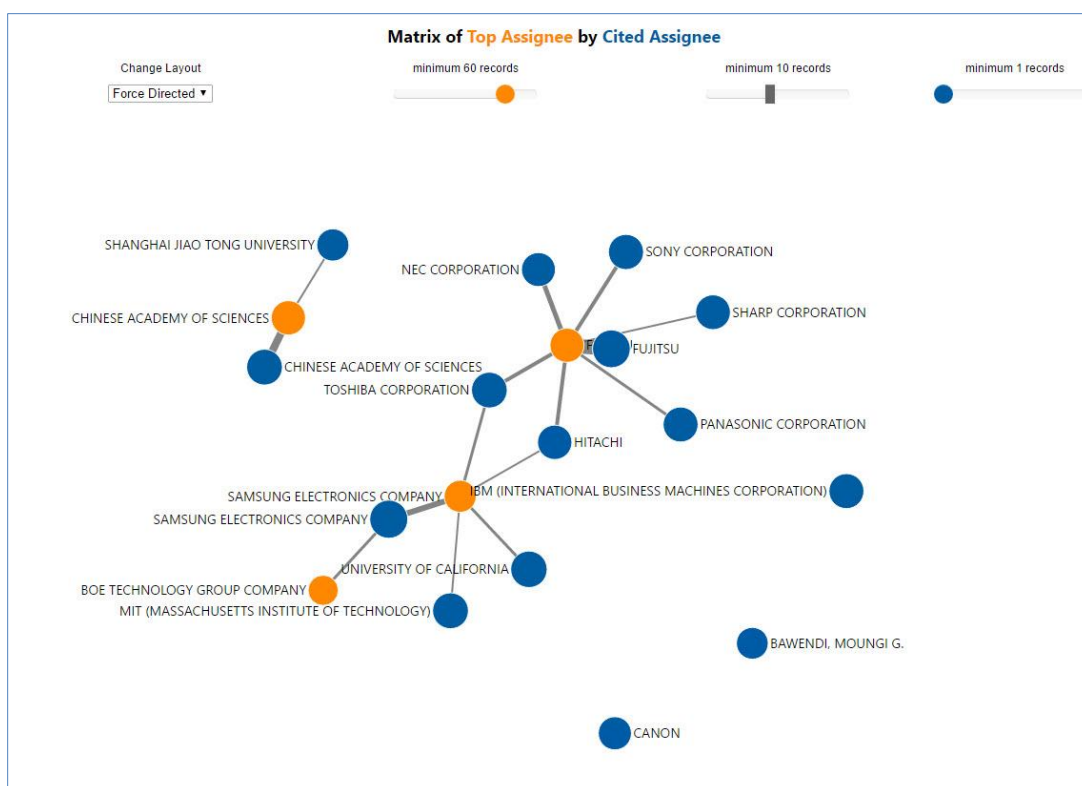
Identification of the controls numbered in the above illustration:

1. Select Layout
2. Filters row items by number of records
3. Filters number of links shown
4. Filters column items by number of records

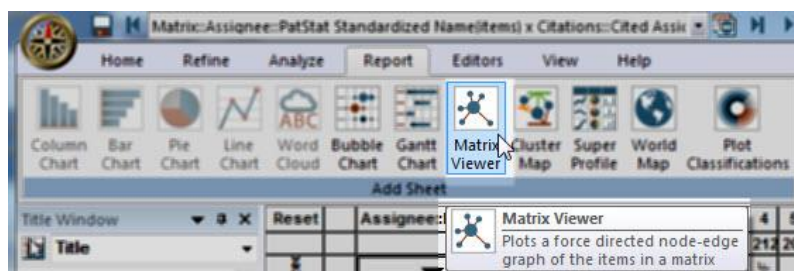
Co-occurrence Matrix used to create Matrix Viewer:

Reset		Assignee::PatStat Standardized Name	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
		# Records	415	389	295	258	254	252	222	215	215	205	190	174	145	120	110	
ns::Cited Assignee PatStat Standardized Name	# Records	<div><div>▼▲</div><div>Show Values &gt;= 1 and &lt;= 121</div><div>Cooccurrence # of Records</div><div>▼▲</div></div>	SAMSUNG ELECTRONICS COMPANY	FUJITSU	UNIVERSITY OF CALIFORNIA	MIT (MASSACHUSETTS INSTITUTE OF	CHINESE ACADEMY OF SCIENCES	TOSHIBA CORPORATION	SONY CORPORATION	IBM (INTERNATIONAL BUSINESS MACH	PANASONIC CORPORATION	SHARP CORPORATION	HITACHI	NEC CORPORATION	CANON	SHANGHAI JIAO TONG UNIVERSITY	BAWENDI, MOUNGI G.	
		187	CHINESE ACADEMY OF SCIENCES	7	7	2	3	60	3	1	1			2	2	10		
		178	FUJITSU	5	121	8	2	1	25	23	7	15	11	28	34	7		
		117	SAMSUNG ELECTRONICS COMPANY	40	7	16	13	1	16	6	9	8	5	12	2	8		8
		79	BOE TECHNOLOGY GROUP COMPANY	15		1	4	1		3		1	2		1		3	1
		57	TOSHIBA CORPORATION	5	16	4	2		17	8	2	4	6	9	12	3		
		55	SHANGHAI JIAO TONG UNIVERSITY					8									18	
		47	JAPAN SCIENCE AND TECHNOLOGY AGE	1	4				5	4	1	3	3	8	2			
		44	SEOUL NATIONAL UNIVERSITY	9									3	1		1		
		40	SONY CORPORATION	2	2		1		1	6	3	5	4	7	2	1		
		37	NEC CORPORATION		9	1			1			2	2	2	5	1		
		37	WUHAN UNIVERSITY	2				4		1					1		8	
		36	ETRI (ELECTRONICS AND TELECOMMUNIC	8	6	3			5	3	5		2	3	2			
		34	KIMM (KOREA INSTITUTE OF MACHINERY	7		1						1						
		32	JILIN UNIVERSITY	4				8									2	
		30	ITRI (INDUSTRIAL TECHNOLOGY RESEAR	2	1	2	4		2			1	1					2

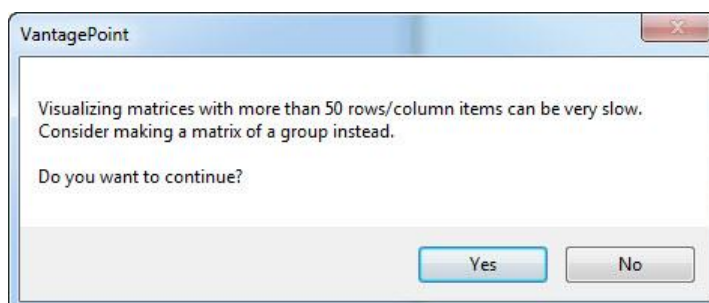
Here is a Layout in Force Directed format, with Node and Link filter adjustments:



To create the Matrix Viewer, have a matrix in the current view. Select **Matrix Viewer** from the **Report** ribbon.



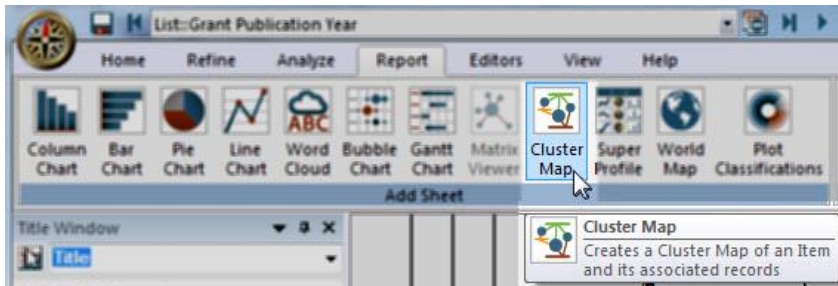
If the matrix is too large, you will see a warning:



## Cluster Map

Creates an interactive cluster map of items and records. There are two ways to do this:

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 items of interest in a List view and then click **Cluster Map** in the Report ribbon.

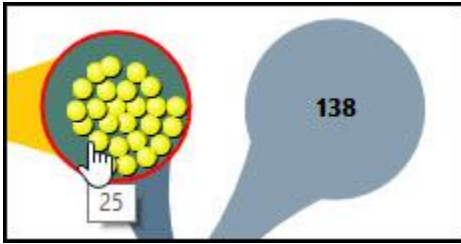
The Cluster Map consists of:

- 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.

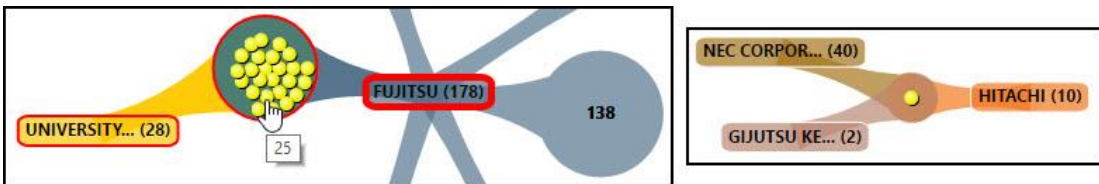




- Record nodes – these are circles with yellow dots inside. Each dot represents a record in the dataset. When you hover over a Record node, the number of records will show in a pop-up tooltip. If there are a lot of records in a node, you will see the number of records instead of yellow dots.

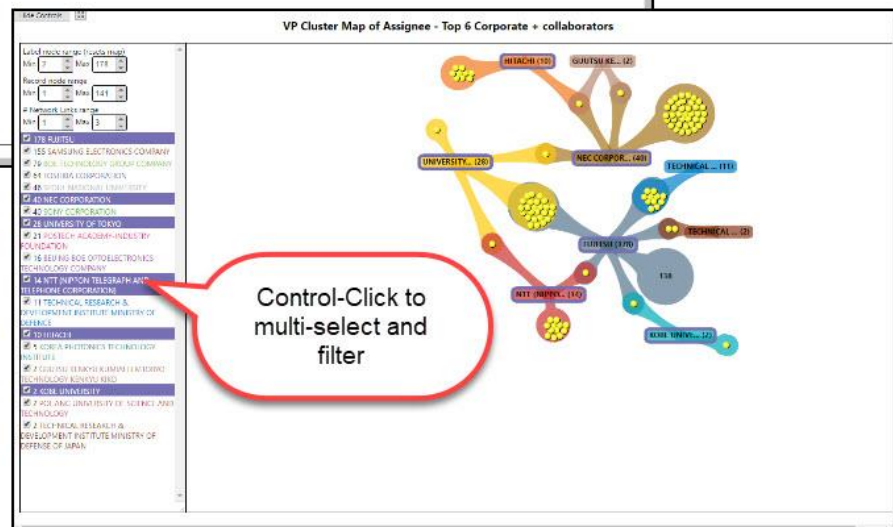
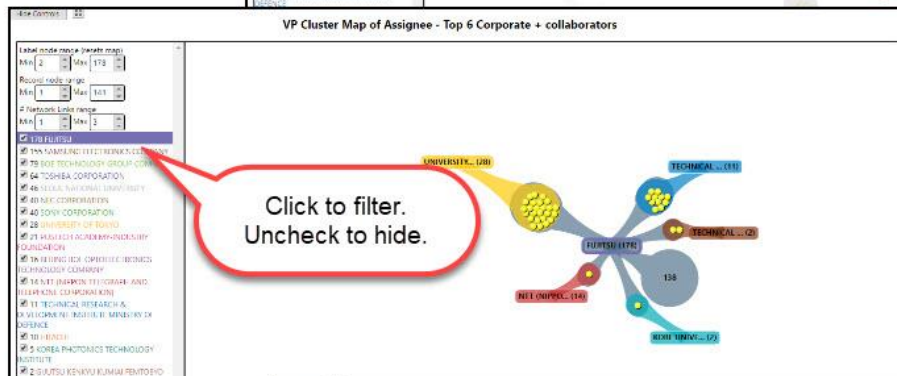
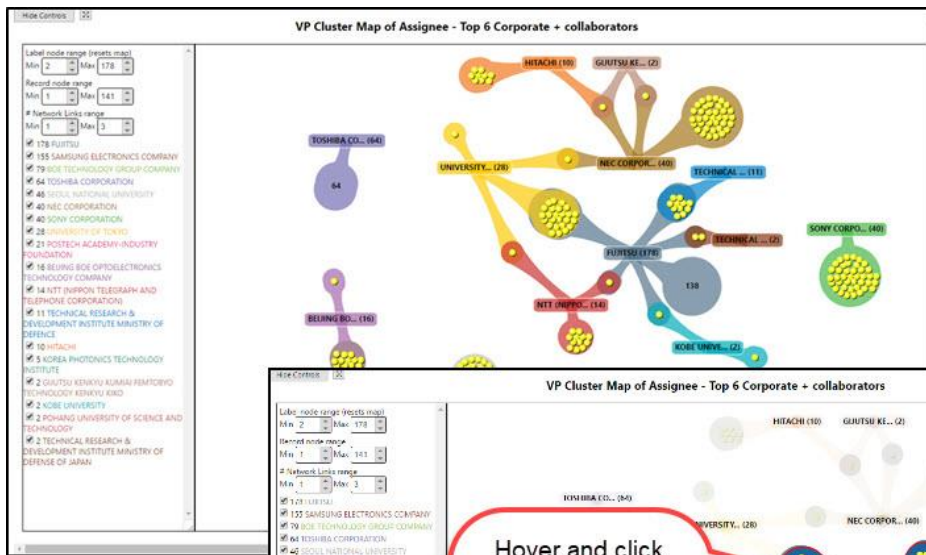


- Links between Label nodes and Record nodes indicate that the item associated with the Label node occurs in the records represented in the Record node. This provides a visual depiction of co-occurrence among any number of items - for example, in the illustration below on the right, one record is shared 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 (see illustrations on the next page):

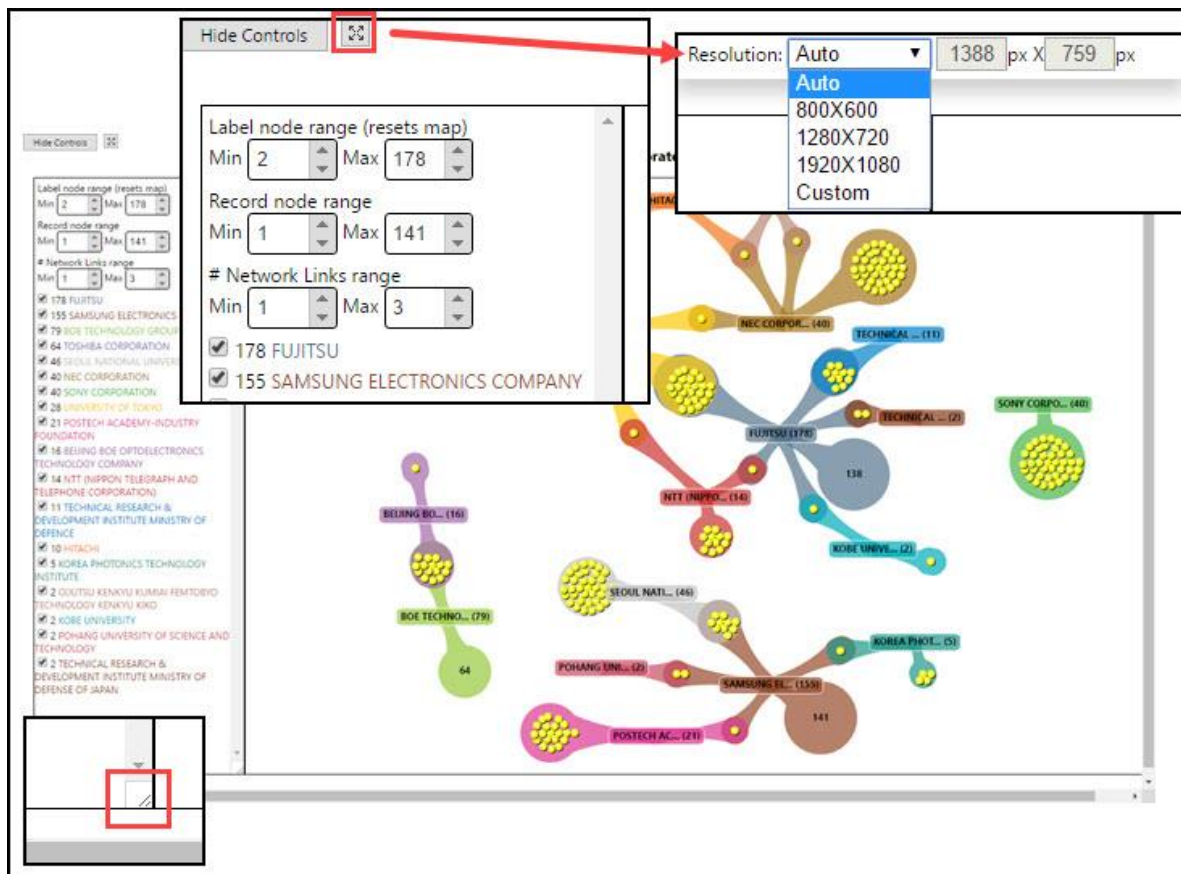
- Click and drag to rearrange the Record and Label nodes.
- Hover and click on the map to highlight nodes and select records to update the Title and Detail windows.
- In the control list, click to select and filter.
- Uncheck the boxes to hide.
- Control-click to multi-select and filter.
- Click on the title to edit.





## Control Panel:

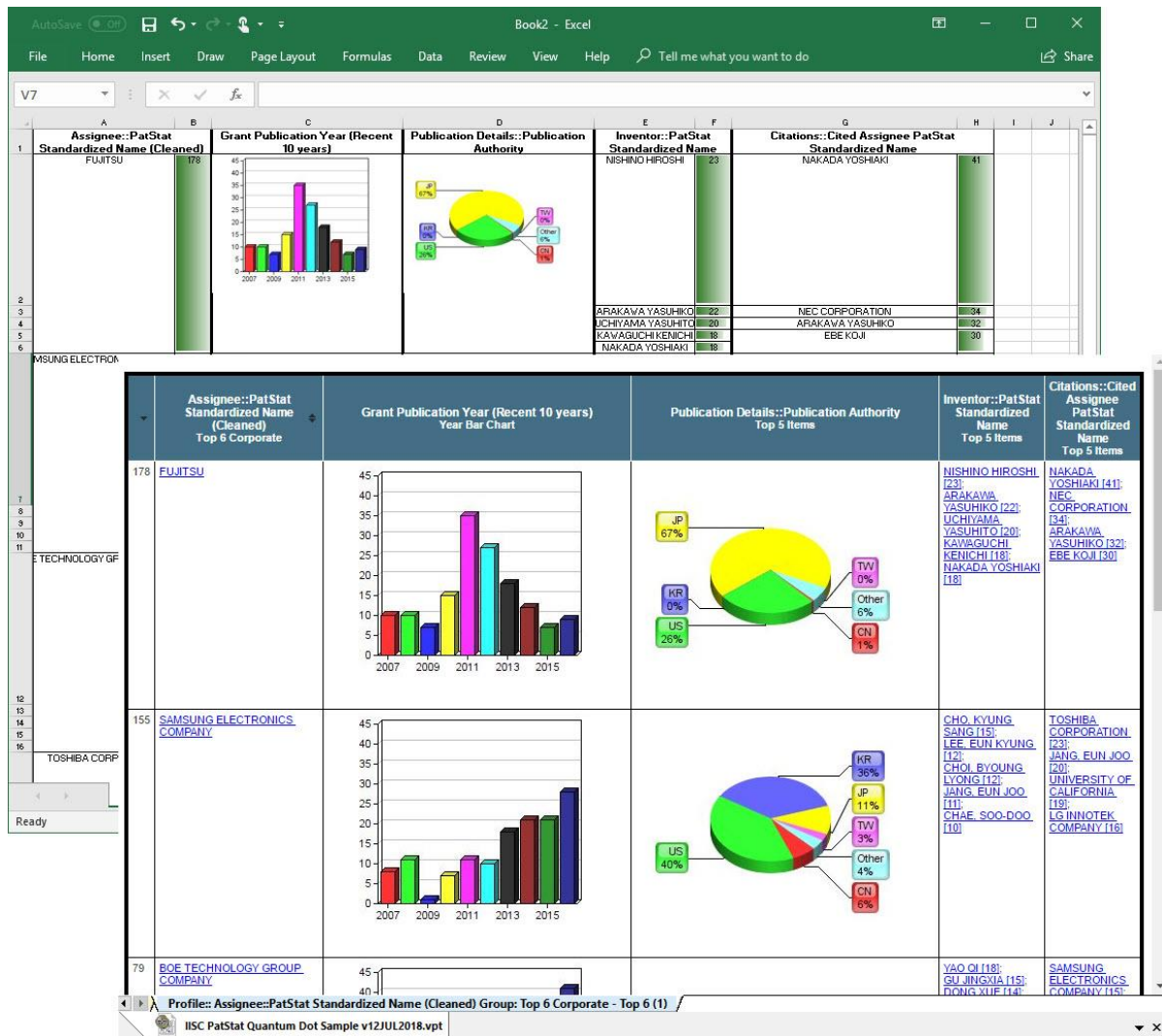
- Hide/Show Controls – Hides or shows the control panel and the checklist of items.
- Change Resolution – the “arrows” button opens controls to change the size of the image.
- Label node range – Sets the range of record counts for the items (labels) to show. The default min and max are determined by 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.
- Check box list of items (labels) – Check/uncheck the box to show or hide individual label nodes. Also multi-select using click and control-click to filter individual label nodes. (See illustrations above)
- Resize the control panel using the click-and-drag corner in the lower right corner.



## 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”.

The screenshot shows the 'Super Profile' application window. It has a title bar with standard window controls. The main area is divided into several sections:

- Load a Template (optional):** A dropdown menu showing 'my template'.
- Step 1: Set the output type:** Two checkboxes, 'Excel' and 'VantagePoint Sheet', both of which are checked.
- Step 2: Define Field to Profile:** A dropdown menu showing '+ Assignee::PatStat Standardized Name (Cleaned)'. Below it, a radio button 'Select a group' is selected, with a dropdown menu showing 'Top 6 Corporate'. To the right, a radio button 'Set # Items to Profile' is unselected, with a text input field containing '10'.
- Step 3: Define Columns for Profile:** A dropdown menu showing 'Publication Details::Publication Authority'. Below it, a 'Select a Group (optional)' dropdown shows 'Select Group'. A 'Select Column Type' dropdown shows 'Pie Chart (top N in dataset)', and an 'Options' text input field contains '5'. There are two buttons: 'Add Column to Profile' and 'Clear Column Selections'.
- About how many ranked wedges do you want to see in your pie chart?:** This text is positioned above a table.
- Table:** A table with 6 columns: '#', 'Edit Column', 'Field', 'Column Type', 'Group', and 'Option'. It contains 4 rows of data.
 

#	Edit Column	Field	Column Type	Group	Option
1	[Edit icons]	Grant Publication Year	Vertical Bar (Year)	Recent 10 years	N/A
2	[Edit icons]	Publication Details::Publication Authority	Pie Chart (top N in dataset)		5
3	[Edit icons]	Inventor::PatStat Standardized Name	Top Items		5
4	[Edit icons]	Citations::Cited Assignee PatStat Standardized Name	Top Items		5
- Visual Preview:** Below the table, there is a preview area showing a small bar chart and a pie chart, along with a list of items.
- Step 4: Run / Save Template:** A section with a 'Template Name:' label and a text input field containing 'my template'.
- Footer:** A row of buttons: 'Run', 'Save Template and Run', 'Save', 'Reset', and 'Cancel'.

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

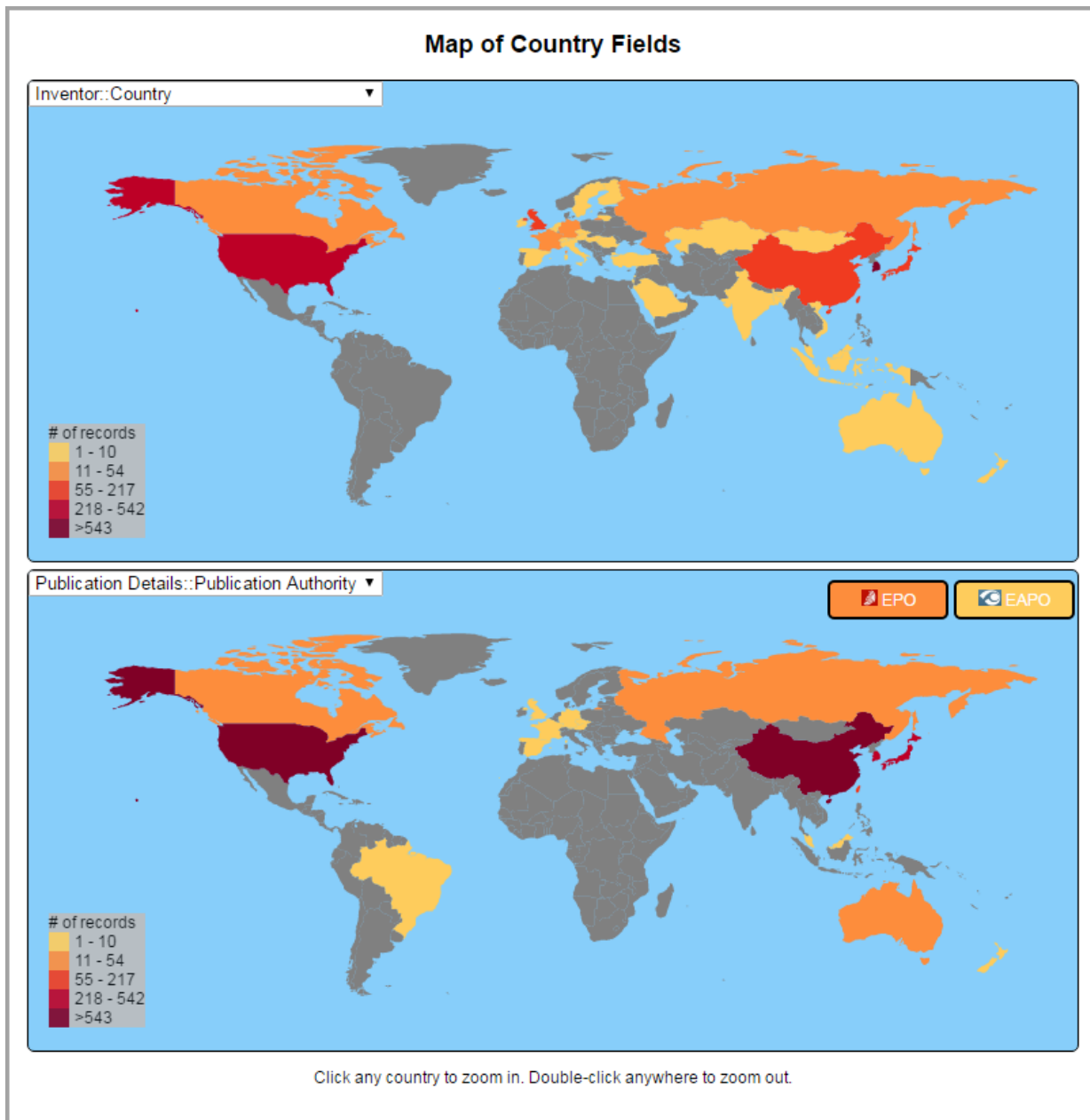
*Row* - Finds the top 'n' terms for each profile term.

---

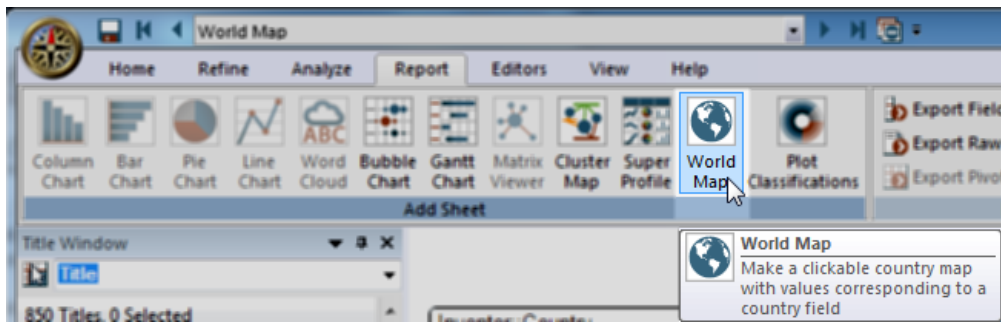
## World Map

*Description:* Make a browser sheet with a clickable country map(s) with values corresponding to a country field.

*Requirements:* Internet Explorer 9 or higher.



From the **Report** ribbon, select **World Map**.



The World Map is displayed. (Two maps using different fields can be displayed simultaneously, as shown above.)

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.

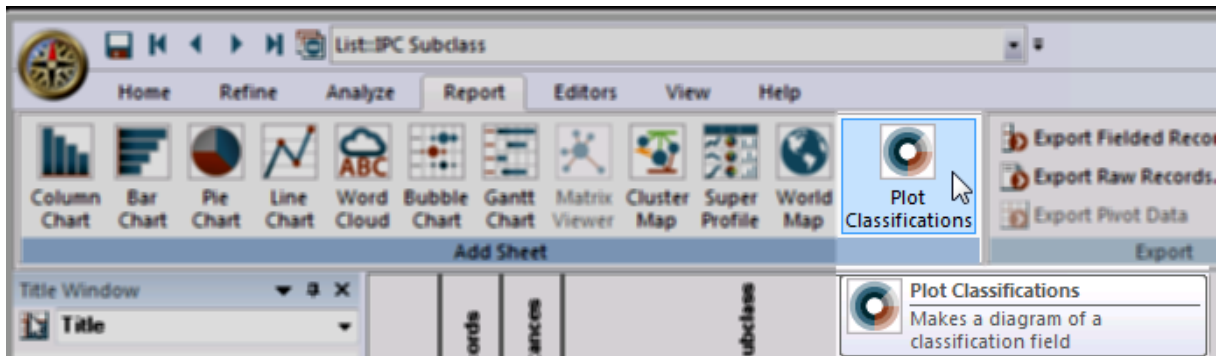


## Plot Classifications

*Description:* Plot a classification field (CPC, IPC, or Derwent) in one of three multi-level layouts: Circle Pack, Treemap, or Sunburst

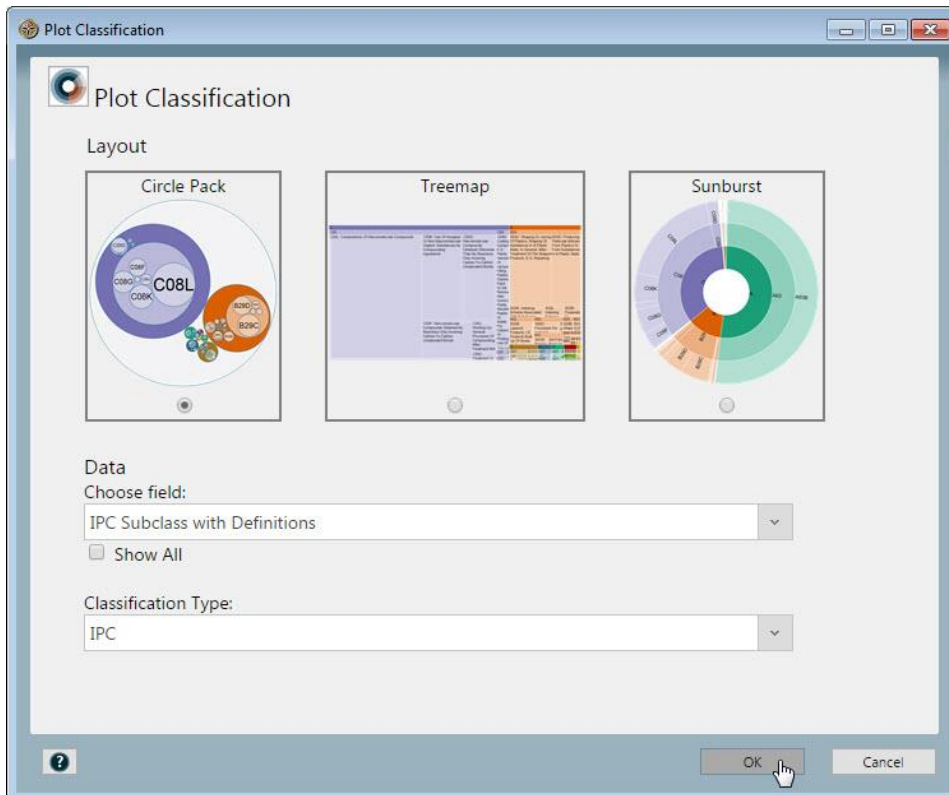
*Requirements:* Classification field should have "Classification" metatag.

From the **Report** ribbon, click **Plot Classifications**.



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.

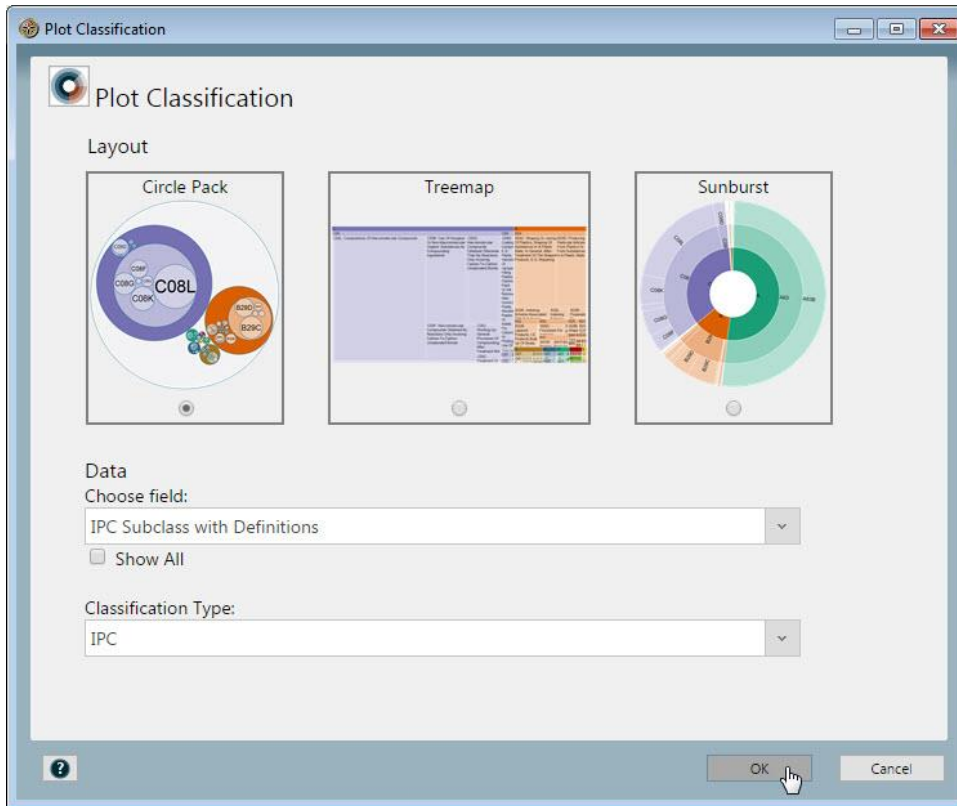


See the detailed Help topics for each: [Circle Pack](#), [Treemap](#), and [Sunburst](#).

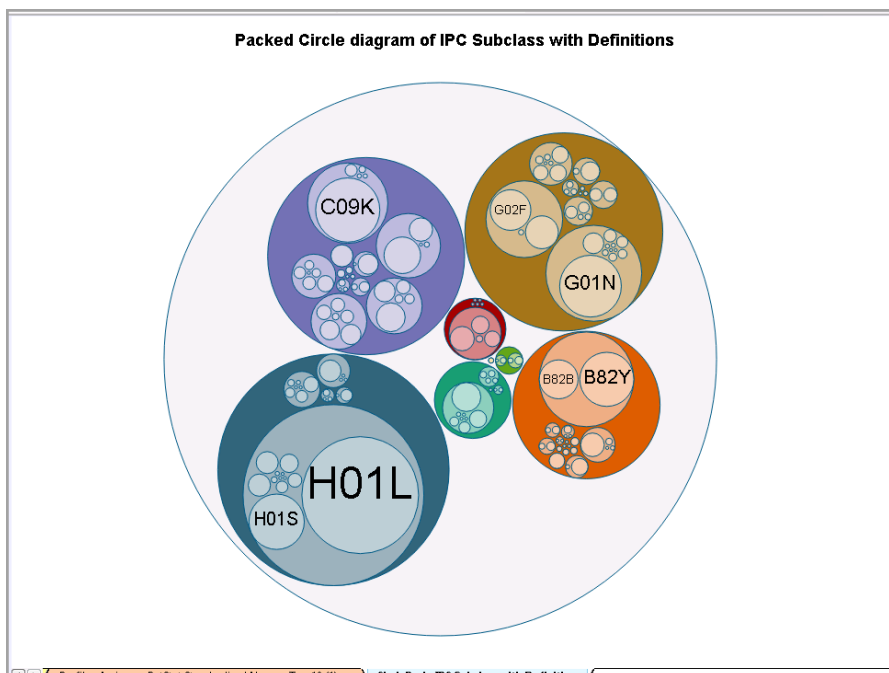


## Circle Pack

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.

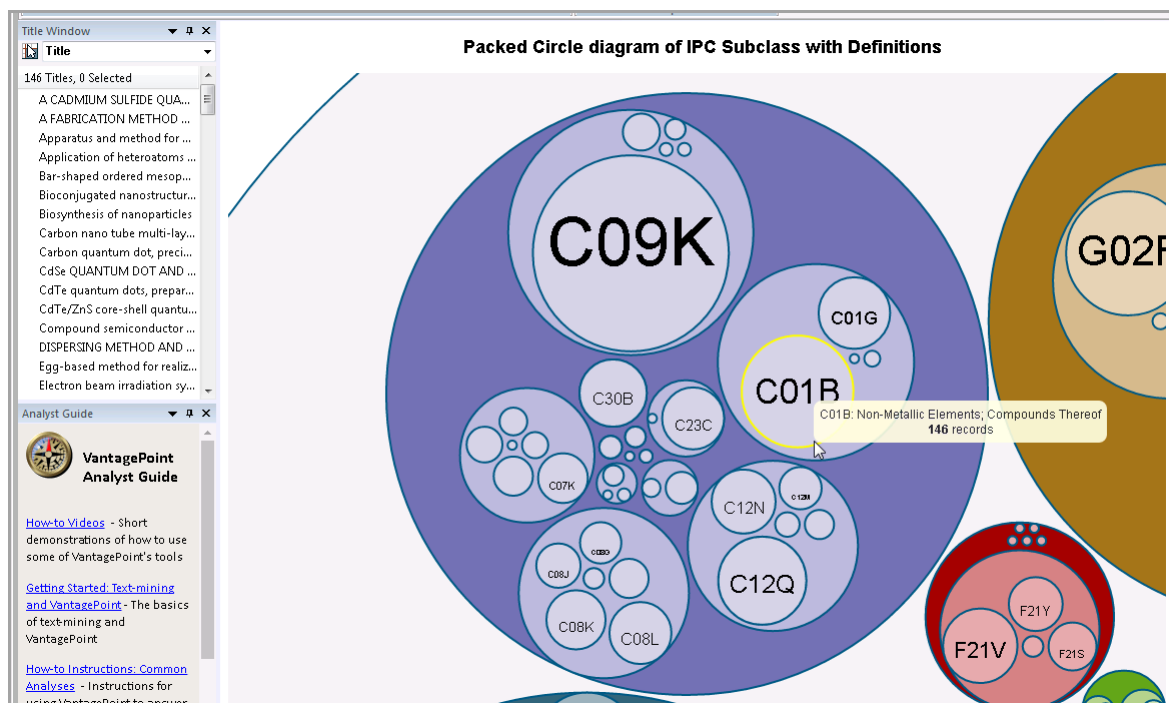


Resulting Interactive Circle Pack Report:



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.

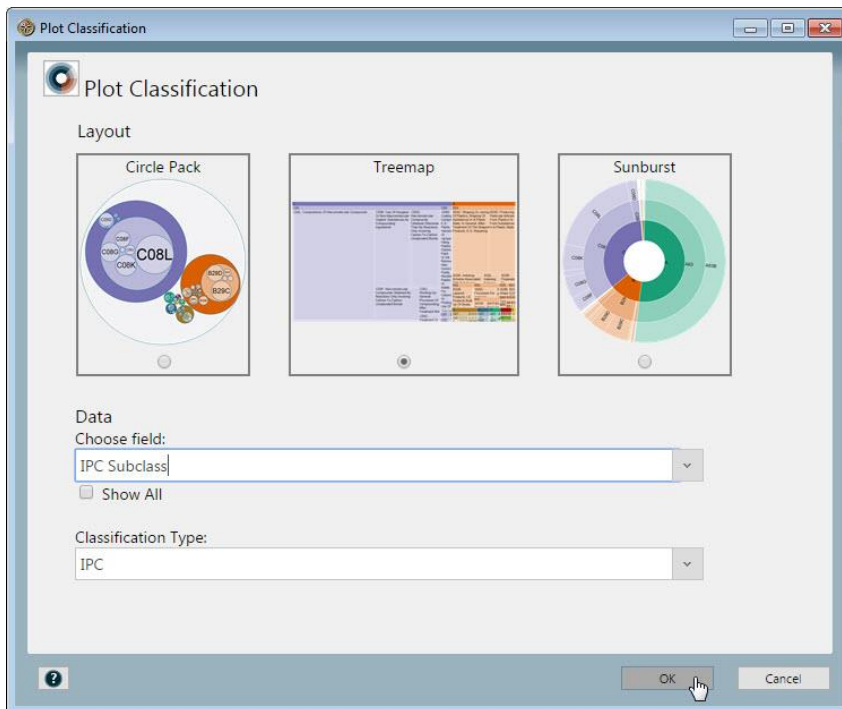
In the illustration below, the user has clicked Circle C01B. The Title Window displays the Titles of 146 records in that IPC Subclass. Hovering the cursor over the circle, the tooltip reveals the IPC Subclass Definition and number of records with that IPC Subclass.



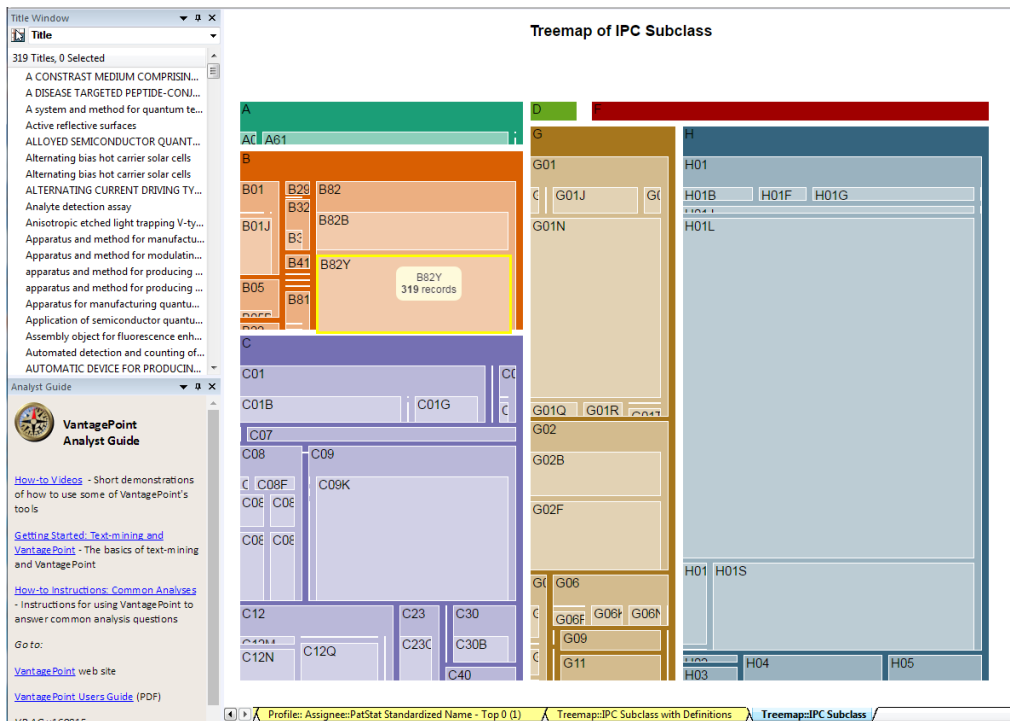
Double-clicking outside the largest circles "zooms out" to restore the original view.

## 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.

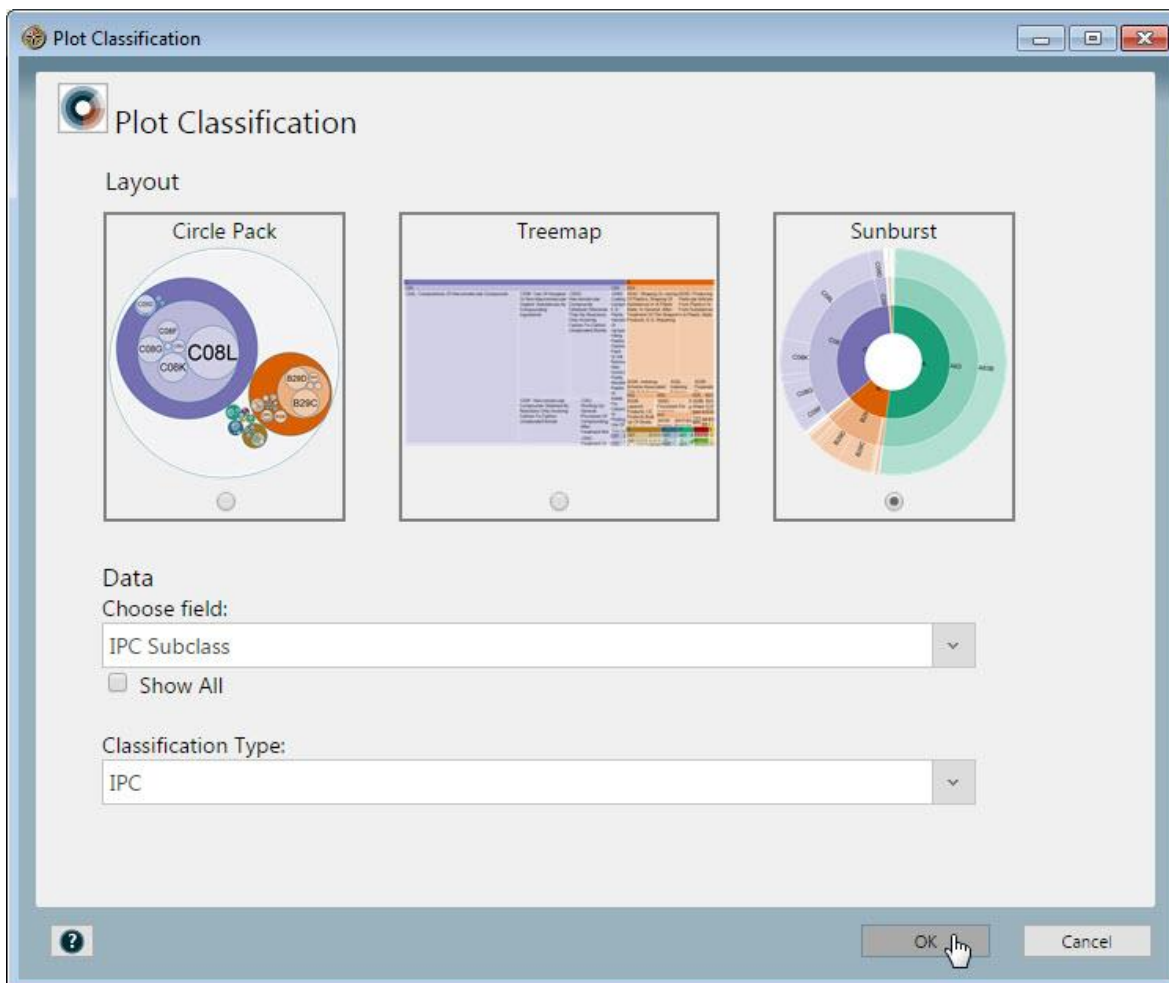


Results are illustrated below. The user has clicked IPC Subclass B82Y. The 319 records in that Subclass appear in the Title Window.

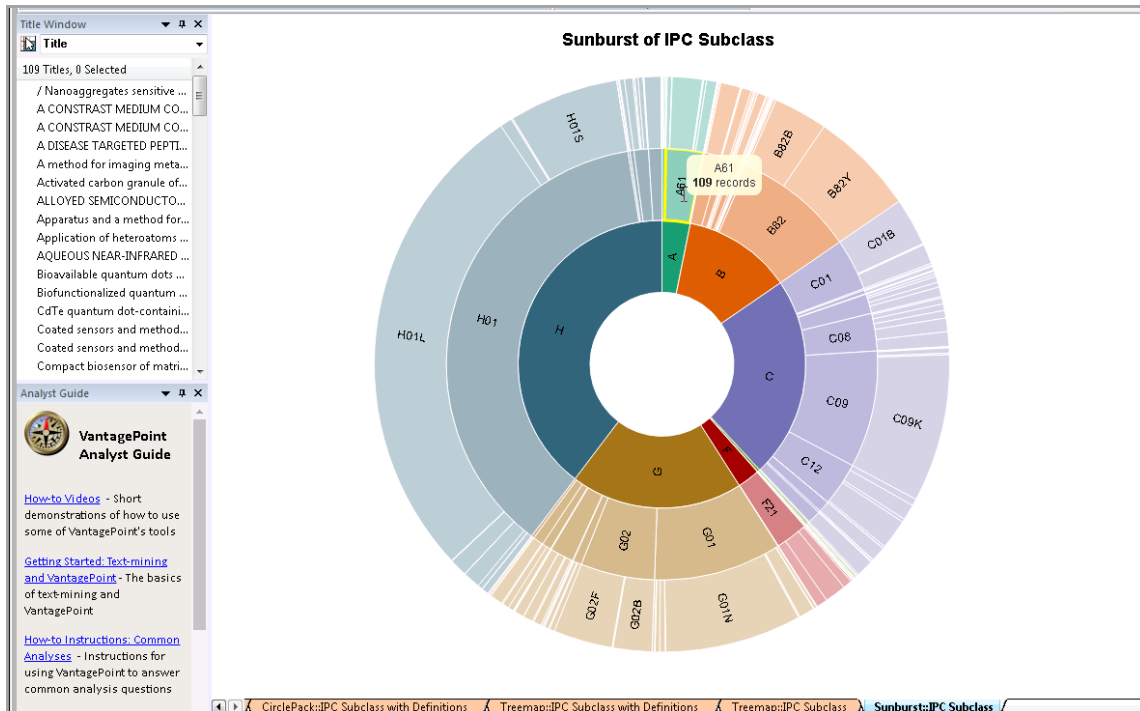


## Sunburst

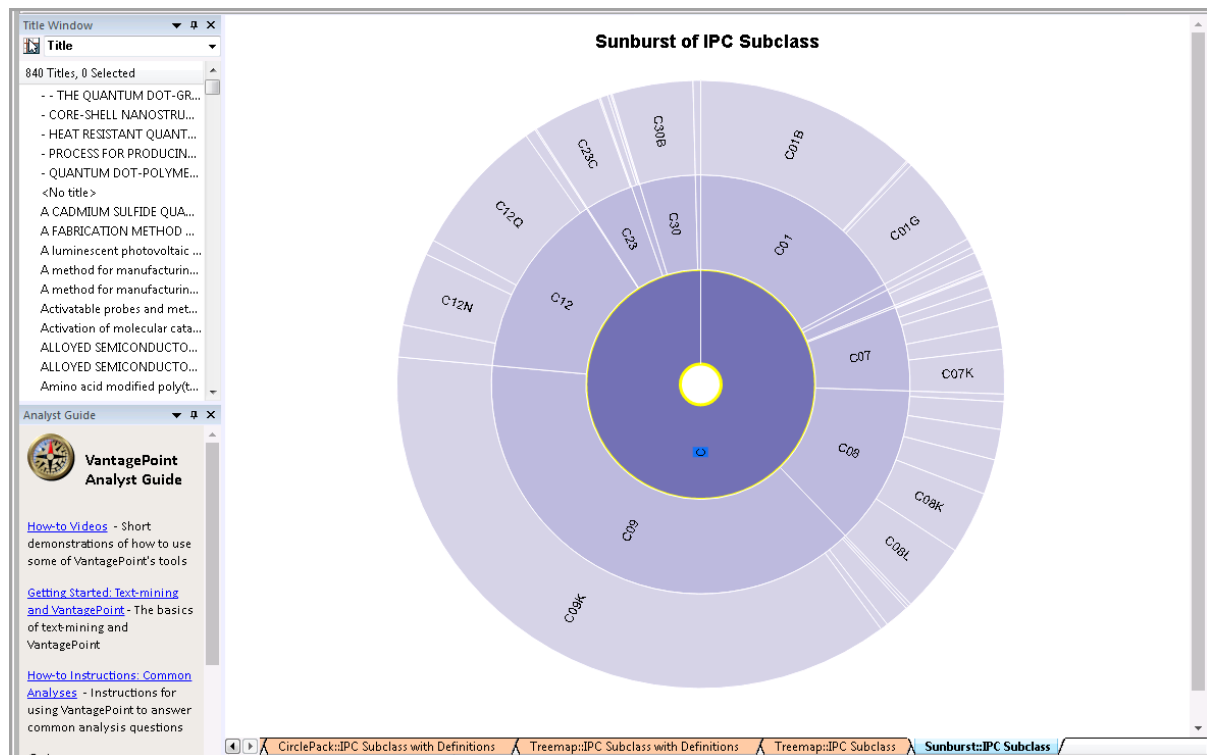
Choose the Layout by clicking the radio button below the desired selection: Sunburst. Then Choose the Data field and Classification Type. Click **OK** to create the Report.



In the illustration below, the user has clicked segment A61. The Title Window displays the Titles of 109 records in that segment. Hovering the cursor over the segment, the tooltip reveals the IPC Subclass and the number of records with that IPC Subclass.



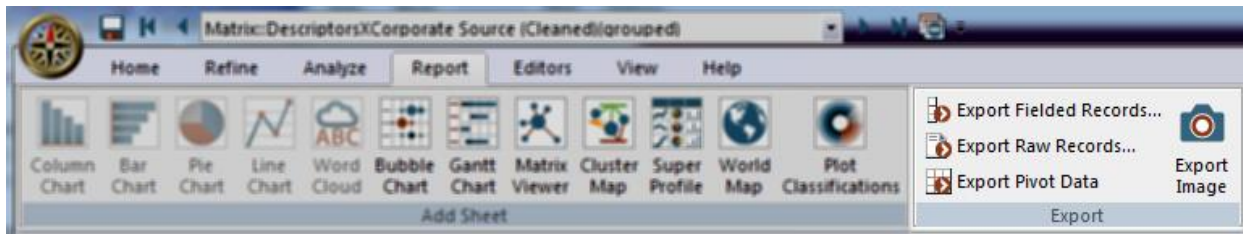
In the following illustration, the user has double-clicked segment C to reveal details of Subclasses in that segment. The 840 Titles in Subclass C are displayed in the Title Window.



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.

## Export

The Export functions are found on the **Report** ribbon:



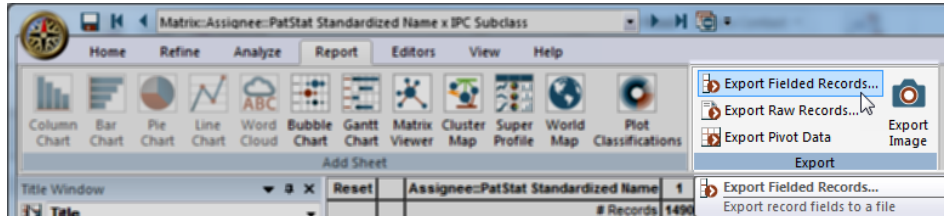
### Export Fielded Records

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 by making a selection or creating a group.

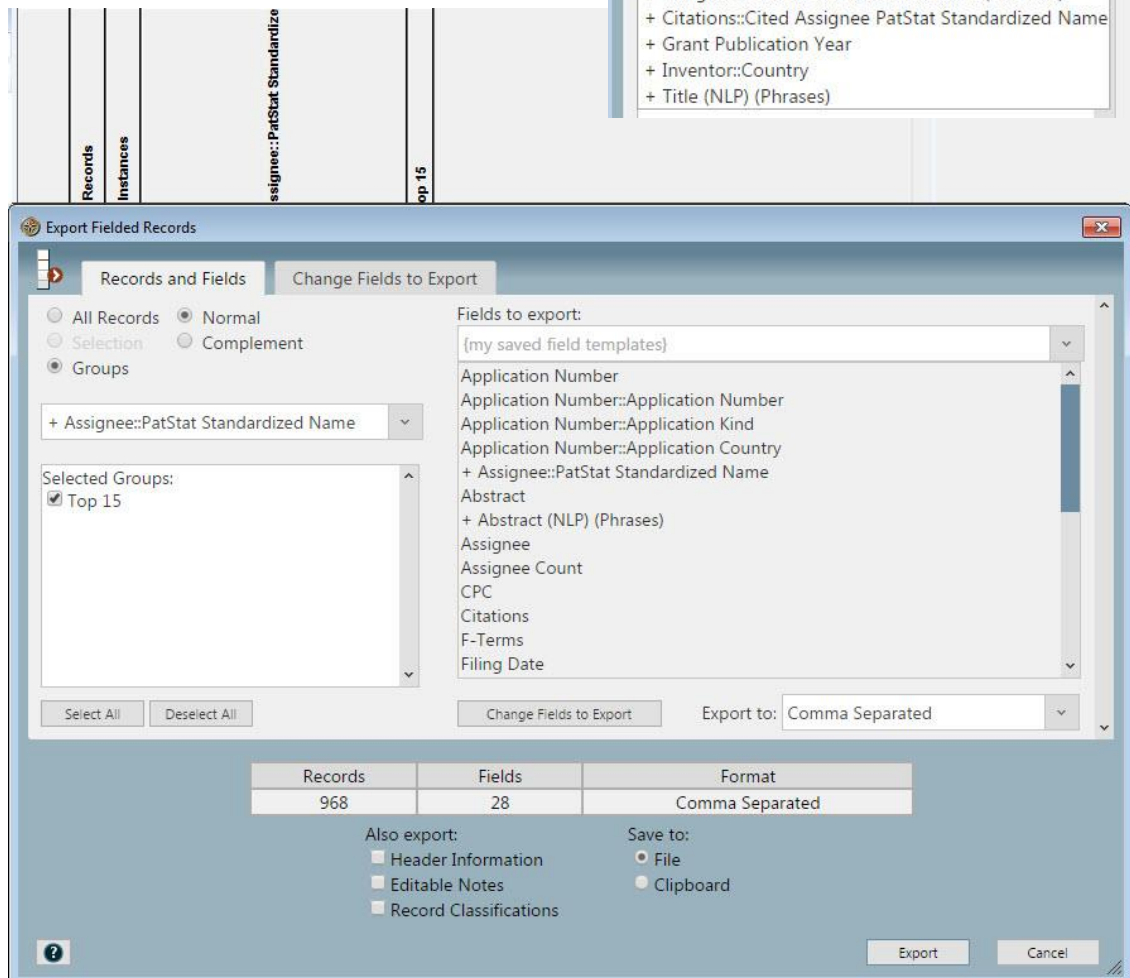
As with the Export Raw Records and Create Sub-dataset operations, you can export All records, a set of records based on a selection made in a list or matrix view, or an existing Group of items in your dataset.

2. From the **Report** ribbon, select **Export Fielded Records**.





- In this dialog, choose what to export: All Records, a Selection, or Groups. In the illustration below, the user is working with a List of Assignees that has a "Top 15" group. Group names for the active sheet or selection will appear in the left window. (The left window is interactive only after "Groups" is selected.) Then you can click the dropdown box to display all fields containing groups, as shown on the right. When the field is selected, the Groups for that field will then display.



When choosing a Group, click the checkbox for the Selected Group(s).

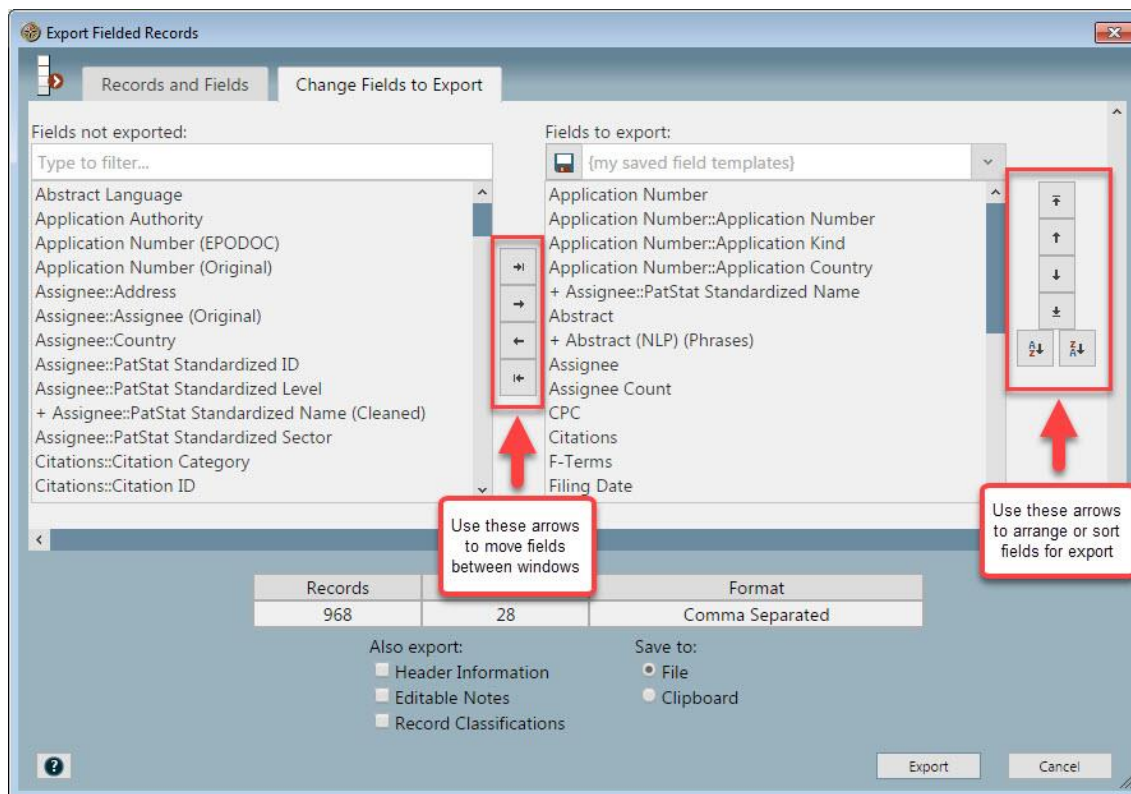
- Choose Normal or Complement. "Normal" results in the creation of a sub-dataset consisting of the selected records or group. "Complement" excludes the records or group selected, and creates a sub-dataset using all the other records.

If any of the records in the selection have been marked for omission (see details in [Record View](#)), you can choose to omit these records during export. (See the illustration at the top of this page.)

- The window 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” window).

Here, you can select from the Fields available for export (in the window on the left) and move to the Fields to export (window on the right). You can also remove any fields you don’t want to export, by selecting the field in the “Fields to export” window and clicking the left arrow. Move fields between the windows by using the left/right arrows that appear between the windows. (Use Ctrl-click or Shift-click to select multiple fields within one window.) 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” window, 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.

6. The Export Format is selected from the Records and Fields tab.

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.
- **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.

You can also choose to export information associated with the data:

- **Header Information** option is available for the XML ([Smart Data Exchange](#)) output only.
- If **Editable Notes** ("Notes about this record" in [Record View](#)) and **Record Classifications** were included with the exported records, they would appear at the end of the record for which they were created. If you have more than one field of record classifications, they will be treated as separate fields in the resulting output.

7. When you are finished making selections in this window, click **Export**.

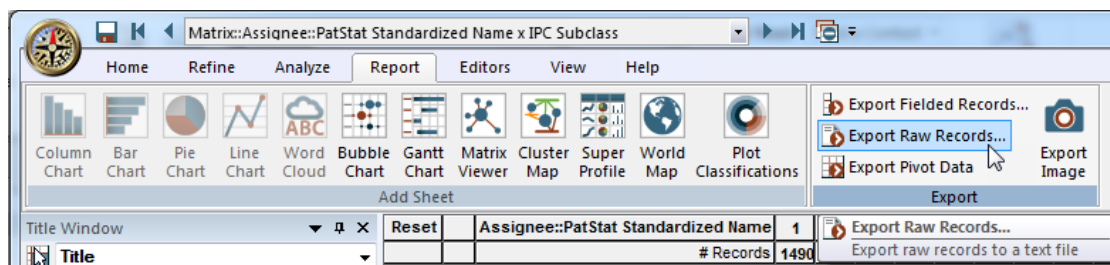
If you chose to save your records to a file, a **Save As...** dialog will appear, where you choose a location to save the file and enter a name. If you chose to export to the Clipboard, the Export Wizard window will close when you select **Export**, and after a moment, you will be able to paste your records into another application.

---

## 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**.

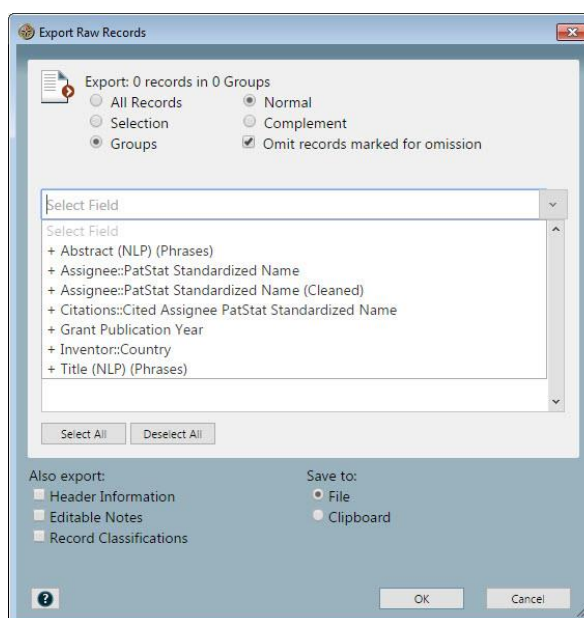


2. In this dialog, choose what to export: All Records, a Selection, or Groups.

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. Click the checkbox next to the Selected Group(s).

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:
  - Header Information
  - If **Editable Notes** ("Notes about this record" in [Record View](#)) and **Record Classifications** were included with the exported raw records, they would appear at the end of the record for which they were created.
5. Click **OK**.

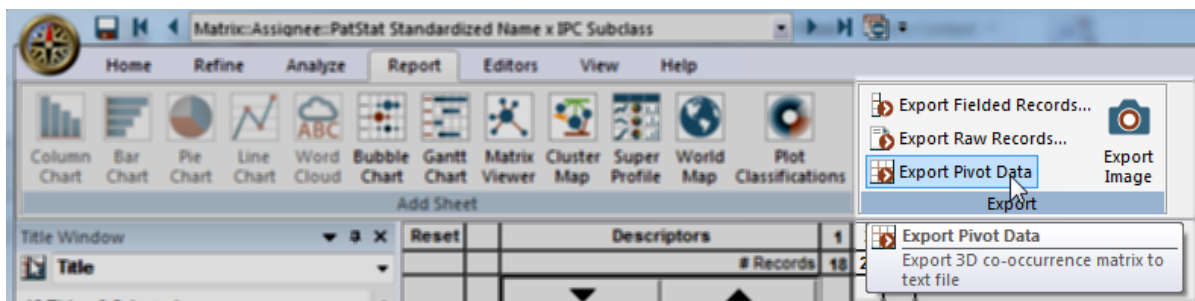
---

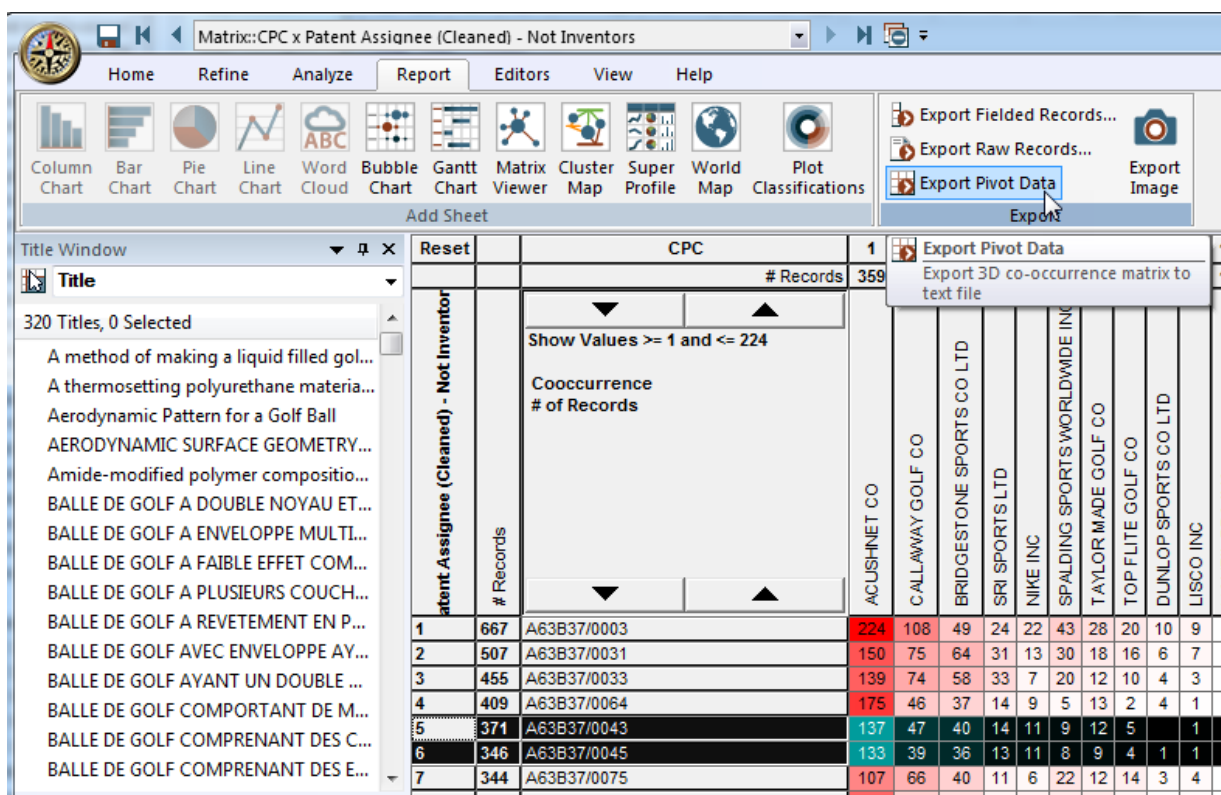
## **Export Pivot Data**

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.

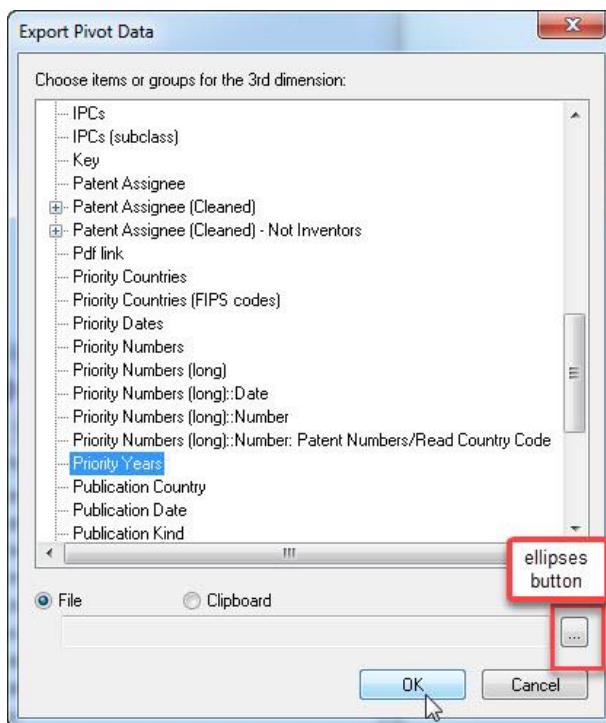
You can also export 3-field co-occurrence data from VantagePoint. Beginning with a normal 2-field co-occurrence, select a portion of the matrix.

From the Report ribbon, select **Export Pivot Data**:



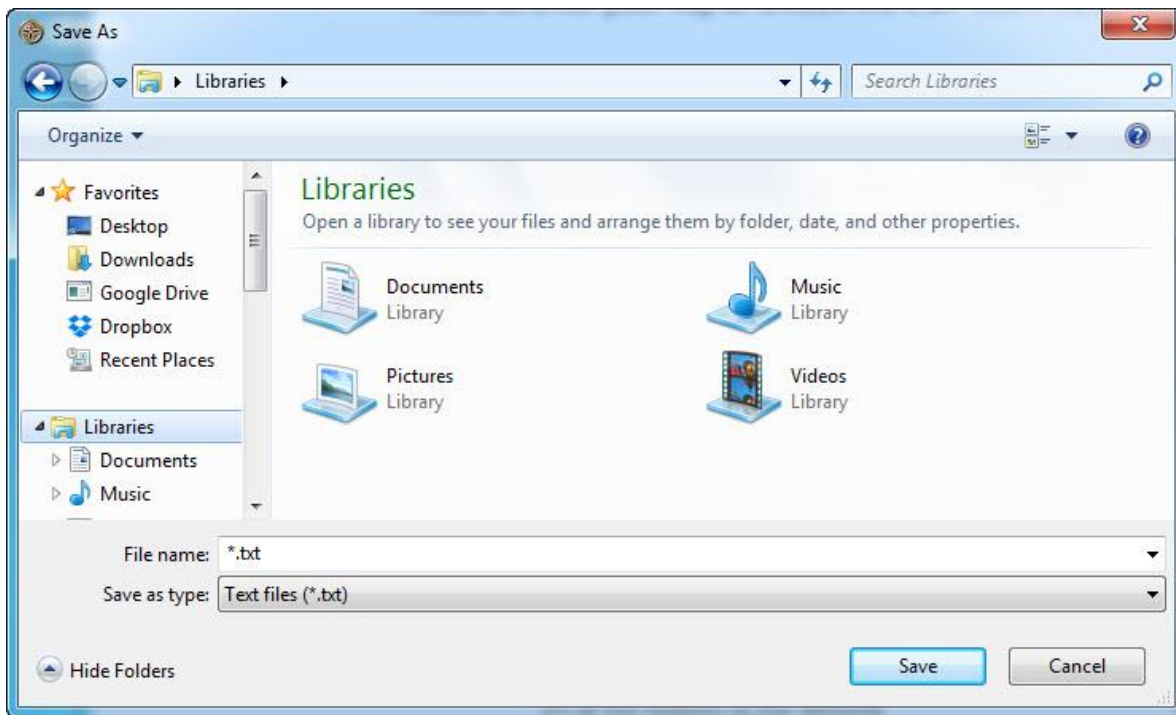


You will then be prompted to select the third field, as illustrated below.



If saving the output to a File, you would click the ellipses button, which brings up the "Save As" dialog. There, 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.)





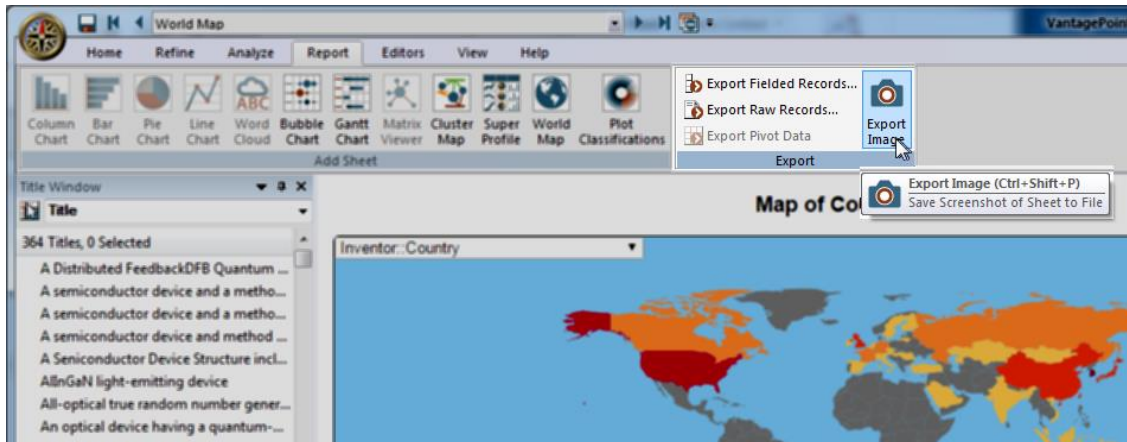
The resulting data are exported with one line per "observation" as illustrated next. This is a standard data format that can be easily imported into many other analysis tools.

	1	2	3	4	5	6	7	8
1	CPC»	Patent Assignee (Cleaned) - Not Inventors»				Priority Years»	Num 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				

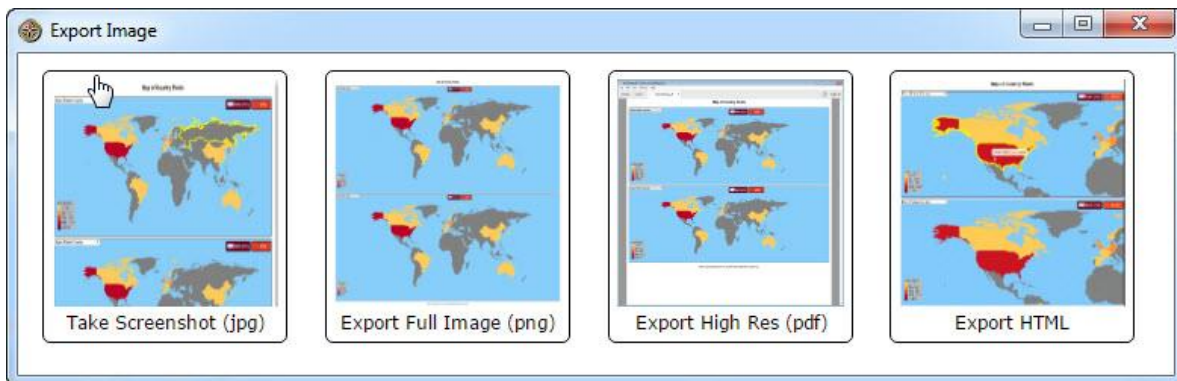
## Export Image

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:





---

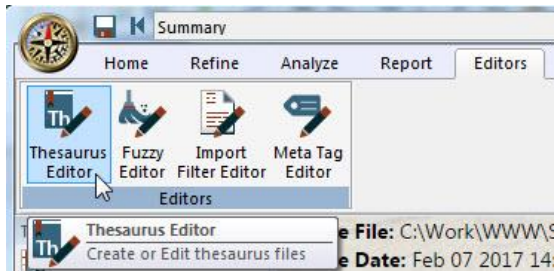
## EDITORS

---

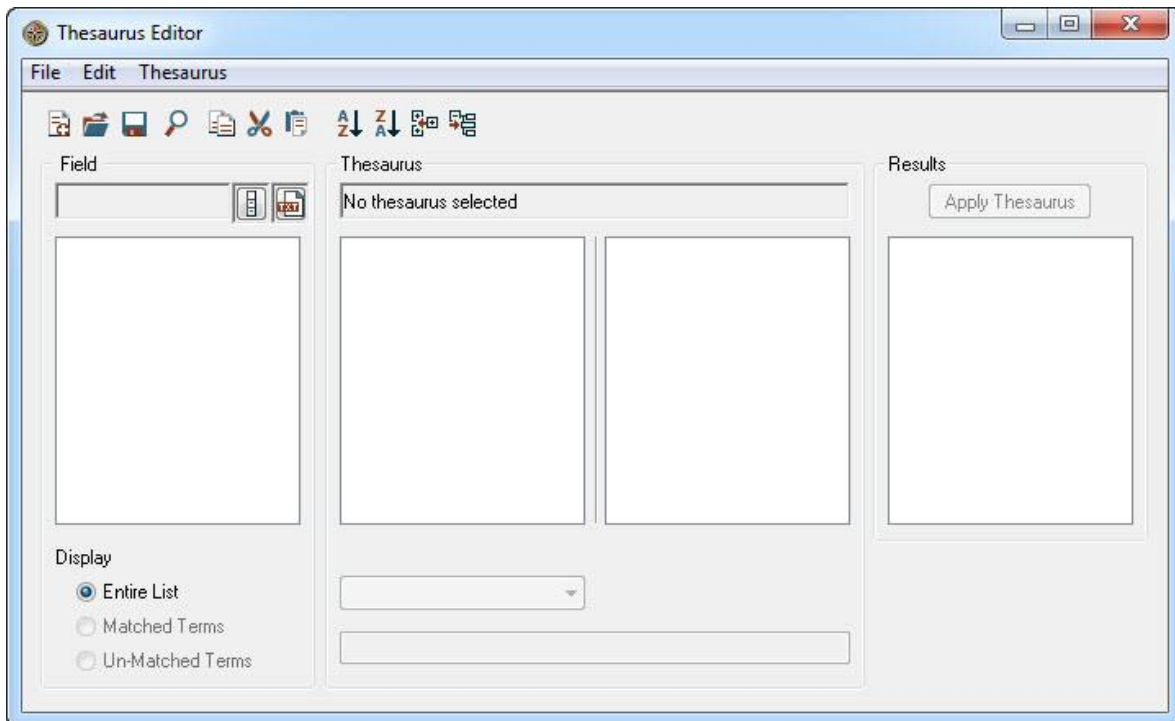
### Thesaurus Editor

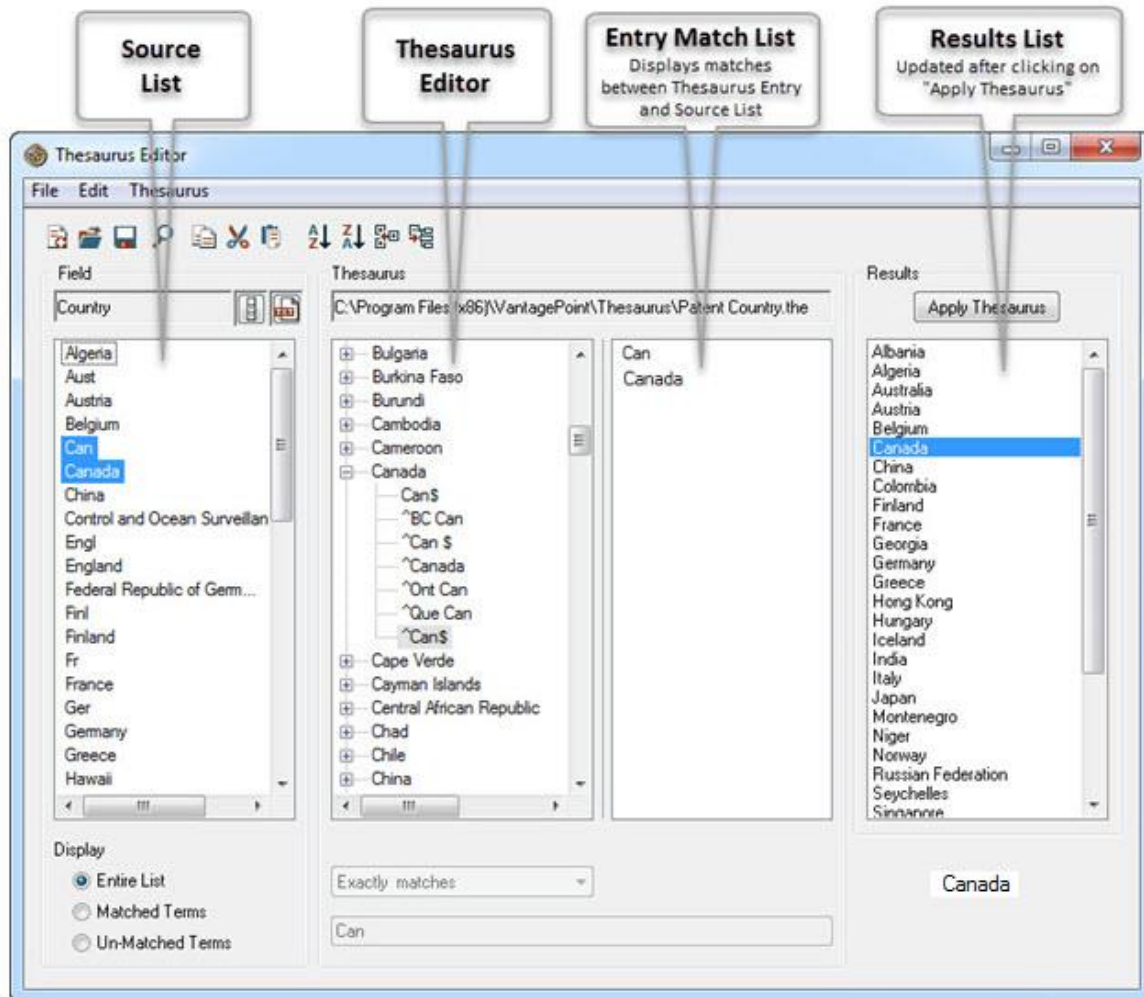
You can create your own thesauri using the VantagePoint Thesaurus Editor. The following illustration shows the major component of the Thesaurus Editor.

To edit or create a thesaurus, select **Thesaurus Editor** from the Editors ribbon.



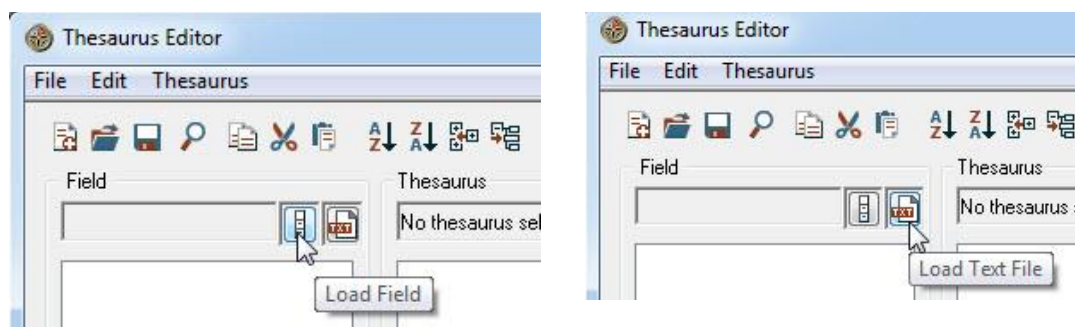
The Thesaurus Editor dialog consists of the Source List window, Thesaurus Editor, Entry Match List, and Results List.





**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:

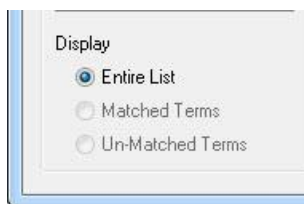


**Thesaurus Editor Window** - You create and edit your thesauri in this window. To edit an existing thesaurus, click **File** and **Open Thesaurus** from the Thesaurus Editor Menu and select the thesaurus from the selection dialog box. To save the changes you have made to the thesaurus, click **File** 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.

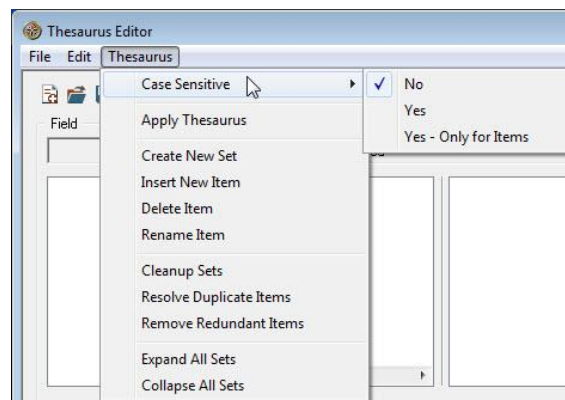
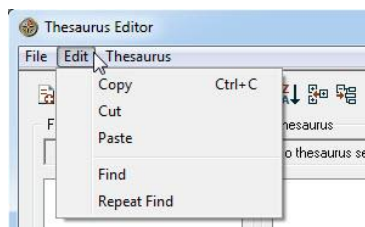
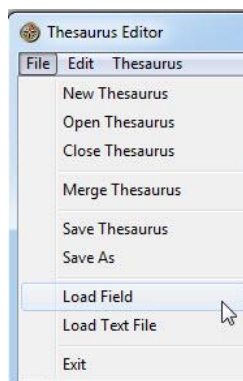
**Results List** - When you click **Apply Thesaurus**, the Thesaurus Editor applies the thesaurus to the Source List and displays the resulting aliases. After applying a thesaurus, if you click on an alias (such as "Canada" in the illustration above), the Thesaurus Editor highlights items in the Source List Window that the thesaurus grouped into that Set. (In the illustration above, "Can", and "Canada" are shown).



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).

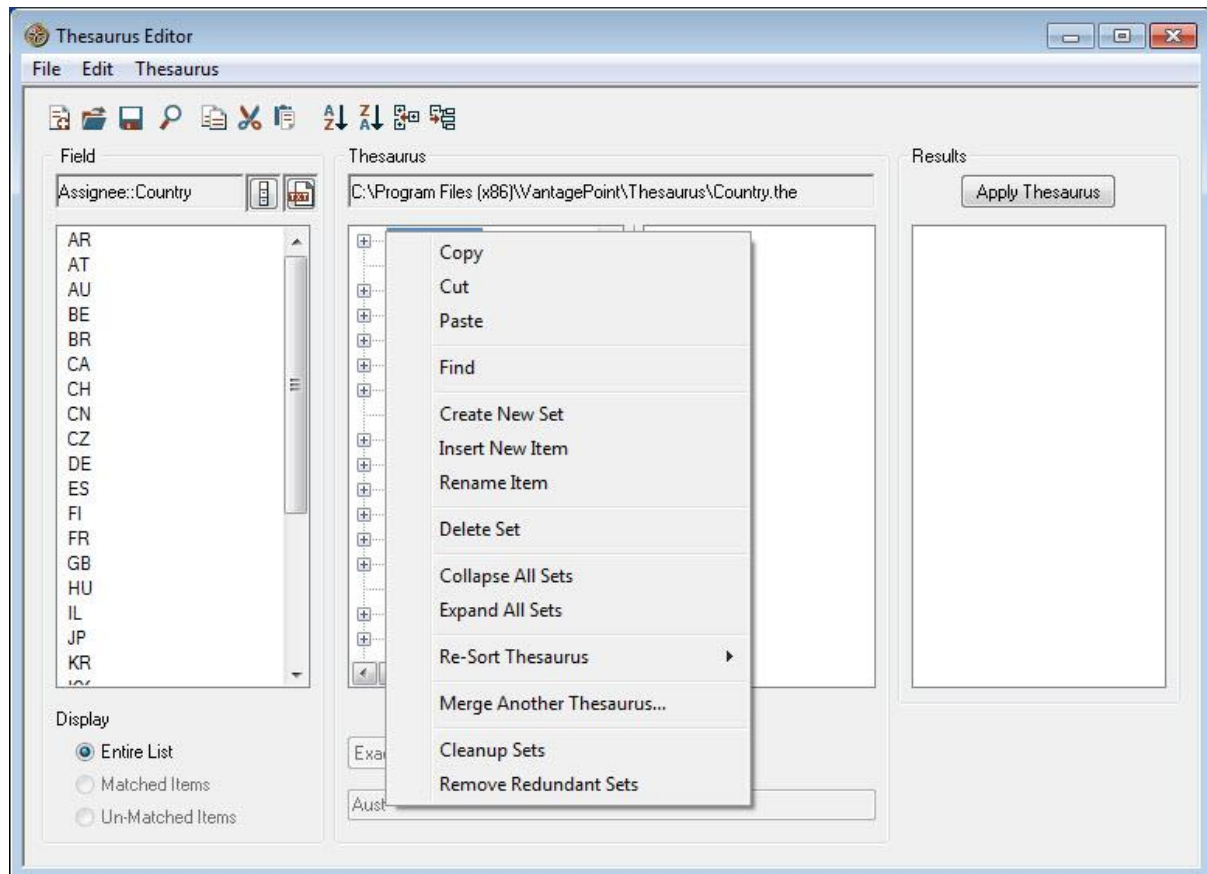
The Thesaurus Editor menus:



## 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:



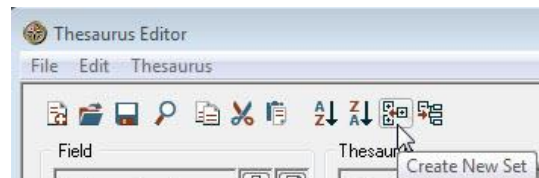
**Copy** - Copies the selected item. Or you can use the shortcut Ctrl+C. You can also click and drag an item to another group.

**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.

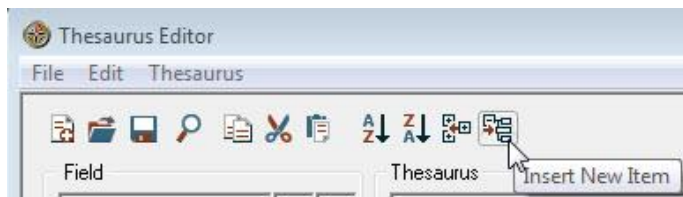
**Find** - Displays the "Find" dialog box. You can also use the shortcut Ctrl+F.

**Create New Set** - Adds a new Set to the thesaurus. The default name for the new Set is "New Set". You can type in the name of the new Set while "New Set" is still editable. Or rename it 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". You change this to the Item you want using the edit controls at the bottom of the Thesaurus Editor window (see [Editing a Thesaurus Item](#)). Note the **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 Sets** - 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.

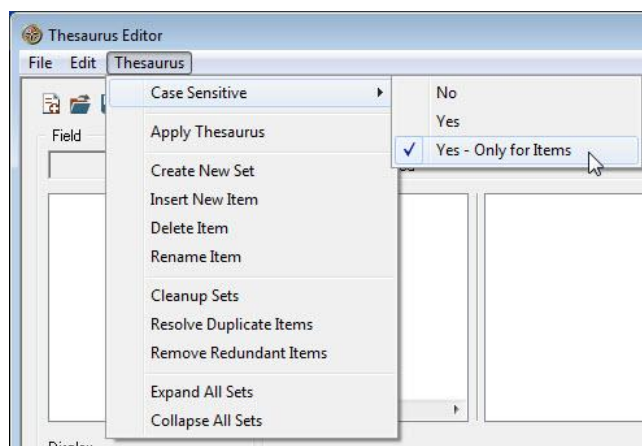
**Remove Redundant Sets** - Searches for and removes redundant Items from your thesaurus.

These actions can also be accessed under Thesaurus Editor Menu items **Edit** and **Thesaurus**.

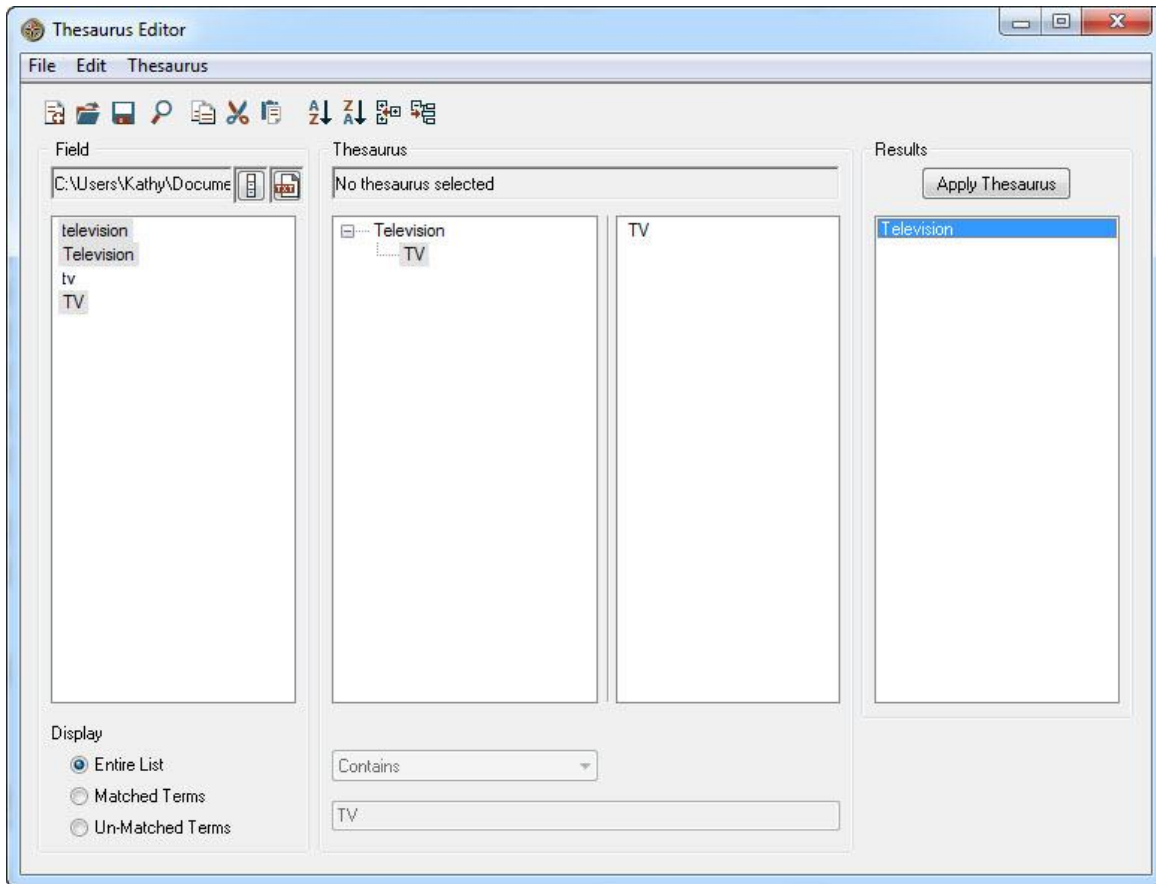
One menu item that isn't on the right-click menu is:

**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 Items. 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 this example, the user is selecting to apply case sensitivity to Items only.



Following is the result after pressing **Apply Thesaurus**. Because item "TV" is subject to case sensitivity, "tv" (in the Source List Window) is not included in the matched (shaded) terms. The Set "Television", is not subject to case sensitivity, and therefore "television" is included in the matched terms.



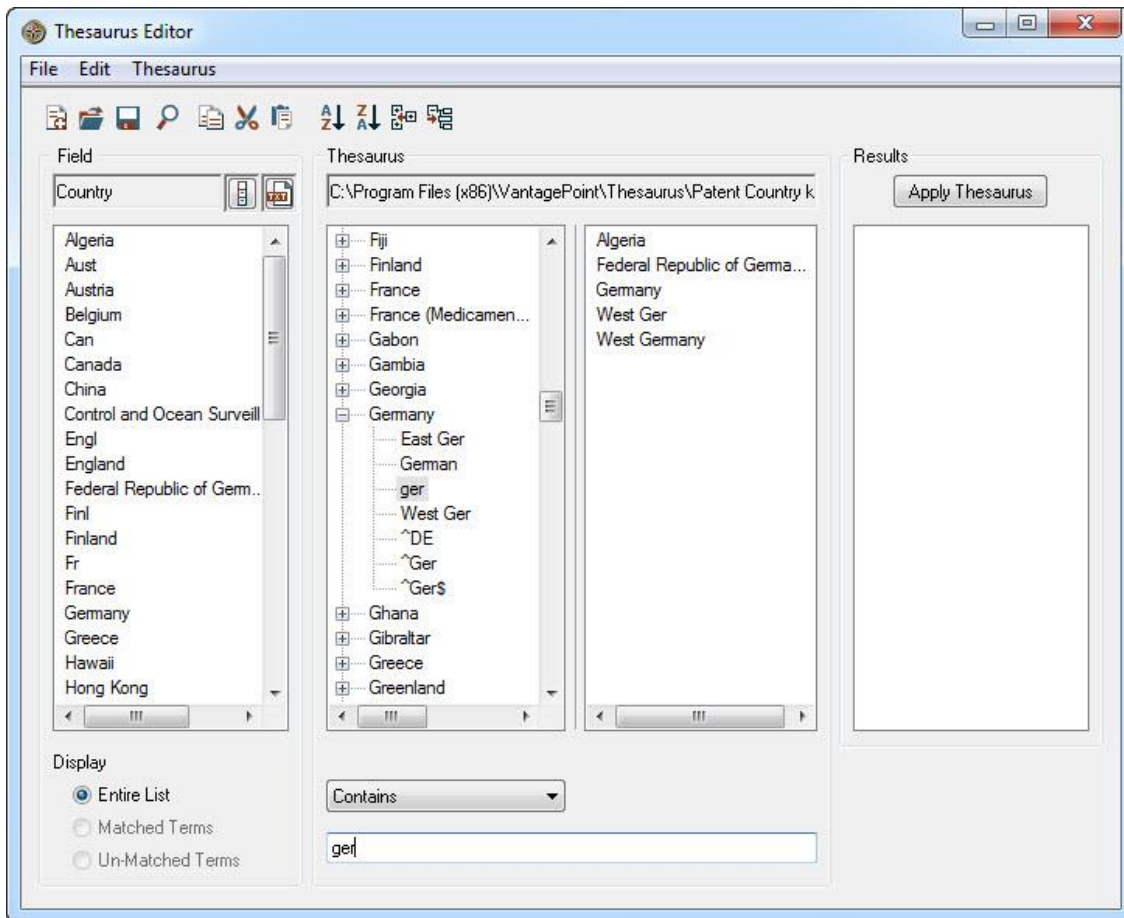
---

### **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:

`()[]{}*+^|`

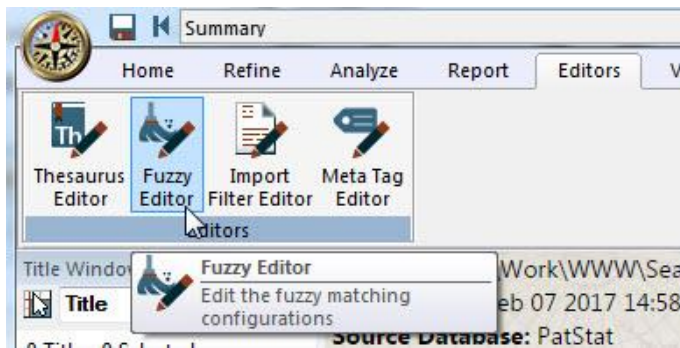
See Also:

[Regular Expressions in VantagePoint](#)



## 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.

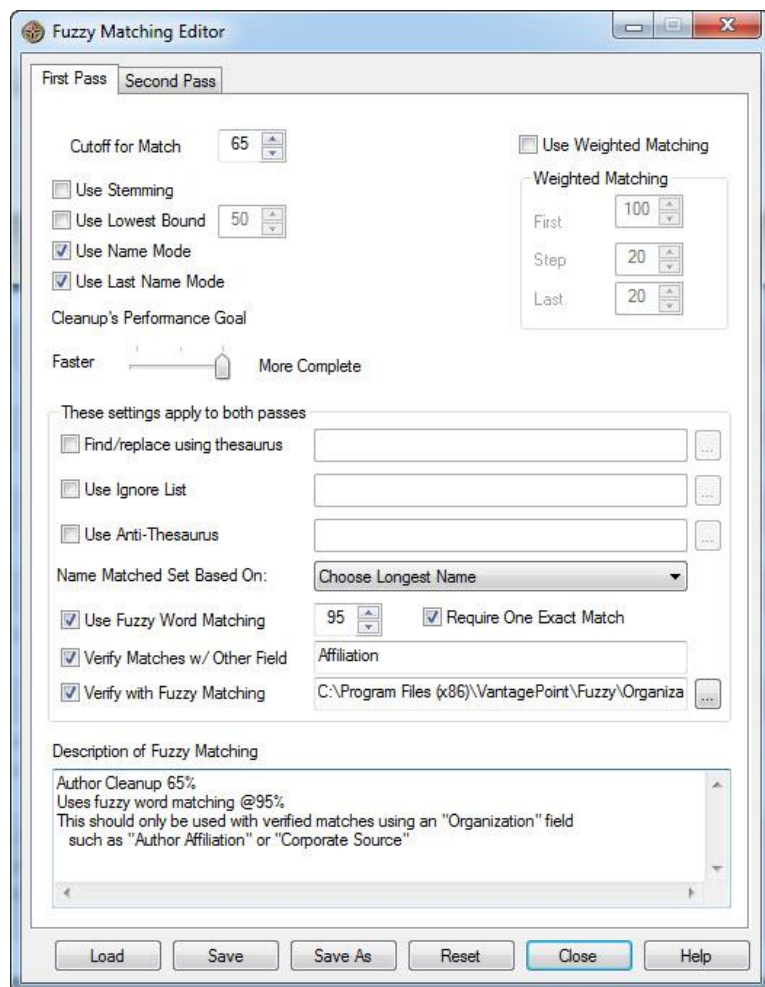
*Use Last Name Mode* – add in the rule set for identifying last names.

**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.

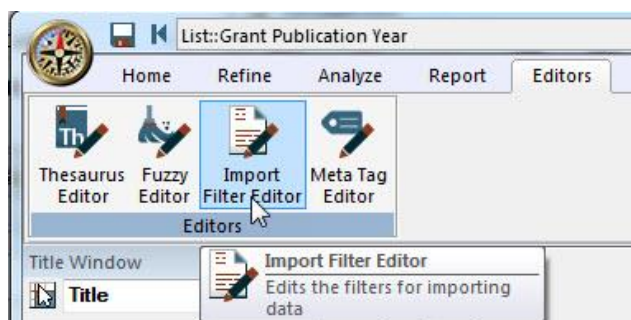
**Close** – Closes this dialog. Prompts to save before closing.

**Help** – Opens VantagePoint Help for this dialog.

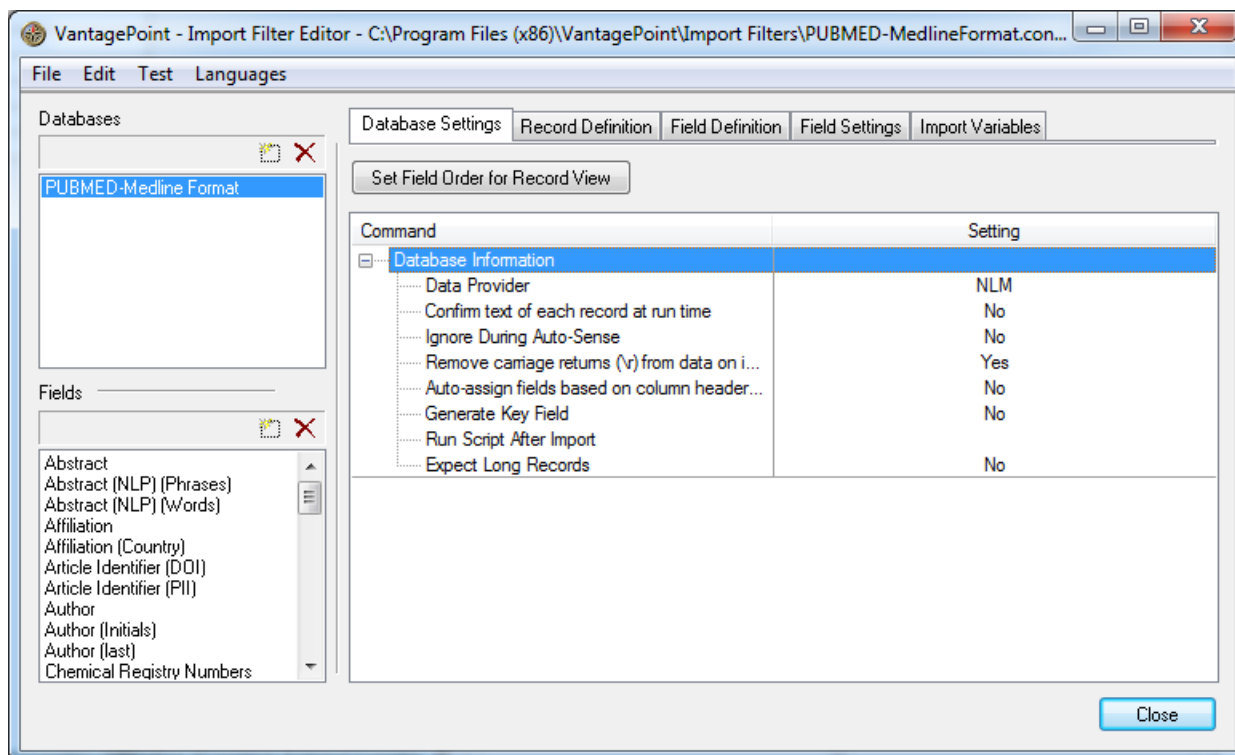
---

## 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.

### 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.

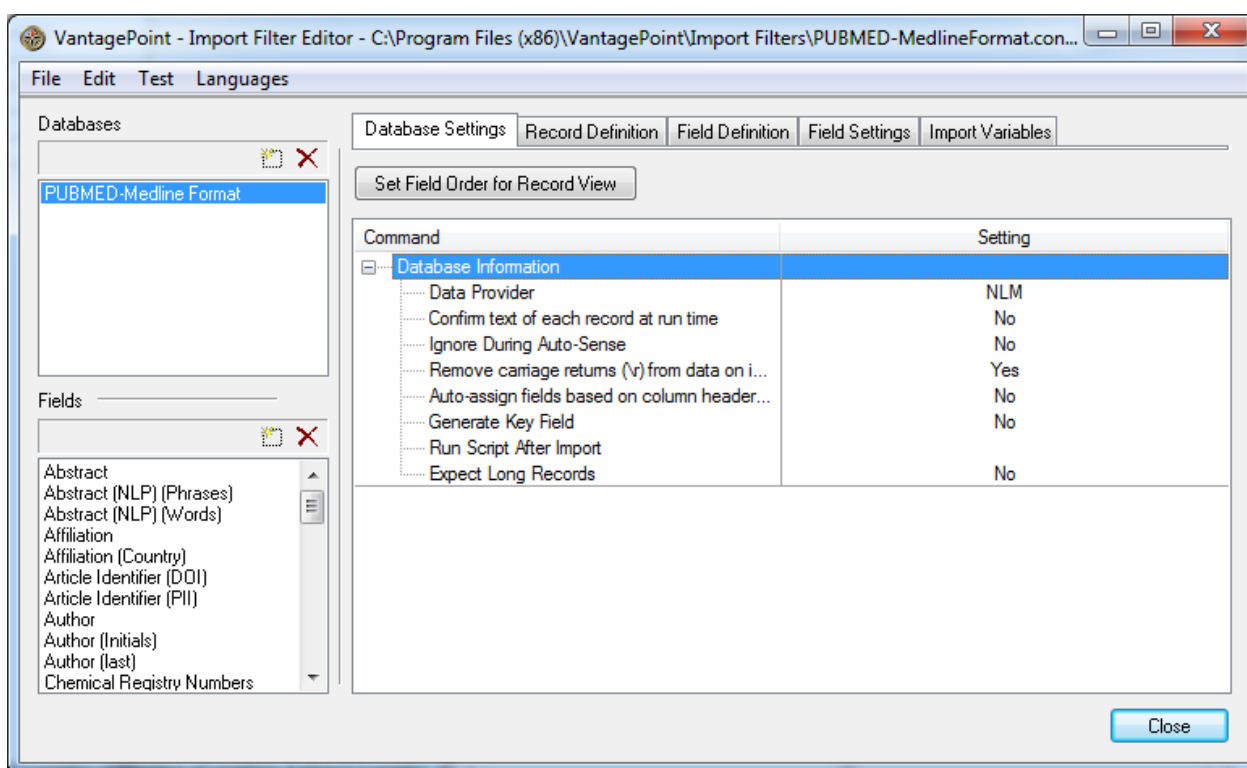
## Command Stack Window.

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.)

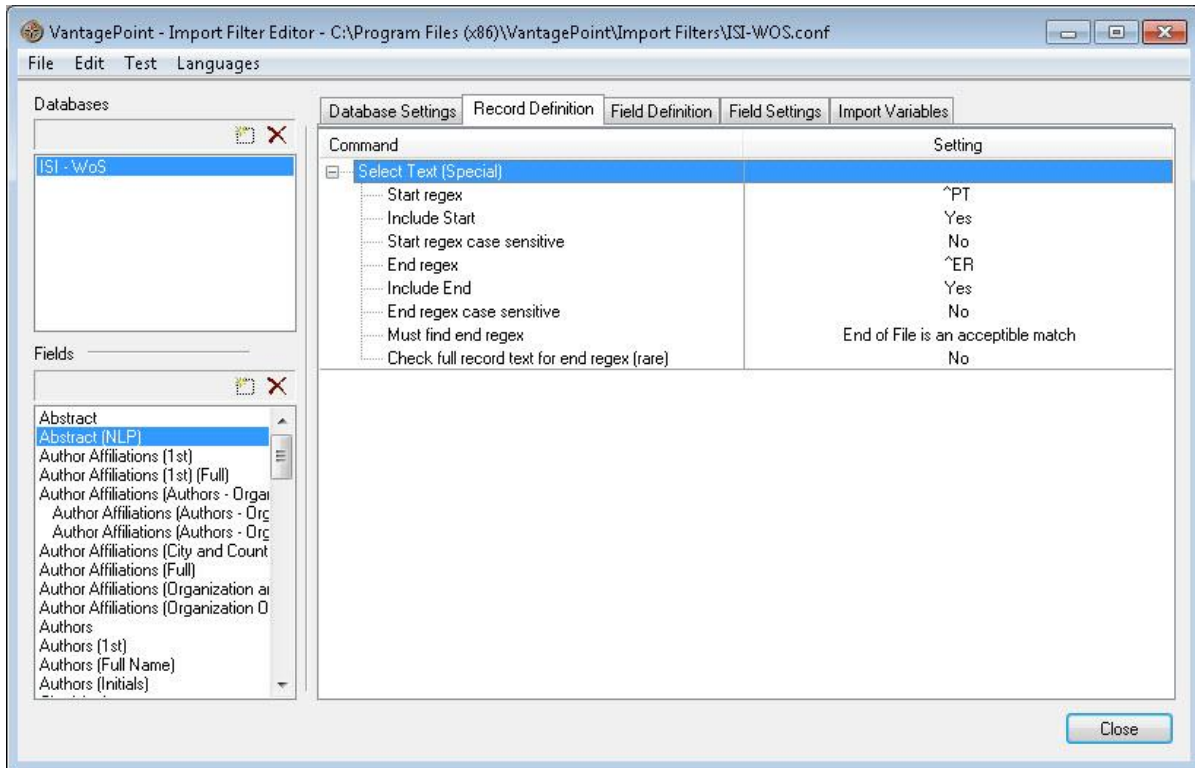


The following table contains detailed explanations of the commands and/or settings that appear in the Command Stack Window, and their options:

<b>Database Settings tab</b>	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	<b>[Yes or No]</b> – “Yes” causes the “Confirm Record Text” dialog to be presented for each record during import.
Ignore During Auto-Sense	<b>[Yes or No]</b> – “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	<b>[Yes or No]</b> – “Yes” strips all carriage return (\r) characters from the raw data before importing it.
Auto-assign fields based on column header names	<b>[Yes or No]</b> – For import of columnar data. “Yes” assigns import filter fields to columns based on matches between the text string in “Field Settings” and first 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	<b>[Yes or No]</b>
[Auto-Assign] Text Qualifier	Single Character
Generate Key Field	<b>[Yes or No]</b>
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.

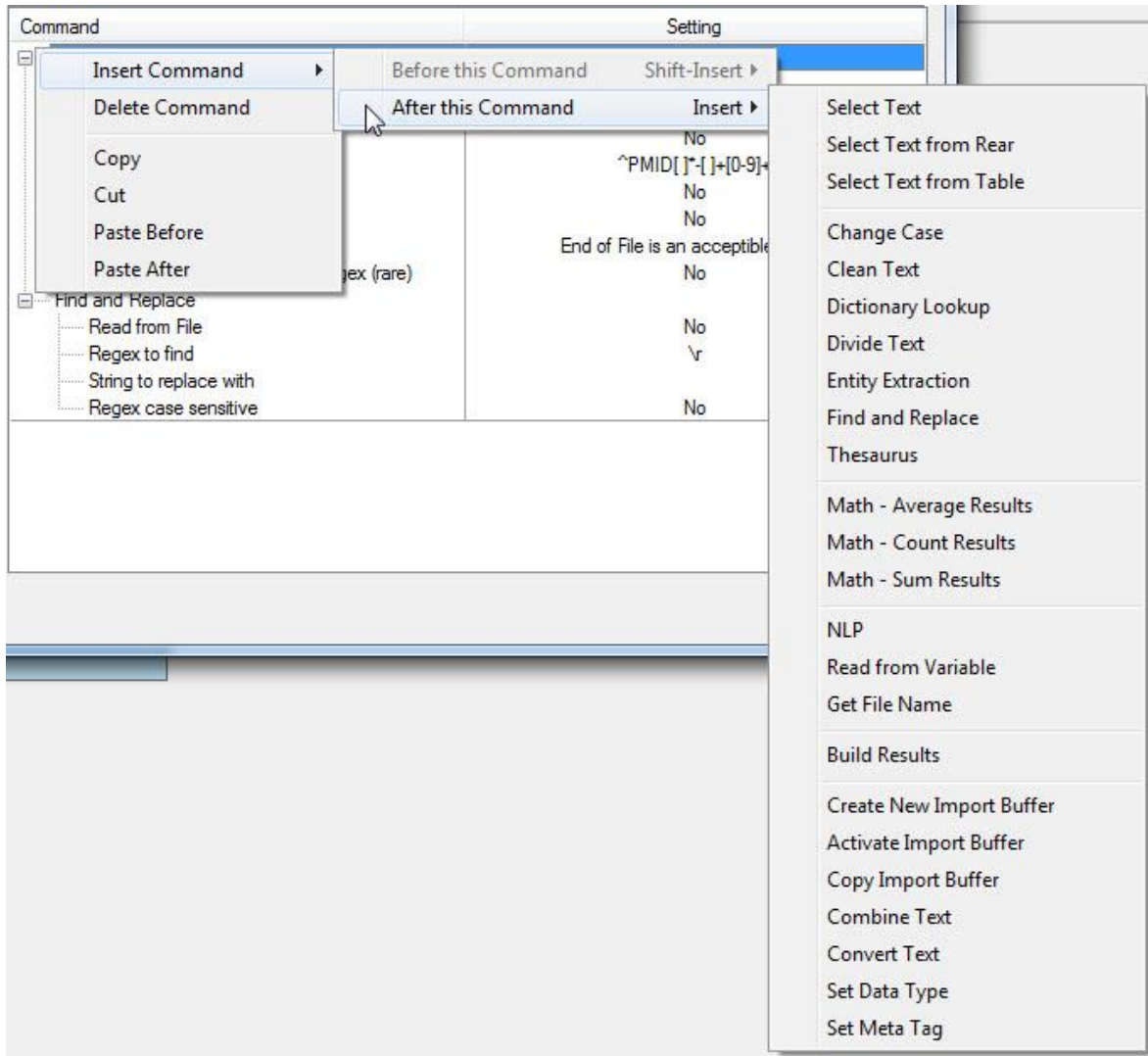


<b>Record Definition tab</b>	Defines how to extract records from the raw data file.
Select Text (Special)	<b>This segment is required as the first command in the Record Definition Field.</b>
Start regex	Enter the <b>regular expression</b> that uniquely identifies the beginning of the record.
Include 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> 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.



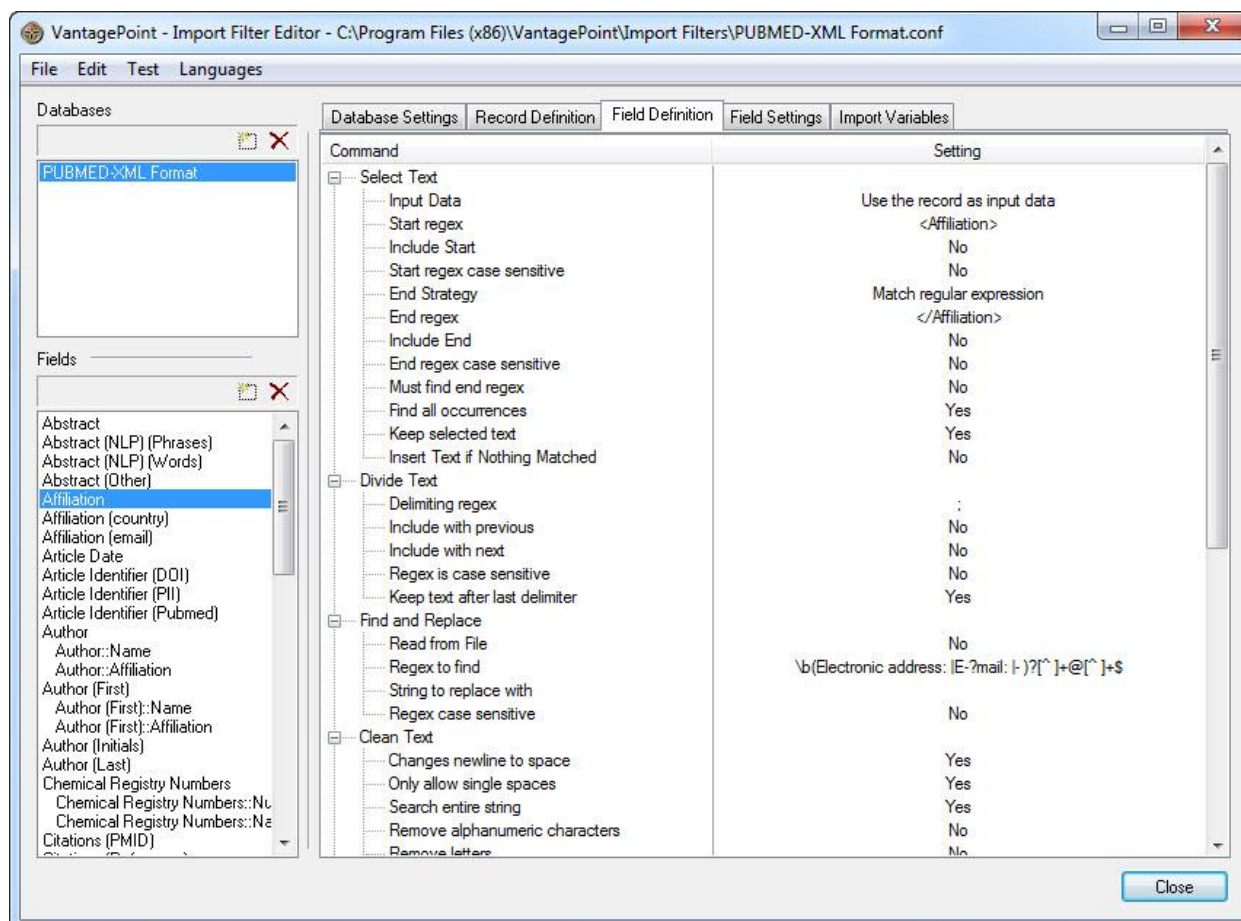
Check full record text for end regex (rare)	<b>[Yes or No]</b> - The import engine uses some rules to stop looking for the end regex. This overrides those rules and requires that the remainder of the raw data file be searched for the end regex.
(subsequent manipulation commands)	The "Select Text (Special)" command may be followed by <b>Text manipulation commands</b> .

Subsequent Commands are entered and managed on the Stack through Right-Click walking menus or via keyboard shortcuts. See the [Text Manipulation Commands](#) topic for Command Stack commands and parameters.

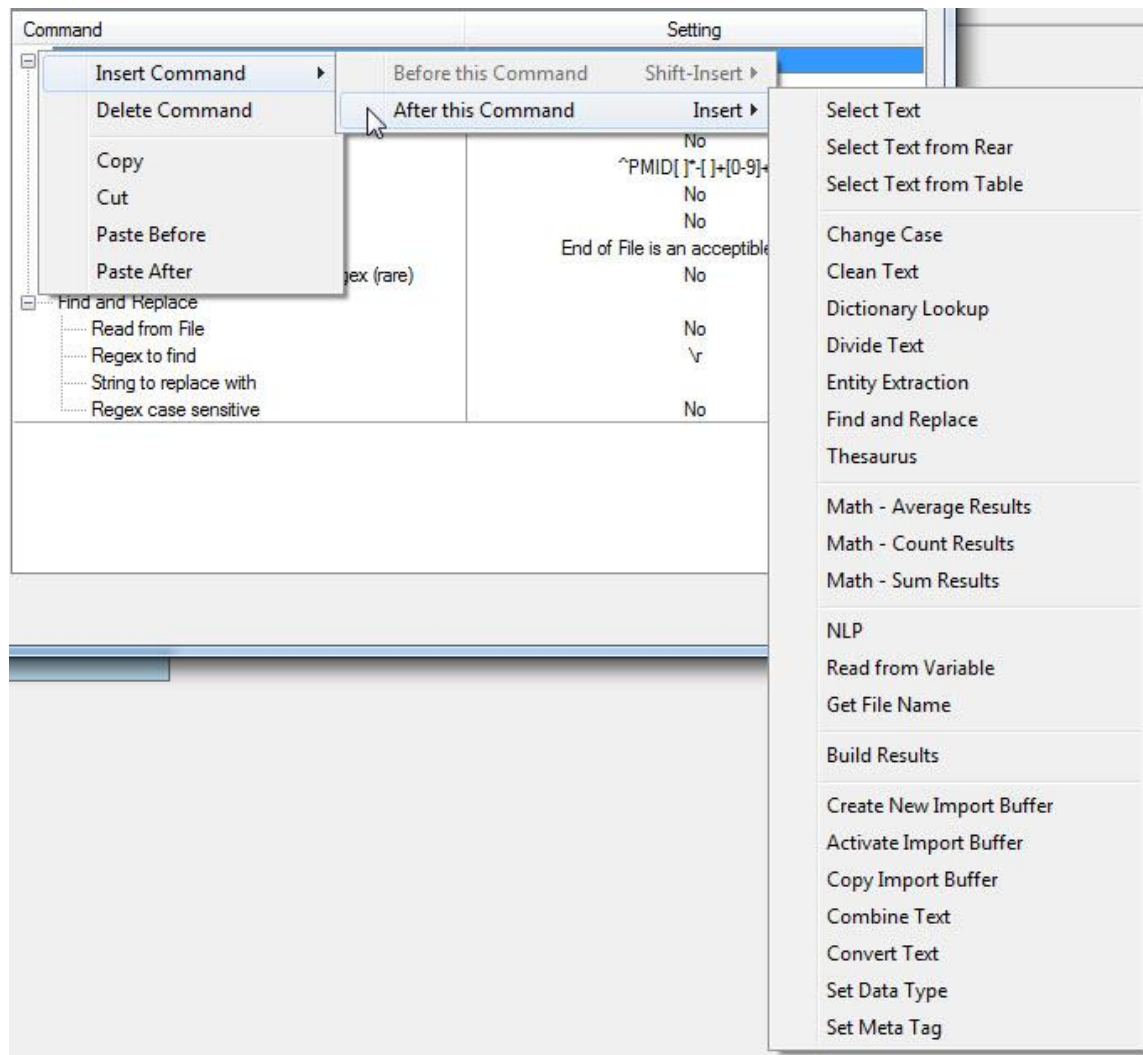


## Import Filter Editor - Field Definition

**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 (as shown below) 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.

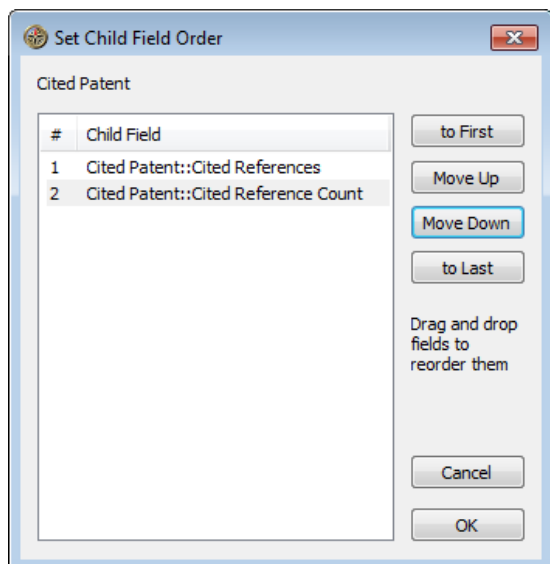
## **Import Filter Editor - Field Settings**

**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.

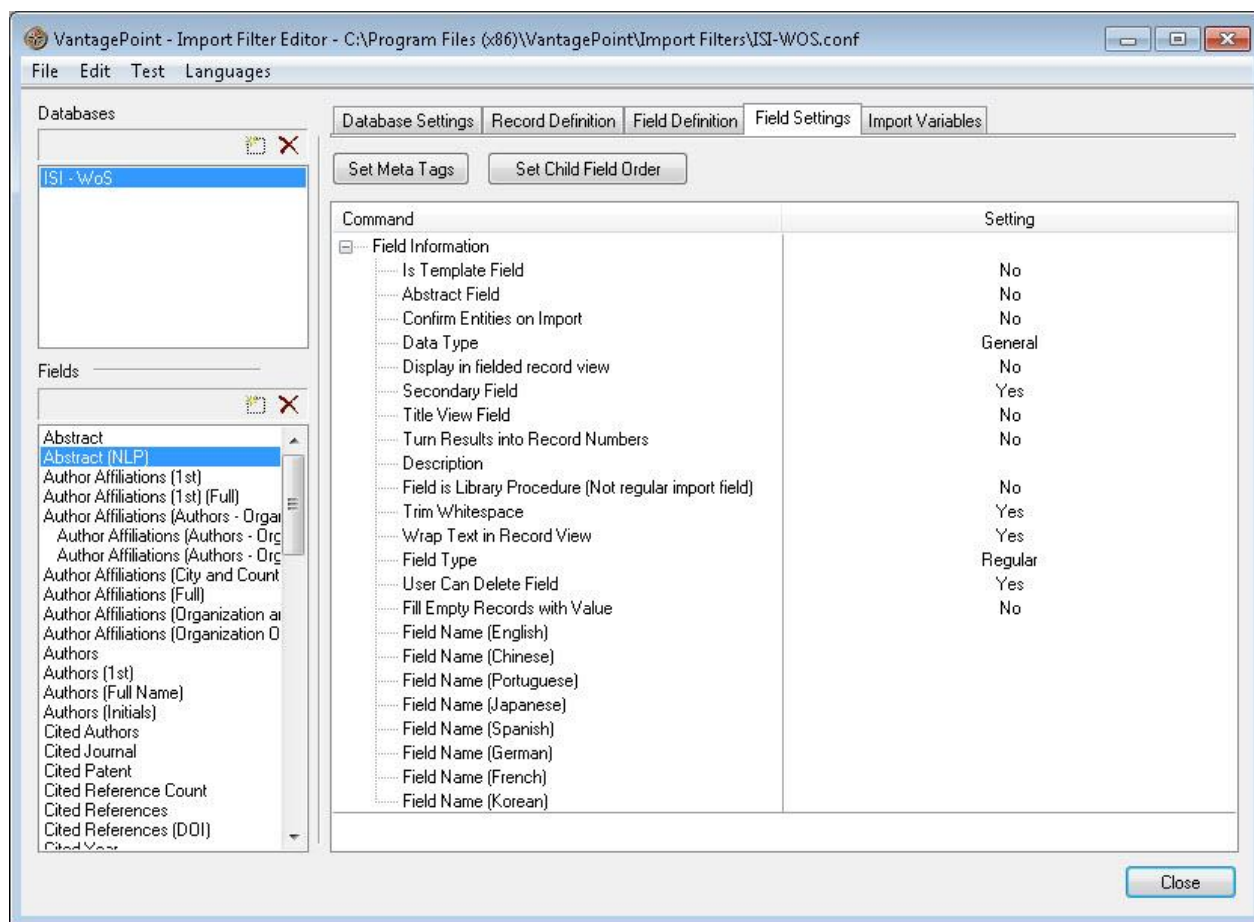
**Buttons:**

**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.



<b>Field Settings tab</b>	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.
Link	For data items that are links to file names.
General	This is the default data type.
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.

---

### **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.

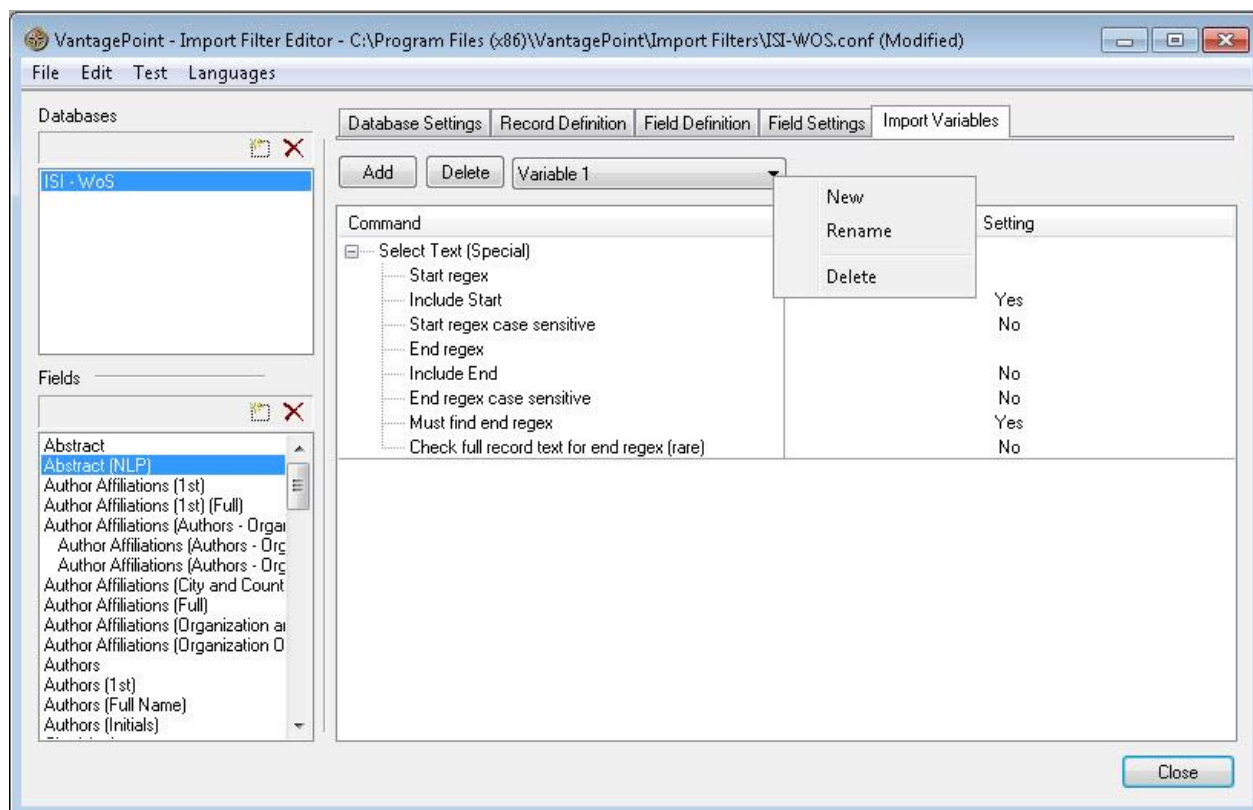
Right-Click Menu on Text Box:

**New** (add a new variable);

**Rename** (allows typing in the text box to rename the variable);

**Delete** (delete the selected variable).

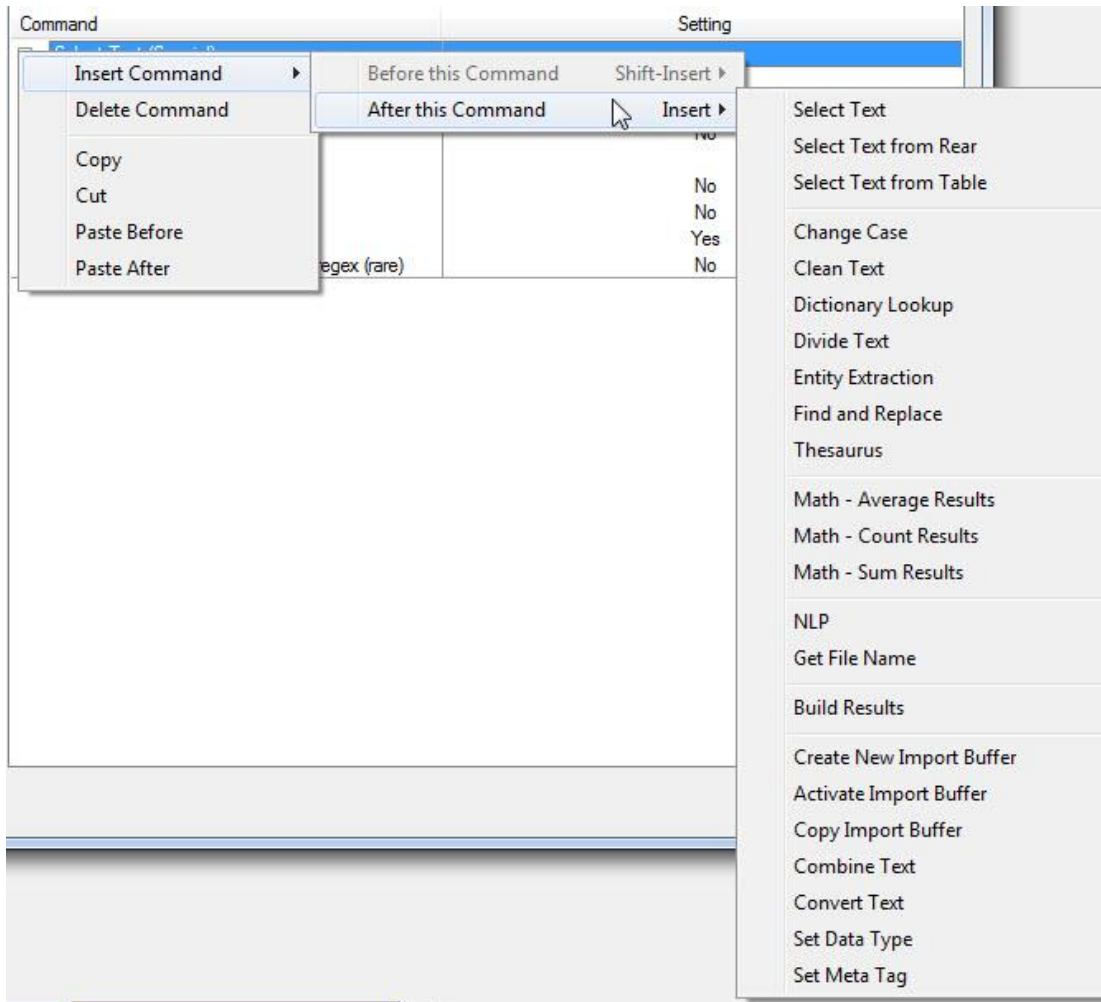
When the "Import Variables" tab is selected, the Command Stack Window is used to assemble an extensible list of text-manipulation tools, each with numerous options.



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".



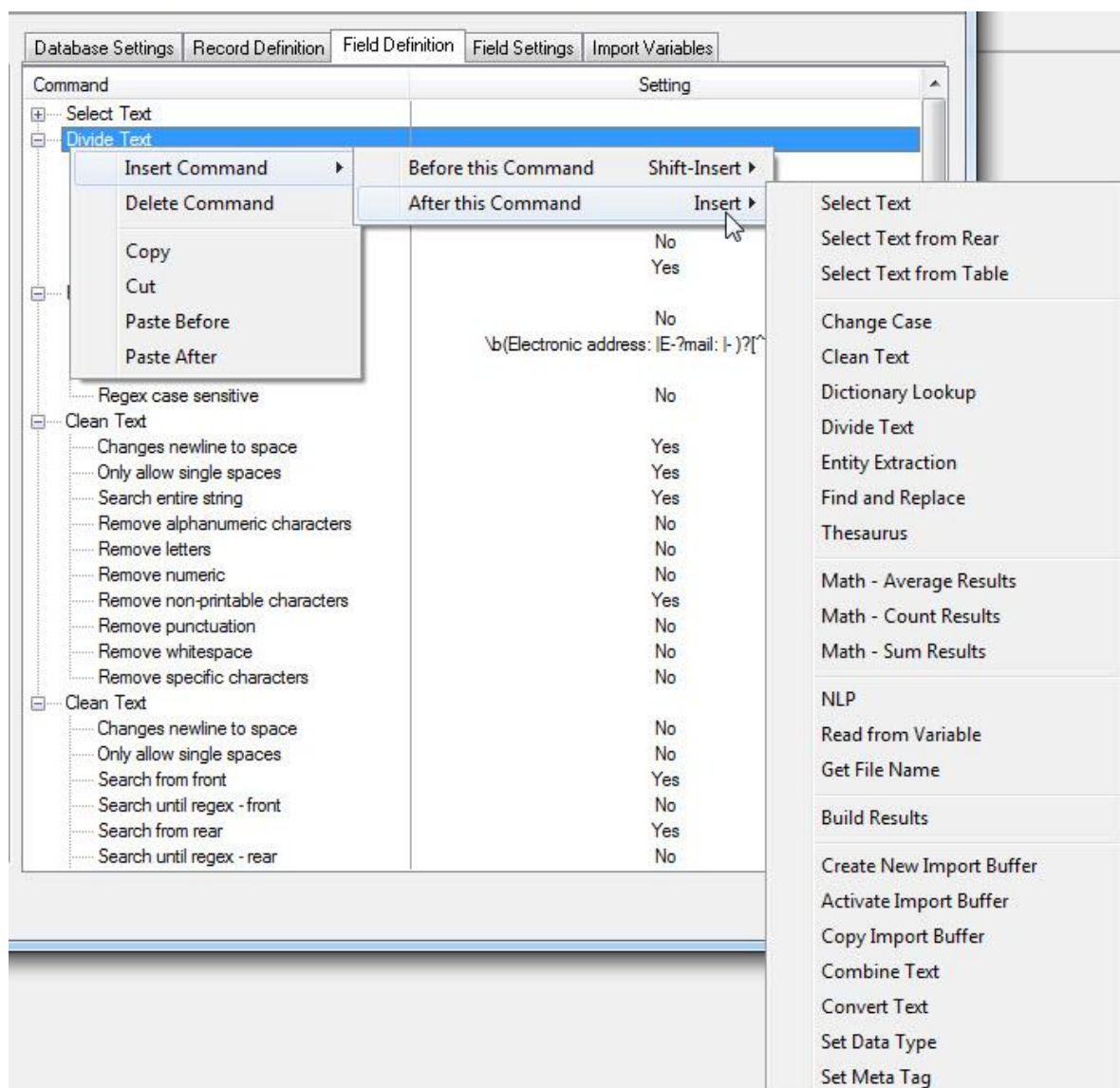
The stack is built using Right-Click menus (or keyboard shortcuts) as shown below.



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
- Change Case

- Clean Text
- Dictionary Lookup
- Divide Text
- Entity Extraction
- Find and Replace
- Thesaurus
- Math - Average Results
- Math - Count Results
- Math - Sum Results
- NLP
- Read from Variable
- Get File Name
- Build Results
- Create New Import Buffer
- Activate Import Buffer
- Copy Import Buffer
- Combine Text
- Convert Text
- Set Data Type
- Set Meta Tag

**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	[Yes or No] – 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	[Yes or No]
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	[Yes or No] – 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	[Yes or No]
Must find end regex	[Yes or No] – 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	[ <b>Yes</b> or <b>No</b> ] (see earlier)
Must find regex	[ <b>Yes</b> or <b>No</b> ] (see earlier)
Insert Text if Nothing Matched	[ <b>Yes</b> or <b>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>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	[ <b>Yes</b> or <b>No</b> ]
Use Text Qualifier	[ <b>Yes</b> or <b>No</b> ] – 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	[ <b>Yes</b> or <b>No</b> ] - Yes to accept Column Name or No to accept Column Number
Column Name	<b>Regular Expression</b>
Column Name is Regex	[ <b>Yes</b> or <b>No</b> ]
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	[ <b>Yes</b> or <b>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>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.
Change 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
Characters to remove (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	<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 “re<u>s</u>earch”)</p>
------------------	---

<b>Find and Replace</b>	Use this to edit data.
Read from File	<b>[Yes or No]</b>
Thesaurus File to Read	Enter the filename and path of thesaurus file to use.
Regex case sensitive	<b>[Yes or No]</b> – 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	<b>[Yes or No]</b>

<b>Thesaurus</b>	
Thesaurus File to read	Enter the filename and path of thesaurus file to use.
Save to Groups	<b>[Yes or No]</b>
Save to Single Group	<b>[Yes or No]</b>
Single Group name	Enter the group name
Keep Unmatched Items	<b>[Yes or No]</b>

<b>Math - Average Results</b>	<p>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.</p>
-------------------------------	---

<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	<b>[Yes or No]</b> (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	<b>[Yes or No]</b>

<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>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>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	<b>[Yes or No]</b> – Option to include the location of the file being imported [Yes] or the file name only [No].

<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]

---

## **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

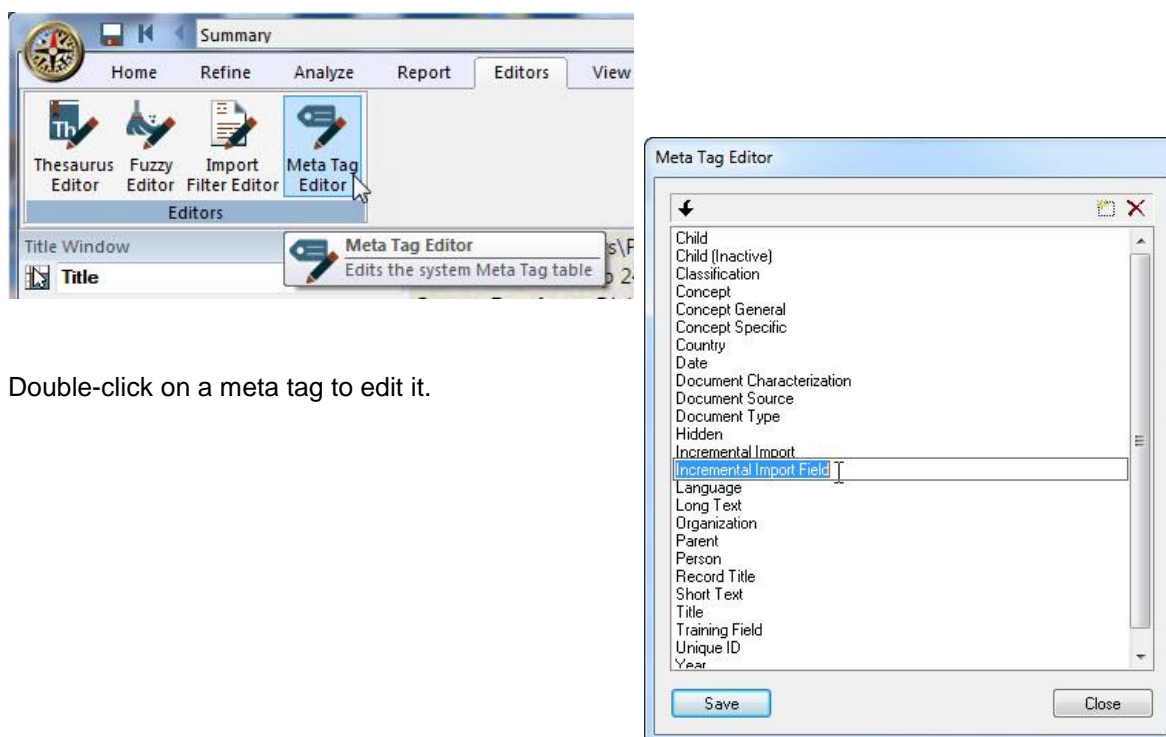
Different data fields frequently have similar types of information. For example, a company's name may appear as a "Corporate Source" in one database and a "Patent Assignee" in another. Meta tags provide a mechanism for the user to indicate the type of data contained in a field, and they are especially 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.

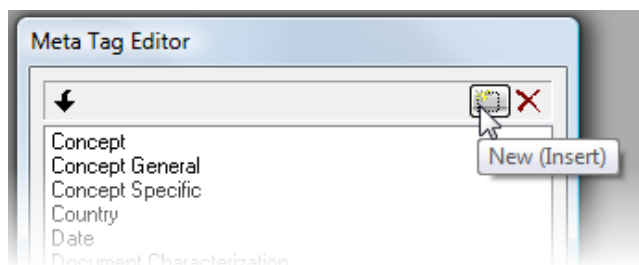
Second, the Meta Tag Editor allows you to interactively edit the local set of meta tags.

The **Meta Tag Editor** is accessed from the Editors ribbon.

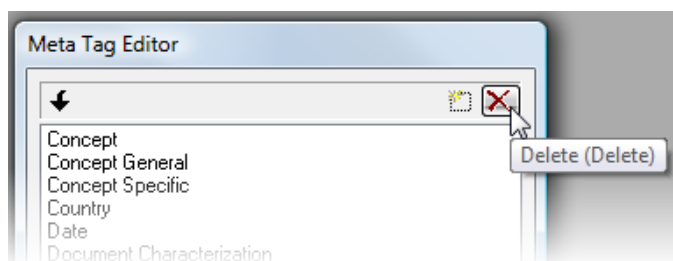


Double-click on a meta tag to edit it.

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.

Source File: C:\Work\WWW\SearchData\Viz\969\684ac2a4-eac6-4f37-a598-b37f17b998ed.xml  
Source Date: Feb 07 2017 14:58  
Source Database: PatStat

Summary Sheet

Number of Records: 2,978

Field	Number of Items	% Coverage	Data Type	Meta Tags
(filters)				
Abstract	2,808	100%		
Abstract (NLP) (Phrases)	34,636	99%		
Abstract Language	6	100%		Language
Applicant Seq Num	13	99%	Number	
Application Author	19	100%		Country
Application Number	978	100%		
Application Number	978	100%		
Application Number	978	100%		Parent
Country   Application Nu				
Assignee Count	6	100%	Number	
Assignee	234	96%		Parent
Standardized Name   Pa				
PatStat Standardized Lev				
Standardized Sector   Ad				
Citations	862	62%		Parent
Cited Application ID   Ge				

Context menu for 'Abstract Language':

- 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...
- Zoom

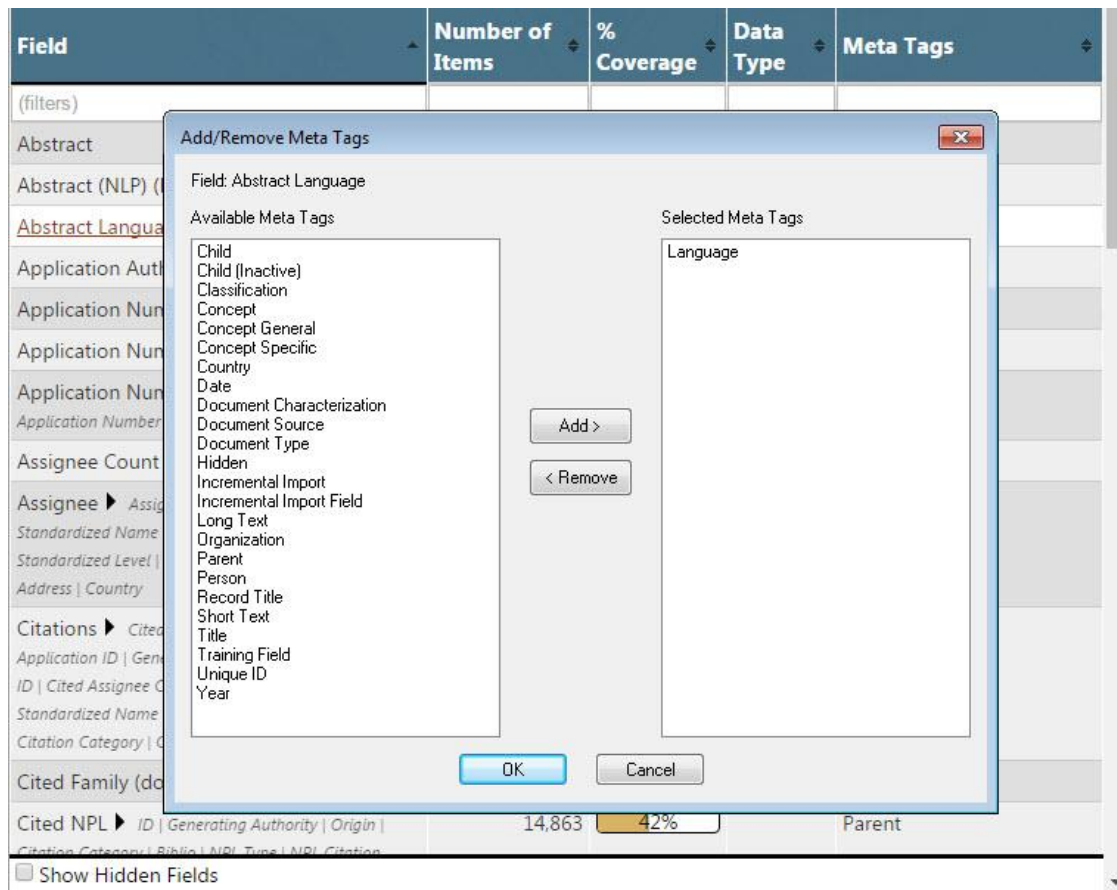
Show Hidden Fields

Summary | List::Grant Publication Year | Chart::Grant Publication Year (1) | List::Assignee::PatStat Standardize

ISCPatStat Quantum Dot

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.

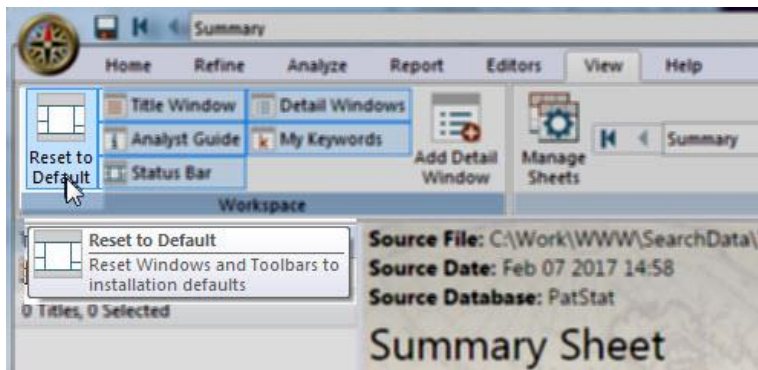
---

## VIEW

---

### Reset to Defaults

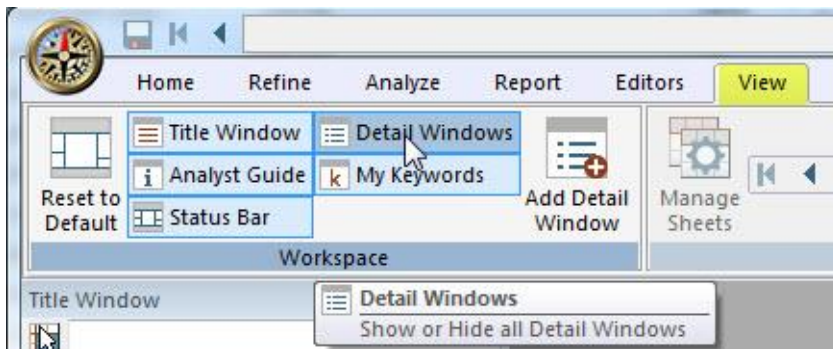
If you have made any changes to the layout of the VantagePoint windows, you can reset to the installation defaults by selecting the View Ribbon and **Reset to Default**:



---

### Detail Windows

Detail Windows are displayed on the right side of the VantagePoint window. If they are hidden, select **Detail Windows** from the View ribbon:



## 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.

The image shows two stacked detail windows. The top window is titled 'Priority Countries' and the bottom is 'Patent Assignees'. Both windows have a table with a numerical value, an expectancy arrow, and a text label.

Value	Arrow	Country
42	↑↑↑	US
1		DE
0	↓	GB
0	↓↓↓	JP

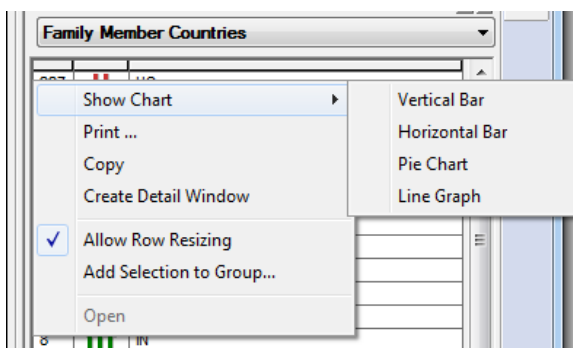
  

Value	Arrow	Assignee
20	↑↑↑	COLGATE PALMOLIV
16	↑↑↑	ENAMELON INC
6	↑↑↑	CHURCH & DWIGHT C
1	↑↑	AFFLITTO J
1	↑↑	ENAMELON
1	↑↑	ENAMELON RES
1	↑	GAFFAR A
1	↑↑	NABIN
1	↑↑	USEN N
1	↑↑	WINSTON A E
0	↓	KAO CORP
0	↓↓↓	LION CORP
0	↓↓	PROCTER & GAMBLE

---

## 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.

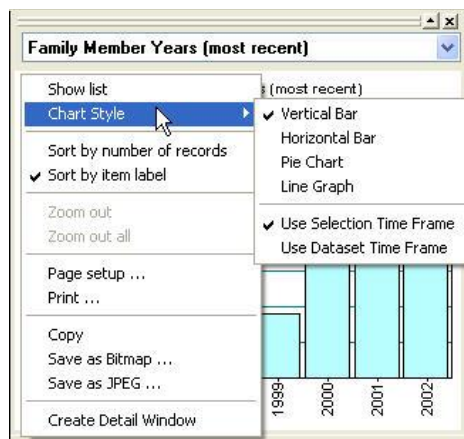
**Add Selection to Group...** - Brings up the **Add items** dialog to select from an existing Group (if any exist), or allows you to create a new Group.

**Open** - opens the item if data type of the item is a file.

---

## **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.

---

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

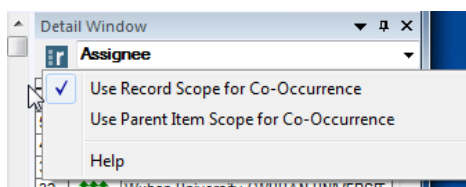
Detail Windows provide details of the records selected in the Main View. They show the co-occurrence of items in one field with items selected in a view.

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 next to the field name. 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 #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	REV-LON CONSUMER PROD CORP (REVL)	✓
4	1	1	US5827505A		0 (Examiner)	1996288503	1996-12-31	CURTIS INC HELENE (CURT-N) UNILEVER NV (UNIL) 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) UNILEVER NV (UNIL) 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) UNILEVER NV (UNIL) UNILEVER PLC (UNIL)	✓
10	1	1	US5827505A		0 (Examiner)	1996269752	1997-08-12	CURTIS INC HELENE (CURT-N) UNILEVER NV (UNIL) UNILEVER PLC (UNIL)	✓
11	1	1	AT409587B		0 (Examiner)	1998557041	1998-10-08	KIEN H (KIEN-H)	
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) MEDICIS PHARM INC (MEDI-N)	

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

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	REV-LON 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	#Instances	Family Member	Cited Patent	Relevance Category	Source	Cited Family	Priority Date	Assignee	US5827505A (AND)
1	1	1	US5827505A	US3507955A		0 (Examiner)	197027924R	1970-04-21	PREV-COAT CORP (PRE_-N)	
2	1	1	US5827505A	US4698178A		0 (Examiner)	1986094946	1987-10-06	GOLDSCHMIDT AG TH (GOLD)	
3	1	1	US5827505A	US5162378A		0 (Examiner)	1992398080	1992-11-10	REV'LON CONSUMER PROD CORP (REVL)	
4	1	1	US5827505A	US5589177A		0 (Examiner)	1996288503	1996-12-31	CURTIS INC HELENE (CURT-N) UNILEVER NV (UNIL) UNILEVER PLC (UNIL)	
5	1	1	US5827505A	US3624120A		0 (Examiner)	197201160T	1971-11-30	PROCTER & GAMBLE CO (PROC)	
6	1	1	US5827505A	US4994593A		0 (Examiner)	1990180429	1991-02-19	CHESEBROUGH PONDS INC (CHEO) UNILEVER NV (UNIL) UNILEVER PLC (UNIL)	
7	1	1	US5827505A	EP612517A1	Y	0 (Examiner)	1994265729	1994-08-31	L'OREAL SA (OREA)	
8	1	1	US5827505A	US5490982A		0 (Examiner)	1996116280	1996-02-13	ARDEN CO DIV CONOPCO INC ELIZABETH	
9	1	1	US5827505A	US5078988A	Y	0 (Examiner)	1990172938	1992-01-07	CHESEBROUGH PONDS INC (CHEO) UNILEVER NV (UNIL) UNILEVER PLC (UNIL)	
10	1	1	US5827505A	US5656280A		0 (Examiner)	1996269752	1997-08-12	CURTIS INC HELENE (CURT-N) UNILEVER NV (UNIL) UNILEVER PLC (UNIL)	
11	1	1	AT409587B	WO1998043489A1		0 (Examiner)	1998557041	1998-10-08	KIEN H (KIEN-H)	
12	1	1	AT409587B	DE10025867A1		0 (Examiner)	2001062363	2000-12-14	STOCK VITAL GMBH (STOC-N)	
13	1	1	AT409587B	DE29819082U1		0 (Examiner)	1999122837	1999-03-18	STR&TAMANN R (STRA-I)	

DPCI Cited Patent Details::Assignee

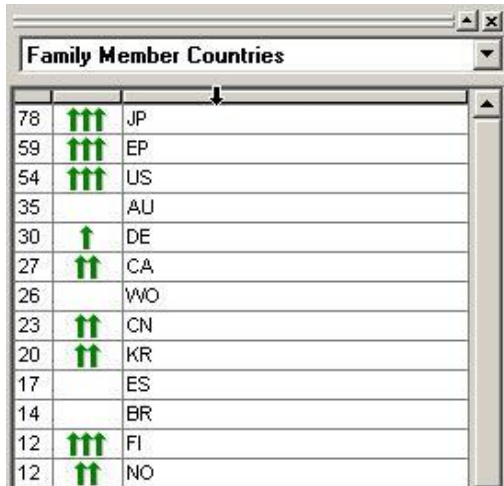
1		CURTIS INC HELENE (CURT-N)
1		UNILEVER NV (UNIL)
1		UNILEVER PLC (UNIL)

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



### Detail Window-Sorting Lists

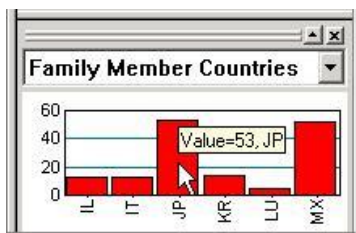
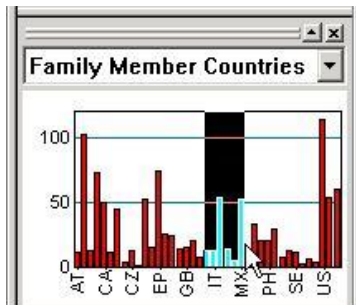
When lists are viewed in a Detail Window, they can be sorted by double-clicking on the bar above the data (similar to sorting lists in the Main window). When you can sort, the cursor changes to the "sort" cursor (down arrow) as shown in the following illustration:



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 following two illustrations:



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:

The screenshot displays a software interface with a main table and two floating detail windows.

**Main Table:**

	# Records	# Instances	Corporate Source	Industry	University	Labs
1	22	22	Carnegie Mellon Univ, Pittsburgh, PA, USA			
2	12	12	California Inst of Technology, Pasadena, C			
3	11	11	Texas A&M Univ, College Station, TX, USA			
4	10	10	Florida Atlantic Univ, Boca Raton, FL, USA			
5	7	7	North Carolina State Univ, Raleigh, NC, US			
6	7	7	Ohio State Univ, Columbus, OH, USA			
7	6	6	FMC Corp, Santa Clara, CA, USA			
8	6	6	Naval Postgraduate Sch, Monterey, CA, U			
9	5	5	Univ of Maryland, College Park, MD, USA			
10	5	5	Univ of Massachusetts, Amherst, MA, US			
11	5	5	Univ of Sydney, Sydney, Aust			
12	5	5	Yale Univ, New Haven, CT, USA			
13	4	4	Ecole Polytechnique de Montreal, Montreal,			
14	4	4	Georgia Inst of Technology, Atlanta, GA, U			
15	4	4	Kyoto Univ, Kyoto, Jpn			
16	4	4	Massachusetts Inst of Technology, Cambri			
17	4	4	Pennsylvania State Univ, University Park, P			
18	4	4	Tsinghua Univ, Beijing, China			
19	4	4	Univ of California at Berkeley, Berkeley, C			
20	4	4	Univ of California, Riverside, CA, USA			
21	4	4	Univ of Tsukuba, Ibaraki, Jpn			
22	4	4	Universitaet der Bundeswehr Muenchen,			
23	3	3	Cent de Developpement des Technologies			
24	3	3	Cent Natl de la Recherche Scientifique, To			
25	3	3	Charles Stark Draper Lab, Cambridge, MA,			
26	3	3	Drexel Univ, Philadelphia, PA, USA			
27	3	3	Istituto Elaborazione Segnali ed Immagini -			
28	3	3	Jet Propulsion Lab, Pasadena, CA, USA			

**Detail Window (Corporate Source):**

1	↑↑↑	Texas A&M Univ, College Station, TX, USA

**Detail Window (Author (Cleaned)):**

6	↑↑↑	Kehtarnavaz, Nasser
4	↑↑↑	Griswold, Norman C.
3	↑↑↑	Kehtarnavaz, Nasser D.
2	↑↑↑	Griswold, Norman
2	↑↑↑	Nakamura, E.
2	↑↑↑	Sohn, W.
1	↑↑	Eem, J.
1	↑↑	Eem, J. K.
1	↑	Li, Shigang
1	↑↑	Miller, K.M.
1	↑↑	Noe, Phil
1	↑↑	Yen, J.
1	↑↑	Zabaneh, Khalil

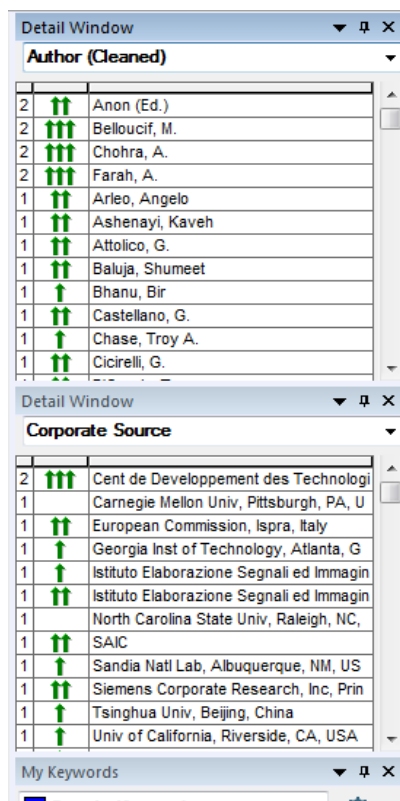
**My Keywords:**

Sample Keywords

9 Keywords, 0 Selected

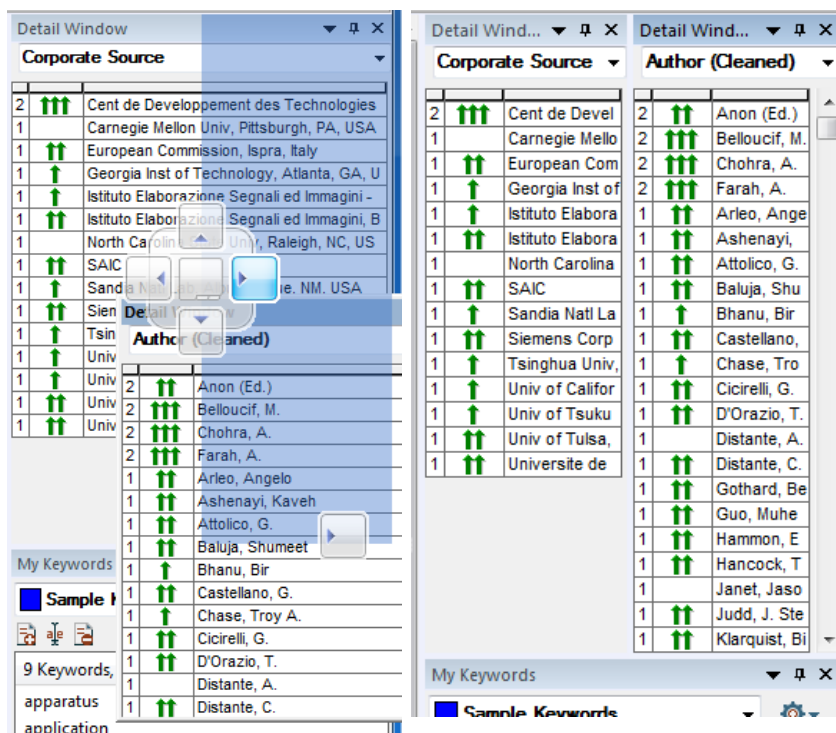
apparatus  
application  
characteristic

The illustration below shows two Detail Windows in the default location.



Here, 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.

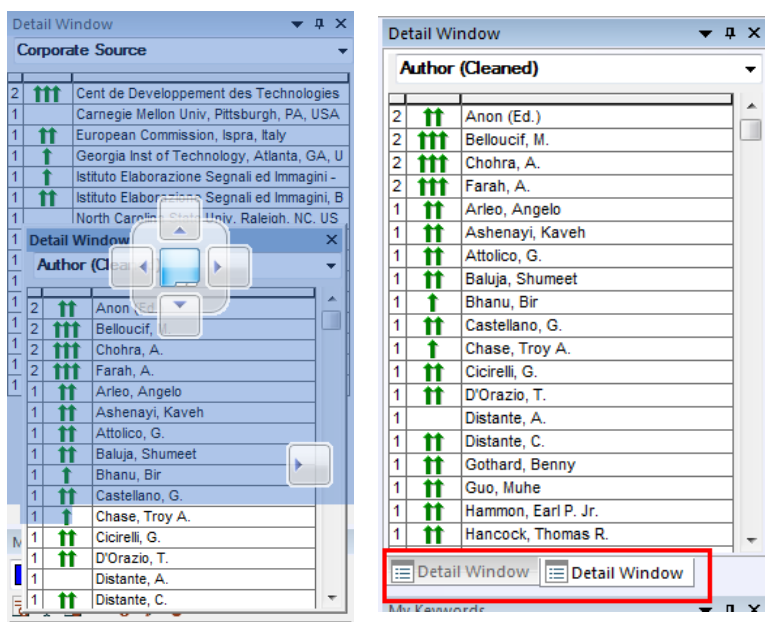
Here is the result:



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 order.

The top screenshot shows the VantagePoint software interface with the 'View' ribbon selected. The 'Reset to Default' button is highlighted in the ribbon. The interface displays a list of titles, a detail window showing a corporate source, and a bar chart titled 'Source Publication Year'.

The bottom screenshot shows the same interface after the 'Reset to Default' action. The 'Emergence Scores' table is visible, showing the following data:

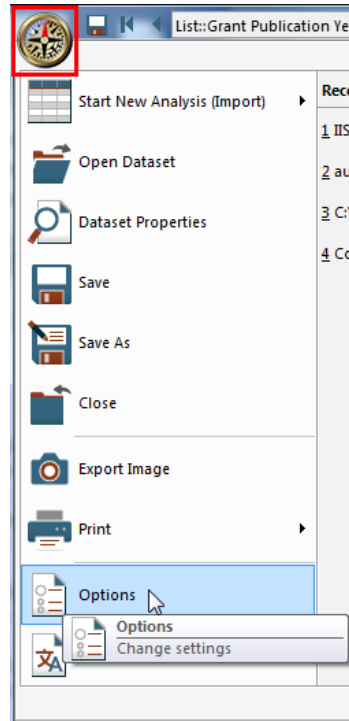
# Records	# Instances	Term	Score
1	77	Collision avoidance	7.819
2	9	Image segmentation	6.953
3	19	Robot learning	5.917
4	11	User interfaces	3.398
5	13	Computational method	2.908
6	82	Motion planning	2.43
7	16	Submersibles	1.915

## Detail Window - Colors for Charts

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



From the App Button, select **Options**.

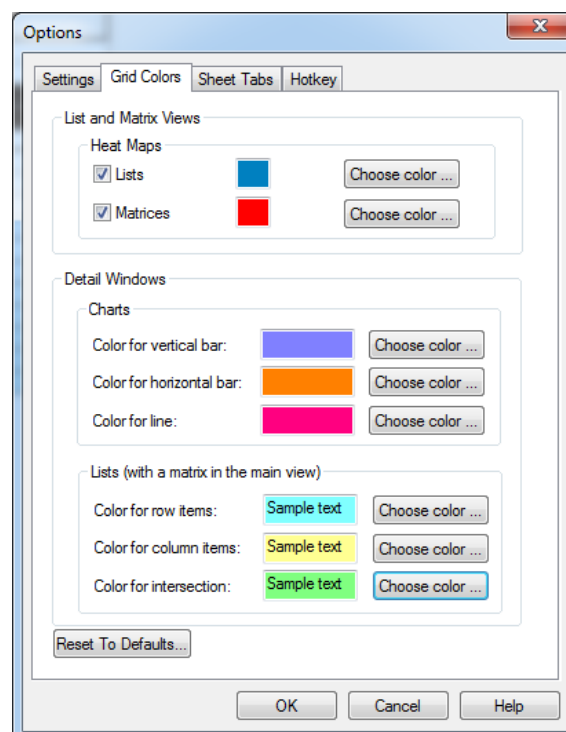


Select the **Grid Colors** tab to reveal colors for Detail Windows:

**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:

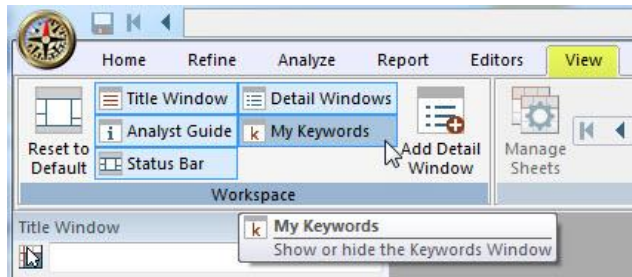
[Detail Window Colors](#)



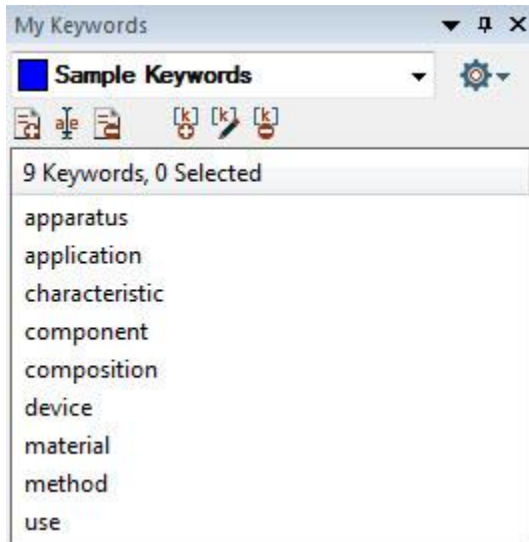
## My Keywords

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.

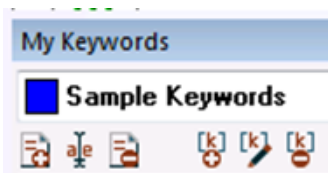
First, if it isn't already visible, enable the “My Keywords” display: From the View ribbon, click **My Keywords**.



The My Keywords window will appear. In this case, the Sample Keywords is presented:



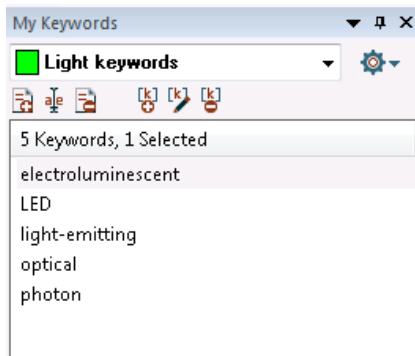
The first group of 3 icons below the "Sample Keywords" list name affect the Keyword List file.



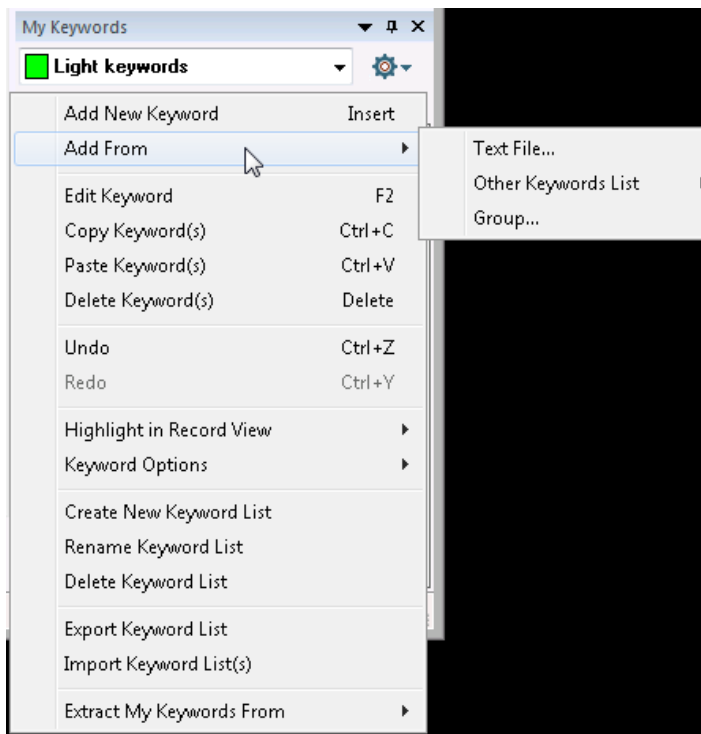
They are (from left to right): Create New Keyword List, Rename (displayed) Keyword List, and Delete (displayed) Keyword List.

The second group of 3 icons affect the individual Keywords within the Keyword List items 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.

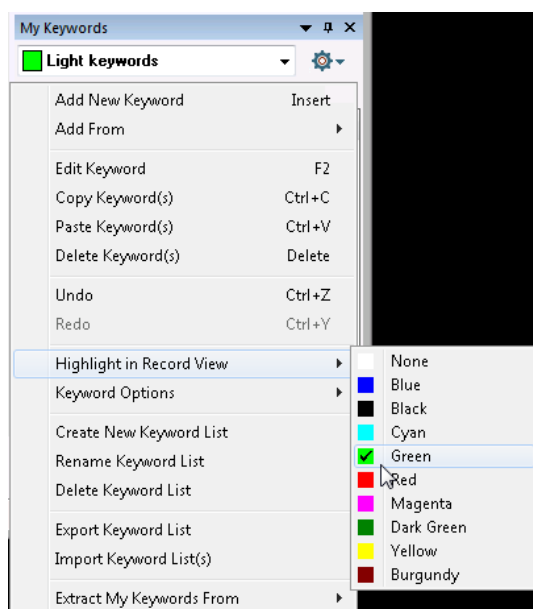
Other ways to add terms to a Keywords List include:

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.

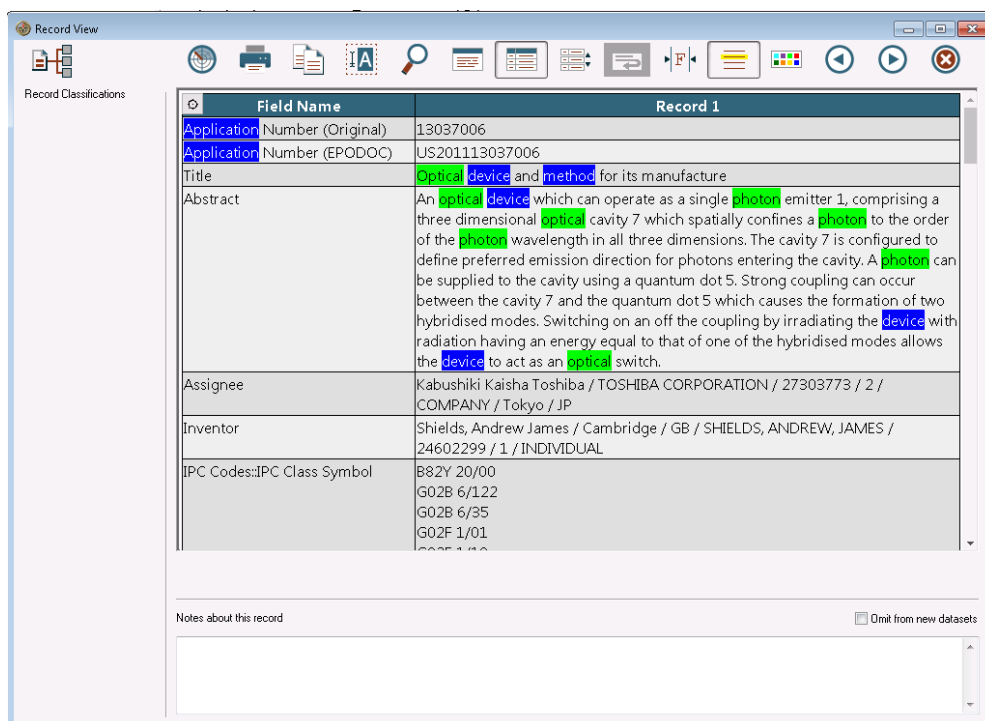


3. In a List View, Right-click on a group name in the column heading and choose 'Add Group Items to Keywords List', then choose the target Keywords List.
4. Perform a Find function (Ctrl + F; or, from the Main Menu, select Edit and Find...): Type in the term, click Find or Select All, and then click the "Add to Keyword List" button. Choose the target Keywords List

Keywords can be highlighted in the Record View for easy identification.

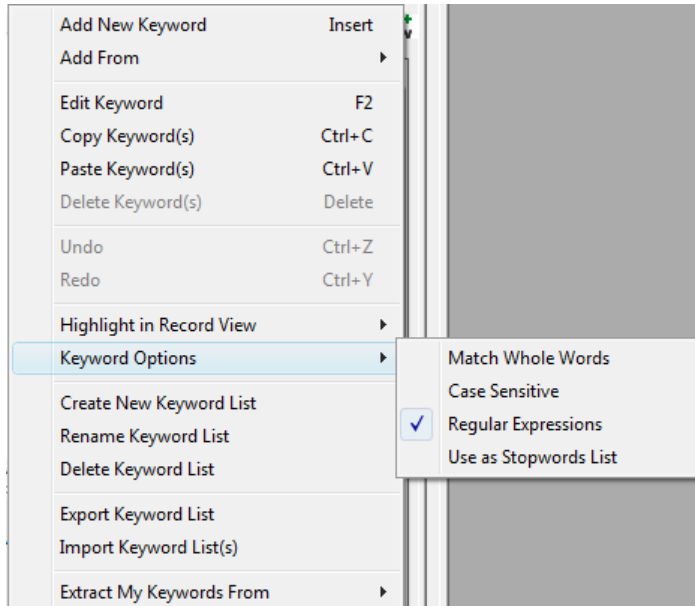


In this illustration, the user has extracted terms from more than one Keywords List. Notice the "highlight Keywords" button at the top of the Record View dialog must be enabled to see the colors. Terms from the different lists can be assigned different colors. You can change the color for a particular 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.

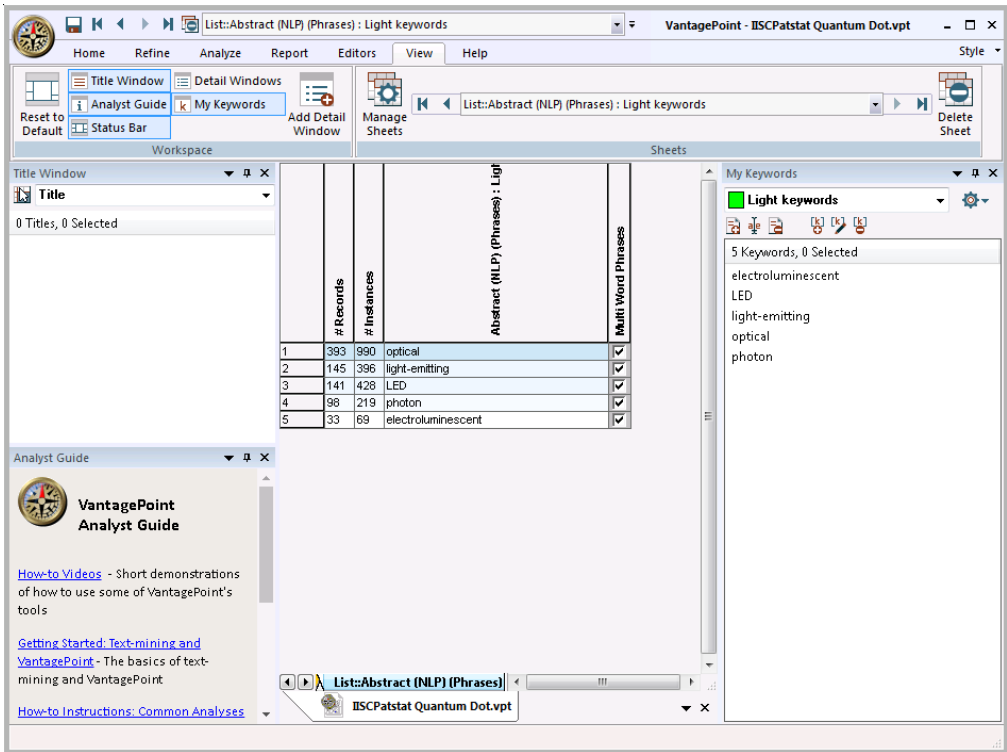
Here, the user is choosing the field from which to Extract the Keywords List:

The screenshot displays the VantagePoint Analyst Guide software interface. The main window is titled 'List::Title (NLP) (Phrases)' and features a menu bar with 'Home', 'Refine', 'Analyze', 'Report', 'Editors', 'View', and 'Help'. Below the menu bar is a toolbar with icons for 'New Analysis', 'Open Dataset', 'Save', 'Save As', 'Close', 'Create Sub-dataset', 'List', 'Matrix', 'Find', 'Select All', and 'Copy'. The 'Title Window' on the left shows a list of 11 titles, with one selected: 'Optical device and method for its manufa...'. The 'My Keywords' window is open, showing a list of keywords and a menu for 'Extract My Keywords From'. The 'Analyst Guide' window is also visible, providing instructions on how to use the software.

The 'My Keywords' window shows a list of keywords with columns for 'Keyword', 'Count', and 'Frequency'. The 'Extract My Keywords From' menu is open, showing a list of fields for extraction. The fields are listed in a table:

Field
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 Summary View now reflects the new field:

Source File: C:\Work\WWW\SearchData\Vir\969\684ac2a4-eac6-4f37-a598-b37f17b998ed.xml  
Source Date: Feb 07 2017 14:58  
Source Database: PatStat

Summary Sheet

Number of Records: 2,978

Field	Number of Items	% Coverage	Data Type	Meta Tags
(filters)				
Abstract	2,808	100%		
Abstract (NLP) (Phrases)	34,636	99%		
Abstract (NLP) (Phrases) : Light keywords	5	24%		
Abstract Language	6	100%		Language
Applicant Seq Num	13	99%	Number	
Application Authority	19	100%		Country
Application Number (EPODOC)	2,978	100%		
Application Number (Original)	2,978	100%		
Application Number ▶ Application Country   Application Number   Application Kind	2,978	100%		Parent
Assignee Count	6	100%	Number	
Assignee ▶ Assignee (Original)   PatStat Standardized Name   PatStat Standardized ID   PatStat Standardized Level   PatStat Standardized Sector   Address   Country	1,234	96%		Parent
Citations ▶ Cited Patent Publication ID   Cited Application ID   Generating Authority   Origin   Citation ID   Cited Assignee Country   Cited Assignee PatStat Standardized Name   Cited Publication Number   Citation Category   Citation Sequence Number	28,362	62%		Parent
Cited Family (docdb)	11,934	70%		
Cited NPL ▶ ID   Generating Authority   Origin   Citation	12,102	86%		Parent

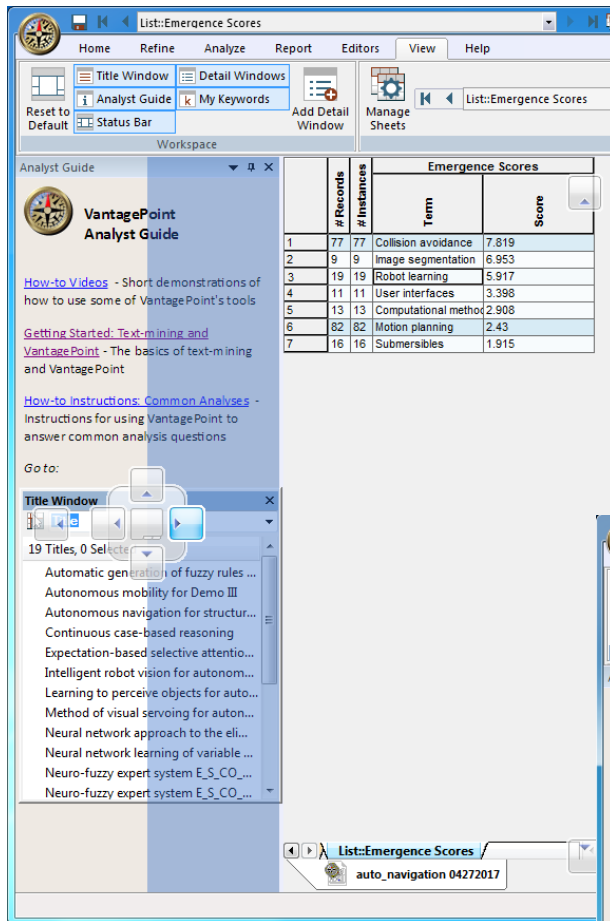
Show Hidden Fields

Summary | List:Grant Publication Year | Chart:Grant Publication Year (1) | List:Assignee:PatStat Standardized Sector | Chart:Assignee:

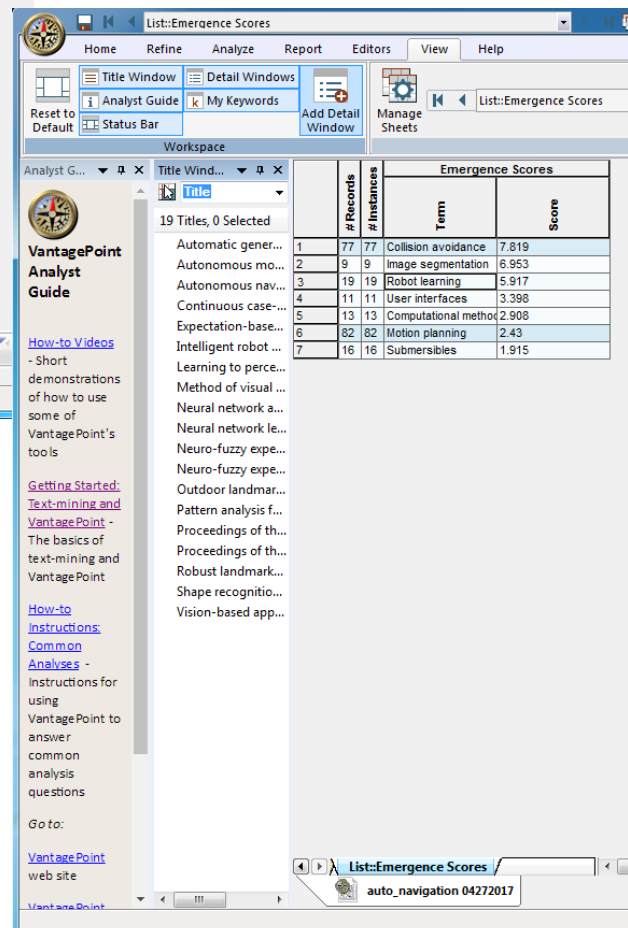
## Docking the Title Window, My Keywords Window, and Analyst Guide Window

The Title Window can be repositioned anywhere in the VantagePoint workspace by clicking and dragging the Title Window banner. The My Keywords Window and Analyst Guide Window are repositioned using these same methods.

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 workspace is titled "List:Emergence Scores" and contains a table with the following data:

	# 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 workspace, displaying a list of 19 titles. The "Detail Window" is also visible on the right side of the interface. The "My Keywords" section shows 9 keywords selected, 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 screenshot illustrates the VantagePoint software interface. The top window, titled 'List::Emergence Scores', shows a workspace with a table of emergence scores. The table has columns for '# Records', '# Instances', 'Term', and 'Score'. The bottom window shows the result of the action: a tabbed view with two tabs, 'Analyst Guide' and 'Title Window', highlighted by a red box. The 'Title Window' tab is active, displaying a list of 19 titles.

	# 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

19 Titles, 0 Selected

- Automatic generation of fuzzy rules for reactive robot controllers
- Autonomous mobility for Demo III
- Autonomous navigation for structured exterior environments
- Continuous case-based reasoning
- Expectation-based selective attention for visual monitoring and...
- Intelligent robot vision for autonomous navigation
- Learning to perceive objects for autonomous navigation
- Method of visual servoing for autonomous vehicles using m...
- Neural network approach to the elimination of road shadow...
- Neural network learning of variable grid-based maps for the...
- Neuro-fuzzy expert system E\_S\_CO\_V for the obstacle avoida...
- Neuro-fuzzy expert system E\_S\_CO\_V for the obstacle avoida...
- Outdoor landmark map generation through human assisted...
- Pattern analysis for autonomous vehicles with the region-...
- Proceedings of the 1997 6th IEEE International Workshop on...
- Proceedings of the 1998 IEEE International Conference on R...
- Robust landmark-based system for vehicle location using lo...
- Shape recognition: A fuzzy approach

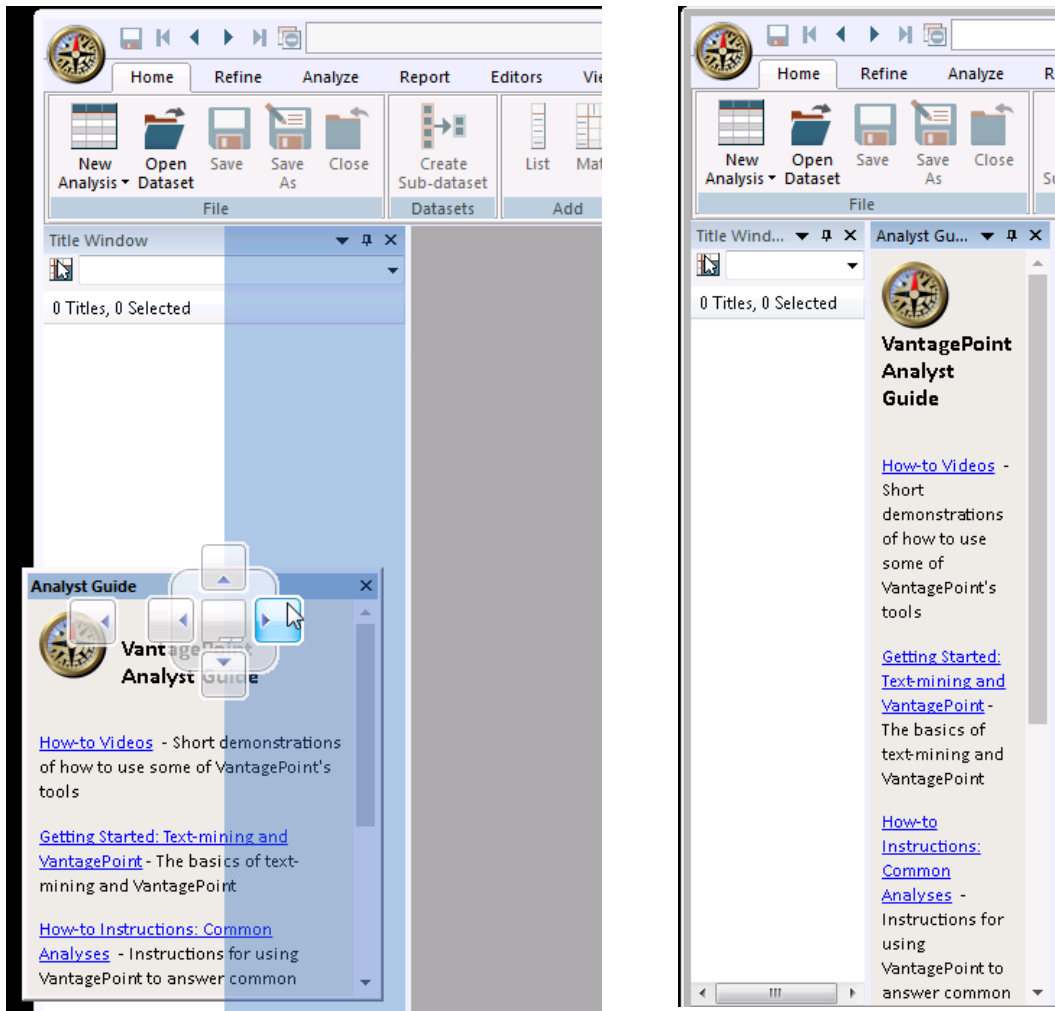
Analyst Guide Title Window



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.

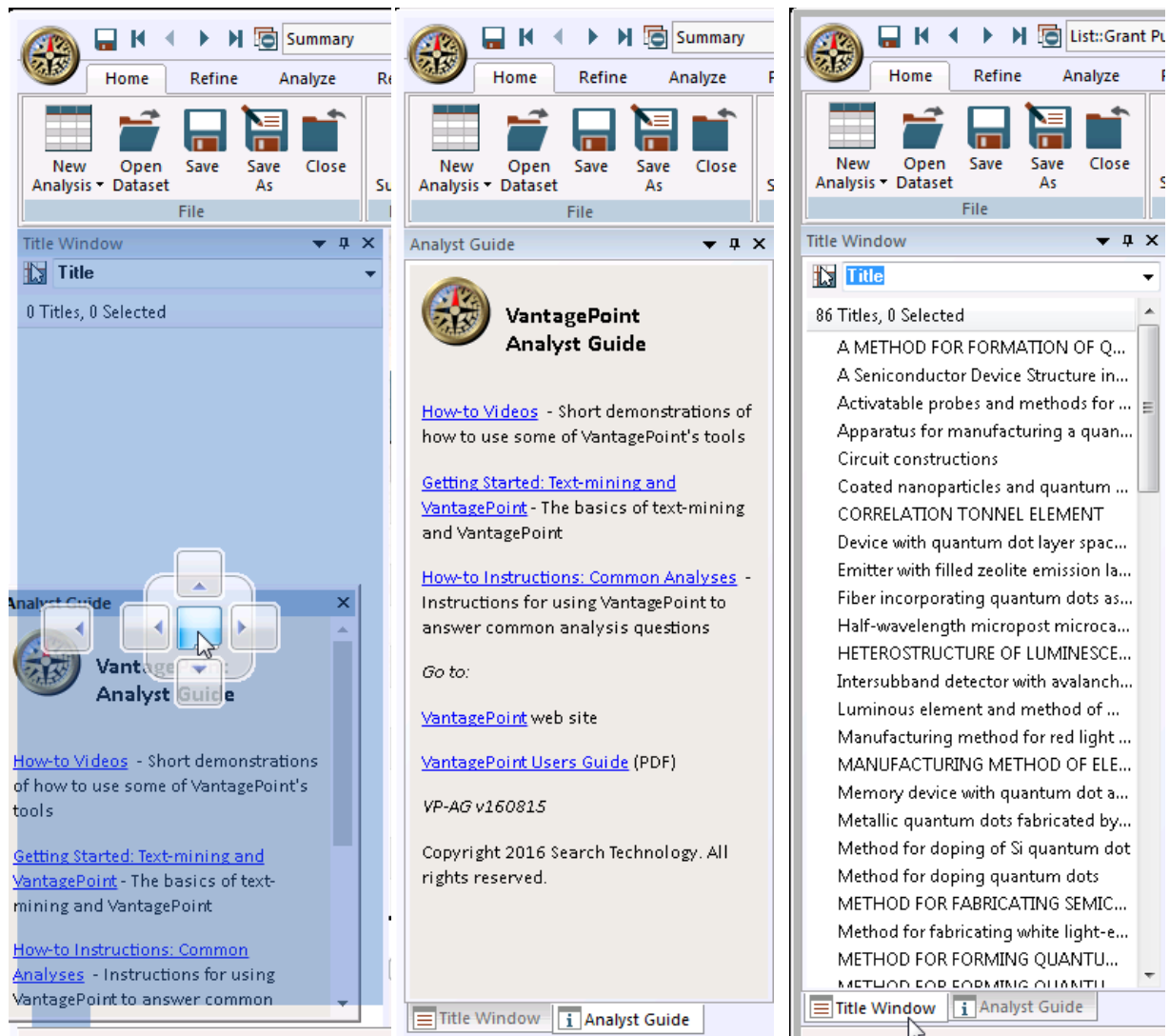
Navigation guides are displayed to help you place the new Window position. In this case, the user is choosing to display the Analyst Guide to the right of the Title Window.

The result is the illustration on the right:

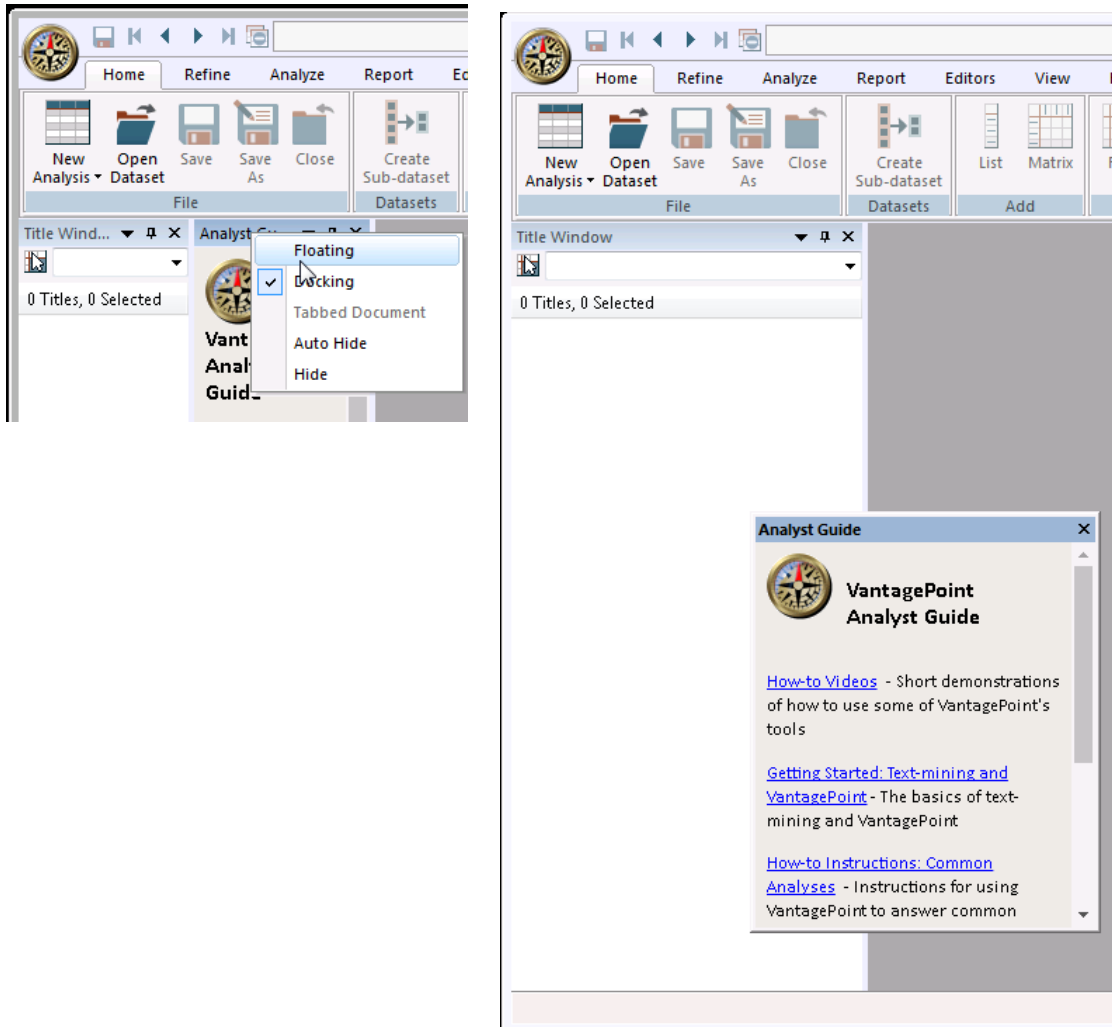


In this case, the user has chosen to display both the Analyst Guide and the Title Window in the left window pane.

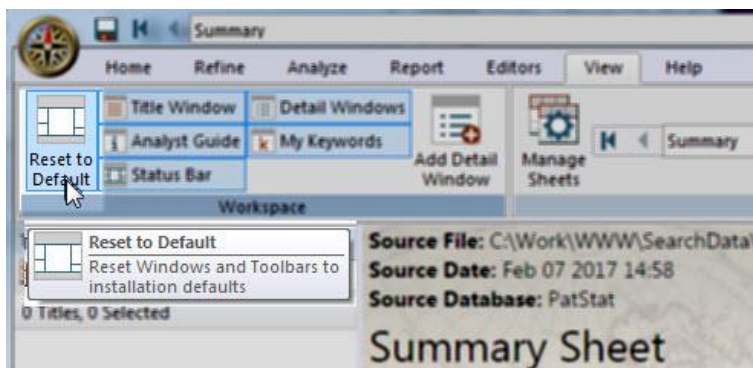
This results in a tabbed view where you select which window to view from the tabs at the bottom:



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**:



---

## 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	↓ 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:

**Source File:** C:\Work\WWW\SearchData\Viz\969\684ac2a4-eac6-4f37-a598-b37f17b998ed.xml  
**Source Date:** Feb 07 2017 14:58  
**Source Database:** PatStat

**Summary Sheet** Number of Records: 2,978 Columns i

Field	Number of Items	% Coverage	Data Type	Meta Tags
(filters)				
Abstract	2,808	100%		
Abstract (NLP) (Phrases)	34,636	99%		
Abstract Language	6	100%		Language
Applicant Seq Num	13	99%	Number	
Application Authority	19	100%		Country
Application Number (EPODOC)	2,978	100%		
Application Number (Original)	2,978	100%		
Application Number ▶ Application Country   Application Number   Application Kind	2,978	100%		Parent
Assignee Count	6	100%	Number	
Assignee ▶ Assignee (Original)   PatStat Standardized Name   PatStat Standardized ID   PatStat Standardized Level   PatStat Standardized Sector   Address   Country	1,234	96%		Parent
Citations ▶ Cited Patent Publication ID   Cited Application ID   Generating Authority   Origin   Citation ID   Cited Assignee Country   Cited Assignee PatStat Standardized Name   Cited Publication Number   Citation Category   Citation Sequence Number	28,362	62%		Parent
Cited Family (docdb)	11,934	70%		
Cited NPL ▶ ID   Generating Authority   Origin   Citation Category   Biblio   NPL Type   NPL Citation Sequence Number	12,102	86%		Parent

☐ Show Hidden Fields

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:

Source File: C:\Work\WWW\SearchData\Viz\969\684ac2a4-eac6-4f37-a598-b37f17b998ed.xml  
Source Date: Feb 07 2017 14:58  
Source Database: PatStat

## Summary Sheet

Number of Records: 2,978

Columns i

Field	Number of Items	% Coverage	Data Type	Meta Tags
(filters)				
Abstract	2,808	100%		
Abstract (NLP) (Phrases)	34,636	99%		
Abstract Language	6	100%		Language
Applicant Seq Num	13	99%	Number	
Application Authority	19	100%		Country
Application Number (EPODOC)	2,978	100%		
Application Number (Original)	2,978	100%		
Application Number ▶ Application Country   Application Number   Application Kind	2,978	100%		Parent
Assignee Count	6	100%	Number	
<u>Assignee</u> ▼	1,234	96%		<u>Parent</u>
Assignee (Original)	1,037	96%		Organization, Child
PatStat Standardized Name	837	96%		Organization, Child
PatStat Standardized ID	837	96%		Organization, Child
PatStat Standardized Level	3	96%		Organization, Child
PatStat Standardized Sector	9	96%		Organization, Child
Address	304	26%		Child
Country	28	50%		Country, Child
Citations ▶ Cited Patent Publication ID   Cited Application	28,362	62%		Parent

☐ Show Hidden Fields

## 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.

		# Records		# Instances		Publication Number (long)	
				Number		Date	
1	1	1	US				
2	1	1	US				
3	1	1	US				
4	1	1	US				
5	1	1	US				
6	1	1	US				
7	1	1	US				
8	1	1	US				
9	1	1	US				
10	1	1	US				
11	1	1	US				
12	1	1	US				
13	1	1	US				
14	1	1	US				
15	1	1	US				
16	1	1	WO				
17	1	1	US				
18	1	1	EP				
19	1	1	US				
20	1	1	US	8395276		20130312	
21	1	1	US	8393979		20130312	
22	1	1	US	8394881		20130312	
23	1	1	US	8394876		20130312	
24	1	1	EP	2563486		20130306	
25	1	1	EP	2563488		20130306	
26	1	1	JP	5158336		20130306	
27	1	1	JP	5159285		20130306	
28	1	1	EP	2365125		20130306	
29	1	1	EP	2563487		20130306	
30	1	1	US	8388468		20130305	
31	1	1	US	8388882		20130305	
32	1	1	US	8388466		20130305	
33	1	1	US	8388467		20130305	
34	1	1	JP	2013030361		20130228	

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	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	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	Year
Record Link	1,498	100%	Link	
Title	1,914	97%		Record Title

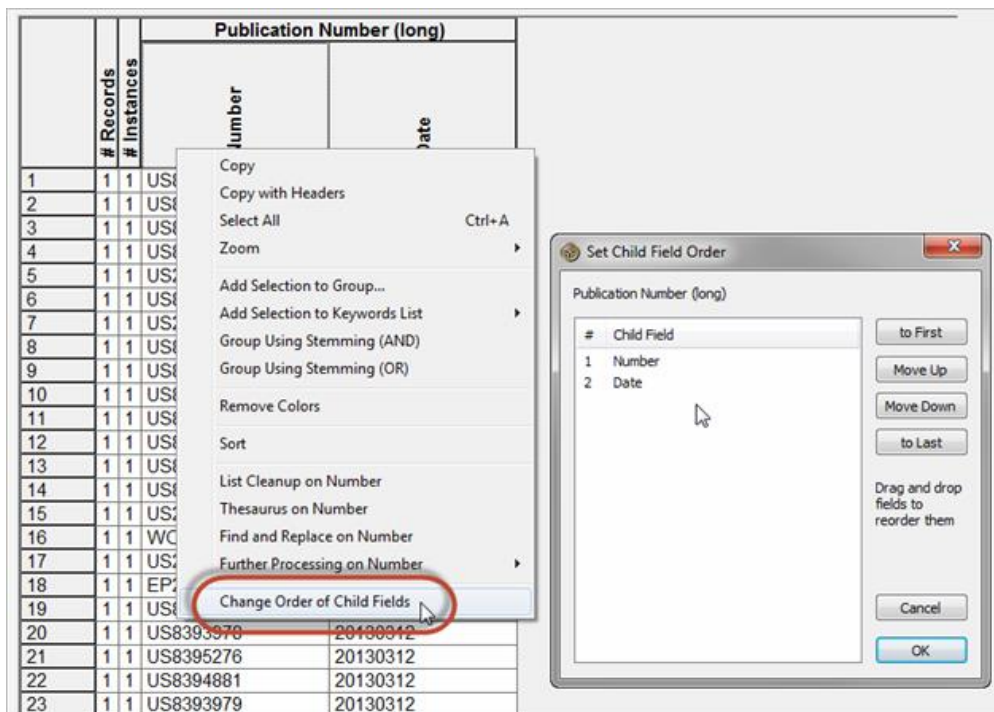
### Swapping in an Inactive Child Field

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	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	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.)

## 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	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
		# Records	57	25	22	16	13	14	18	18	13	10	54	35	39	20	22	15	4	5	4	2	1	2
		▼ ▲																						
		Show Values >= 1 and <= 36																						
		Cooccurrence # of Records																						
		▼ ▲																						
	Publication Number (long)	# 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	30	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

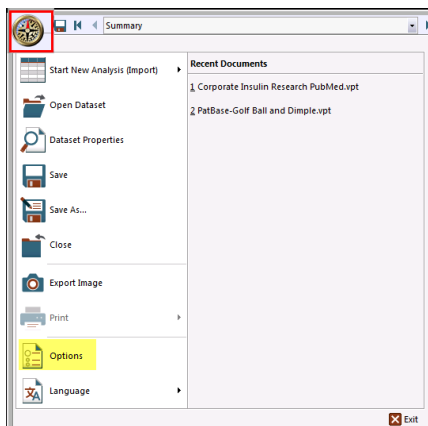
---

## APP BUTTON

---

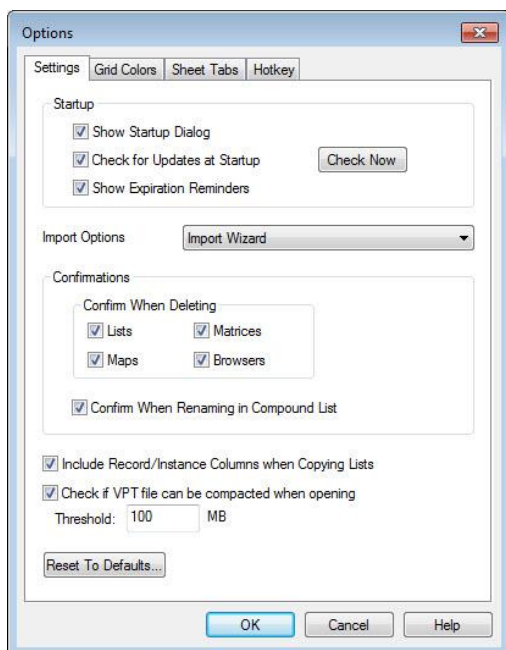
### Options dialog

Set personal preferences in VantagePoint by clicking the App Button and choosing **Options**.



### Settings

You are presented with the **Options** dialog. Four Tabs at the top are presented: Settings, [Grid Colors](#), [Sheet Tabs](#), and [Hotkey](#).



#### 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

Set 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.

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.

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.

## Enabling or disabling the startup dialog box

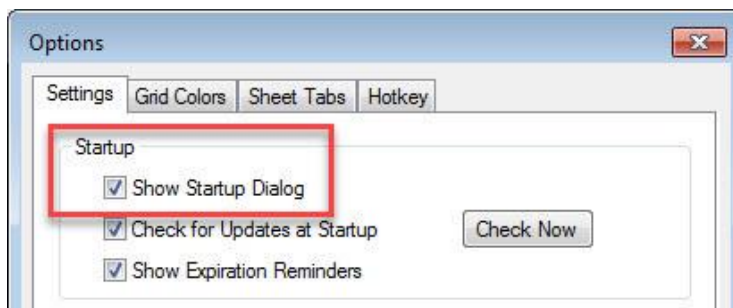
When VantagePoint is first started, a dialog box appears giving you the choice to Import a File or Open an Existing VantagePoint File. This dialog box can be enabled or disabled as follows:



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



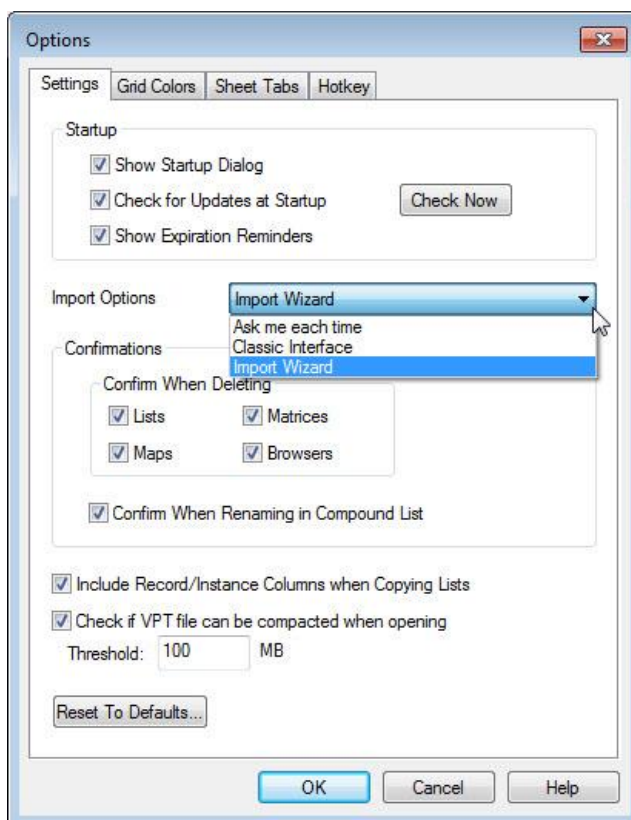
From the App Button , select **Options...**

The **Options** dialog 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**.

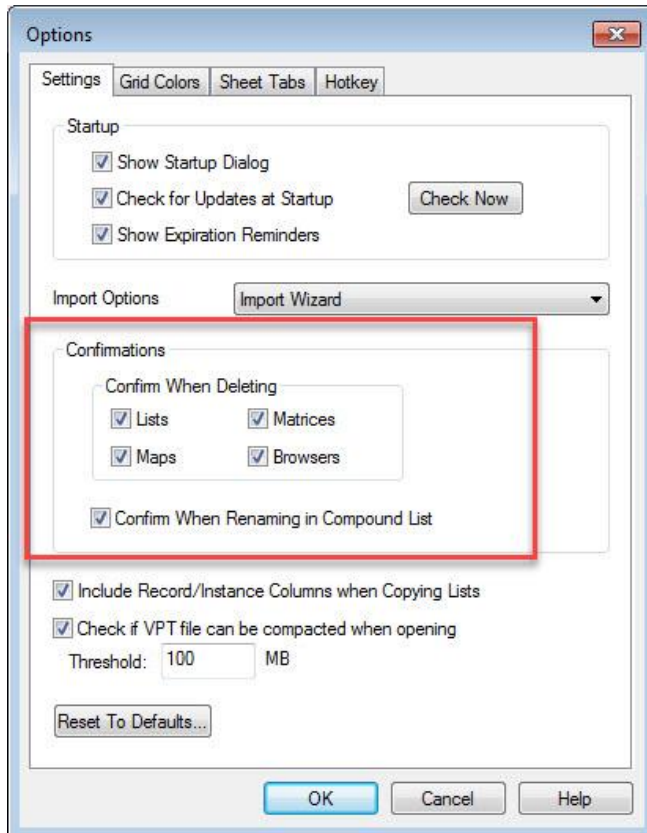


## Changing the Confirmations Settings

### Confirm When Deleting

You can choose whether VantagePoint will prompt you for confirmation when deleting sheets in a dataset.

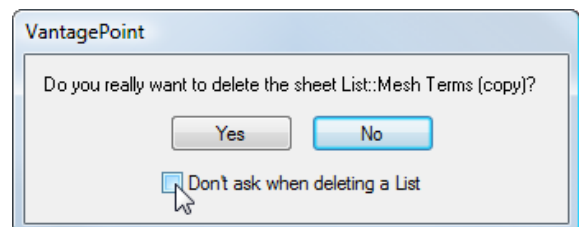
The setting is found on the Settings tab of the **Options** dialog. (Click the App Button , and select **Options**.)



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 VantagePoint questioning you. 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.

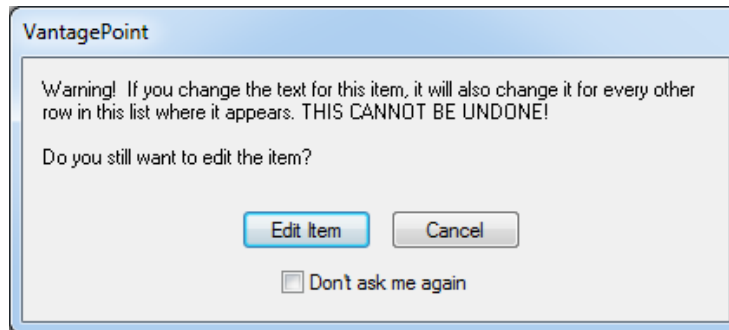




## Confirm When Renaming in Compound List

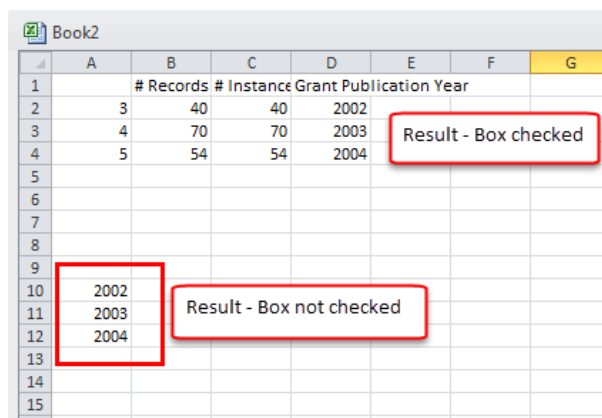
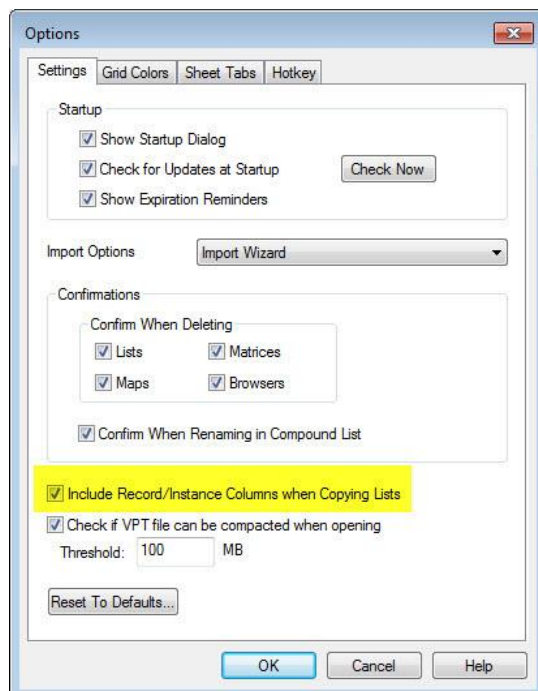
Check the "Confirm When Renaming in Compound List" box to receive a Confirmation prompt when you attempt to edit an item in a List View that is one of a parent/child field ("Compound List").

Before you edit the item, you will receive this Warning:



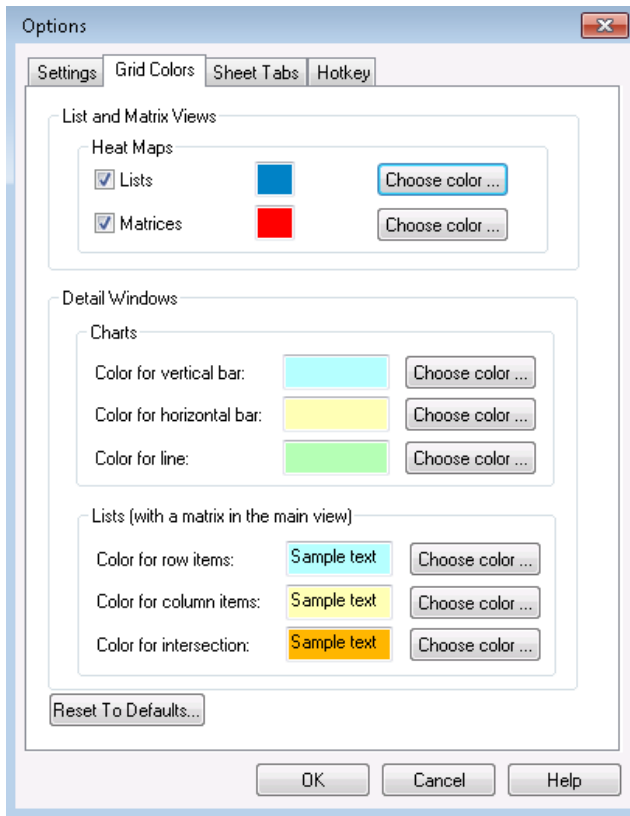
## Include Record/Instance Columns when Copying Lists

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.

An Excel spreadsheet titled "Book2" showing data exported from VantagePoint. The spreadsheet has columns A through G. Row 1 contains headers: "# Records", "# Instance", "Grant", "Publication Year". Rows 2-4 contain data. A red box highlights the "Grant" column (column D) for rows 2-4, with the text "Result - Box checked" next to it. Another red box highlights the "Publication Year" column (column E) for rows 2-4, with the text "Result - Box not checked" next to it.

	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							

## **Grid Colors:**

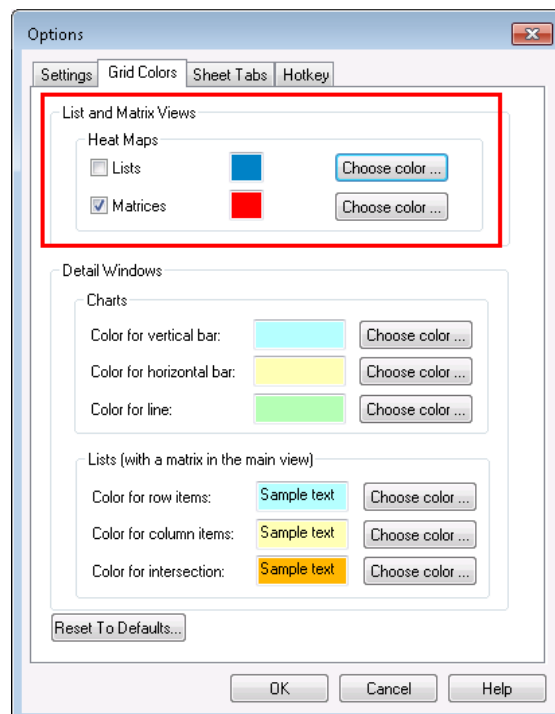


## ***Heat Maps Settings***

The VantagePoint 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.

See the Topics [Detail Window Colors](#) and [Detail Windows - Colors for Charts](#) for details about these settings.



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 left screenshot shows a right-click context menu for a List view. The menu includes options like Copy, Copy with Headers, Select All, Zoom, Add Selection to Group..., Add Selection to Keywords List, Group Using Stemming (AND), Group Using Stemming (OR), Remove Colors (highlighted), Sheet Properties..., and Edit Item Text. The background shows a table with columns for # Records, # Instances, and Grant Publication Year.

The right screenshot shows a right-click context menu for a Matrix view. The menu includes options like Copy, Select All, Zoom, Add Row Selections to Group, Add Column Selections to Group, List Cells In Matrix, Remove Colors (highlighted), Sheet Properties..., Reset Matrix, and Sort Row. The background shows a matrix with columns for Assignee:PatStat Standardized Name and rows for IPC Subclasses.

## 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:

The screenshot shows the 'Options' dialog box with the 'Sheet Tabs' tab selected. The 'Default Tab Colors' section lists five categories: List, Matrix (including Factor), Map, Charts, and Summary. Each category has a 'Sample text' box and a 'Choose color...' button. The 'Summary' tab is highlighted in blue in the background. The dialog box also has a 'Reset To Defaults...' button and 'OK', 'Cancel', and 'Help' buttons at the bottom.

## **Hotkey:**

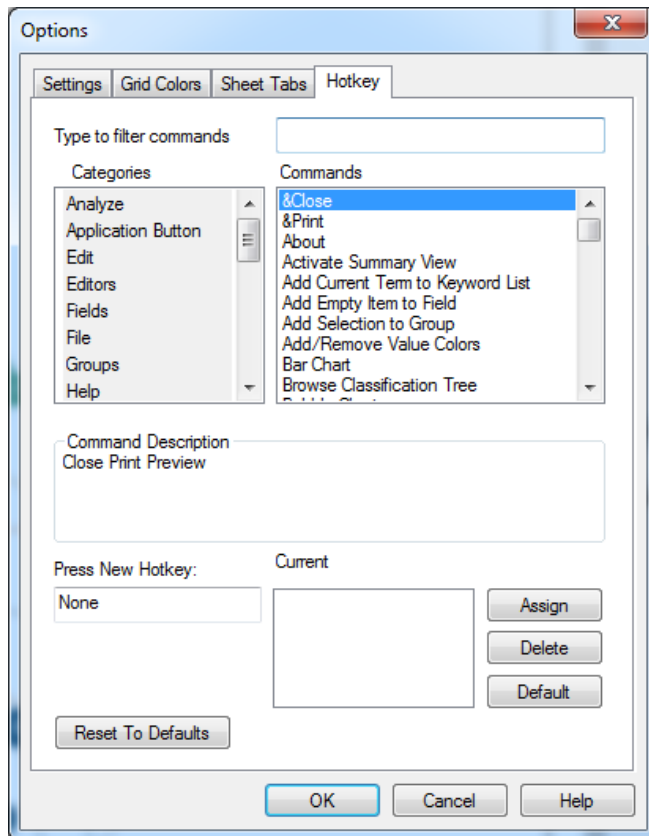
You can assign Hotkeys/Keyboard shortcuts for many VantagePoint commands.



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 “type to filter commands” to quickly locate a command.

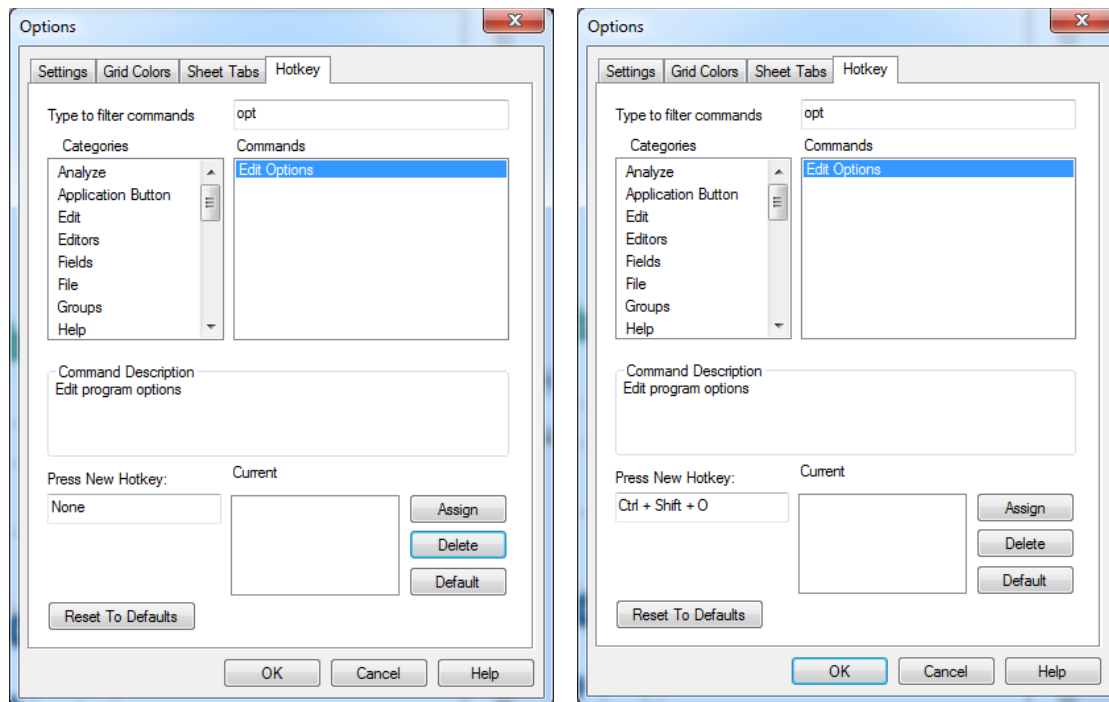
Click in the “Press New Hotkey” field, and, using your keyboard, type the characters for your shortcut. Click **Assign** to add.

An example appears on the following page.

In this example, the user wants to assign a shortcut to open the Options dialog.

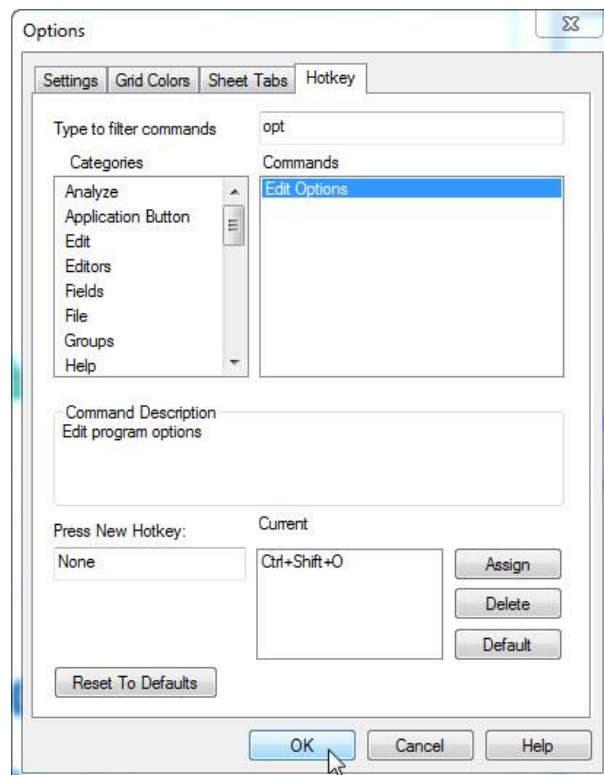
In the "Type to filter commands" field, the user is typing "options", and the "Edit Options" command appears in the Commands window.

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 Ctrl key then Shift then 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** to finish.

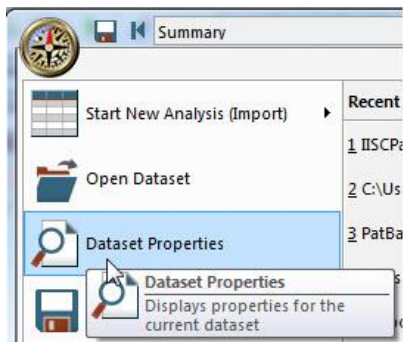
Now when the user presses the keys "Ctrl Shift o", the Options dialog will appear.



## Dataset Properties



The **Dataset Properties** are accessed from the App button :



**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 | Path for "Link" Data Type:

Title View Field: Title

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

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.

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 (also known as database configurations) that are saved in your \*.vpt files (imported using VantagePoint version 3.0 and later), or
- Attach import filters to \*.vpt files (imported using versions of VantagePoint v2.x and earlier).

See [Changing Database Configurations in a VantagePoint file](#).

**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.

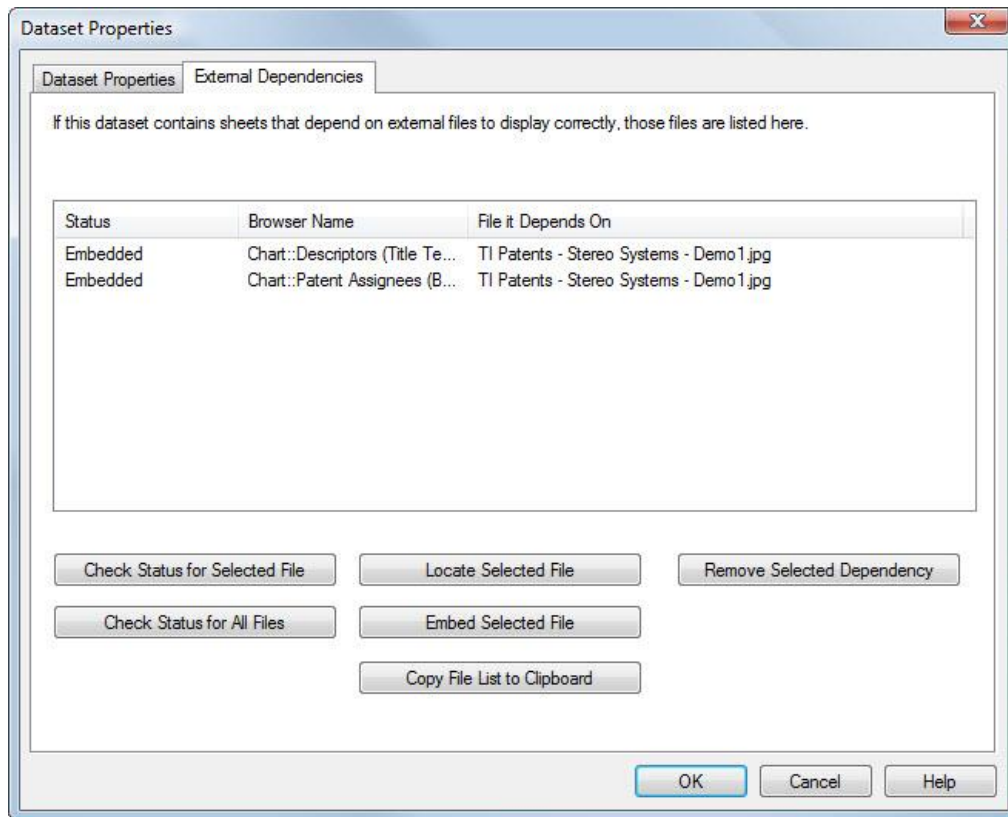
**Embed Selected File** – Embeds the selected dependency file in the \*.vpt data file. If successful, the file's "Status" will change from "OK" to "Embedded".

**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.

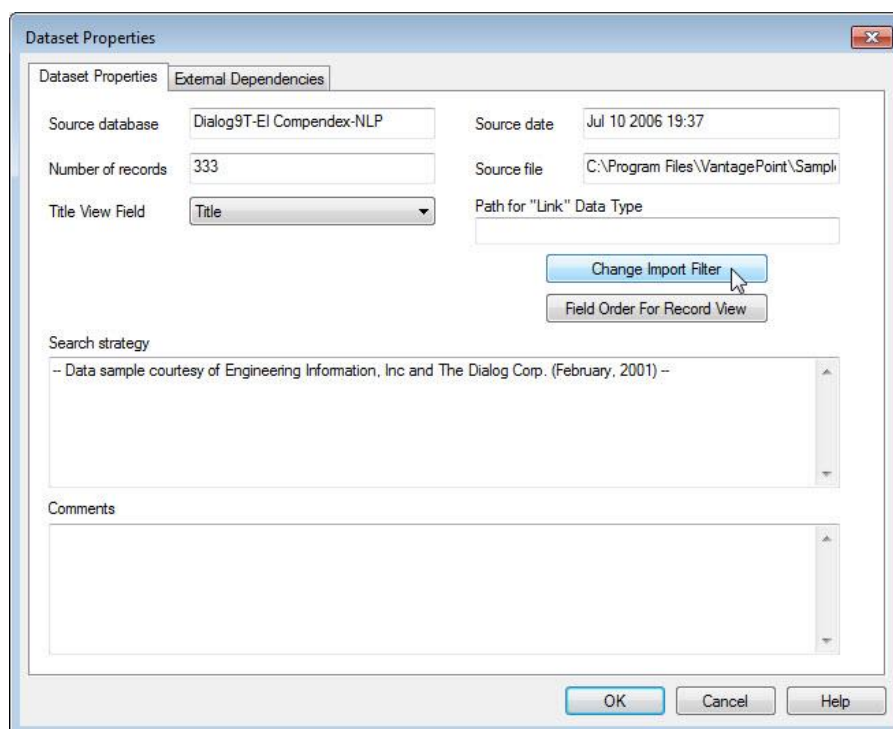
Usually, you do not need to update an import filter in a dataset. When you do, it is usually because you have received an updated import filter and want to update the database configuration in your data file (\*.vpt) so you can take advantage of new fields that can be parsed from the raw data.

The process of changing import filters in a VantagePoint file begins in the **Dataset Properties** dialog box (see [Dataset Properties](#)). You may 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:**

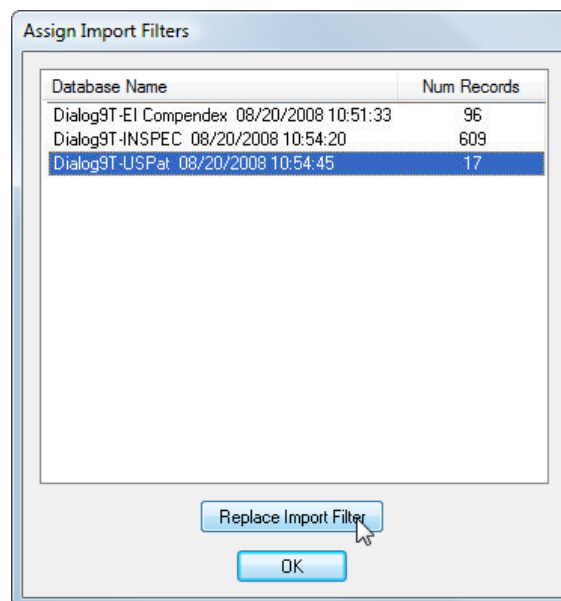
Click **Change Import Filter** in the Dataset Properties dialog.



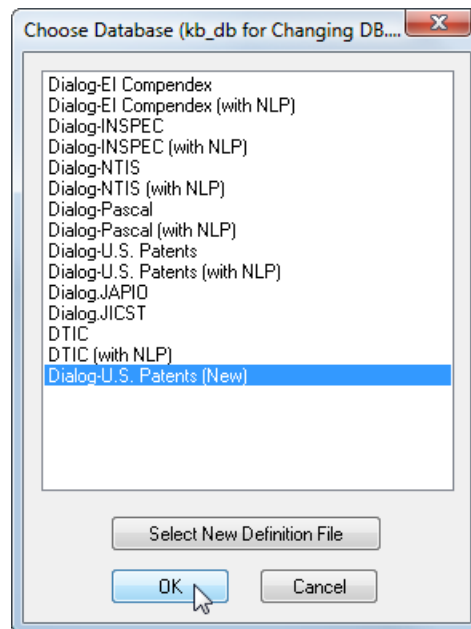
The list shown in the **Assign Import Filters** dialog gives the database configurations currently contained in your \*.vpt file and the number of records associated with each database configuration. Each record is associated with no more than one database configuration.

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**.

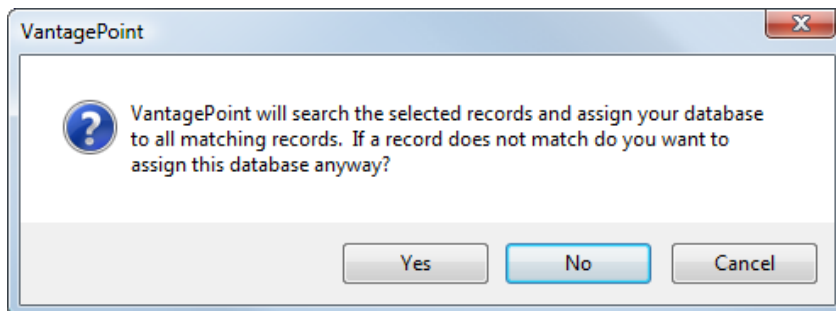
Here, we are updating the import filter for 17 records currently associated with the "Dialog9T-USPat" database.



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:

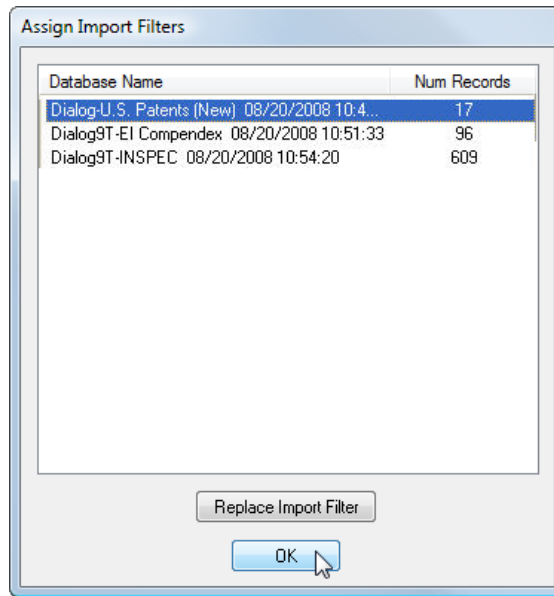


**Yes** - Assigns the selected database configuration to all records selected in the Assign Databases dialog earlier. This forces an association, and should only be used in exceptional situations.

**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 here.



**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 click **Cancel** in the **Dataset Properties** dialog.

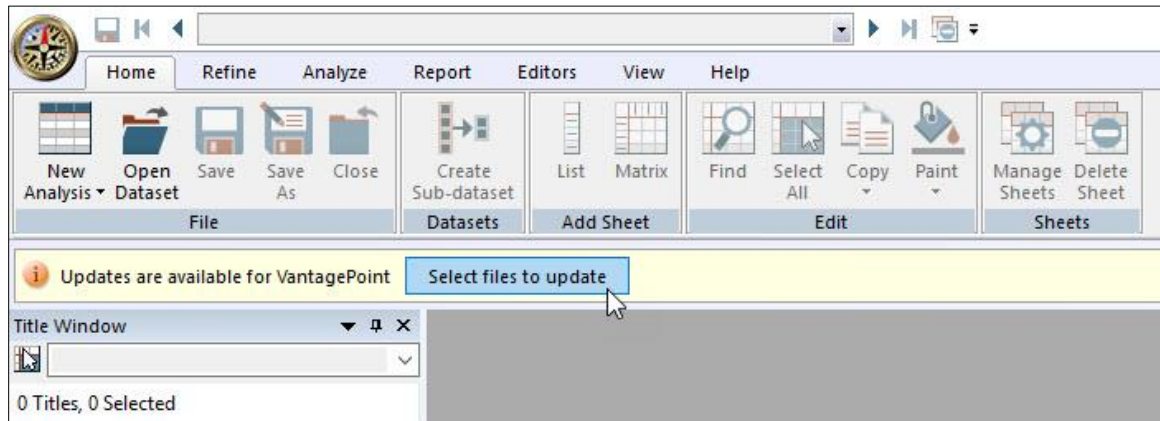
---

## ADDITIONAL TOPICS

---

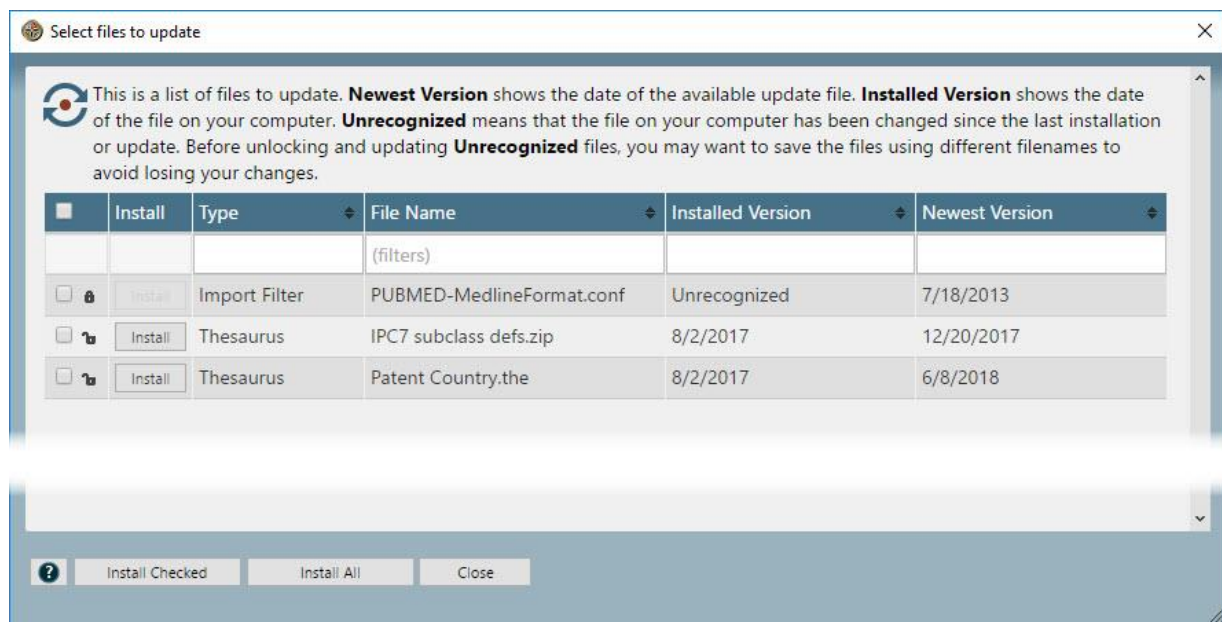
### Updating Files in VantagePoint

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:

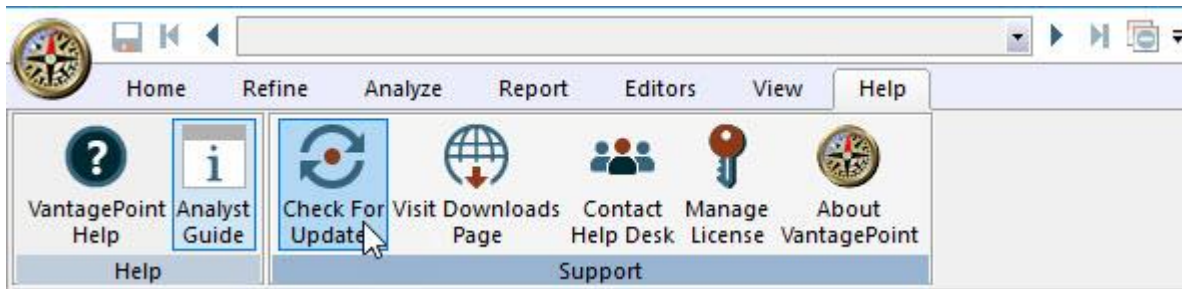


Click the button 'Select files to update' and you will see a list of files to update.

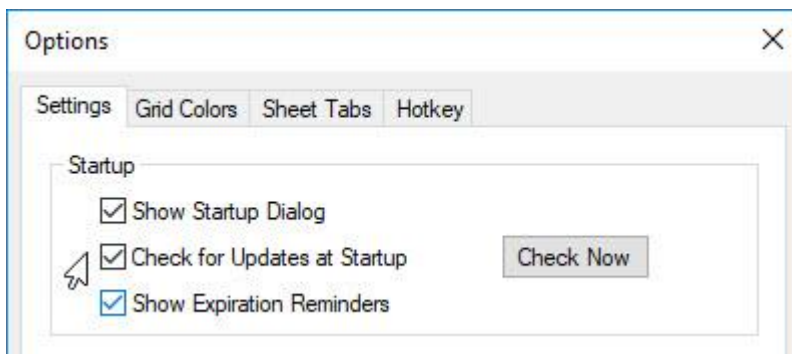
The column **Newest Version** shows the date of the available update file. **Installed Version** shows the date of the file on your computer. "Unrecognized" means that the file on your computer has been changed since the last installation or update. These files have a "locked" icon to prevent accidental 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 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:

Manage VantagePoint License

Your Registration Code Is: 1234-5678-9ABC-D

Your License Expires: Never

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 |

Activate New Registration Code

Deactivate Automatically through the Internet

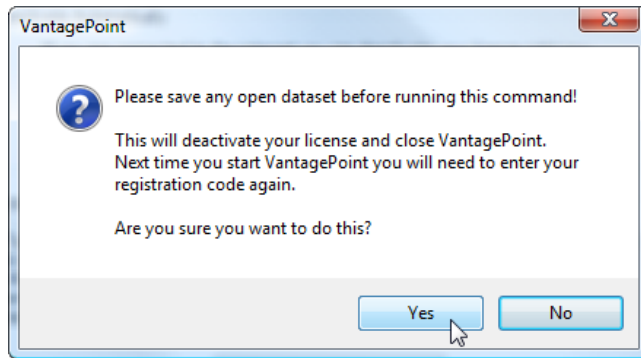
If you want to install VantagePoint on a different computer, simply Deactivate the license here. After that you can use your Registration Code to activate the software on another computer.

Deactivate Now

Test Network Connection



You are presented with the warning box for confirmation:



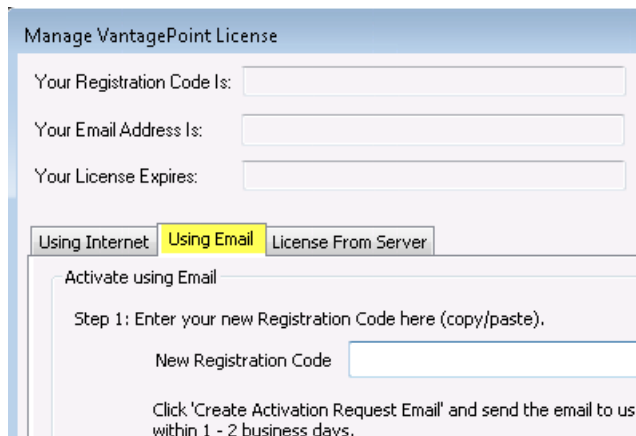
When you are ready to accept, click **Yes**. You should receive a message box stating: "Successfully deactivated license. VantagePoint will now close". Click **OK**. VantagePoint closes.

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.)

Click the **Using Email** tab.

A screenshot of a "Manage VantagePoint License" dialog box. It has three input fields at the top: "Your Registration Code Is:", "Your Email Address Is:", and "Your License Expires:". Below these are three tabs: "Using Internet", "Using Email" (which is highlighted in yellow), and "License From Server". Under the "Using Email" tab, the text says "Activate using Email" followed by "Step 1: Enter your new Registration Code here (copy/paste).". There is a text input field labeled "New Registration Code". At the bottom, it says "Click 'Create Activation Request Email' and send the email to us within 1 - 2 business days."

1. Click the **Create Deactivation Code** button.

Manage VantagePoint License

Your Registration Code is: 1234-5678-9ABC-D

Your License Expires: Never

Using Internet Using Email License From Server

Activate using Email

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

New Registration Code

Create and send us this Activation Request Email. We will reply with an Activation Code which will allow you to run the software (requires 1-2 business days).

Create Activation Request Email

Activation Request Code 1234-5678-9ABC-DEFG-HIJK-LMN

Activation Code

Activate now!

Deactivate using Email

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).

Create Deactivation Code

Deactivation Code A1B2-C3D4-EF5G-67Hi-J8K9-LMN

Create Deactivation Request Email

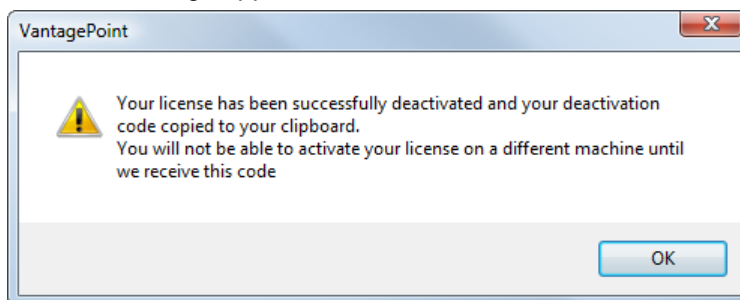
View Contact Info

OK Help

A Warning box appears, advising that performing this action will deactivate your license and close VantagePoint.

Click **Yes** to confirm, if you want to proceed.

Another message appears:



Press **OK** to dismiss the message. *NOTE: This does not complete the process - you must continue through step 3.*

2. A Deactivation Code has been assigned and appears in the "Deactivation Code" field.
3. Click the **Create Deactivation Request Email** button.

An email addressed to "activate@searchtech.com" appears, with the Deactivation Code pasted in the body of the email. **Send** the email. *You must send us the Deactivation Code before you can activate VantagePoint on another computer.* Press **OK** in the dialog box. VantagePoint closes.

You should receive an email from "activate@searchtech.com" confirming your Registration Code was successfully deactivated. The Deactivation process is not complete until you receive this confirmation.

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. If your computer is not connected to the internet, you must [Repair using Email](#).

### 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.

The screenshot shows a 'Repair License' dialog box with the following elements:

- Title Bar:** 'Repair License' with a close button (X).
- Message:** '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'. A text box contains '1234-5678-9ABC-DE'. A red callout bubble points to it with the text '1. Paste your Registration Code here'.
- Step 2:** 'Choose whether to repair automatically through the internet or by contacting us another way'.
  - Radio Button:** 'Repair Automatically through the Internet' (unselected).
  - Buttons:** 'Repair Now!' and 'Test Network Connection'.
  - Radio Button:** 'Repair using Email' (selected).
  - Text:** '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).'
  - Buttons:** 'Create Request Email' (highlighted with a mouse cursor and a red callout bubble saying '2. Click this Button'), 'Repair Request Code' (containing 'PUMJ-VoN...'), 'Repair Code' (empty), 'Activation Code' (empty), and 'Repair now!'.
- Footer Buttons:** 'View Error Codes' and 'Close Without Activating'.

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.) Continue with the steps below:

**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).

Repair Request Code

Repair Code

Activation Code

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.

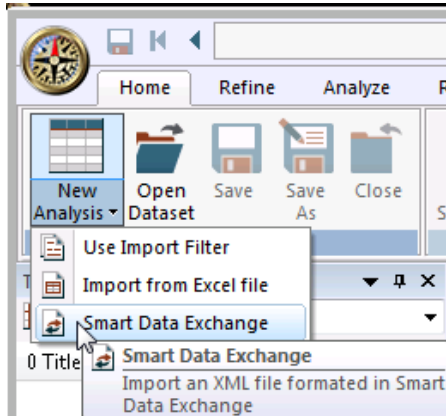
You will receive a "License successfully activated!" message box. Click **OK**. VantagePoint should open.

See Also:

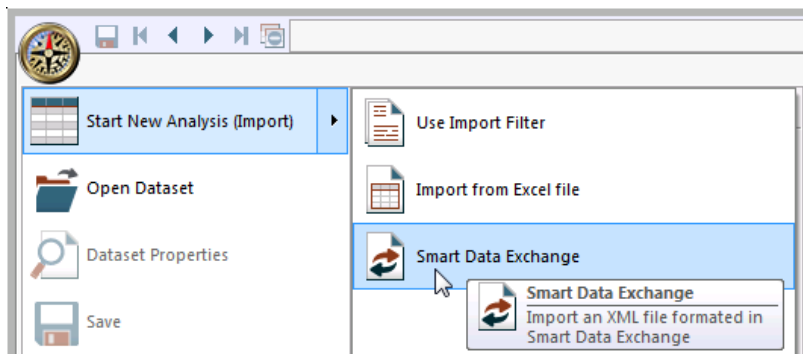
[Registration Code - Activating/Reactivating your License](#)

## 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)

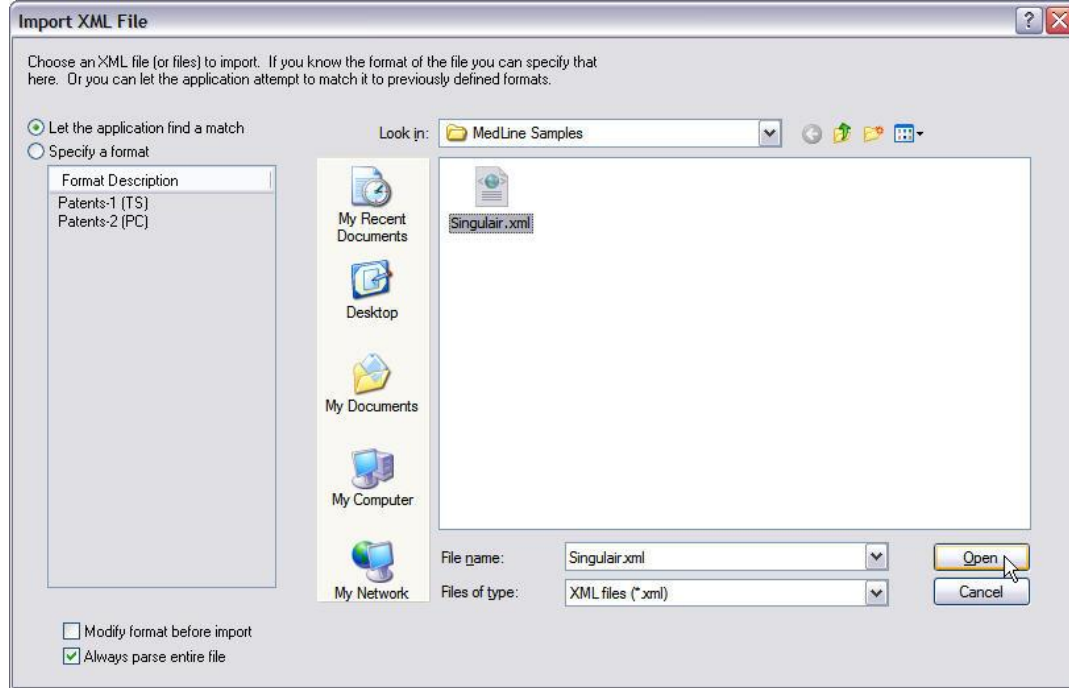
The wizard for importing XML files helps you import XML data and, if the XML format has not previously been imported using the wizard, it helps you create an Import Filter for your data.

**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 now 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).

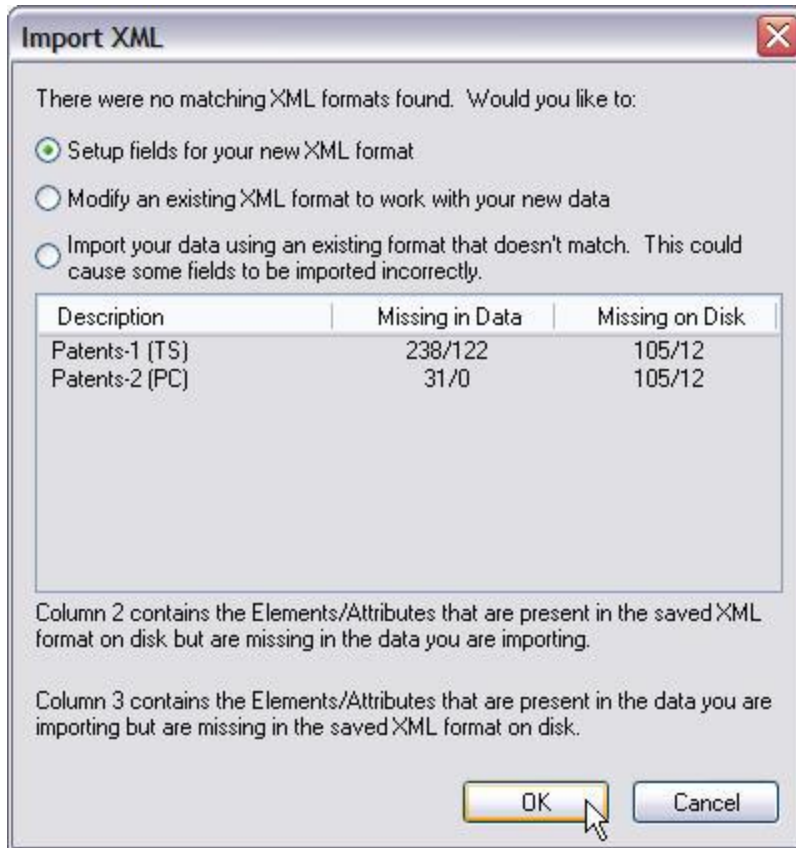
You are presented with the **Import XML File** dialog:



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.

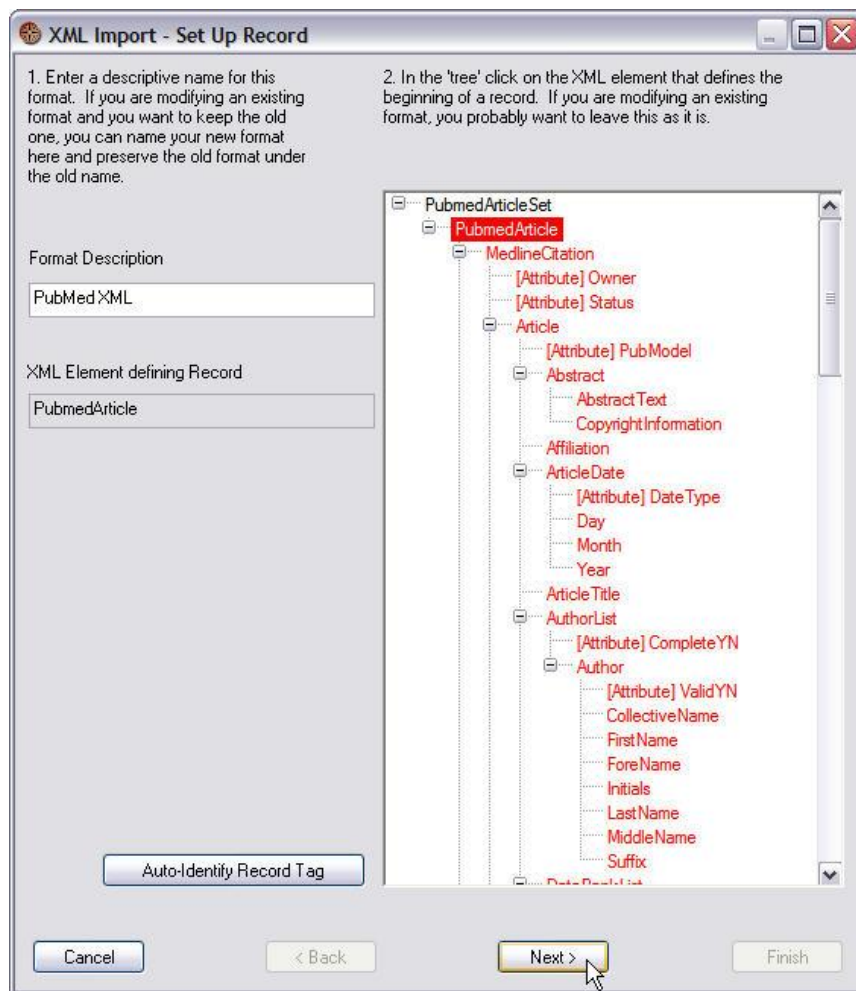
Make your selection and click **OK**. You are taken to the **Set up Record** dialog ([Step 7](#)).

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.

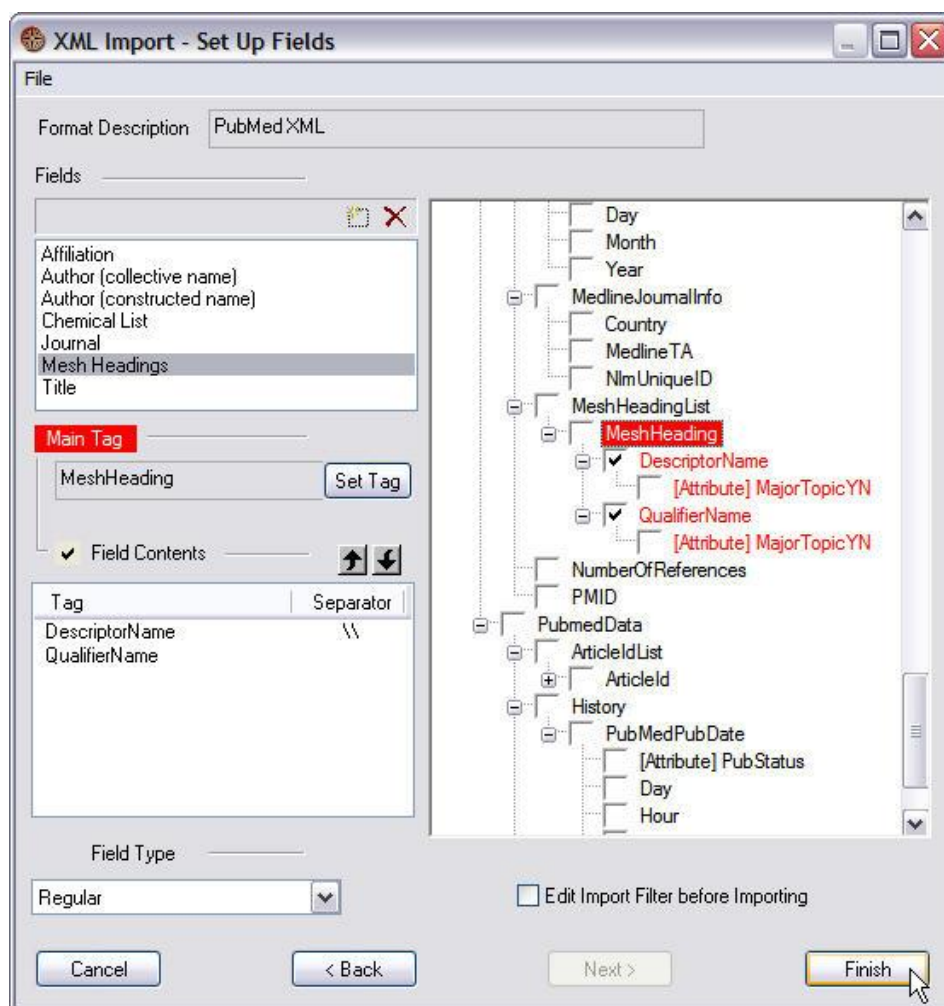
7. In the "Format Description" box, type in a descriptive name for the format. This is used as the filename for the Import Filter, so the rules for naming files apply. This will also be displayed as the “Source Database” in the Summary View.



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.

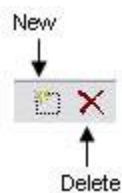


There are four controls on the left side:

- 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**

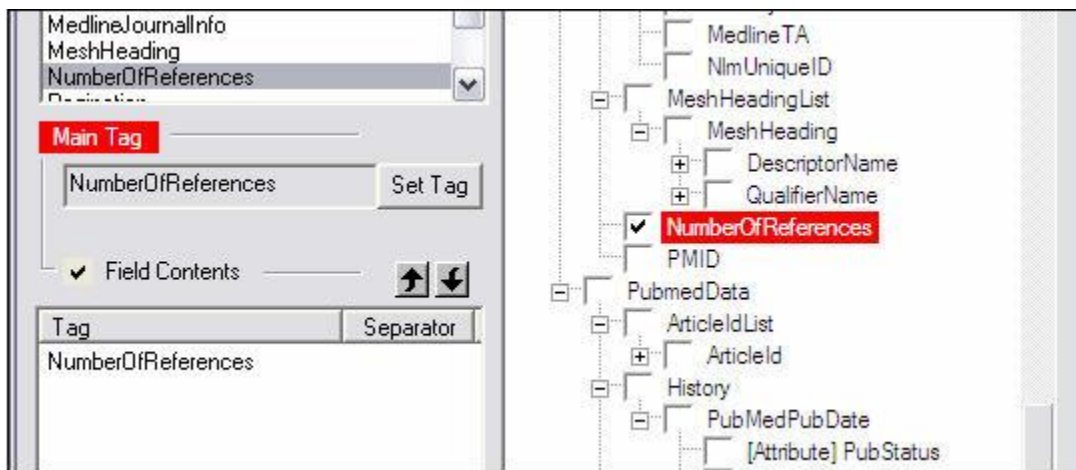
The Main Tag is the XML tag that specifies your field. To set the main tag:

- 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

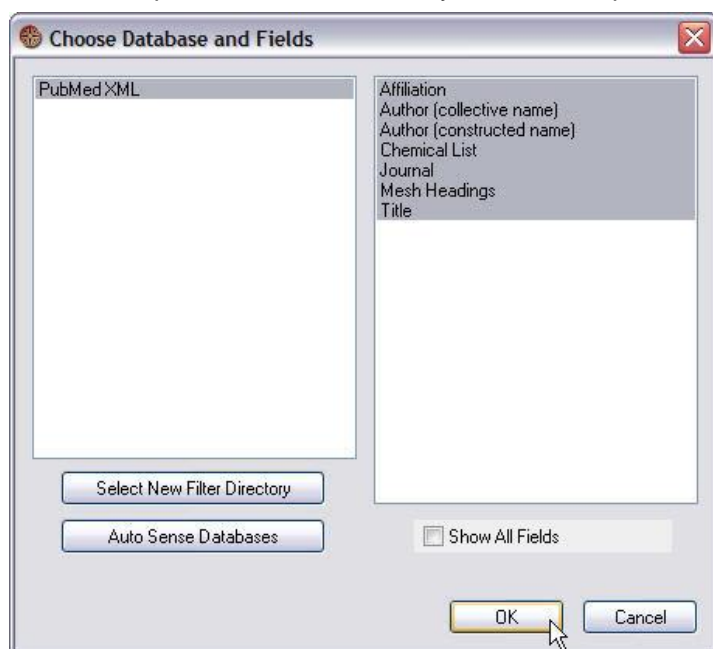
### **Field Type**

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.

## 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 backlash), "-", 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.

"(\\.|-|\\s)" 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 “.

---

## APPENDIX: ADDITIONAL NOTICES

---

*VantagePoint* uses **Visual Basic (Scripting Edition)** from Microsoft Corporation.

---

*VantagePoint* uses **Boost.Regex** under the following permission notice:

Copyright © 1998-2013 John Maddock

Boost Software License - Version 1.0 - August 17th, 2003

Permission is hereby granted, free of charge, to any person or organization obtaining a copy of the software and accompanying documentation covered by this license (the "Software") to use, reproduce, display, distribute, execute, and transmit the Software, and to prepare derivative works of the Software, and to permit third-parties to whom the Software is furnished to do so, all subject to the following:

The copyright notices in the Software and this entire statement, including the above license grant, this restriction and the following disclaimer, must be included in all copies of the Software, in whole or in part, and all derivative works of the Software, unless such copies or derivative works are solely in the form of machine-executable object code generated by a source language processor.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, TITLE AND NON-INFRINGEMENT. IN NO EVENT SHALL THE COPYRIGHT HOLDERS OR ANYONE DISTRIBUTING THE SOFTWARE BE LIABLE FOR ANY DAMAGES OR OTHER LIABILITY, WHETHER IN CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

---

*VantagePoint* uses **Chromium Embedded Framework** from Marshall A. Greenblatt and Google Inc. under the following permission notice:

Copyright © 2008-2014 Marshall A. Greenblatt. Portions Copyright © 2006-2009 Google Inc. All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

- Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
- Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
- Neither the name of Google Inc. nor the name Chromium Embedded Framework nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS 'AS IS' AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT OWNER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

---

VantagePoint uses: **xerces-c.dll** ("software" and "file") from the Apache Software Foundation under the following permission notice:

Copyright 1997-2016 Search Technology, Inc.

Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may also obtain a copy of the License at

<http://www.apache.org/licenses/LICENSE-2.0>

Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License.

---

VantagePoint uses software from **Info-ZIP** under the following permission notice:

Copyright (c) 1990-2009 Info-ZIP. All rights reserved.

For the purposes of this copyright and license, "Info-ZIP" is defined as the following set of individuals: Mark Adler, John Bush, Karl Davis, Harald Denker, Jean-Michel Dubois, Jean-loup Gailly, Hunter Goatley, Ed Gordon, Ian Gorman, Chris Herborth, Dirk Haase, Greg Hartwig, Robert Heath, Jonathan Hudson, Paul Kienitz, David Kirschbaum, Johnny Lee, Onno van der Linden, Igor Mandrichenko, Steve P. Miller, Sergio Monesi, Keith Owens, George Petrov, Greg Roelofs, Kai Uwe Rommel, Steve Salisbury, Dave Smith, Steven M. Schweda, Christian Spieler, Cosmin Truta, Antoine Verheijen, Paul von Behren, Rich Wales, Mike White.

This software is provided "as is," without warranty of any kind, express or implied. In no event shall Info-ZIP or its contributors be held liable for any direct, indirect, incidental, special or consequential damages arising out of the use of or inability to use this software.

Permission is granted to anyone to use this software for any purpose, including commercial applications, and to alter it and redistribute it freely, subject to the above disclaimer and the following restrictions:

- Redistributions of source code (in whole or in part) must retain the above copyright notice, definition, disclaimer, and this list of conditions.
- Redistributions in binary form (compiled executables and libraries) must reproduce the above copyright notice, definition, disclaimer, and this list of conditions in documentation and/or other materials provided with the distribution. Additional documentation is not needed for executables where a command line license option provides these and a note regarding this option is in the executable's startup banner. The sole exception to this condition is redistribution of a standard UnZipSFX binary (including SFXWiz) as part of a self-extracting archive; that is permitted without inclusion of this license, as long as the normal SFX banner has not been removed from the binary or disabled.
- Altered versions--including, but not limited to, ports to new operating systems, existing ports with new graphical interfaces, versions with modified or added functionality, and dynamic, shared, or static library versions not from Info-ZIP--must be plainly marked as such and must not be misrepresented as being the original source or, if binaries, compiled from the original source. Such altered versions also must not be misrepresented as being Info-ZIP releases--including, but not limited to, labeling of the altered versions with the names "Info-ZIP" (or any variation thereof, including, but not limited to, different capitalizations), "Pocket UnZip," "WiZ" or "MacZip" without the explicit permission of Info-ZIP. Such altered versions are further prohibited from misrepresentative use of the Zip-Bugs or Info-ZIP e-mail addresses or the Info-ZIP URL(s), such as to imply Info-ZIP will provide support for the altered versions.
- Info-ZIP retains the right to use the names "Info-ZIP," "Zip," "UnZip," "UnZipSFX," "WiZ," "Pocket UnZip," "Pocket Zip," and "MacZip" for its own source and binary releases.

---

Some macros distributed by Search Technology, Inc. use the **ChartDirector** API, which is distributed under the ChartDirector Redistribute License, to which the following notices apply:

- This software is based in part on the work of the Independent JPEG Group
- This software is based in part on the work of the FreeType Team

Under the ChartDirector Redistribute License, *VantagePoint* users ("End User") are permitted to run Macros distributed by Search Technology, Inc. The ChartDirector Redistribute License prohibits development of Macros by the End User. If an End User wants to develop macros that use the ChartDirector API, they must acquire a ChartDirector Developer License (see <http://www.advsofteng.com> ).

---

*VantagePoint* uses software from the **d3.js** JavaScript library under the following permission notice:

Copyright © 2010 - 2016 Mike Bostock

All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

- Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
- Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and / or other materials provided with the distribution.
- Neither the name of the author nor the names of contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT OWNER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

---

*VantagePoint* uses software (**jquery**, **jquery-ui**) from the jQuery Foundation under the following permission notice:

Copyright © jQuery Foundation and other contributors, <https://jquery.org/>

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and / or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions :

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

---

*VantagePoint* uses software (**phantomjs.exe**) under the following permission notice:

Copyright © Ariya Hidayat 2012

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

- Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
- Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and / or other materials provided with the distribution.
- Neither the name of the <organization> nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL <COPYRIGHT HOLDER> BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

---

*VantagePoint* uses software (**tablesorter**) under the following permission notice:

Copyright © 2014 Christian Bach

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and / or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions :

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

---

*VantagePoint* is based upon work supported by the Defense Advanced Research Projects Agency, the U.S. Army Tank-automotive and Armaments Command, and the U.S. Army Aviation and Missile Command under Contract DAAH01-96-C-R169.