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.
# TABLE OF CONTENTS

## INTRODUCTION
- Quick Reference for Menu ................................................................. 1
- Installation from CD ........................................................................... 2
- Contents of the VantagePoint Directory ............................................. 3
- Getting Started – Registration Code Activation ............................... 4
- Activating VantagePoint using License from Server ....................... 6
- Registration Code – Moving VantagePoint from one computer to another ... 8
- Startup Dialog .................................................................................. 11
- Files and Datasets ........................................................................... 15
- Records and Fields ......................................................................... 16

## OVERVIEW
- The VantagePoint Window ................................................................. 17
- The Main Workspace ......................................................................... 18
- Zooming in a List or Matrix ............................................................... 19
- The Title View ................................................................................ 21
- How to Update the Title View ........................................................... 22
- How to Display a Record ................................................................. 22
- The Record Display ......................................................................... 23
- Detail Windows ................................................................................ 25
- The Summary View ......................................................................... 26
- My Keywords .................................................................................. 29
- Field Statistics ............................................................................... 34
- Sheet Management .......................................................................... 36
- Delete the Current Sheet ................................................................. 38
- Rename the Current Sheet ............................................................... 38
- Canceling VantagePoint Processes .................................................. 39
- Context-Sensitive Help ................................................................... 40
- Analyst’s Guide ............................................................................... 41
- Customize Toolbars ......................................................................... 43

## FILES
- Importing a Raw Data File ............................................................... 46
  - Importing a Raw Data File using Import Wizard ........................... 47
  - Importing a Raw Data File using Classic Interface ...................... 49
  - Import Database Table .................................................................. 52
  - Import XML (Smart Data Exchange) ............................................ 55
  - Import XML (Wizard) ................................................................. 56
- Importing Additional Fields ............................................................... 62
- Dataset Properties........................................................................... 64
- Opening a VantagePoint File ............................................................ 67
  - Opening a VantagePoint file using the startup dialog box .......... 67
  - Opening a VantagePoint file using the Main Menu .................... 67
- Creating a Sub-Dataset .................................................................... 68
- Exporting Fielded Records ............................................................... 69
- Exporting Raw Records .................................................................. 72
- Saving a VantagePoint File ............................................................... 73
- Merging Two VantagePoint Files .................................................... 73
- Removing Duplicate Records in a VantagePoint File ..................... 75
- Combining Duplicate Records in a VantagePoint File ..................... 76
- Record Fusion ............................................................................... 77
### Lists

<table>
<thead>
<tr>
<th>Topic</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>List views</td>
<td>80</td>
</tr>
<tr>
<td>Creating a list view</td>
<td>80</td>
</tr>
<tr>
<td>Sorting rows in a list view</td>
<td>81</td>
</tr>
<tr>
<td>Renaming a field</td>
<td>81</td>
</tr>
<tr>
<td>Copying a field</td>
<td>82</td>
</tr>
<tr>
<td>Merging fields</td>
<td>83</td>
</tr>
<tr>
<td>Deleting a field</td>
<td>84</td>
</tr>
<tr>
<td>Further Processing</td>
<td>85</td>
</tr>
<tr>
<td>Selecting multiple items in a list view</td>
<td>87</td>
</tr>
<tr>
<td>Copy / Copy with Headers</td>
<td>87</td>
</tr>
<tr>
<td>Edit item text</td>
<td>88</td>
</tr>
<tr>
<td>Finding a string in a list view</td>
<td>88</td>
</tr>
<tr>
<td>The Find String Dialog Box</td>
<td>89</td>
</tr>
<tr>
<td>Finding and selecting all items containing a string in a list view</td>
<td>91</td>
</tr>
</tbody>
</table>

#### Groups

<table>
<thead>
<tr>
<th>Topic</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Groups of list items</td>
<td>92</td>
</tr>
<tr>
<td>The Manage Groups Dialog Box</td>
<td>93</td>
</tr>
<tr>
<td>Creating a group in a list view</td>
<td>94</td>
</tr>
<tr>
<td>Renaming a group</td>
<td>94</td>
</tr>
<tr>
<td>Deleting a group</td>
<td>95</td>
</tr>
<tr>
<td>Adding items to a group in a list view</td>
<td>95</td>
</tr>
<tr>
<td>Removing items from a group in a list view</td>
<td>96</td>
</tr>
<tr>
<td>Adding/Clearing/Toggling group membership for selected list items</td>
<td>96</td>
</tr>
<tr>
<td>Using Group Exclusion (x) in new dataset operations</td>
<td>97</td>
</tr>
<tr>
<td>Create field from group items</td>
<td>97</td>
</tr>
<tr>
<td>Create field from group names</td>
<td>98</td>
</tr>
</tbody>
</table>

#### Meta Tags

<table>
<thead>
<tr>
<th>Topic</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adding Meta tags for fields</td>
<td>99</td>
</tr>
<tr>
<td>Meta Tag Editor</td>
<td>100</td>
</tr>
</tbody>
</table>

### Tools for Working with Lists

<table>
<thead>
<tr>
<th>Topic</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cleaning a list</td>
<td>102</td>
</tr>
<tr>
<td>List cleanup confirmation</td>
<td>104</td>
</tr>
<tr>
<td>Saving the Cleanup Session</td>
<td>112</td>
</tr>
<tr>
<td>Applying a thesaurus to a list</td>
<td>114</td>
</tr>
<tr>
<td>Find and replace</td>
<td>115</td>
</tr>
<tr>
<td>Creating a thesaurus using groups</td>
<td>116</td>
</tr>
<tr>
<td>Merging “List Cleanup” and “Thesaurus Using Groups” into an existing thesaurus</td>
<td>117</td>
</tr>
<tr>
<td>Managing multiple matches in a thesaurus</td>
<td>118</td>
</tr>
<tr>
<td>Thesaurus editor</td>
<td>120</td>
</tr>
<tr>
<td>Editing a Thesaurus</td>
<td>122</td>
</tr>
<tr>
<td>Editing a Thesaurus Pattern</td>
<td>125</td>
</tr>
<tr>
<td>Fuzzy matching editor</td>
<td>126</td>
</tr>
</tbody>
</table>

#### Tools for working with groups in a list

<table>
<thead>
<tr>
<th>Topic</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Creating groups by comparing two lists</td>
<td>128</td>
</tr>
<tr>
<td>Creating groups using a thesaurus</td>
<td>131</td>
</tr>
<tr>
<td>Creating groups using stemming</td>
<td>133</td>
</tr>
</tbody>
</table>

### Overview of Parent Fields, Child Fields, and Table Views

<table>
<thead>
<tr>
<th>Topic</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Working with child fields</td>
<td>136</td>
</tr>
<tr>
<td>Parent fields in other views: Matrix, Map, Details</td>
<td>140</td>
</tr>
</tbody>
</table>
## Co-Occurrence Matrix
- Creating a Co-Occurrence Matrix of List Items or Groups .................................................. 150
- Sorting Rows or Columns in a Co-Occurrence View ................................................................. 151
- Flooding a Co-Occurrence Matrix .................................................................................................. 153
- Heat Map ........................................................................................................................................ 154
- Painting Cells in a Co-Occurrence View ....................................................................................... 155
- Selecting Multiple Cells in a Co-Occurrence View ....................................................................... 157
- Finding a String in a Co-Occurrence View .................................................................................... 157
- Exporting a Co-Occurrence Matrix .................................................................................................. 158
- List Cells in Matrix .......................................................................................................................... 160
- Detail Window Colors (Matrix View) ............................................................................................... 163

## Correlation Matrix
- Creating an Auto-Correlation Matrix ............................................................................................. 165
- The Cross-Correlation Matrix .......................................................................................................... 167
- Creating a Cross-Correlation Matrix ............................................................................................... 168

## Factor Matrix
- The Factor Matrix ............................................................................................................................. 170
- Creating a Factor Matrix .................................................................................................................. 171
- Sorting Rows and Columns in a Factor Matrix .................................................................................. 171
- Creating Groups in a Factor Matrix .................................................................................................. 172
- Selecting Multiple Cells in a Factor Matrix View ............................................................................ 173

## Maps
- Cross-Correlation Maps .................................................................................................................... 174
- Creating a Cross-Correlation Map .................................................................................................... 175
- Auto-Correlation Maps ...................................................................................................................... 178
- Creating an Auto-Correlation Map .................................................................................................... 179
- Factors Maps ..................................................................................................................................... 181
- Creating a Factors Map .................................................................................................................... 182
- Using Maps ........................................................................................................................................ 184
- Changing Preferences for Map Display ............................................................................................ 188
- Creating a Principal Components Decomposition (PCD) ............................................................... 193

## Automation and Scripts
- Running Scripts ................................................................................................................................. 195
- Modify Scripts Menu .......................................................................................................................... 196

## Import Filter Editor
- Database Settings .............................................................................................................................. 202
INTRODUCTION

Welcome to your new VantagePoint!

VantagePoint is a powerful text-mining tool for discovering knowledge in text databases. It helps you quickly understand and navigate through large volumes of text-based information, giving you a better way to view your information and turn your information into knowledge. The perspective provided by VantagePoint helps you quickly grasp the significant concepts and entities in your search results, allowing you to clarify relationships and find critical patterns. VantagePoint can import data from hundreds of databases from the major online providers, and you can create import filters to work with your own data sources. Flexible tools such as data cleanup and user-managed thesauri provide automated and user-assisted normalization of data. With Visual Basic Scripting, you can write scripts that automate repetitive analysis procedures, and you can launch those scripts with a single click. VantagePoint is used by large and small companies, government agencies, and academic institutions world-wide for Competitive Technical Intelligence, Patent Analysis, and Technology Management to mine intelligence from online data repositories.

If this is your first time using VantagePoint, this manual will help introduce you to the many features and tools built into VantagePoint. The following page contains a Quick-Reference chart for the VantagePoint Menu.
Quick Reference for Menu

Following is a list of the VantagePoint Menu bar and the functions within each:

**File**
- Open/Close
- Save/Save As
- Create Sub-dataset
- Import Raw Data File (Use Import Filter)
- Import Database Table (Excel, Access, etc.)
- Import XML (Smart Data Exchange)
- Import XML (Wizard)
- Export Fielded Records
- Export Raw Records
- Export 3D Co-occurrence Matrix
- Print/Print Preview
- Page Setup
- Dataset Properties
- Exit

**Edit**
- Copy / Copy with Headers
- Select All
- Find

**View**
- Toolbar
- Status Bar
- Workbook
- Analyst’s Guide
- Title Window
- My Keywords
- Detail Windows
- Add Detail Window
- Reset to Default

**Sheets**
- Add List
- Add Matrix
- Add Map
- Add Factor Matrix
- Manage Sheets
- Delete Sheet
- Summary (followed by list of sheets in current file)

**Fields**
- Import More Fields
- Rename Field
- Copy Field
- Delete Field
- Merge Fields
- Create Field from Group Items
- Create Field from Group Names
- Thesaurus
- Find and Replace
- List Cleanup
- Resume Saved List Cleanup
- Create Key Field
- Extract Nearby Phrases
- Further Processing

**Groups**
- Edit Groups
- List Comparison
- Group Using Thesaurus
- Create Thesaurus Using Groups
- Group Using Stemming (AND)
- Group Using Stemming (OR)
- Principal Components Decomposition (PCD)

**Tools**
- Data Fusion
- Record Fusion
- Combine Duplicate Records
- Remove Duplicate Records
- Record Classifications
- Import Filter Editor
- Thesaurus Editor
- Fuzzy Editor
- Meta Tag Editor (present when no dataset is open)

**Options**
- Sheet Properties
- Customize Toolbars
- Edit Keyboard Shortcuts
- Detail Window Colors
- Language

**Scripts**
- Run Script
- Modify Script Menu
  (followed by List of select Scripts/Macros)

**Window**
- Cascade
- Tile Horizontal
- Tile Vertical
- Arrange Icons

**Help**
- VantagePoint Help
- Analyst’s Guide
- Check for Updates
- Visit Downloads Page
- Manage License
- About VantagePoint

© Search Technology, Inc. 1997-2015
Installation from CD

The installation of VantagePoint uses a standard Microsoft installer utility. Your VantagePoint CDROM contains all of the VantagePoint files necessary for installation.

To install VantagePoint,
1. Insert the VantagePoint CDROM into your drive, double-click on the "My Computer" icon on your screen, and then double-click on the icon for your CDROM drive. This should open a view of the contents of the CDROM.
2. Double-click on the VantagePoint.msi program icon. This begins the installation process.
3. Follow the instructions on the screen to perform the installation.

Contents of the VantagePoint Directory

The VantagePoint installation process places the following files in the folder you choose during the installation:
1. AnalystGui folder
2. DIC folder (contains English dictionaries for the VantagePoint parser)
3. Fuzzy folder (contains fuzzy logic definitions for list cleanup)
4. HTMLHelp folder (on-line help)
5. Import Filters folder (contains import filters)
6. Macros folder (contains example VantagePoint automation scripts)
7. SampleData folder
8. Thesaurus folder (contains thesauri for list reduction and cleanup)
9. Copyright.txt, License.txt
10. process.avi, ProcessComplete.wav (Media files)
11. VP-ReleaseNotes.pdf
12. VP.exe (VantagePoint program)
13. VPUsersGuide.pdf (This manual)
14. VPx.exe (VantagePoint exception handling and bug reporting utility)
Getting Started – Registration Code Activation

To get started, Click on the “Start” button on your screen, and then click on the “Programs” item. Select the “VantagePoint” folder and then click on the “VantagePoint” item. This will start VantagePoint.

Registration Code Activation: The first time you run VantagePoint, you will be prompted for a Registration Code. Your Registration Code is your key to unlock VantagePoint. This code is provided by Search Technology or an authorized VantagePoint value-added reseller. After you activate a valid Registration Code, you will not be required to enter it again under normal conditions. (Please see “Registration Code – Repair License” under Miscellaneous Operations [at the end of this User’s Guide] for exceptions.)

This procedure can be used for new installations or to Reactivate your VantagePoint License. (For reactivation, first see “Registration Code – Moving VantagePoint from one computer to another” for important instructions on Deactivating your License.)

For most users, there are two methods of Activating (or Reactivating) your VantagePoint License: Using the Internet or Using Email. Following are detailed instructions for each. For those with a “floating license” model, see the next topic “Activating VantagePoint Using License From Server”.

Activate Automatically through the Internet:

1) When you start VantagePoint, you will be prompted for your Registration Code. Copy and paste the Registration Code into the New Registration Code field and click the Activate New Registration Code button.

You should receive a “License Successfully Activated” message. Click OK and VantagePoint will open.
Activate 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 to complete, depending on your location.)

Select the Using Email tab:


2. Click Create Activation Request Email.

   An email message addressed to “activate@searchtech.com” is created containing the Registration Code and Activation Request Code. Send the email message.

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

3. Copy and Paste the code into the “Activation Code” field.

4. Click Activate now!

   A “License Successfully Activated!” message box appears. Click OK and VantagePoint will open.
Activating VantagePoint Using License from Server

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

Beginning with version 8, 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.
2. Enter your credentials 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. 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.
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 computer. In this case, you must deactivate the Registration Code on the old computer before it can be used on the new 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.

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 some location where 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 dialog](image)

You are presented with the warning box for confirmation:

![Deactivation confirmation dialog](image)
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. Refer to the “Getting Started - Registration Code Activation” topic for steps to Reactivate your License.

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.
1. Click the Create Deactivation Code button.

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 Warning message appears:

![Warning Message](image)

Press OK to dismiss the message. **NOTE: This does not complete the process – you must continue through Step 3, below.**

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.**
Startup Dialog

You should see a dialog box where you choose whether to Import Raw Data File, Import Database Table, or Open Existing VantagePoint File.

You may elect to not show this dialog box again on startup by checking the box. See the section entitled “Enabling or Disabling the startup dialog box” (under Miscellaneous Operations) to change the setting while running VantagePoint.

Context-Sensitive Help: On-line help is available for most VantagePoint functions by pressing the F1 key:
1. If you choose to Import Raw Data File, you are taken to Step 1 of the Import Wizard (see Note below, then continue on to #2).

   **Note:** If you choose to Import a Raw Data File, the Wizard method of import becomes your default. To change, see the section entitled "Changing the import data method" (under Miscellaneous Operations) to change to the Classic Interface, or to be asked each time which import method to use.

If you choose to Import Database Table, a dialog box will appear where you choose the data source (enter the file name or browse for the file location. When the file is located and selected, click Open or double-click on the file.) 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 6. (See full details and the important Note in the "Import Database Table" section.)

If you choose to Open Existing VantagePoint File, select the file to be opened. For your convenience, the window displays recently used files which can be opened by either double-clicking on the file name or 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 where you select the file location. When the file is located and selected, click Open or double-click on the file. A Summary View will appear. Continue with Step 6.

2. **Step 1 of the Import Wizard:**
   Here you choose the 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.)

   Once the file(s) 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(s). VantagePoint automatically detects which file to use. **Note:** Files shown are for illustration purposes – your list of database files may differ.

   Click Next.

   **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 you accept the VantagePoint selection.
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.

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. You can then select more fields from the entire list.

5. Click **Finish**.

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

6. The first thing you will want to do is open a listing of one of the fields (see the Section entitled “Lists”). This can be accomplished using any of the following methods:
   a. Double-click the field name on the Summary screen.
   b. From the Main Menu, select **Sheets** and **Add List**... Select the desired field from the given list, and click **OK** (or simply double-click the field name).
   c. Click on the List button on the toolbar. Select the desired field from the given
list, and click **OK** (or simply double-click the field name).

d. Press Ctrl-L. Select the desired field 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 views and then access them by clicking on the tabs.

The remainder of this manual presents several topics that will help you understand and use *VantagePoint*. 
Files and Datasets

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

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

1. First, the text is divided into individual records. A record is the largest individual segment of information in the file. A raw data file consists of several (tens, hundreds, or maybe thousands) records, each of which has a similar structure.

2. Then the pre-processor divides each record into fields. For the most part, each record contains the same field structure (e.g., title, authors, keywords, abstract, etc.). On rare occasions, a field may be missing from a record.

3. Next, the pre-processor divides the text fields (e.g., the abstract and title) into words or phrases, and creates a new field for them (e.g., abstract words, title words, and abstract phrases).

4. Finally, the pre-processor creates a database relating all of the contents of the fields to all of the records. For example, if the word “chemistry” is found in at least one record, then the word “chemistry” is entered into the database and that word is linked to every record that contains the word “chemistry.”

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

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

| **Author(s)** AU | Kurata, H.; Namekawa, T.; Harabe, 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** VD | vol. 29, no.4; p.521-30 |
| **Date** DA | Nov. 1993 |
| **ISSN/ISBN** IS | 00900603; 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 (HES). 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. B52103. C7890 |
| **Date Indexed** DI | 8400 |
OVERVIEW

The **VantagePoint** Window

The **VantagePoint** window consists of the Main Menu, the Toolbars, the Title View, the Main Workspace, and the Detail Windows. The Analyst Guide and My Keywords windows are also enabled in this illustration.
The Main Workspace

The Main Workspace displays all of the list, matrix and map views you create.

1. Each view you create is displayed as a separate sheet identified by a tab. You can access each view by clicking on the tabs.
2. You can scroll through the tabs using these buttons. (The Navigation tool bar is helpful for moving between sheets. For detailed information, see the “Sheet Management” section.)
3. You can scroll within the sheet using these scroll bars.
4. You can select among multiple open datasets using the workbook/dataset tabs (to enable the tabs: From the Main Menu select View and Workbook).
Zooming in a List or Matrix

You can now make list and matrix views bigger by using the Zoom function. (The Zoom function in Map views already existed.) Row height and column width are proportionately resized to your selection. The resizing applies only to the view in which Zoom is selected.

Within a List or Matrix view, right-click and select **Zoom**, then choose the desired size.
Within Lists and Matrices, you can also zoom in and out using a wheel mouse. While holding down the Ctrl key, roll the wheel toward you to enlarge the view; roll away from you to shrink the view.

To restore the default setting, right-click and select Restore.
The Title View

The **Title View** is a window that 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 View displays the titles of records that contain both the row and column item of two list items.

The following example shows the titles of 18 records in this dataset from one Corporate Source (Ford Motor Co).

![Title View Example](image)

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

You can also multi-select records in the Title View using Ctrl-click and Shift-click. Right-click in the Title View and a menu is displayed with the following options:

- **View Records** – displays selection in Record Display (in earlier versions of **VantagePoint**, the display of multiple records was only available in the Raw Record view. With version 7, **VantagePoint** will also display multiple records in the Fields View).

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

- **Select All** – selects all the titles displayed in the Title View. Then use “Copy Title Names” to copy all titles into another application. (Note: The Select All button next to the Title bar was added to quickly Select All Titles in the Title View.)

- **Create Sub-Dataset from Selection** – takes whatever records are selected in the Title View 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 a classification to a record or records.

---

**How to Update the Title View**

The **Title View** 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 View** window. Or, using the right-click menu in the Title View, select **View Records**.

You can display a new record in the **Record Display** by double-clicking on another title in the **Title View** window. Or, use the **Previous** / **Next** arrows in the Record Display to browse each record in the Title View.
The Record Display

The Record Display is accessed by double-clicking on a title in the Title View. The Record Display shows one or more records at a time. If multiple items are selected in the Title View, the selected records will be shown in Record Display. In this example, the user’s Keywords are highlighted.

Following is a description of the buttons at the top of the display:

- **Print**: Prints the record(s) 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(s) (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.
- **Order**: Using this button, the user can change the order of Fields displayed in Fielded View. See the "Dataset Properties" Section for a detailed explanation.
- **Wrap**: Word wrap. (Applies to the Raw Record view only.)
- **Fixed Font**: Displays record in a fixed-width font. This improves readability for some record formats.
- **Classify**: Displays Record Classifications for the dataset. User can set or change assignments.
- **Highlight Keywords**: If user has created a “My Keywords” List, this button will turn on or off the highlighting of those terms in the Record Display.
Colors: Allows you to assign the color of your choice to terms in a Keywords List.

Previous: Displays previous record in Title View (button is disabled if more than one record was selected in the Title View).

Next: Displays next record in Title View (button is disabled if more than one record was selected in the Title View).

Exit: Closes the Record Display.

At the bottom of the Record Display window, the following appear:

Notes about this record: Add annotations for the viewed record. Adding an annotation also adds an icon beside the record in the Title View.

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 View.

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 this request for confirmation: “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.

An alternative view (the Fields view) is shown below.

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

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 Window is a columnar display of the co-occurrence values, the “expectancy arrows”, and the text of the co-occurring items. The Chart-type Detail Window shows the same data as the List-type Detail Window, except that the co-occurrence values are graphically displayed and the expectancy arrows are not shown. Additional details are provided in the expanded “Detail Windows” section later in this manual.

The following illustration shows four Detail Windows on the right-hand side of the screen, each showing details about the records selected in the co-occurrence matrix. 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 associated records are highlighted in the Title View. In the illustration shown above, the user has clicked on the year “1998” in the “Family Member Years” Detail Window, and the 12 record titles (out of the 122 selected in the co-occurrence matrix) from 1998 are highlighted in the Title View.

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. Meta tags can also be shown in Detail Windows, provided that ALL fields associated with that Meta tag have a Data Type = Number.

See the expanded “Detail Windows” section later in this manual for additional details.
The 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 the Field Statistics section 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.

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

List Cleanup... To reduce or clean up a list. Presents the List Cleanup dialog box. (See the Section entitled "Cleaning a list").

Thesaurus... To apply a thesaurus to a list. Presents the Thesaurus dialog box. (See the Section entitled "Applying a thesaurus to a list").

Find and Replace... To apply a “Find and Replace” thesaurus to a list. (See the Section entitled "Find and Replace").
**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 and the original field is left unchanged.

**Extract My Keywords** – Lets the user apply his/her own list of Keywords to a selected field, resulting in a new field. (See the Section entitled "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 external files. When the user clicks on the data item in the Fielded Record View, VantagePoint should launch the application associated with that file. Examples of files are: images (e.g., *.jpg, *.bmp), documents (e.g., *.pdf, *.doc), spreadsheets (e.g., *.xls), intranet links (e.g., *.ndl), and Internet links (e.g., *.htm, *.html).
- **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.

**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** – Makes the Summary View larger or smaller. (Holding the Ctrl key on your keyboard while rolling a mouse wheel is another method for zooming in to or out of the Summary View.)

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.).
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:

Initially, “Show All” is checked. By unchecking that box, the others are available to 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.)
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, enable the "My Keywords" display: From the Main Menu, select View and My Keywords. The Keywords window will appear.

The icons on the left affect the Keywords List: Add, Rename, and Delete (a Keyword List). The “kw” icons on the right affect the individual keywords: Add, Edit, and Delete (a Keyword).

In this illustration, a User has created a Keyword List named “Stereo Keywords”, containing 5 Keywords.
Clicking the **Manage Keywords** icon reveals a Menu.

The **Manage Keywords** 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 Display 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:
A new List view of the results is presented:

The Summary View now reflects the new fieldname:
Field Statistics

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

Note: This illustration was created to show the ways different data are displayed in Field Statistics. VantagePoint will display data for only one field at a time.

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, or Year. 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.

Records

# In Dataset: Total number of records in the dataset

# Without <field name>: Number of records that do not have this field. In this illustration above, 304 records did not have abstracts and therefore do not have abstract phrases.

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. In this illustration, 364
of the records contain the word “enzymes” at least once.

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

**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. In this illustration, the word “enzymes” occurs 785 times.

**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 how many decimals places to show in the statistical summary.
Sheet Management

The Navigation Toolbar helps you quickly navigate the sheets within a VantagePoint file.

Use the blue arrows or dropdown list to quickly and easily move between sheets in the current 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 green arrows to return to the sheets you have already viewed, in the order they were viewed. When you first open a VantagePoint file, the green arrows are disabled. As you move from sheet to sheet, the left-pointing arrow is enabled. Use it to “go back” to a sheet you viewed previously (in reverse order, from the most recent to the first sheet viewed). The right-pointing arrow is enabled only after using the “back” arrow. It takes you forward through the sheets in the sequence they were viewed.

In contrast, the blue arrows are used navigate through the sheets in the sequential order they are arranged in the file, which is also the order shown in the dropdown list.
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 Navigation toolbar…

or by selecting **Sheets** and **Manage Sheets…** from the Main Menu.

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

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

![Image of Sheets Dialog]

**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:** Select one or more sheets (Click and Shift-Click or Control-Click) and click **Delete Sheet(s)** to delete these sheets. **Note:** The Summary sheet cannot be deleted.

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

**Rename Sheet:** Select the sheet to be renamed and click **Rename Sheet**. Enter the new name in the **Rename Sheet** dialog box and click **OK**.
Delete the Current Sheet

To delete the current sheet, simply click the **Delete Current Sheet** button on the Navigation toolbar.

*Or from the Main Menu select **Sheets** and **Delete Sheet**.*

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

**Note:** Unless you have changed the “Confirm When Deleting” setting in the **Options** dialog, **VantagePoint** will prompt you for confirmation before a sheet is deleted. See the section entitled **“Confirm When Deleting Settings”** (under Miscellaneous Operations) for more information.

Rename the Current Sheet

In addition to the Rename Sheet function in the Sheets dialog, a simple way to rename a sheet is to double-click on the sheet name. A text edit box appears (highlighted here for illustration only) where you can enter a new name for the sheet:

Result:
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 click **OFF** the Animation checkbox, *VantagePoint* will not play the animation and will display a static image instead.

If you click **ON** the **Notify Upon Completion** checkbox, *VantagePoint* will provide an audible alert when the process is complete.

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.

If you work with other applications while *VantagePoint* is working in the background, you can use the button on the Windows task bar to re-access the **Cancel** dialog box.
Context-Sensitive Help

On-line help is available for most VantagePoint functions by pressing F1.
**Analyst’s Guide**

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

- How-to Videos
- Analyst’s handbook (overview of the basic analytical process)
- Walkthroughs of common analyses
- Frequently Asked Questions
The Analyst's Guide Window can be “docked” anywhere on the screen by clicking and dragging the banner line.

You can close (or open) the Analyst's Guide by clicking Analyst's Guide in either the View or Help Menus.
Customize Toolbars

A user-defined toolbar was added for running certain scripts. The graphical icons and scripts they call up are as follows:

If it is not already displayed, you can enable this toolbar by selecting **Tools** and **Customize Toolbars**... from the VantagePoint menu.
The Customize toolbars dialog is displayed.

Click New.

Type in the New Toolbar name and press OK.

“My Reports” appears in the list of Toolbars. A new (empty) Toolbar appears in the VantagePoint window.

Click the Commands tab.

In the “Categories” window, select User Defined.
Click and drag the buttons (any or all) to the new toolbar, as the user has done here:

NOTE: You can customize any of the VantagePoint toolbars using the “click and drag” method. To remove an icon from a toolbar, click and drag it off the toolbar, then release the mouse button. You can also enable or disable the toolbars by checking or removing the checkmark in the corresponding box on the Toolbars tab.

Finally, this illustration shows the result after the user has dragged the “My Reports” toolbar to where it is now docked with the other toolbars.
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 the section entitled “Changing import data method” (under Miscellaneous Operations) for steps on how to change the import method.

Following are step-by-step instructions for each method.
**Importing a Raw Data File using Import Wizard**

1. From the Choose Import Method dialog, 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. (Use Ctrl-Click or Shift-Click to select multiple files.)

2. Once the file(s) 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 than those shown here.)

   Click **Next**.

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

![Import Wizard Step 3 of 3](image)

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

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. Click Finish.

![Import Wizard Step 3 of 3](image)

5. 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 (which appears on the first Import), click Use Classic Interface or from the Main Menu, select File and Import Raw Data File... 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 (formerly known as “configurations”) 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 and end indicators, field labels/delimiters). (Note: Your list of databases may be different from those shown here.) (Note: If VantagePoint cannot find the
Program Files\VantagePoint\Import Filters folder, you will see a Browse For Files or Folder dialog box, where you specify the location of your database import filter.)

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 fields defined as "Secondary Fields" — fields that are not normally imported at first. Check the "Show All Fields" checkbox to view these fields in the right-hand window, as shown below. You can then select fields from the entire list.

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.
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 very large record you will see the following warning:

This may indicate that you chose the wrong database and the record Start|End indicators do not match anything in the raw data file. You can Continue, Choose Another Import Filter, or Cancel Import. You are given 30 seconds to respond. If no response is received, *VantagePoint* will continue (default = “Yes”). If you click Help, you are offered a link to the VantagePoint download site where you can choose another import filter.
**Import Database Table**

1. From the Main Menu, select **File** and **Import Database Table**.

2. In the **Choose Data Source to Import** dialog box, click **Browse** to locate the MS Excel or MS Access 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 Excel file is being imported. If the file contains more than one worksheet, you will be prompted to select which sheet to use:

   **NOTE:** The software-level interfaces provided by Excel make some assumptions about the size of data elements in your Excel Sheet. By default, Excel’s interface makes a determination of the maximum allowable size of all of the elements in a given column based on the first few rows of the table. If the first few rows are not typical, then subsequent elements in the column may be truncated. We attempt to overcome this by asking the Excel interface to examine the entire table before making this determination. However, some users may not have sufficient User Permission for this. If this is the case, **VantagePoint** will present a notification, then proceed using the default settings. In that case, be aware that your data may be incomplete.
Here, VantagePoint has identified an Access file is being imported. Choose the Table or Query 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 semicolon). 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.

When you have set each of the fields, you can save the settings as an Import Filter so you can use it later. Finally, click OK to begin importing the data.
When import is complete, a Summary View is presented.
Import XML (Smart Data Exchange)

This is a simple “point and click” operation. From the Main Menu, select File and Import XML (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 under the Main Menu item **File**.

1. Access the XML Import File Wizard by selecting **Import XML (Wizard)** from the Main Menu item **File**. 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 9 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:

![Image of Import XML 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.

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.

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.
There are four controls on the left side:

a. **Fields** – for creating, selecting, and deleting fields from your import filter.

b. **Main Tag** – for setting and displaying the main XML tag that defines the field selected in (a).

c. **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.

d. **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:

```
<MedlineJournalInfo>
  <MeshHeading>
    <NumberOfReferences> ...
  </MeshHeading>
</MedlineJournalInfo>
```

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:

<table>
<thead>
<tr>
<th># Records</th>
<th># Instances</th>
<th>Mesh Headings</th>
</tr>
</thead>
<tbody>
<tr>
<td>11</td>
<td>99</td>
<td>Humans \ therapeutic use</td>
</tr>
<tr>
<td>12</td>
<td>92</td>
<td>Anti-Asthmatic Agents \ therapeutic use</td>
</tr>
<tr>
<td>13</td>
<td>82</td>
<td>Acetates \ pharmacology</td>
</tr>
<tr>
<td>14</td>
<td>82</td>
<td>Asthma \ drug therapy</td>
</tr>
<tr>
<td>15</td>
<td>81</td>
<td>Adolescent \ therapeutic use</td>
</tr>
<tr>
<td>16</td>
<td>74</td>
<td>Leukotriene Antagonists \ therapeutic use</td>
</tr>
<tr>
<td>17</td>
<td>65</td>
<td>Adult \ therapeutic use</td>
</tr>
<tr>
<td>18</td>
<td>61</td>
<td>Acetates \ adverse effects</td>
</tr>
<tr>
<td>19</td>
<td>61</td>
<td>Asthma \ therapeutic use</td>
</tr>
<tr>
<td>20</td>
<td>58</td>
<td>therapeutic use</td>
</tr>
<tr>
<td>21</td>
<td>51</td>
<td>Anti-Asthmatic Agents \ drug therapy</td>
</tr>
<tr>
<td>22</td>
<td>46</td>
<td>Female \ therapeutic use</td>
</tr>
</tbody>
</table>

**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.

9. The final step is to choose the fields you want to import, as illustrated here.

10. Click **OK**.

When import is complete, a Summary View will be presented.
Importing additional fields

1. From the Main Menu, select Fields and 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 “Display Secondary Fields” checkbox.)

VantagePoint files imported using version 3.0 (and later) 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” (in the Record Display) 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.
VantagePoint files imported using versions earlier than 3.0 do not contain the database definitions. When you attempt to Import More Fields for one of these older files, you will see the following message:

![Message](image)

See the sections "Dataset Properties" and "Changing Database Configurations" for instructions on how to assign import filters (database definitions) to old files.
Dataset Properties

The dataset properties are accessed from the Main Menu: File and Dataset Properties...

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 View 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 the Section entitled “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 earlier versions of VantagePoint (v2.x and earlier).

See the section entitled "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. This leads to the following dialog box (data are for illustration purposes – whatever field names are in your dataset will be shown):

![Field Order for Record View dialog box]

To include a field in the Fielded Record View, click "on" the checkbox next to the field name, or click it "off" to not show the field in the Fielded Record View. To change the order that the fields are presented in the Fielded Record View, click on the field name and use the Up and Down arrows to move the field names around (or click and drag the field names). Click **OK** to save changes and return to the Dataset Properties dialog box.

**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.
Opening a VantagePoint file

There are two methods for opening a VantagePoint file: using the startup dialog box or, if the startup dialog box is disabled, using the Main Menu. Following are instructions for each method.

Opening a VantagePoint file using the startup dialog box

If enabled, the following dialog box appears when you launch VantagePoint:

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… (at the top of the list of recently used files) which opens a dialog box where you select the file location (continue with Step 2 below).

Opening a VantagePoint file using the Main Menu

1. From the Main Menu, select File and Open or Click the Open icon on the toolbar or press Ctrl+O on the keyboard.
2. In the Open dialog box select the drive, folder, or network location that contains the VantagePoint file you want.
3. Double-click on the file you want to open.
Creating a Sub-dataset

You can extract 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. In the Main Workspace, select the sheet tab for the list or matrix 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 list items (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 rows.

2. From the Main Menu, select File and Create Sub-dataset or press Ctrl+N on the keyboard.

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

4. Choose to Create New Dataset from a Group (if any exist), Selection, or All Records.

5. If you select Group, then select the group you want to use as the basis for extracting the sub-dataset. You can navigate the hierarchical structure of the groups by double clicking on the list types to expand or collapse the group names. (For more on Groups, see the “Groups” section.)

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 “The Record Display” section), 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.

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 in the Main Workspace.
Exporting 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.

From the Main Menu, select File and Export Fielded Records ….

1. Choose which records you want to export.

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

   The options and controls in this window are the same as for Create Sub-dataset.

   When you have made your selection, press Next.

2. Here, select the Fields and arrange the Order of the Fields to be exported.
By default, all Fields will be included in the Export. Individual fields can be removed from the default set by selecting the field and clicking the **Remove** button. The names of fields move between the two windows as they are added or removed.

Clicking the **Remove All** button clears those fields listed in the “Fields to Export” window and moves them to the “Available Fields” window. When you select the **Add All** button, all of the Available Fields are moved to the “Fields to Export” window.

You can change the order of the fields in the “Fields to Export” window by selecting the field (or fields) and using the **Up** and **Down** buttons to move the fields so they will be exported in the order you choose.

If Editable Notes (“Notes about this record” in Record Display), Record Classifications and Header Information 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.

When you are finished making selections in this window, click the **Next** button to continue.

3. **Select Output.** In this step you will choose whether you want the exported records to be saved to a new File or the Clipboard (for pasting into another application).

You will also choose an output type from the dropdown list. Each of the supported output types can be exported to either the clipboard or a file.

The “Export Header Information” option is available for the XML (Smart Data Exchange) output only.

Currently supported output types include:

- **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.

- **Comma Delimited** (*.csv) – Alternative to the Tab Delimited export that uses commas to delimit fields.

- **Tab Delimited** (*.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.
• **XML (Smart Data Exchange)** (*.xml) – A generic XML format.

4. Press **Finish**.

If you selected 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 Finish, and after a moment, you will be able to paste your records into another application.
Exporting Raw Records

You can export collections of raw records to the clipboard or to a file. From the Main Menu, select File and Export Raw Records ... 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.

If any of the records in your dataset are tagged “Omit from new datasets” (see “The Record Display” section), 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.

The following illustration shows the header information that can (optionally) be included with the exported raw records.

If Editable Notes (“Notes about this record” in Record Display) and Record Classifications were included with the exported raw records, they would appear at the end of the record for which they were created.
Saving a VantagePoint file

1. From the Main Menu, select **File** and **Save** (or **Save As** to save with a new file name) or Click the **Save** icon on the toolbar or press **Ctrl+S** on the keyboard.
2. 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.
3. Click **Save** to save the file.

Merging two VantagePoint files

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

From the Main Menu, Select **Tools** and **Data 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 window. 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 “Identifiers” 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, **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 on “**Applying Thesaurus to a List**” for an explanation of these options.

Click **OK** to proceed with merge.

**Note:** If any of the records in your files are tagged “Omit from new datasets” (see “The Record Display”), 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.
Removing Duplicate Records in a VantagePoint file

With a dataset open, select Tools and Remove Duplicate Records... from the Main Menu. 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 “The Record Display”), 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, the tagged records will be omitted. If you answer No, the “omit” tag will be ignored.
Combining Duplicate Records in a VantagePoint file

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 Tools and Combine Duplicate Records... from the Main Menu. The following dialog box will appear:

As explained in the “Removing Duplicate Records in a VantagePoint file” section, 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 “The Record Display”), 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, 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 the "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 Main Menu, select Tools and Record Fusion....

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 “Data Fusion”. See the section entitled “Merging Two VantagePoint Files”.

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.

**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.
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 in a List View”.)

Then, from the Main Menu, select **Fields** and **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 parser and the results will appear as a new field name specified in “Results Field Name”.

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

List Views

A list shows all of the items of a field for a dataset. For example, an Authors List would show all of the names contained in the Authors field of the dataset. As another example, the Abstract Words List would list all of the words contained in all of the Abstracts in the dataset.

The following illustration shows a list view of Corporate Sources.

The column heading #Records shows the number of records in the dataset containing that organization named in the Corporate Source field.

The column heading #Instances shows the total number of times the organization appears in the dataset. In this example only one Corporate Source is listed in each record.

Therefore, the number of records and number of instances are the same. This would not be the case for some fields (e.g., abstract words and phrases).

The column heading Corporate Source lists the names of the organizations in the dataset.

The column headings Map Items, Government, Academic, Industry, 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” in the Main Overview section for more details.
Creating a List View

1. From the Main Menu, select **Sheets** and **Add List**...
   
   **or** Click the **List** button on the toolbar  
   **or** 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.

2. Double-click on the list you want to view.
   
   **Or** from the Summary View, simply double-click on the field name.

---

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.
Renaming a field

You can use VantagePoint to rename a field.

1. From the Main Menu, choose Fields and Rename Field...

2. The lists (or fields) in your dataset are shown in the Rename dialog box. Select the field you want to rename.

3. In the "New field name" box, VantagePoint enters the existing field name. Type the new field name.

4. Click OK to rename the field.

(Alternatively, from the Summary View, right-click on the field you want to rename and choose Rename Field. A dialog box will appear where you enter the New field name.)
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 Main Menu, choose Fields and Copy Field...

2. The lists (or fields) in your dataset are shown in the Choose Field to Copy dialog box. Select the field you want to copy.

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.

(This operation can also be done from the Summary View by right-clicking on the field to be copied and choosing Copy Field...)

![Choose Field to Copy dialog box](image)
Merging fields

From the Main Menu, select Fields and 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. The fields (and groups) in the right-hand window are those that will be merged. If a field has groups, you can choose whether to Keep the groups in the new field.

If you have added a field (or group) that should not be merged, click on the field (or group) name in the right-hand window and click Remove. Clicking 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.
Deletings a field

**CAUTION:** Deleting a field permanently removes the field from the dataset. This is not the same as deleting a sheet (Main Menu 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.

You can delete a field by selecting Fields and Delete Field... from the Main Menu. 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.) You then must confirm the operation through a confirmation dialog box to complete the deletion.

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 Main Menu item Fields and Further Processing; then select the procedure you want to use.
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” in the “Import Filter Editor” section for additional information.
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.

Copy / Copy with Headers

You can copy items from a **List View** for pasting in other applications.

1. Select the item(s) you want to copy.
2. Select **Edit** from the Main Menu (or right-click on your selection, as shown below).
3. Select either **Copy** or **Copy with Headers**.

Here is an illustration of the results of each function, after pasting into an Excel file:
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. 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 box.

Finding a string in a list view

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. Once the string is found, click Find again to find the next occurrence.

Click Select All to have VantagePoint highlight all records containing the string.
The Find string Dialog Box

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

Match Whole Word Only: Click this check-box on if you want the search to find a whole word match for what you typed.

Match Case: Click this check-box on if you want the search to match the upper and lower case exactly as you typed.

Use Regular Expression: You can use a matching syntax called Regular Expression.
(A full discussion of regular expressions is beyond the scope of this User’s Manual. 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 “\.” (“backslash” followed by “period”). For example, to match “Inst.” you must enter “Inst\.”
If you click Use Regular Expression “off”, 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 (and selected), 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 unselects 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.

<table>
<thead>
<tr>
<th>Operator</th>
<th>Description</th>
<th>Diagram</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adjacent</td>
<td>The Secondary term must appear next to the Main term, but the order of the terms is unimportant.</td>
<td></td>
</tr>
<tr>
<td>And</td>
<td>The Boolean “And” – matches when the Main (A) and Secondary terms (B) appear together.</td>
<td><img src="https://via.placeholder.com/150" alt="Diagram" /></td>
</tr>
<tr>
<td>And Not</td>
<td>Matches the Main term (A) when it appears in the absence of the Secondary term (B).</td>
<td><img src="https://via.placeholder.com/150" alt="Diagram" /></td>
</tr>
<tr>
<td>Followed by Adjacent</td>
<td>The Main term must be directly followed by the Secondary term.</td>
<td></td>
</tr>
<tr>
<td>Followed by And</td>
<td>Similar to “And” above, but the Main term must appear before the Secondary term.</td>
<td><img src="https://via.placeholder.com/150" alt="Diagram" /></td>
</tr>
<tr>
<td>Followed by Near2/Near3/Near4*</td>
<td>Asserts that the Main and Secondary terms are within 2, 3, or 4 words of each other, and that Main term comes first.</td>
<td></td>
</tr>
<tr>
<td>Near2</td>
<td>Asserts that the Main and Secondary terms are within 2, 3, or 4 words of each other. The terms can be in any order.</td>
<td><img src="https://via.placeholder.com/150" alt="Diagram" /></td>
</tr>
<tr>
<td>Near3</td>
<td></td>
<td><img src="https://via.placeholder.com/150" alt="Diagram" /></td>
</tr>
<tr>
<td>Near4*</td>
<td></td>
<td><img src="https://via.placeholder.com/150" alt="Diagram" /></td>
</tr>
<tr>
<td>Or</td>
<td>The basic Boolean “Or” operator – Matches if either of the Main or Secondary terms is found</td>
<td><img src="https://via.placeholder.com/150" alt="Diagram" /></td>
</tr>
<tr>
<td>Or Not</td>
<td>Matches if Main term is found OR if the Secondary term is NOT found. (inclusive).</td>
<td><img src="https://via.placeholder.com/150" alt="Diagram" /></td>
</tr>
</tbody>
</table>

*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 all items containing a string in a list view

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 and select.
3. Click Select All to search for and select all items containing the string.
Groups

Groups of list items

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.

This example shows three groups of Corporate Sources that have been defined by the user: Government, Academic, and Industry.

This illustration 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 assigned all of the Corporate Sources in the above list to a group.)
The Manage Groups Dialog Box

The Manage Groups dialog box is accessed from a List view (it is not offered when viewing a Matrix or Map). Select Groups and Edit Groups... from the Main Menu.

or Click the Group button on the toolbar
or press Ctrl+G on the keyboard

Manage Groups - [fieldname]: This lists the user-defined groups for the field (if any). Click on the name of the group(s) you want to work with, or click Add to add a new group.

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 group(s) 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 the “Create field from group items” section 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 the “Create field from group names” section 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).

See the following sections for specific instructions regarding these Group actions.

---

**Creating a group in a list view**

1. Create (or open) a List View.
2. From the Main Menu, select **Groups** and **Edit Groups**...

   or Click the **Group** button on the toolbar
   or press **Ctrl+G** on the keyboard.
3. On the **Manage Groups** dialog box, select **Groups** from the Menu and **Add**.
4. Type the name of the group in the **Create Group** dialog box and then click **OK**.
5. Close the **Manage Groups** dialog box.

   The new group shows up as a column of empty check boxes labeled with the group name.

---

**Renaming a group**

1. Create (or open) a List View containing the group to be renamed.
2. From the Main Menu, select **Groups** and **Edit Groups**...

   or Click the **Group** button on the toolbar
   or press **Ctrl+G** on the keyboard.
3. On the **Manage Groups** dialog box, click on group name you want to change.
4. Select **Groups** from the Menu and **Rename**.
5. Change the name in the **Rename Group** dialog box and then click **OK**.
6. Close the **Manage Groups** dialog box.
Deleting a group

1. Create (or open) a List View containing the group to be deleted.
2. From the Main Menu, select Groups and Edit Groups…
   - or Click the Group button on the toolbar
   - or press Ctrl+G on the keyboard.
3. On the Manage Groups dialog box, click on the name(s) of the group(s) you want to delete.
4. Select Groups from the Menu and Delete.
5. Click Yes or Yes to All on the Confirm Group Delete dialog box.
6. Close the Manage Groups dialog box.

Adding items to a group in a list view

There are a few 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.
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 here.

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.
Alternatively, you can:

a) Choose **Groups** and **Edit Groups...** from the Main Menu (while viewing a List).

b) In the **Manage 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 new group name. Enter the group name and click **OK**. Then click the **Add** checkmark in the lower right corner for the selection to be added to the new group.

   These steps can also be performed in the Manage Groups dialog using the Menu items **Groups** and **Selection**.

c) Close the **Manage 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 twice on the check box corresponding to the list item and group. 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 Main Menu choose **Groups** and **Edit Groups...**.
   
   b. In the **Manage Groups** dialog box, click on the group name from which the list items are to be removed and under **Selection**, click **Clear Tags**. Alternatively, with the group name selected, you could simply click the **Clear** button in the lower right.

   c. Close the **Manage Groups** dialog box.

---

**Adding/Clearing/Toggling group membership for selected list items**

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 Main Menu, select **Groups** and **Edit Groups**...

   or Click the **Group** button on the toolbar

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

3. In the **Manage Groups** dialog box, click on the name of the group for which you want to add/clear/toggle the list items.

4. Under Menu Item **Selection**, click **Add tags** (adds the selected list items to the group), **Clear tags** (removes the selected list items from the group), or **Toggle tags** (adds the selected list items that are not in the group and removes those that are in the group). Alternatively, with the group name selected, you could simply click the **Add** checkmark button or **Clear** button in the lower right to add and clear membership.

5. Close the **Manage Groups** dialog box.
Using Group Exclusion (x) in new dataset operations

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 this illustration, a new dataset created using the group “Sample” would include all records that meet the following criteria:

\[(\text{Descriptors} = \text{"Computer vision" OR Descriptors} = \text{"Sensors") NOT Descriptors} = \text{“Algorithms”)}\]

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.

From the Main Menu, select Fields and Create Field from Group Items…. In the dialog box, choose the group to use. (Click the “+” next to the field names to display the group names.) When you click on a group name, VantagePoint automatically fills in the “New field name”. You can accept the field name VantagePoint assigned or create your own.

The radio buttons allow you to select either the checked items or the unchecked items in the group.

If you want to keep the groups defined, leave the “Keep groups” box checked.

Click OK.

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

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 of the original field.
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.

From the Main Menu, select Fields and Create Field from Group Names.…

The top window of the dialog box, “Select field:”, displays the field names that have groups assigned. Select the field you want to work with.

In the “Select groups:” window, choose the group name(s) to use.

VantagePoint automatically fills in the “New field name”. You can accept the field name VantagePoint assigned or create your own.

You can choose to “Remove empty items” by leaving the box checked.

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

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 of the original field.
Meta Tags

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 (e.g., the “Descriptors (Cleaned)” and “Identifier” fields).
Meta tags are assigned using the following dialog box, which is accessed by selecting **Set Meta Tags**... in the menu shown in the previous figure.

To add meta tags to a field, select the meta tag(s) in the list on the right (click, shift-click, and/or ctrl-click) and then click the button pointing to the left.

To remove meta tags from a field, select the meta tag(s) in the list on the left (click, shift-click, and/or ctrl-click) and then click the button pointing to the right.

Click **OK** to complete the operation.

---

**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.

**Note:** Meta tags cannot be edited while data files are open. You must close all data files before the **Meta Tag Editor** menu item will appear on the Main Menu.
The Meta Tag Editor is accessed from the Main Menu by selecting **Tools** and **Meta Tag Editor**. The illustration on the right shows the **Meta Tag Editor**:

Double-click on a meta tag to edit it.

To add a new meta tag, click on the **New** button on the toolbar.

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.
**TOOLS FOR WORKING WITH LISTS**

**Cleaning a list**

You can 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, you first open the List Cleanup dialog box (from the Main Menu choose **Fields** and **List Cleanup…**).

![List Cleanup dialog box](image)

2. The lists (or fields) in your dataset are shown in the upper left portion of the List Cleanup dialog box. Select the list you want to clean.

3. In the right side of the dialog box, find the cleanup module you want to use. The cleanup modules are usually located in a folder named "Fuzzy" in your *VantagePoint* installation folder (e.g., C:\Program Files\VantagePoint\Fuzzy). The “Fuzzy” cleanup module specifies rules and parameters that guide the process of matching one term to another. As you click on a *.fuz file, a description of the fuzzy module appears in the window at the bottom of the dialog.

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

5. Using the “Confirm Changes” 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 Confirm dialog box can take a long time (see below).

6. Select “Verify Matches w/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. Click the Setup Verification button if you checked this box and the Choose Field dialog will appear.

- In the Choose Field dialog box, pick the field you want to use to verify matches made by List Cleanup. By clicking the “Use Fuzzy Match” box, you can verify matches based on close agreement of items in this verification field. Click OK and you are returned to the List Cleanup dialog (pictured in Step 1).

Referring back to the dialog box pictured in Step 1:

7. Set the Performance Goal slide to the desired setting.

8. If your original list has groups, choose how you would like to preserve those groups in the new list. At the simplest level, cleaning a list combines two or more list items in the original list into a single list item in the new list. If the group memberships of the original list items disagree, VantagePoint needs to know how you want to handle it.

Under Resolving Indeterminate Group Tags:
- “Mark neutral” will leave group membership (or exclusion) of the new list item blank if there is any disagreement among the original list items.
- “Based on record count” will decide group inclusion (or exclusion) based on a “vote” of the number of records included (or excluded) using the original list items.
- ”Mark include” will include (check-mark) the new list item in the group if any of the original list items are included in that group.

9. Click Use 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 “Confirm Changes” box you will see the Cleanup Confirm dialog box. If you did not check the “Confirm Changes” 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. **No operations are actually performed on the list until you click the “Accept” button.** At any time before Accepting, you can save the session and resume at a later time. See the (next) section entitled “Saving the Cleanup Session” for details.

The largest portion of the dialog box is for a list of potential equivalencies found by the VantagePoint algorithms. There are two levels of list items shown here – the group/set names or **aliases** (next to the “+” or “−” signs) and the potentially equivalent source list items, which appear under each alias name when the grouping is expanded.

The group/set names can be sorted alphabetically by clicking on the “Item Name” header. Alternatively, the groups/sets can be sorted by number of records by clicking on the “Num Records” header. Reverse sort order is achieved by clicking on the header again.

The Number of Records is the total for each grouping. The record count of each source list item in the grouping adds up to the group/set total.

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.

You can click and drag an item from one grouping to another.

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:

- **Find** – Displays the Find dialog box. Can also be performed using the shortcut Ctrl+F.
- **Select All** – Selects all displayed items. Can also be performed using the shortcut Ctrl+A.
- **Create New Grouping** – Creates a new group/set beginning with the highlighted list item. This action is enabled if you are viewing all the list items (see “Display All Items” below) and you Right-Click on an ungrouped list item (one without a “+” or “-”). Can also be performed using the “Insert” key.
- **Remove Term from Grouping** – Removes the highlighted source list item from the grouping. The source list item is removed from the grouping and moved to the main level. Can also be removed using the “Delete” key.
- **Rename Term** – Opens the name of the group/set for editing. Can also be performed using the shortcut Ctrl+R.
- **Make This Item the Group Name** – Makes the highlighted source list item the name of the group/set. Can also be performed using the shortcut Ctrl+N.
- **Delete Grouping** – Deletes the grouping. The source list items are moved to the main level. Can also be performed using the “Delete” key.
- **Cut** – Cuts the highlighted grouping or source list item from the tree. When used in combination with Paste (see below), this is a convenient way to move source list items around. After you cut a group/set or source list 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.
- **Uncut** – After a “Cut” operation, this restores the grouping or source list item to the position from which it was cut. Can also be performed using the shortcut Ctrl+Z.
- **Paste** – After a “Cut” operation, places the cut group/set or source list item into the highlighted group/set. Can also be performed using the shortcut Ctrl + V.
- **Collapse All Items** – Changes the display to hide all of the source list items and show only the group/set names.
- **Expand All Items** – Changes the display to expand the groupings and show the source list items within each group/set.
- **Add Item(s) to Custom Set** – Creates a “Custom Set of Items” using the item(s) selected in the display.
- **Remove Item(s) from Custom Set** – Removes the selected item(s) from the Custom Set of Items.
- **Remove All Items from Custom Set** – Removes all items from the Custom Set of Items.
- **Sort** –
  - **All Items** – Sort all Top Level Items and dependent siblings by Name or by Number of Records.
  - **Top Level Items** – Sort all Top Level Items (only) by Name, or by Number of Records
  - **Children of Selected Item** – Sort children of selected Top Level Item by Name, or by Number of Records. (Note: “Children” changes to Siblings when right-clicking on an item within a group.)

Under **Display** – There are three selections that determine what is shown in the display.

- **All Items** – Shows all list items, grouped and not grouped.
- **Combined Items** (default) – Shows only the groupings and source list items that are to
be changed.

**Custom Set of Items** – Shows only a smaller, customized set of items for manual cleanup/confirmation.

Under **Custom Set of Items** – There are several controls you can use to add items to or remove items from the Custom Set.

**Find Close Matches (%)** – Finds items that match the selected item(s) within the selected cutoff percentage. The percentage controls the degree of similarity required to match items. The lower the percentage is, the lower the threshold for matching. The percentage is changed using the up/down arrows to the right of the button.

When you are displaying "All Items" or "Combined Items", clicking **Find Close Matches** reduces the displayed items to a customized set of items that match the selected item(s) within the specified cutoff percentage.

In the following illustration, the user selected "Maps" in the Combined Items Display mode and clicks **Find Close Matches**.
The display switches to a Custom Set of Items created as a result:

When a Custom Set of Items is displayed, clicking **Add Close Matches** adds items from the hidden set that match the selected item(s) within the selected cutoff percentage. In the following illustration, the user has selected an item in a Custom Set and is preparing to click **Add Close Matches**.
When the user clicks **Add Close Matches**, new items from the hidden set are added, as shown below:

**Remove All** – Clears the Custom Set of Items from the display.

**Invert Set** – Hides the currently displayed items and shows all the currently hidden items.
Find – Enter a Search String to work with. You can use Regular Expressions if you check the box, as in the following illustration. The window displays the results of this search (user has pressed Add to achieve the results and selected “Custom Set of Items” under “Display” to display the results):

Add – Adds items from the hidden set that match the "Find" string (or Regular Expression).

Remove – Removes items from the displayed set that match the "Find" string (or Regular Expression).

Reminder: The cleanup operation is not applied to the current list until you click Accept. 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”).

Accept – When you are ready to rename all of the source list items to the related group/set name, click Accept. This creates a new list.

Cancel – Click this to cancel the List Cleanup operation. Any changes that you made in the Cleanup Confirm dialog box will be lost (unless you saved the session, described below).

The Cleanup Confirm Menu Items are illustrated and described below:

Under Cleanup:
Save Session to Finish Later - saves session so it can be resumed later. See “Saving the Cleanup Session”. Note: Custom Sets are NOT saved.

Load Saved Session – (enabled only if a saved session exists) – loads a previously saved session. See “Saving the Cleanup Session”.

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 “How to apply 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 the section on “Managing Multiple Matches in a Thesaurus”. Once you’ve finished working with the thesaurus, you will then be returned to the Cleanup Confirm 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.

Cancel Cleanup - Cancels the cleanup process.

Accept Cleanup - Executes the cleanup process.

Under 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.
You can display a **Detail Window** for the item(s) selected. Be sure **Show Detail Windows** is checked and then select **Add New Detail Window**.

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).

Any number of Detail Windows can be added by choosing **Add New Detail Window** from the **Detail Window** menu.
Saving the Cleanup Session

If you are unable to finalize the list cleanup and want to resume the session at a later time, select **Cleanup** from the Cleanup Confirm menu and **Save Session to Finish Later**. Note: Custom Sets are NOT saved with the 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 **OK**.

A confirmation dialog appears stating your cleanup session was saved.

Click **OK**. You can now click **Cancel** on the Cleanup Confirm dialog box and answer **Yes** to confirm, as your session is saved for retrieval at a later time.
Once a session is saved, you can select **Resume Saved List Cleanup** from the Main Menu item **Fields**:

You are presented with a list from which to choose the session to be resumed. Cleanup sessions created with the current dataset are displayed. Checking “Show All Sessions” will display all cleanup sessions, including those created using other datasets.

Select the session and click **OK**. You will then be presented with the **Cleanup Confirm** 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.
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 Main Menu, choose Fields and Thesaurus...

2. The lists (or fields) in your dataset are shown in the upper left portion of the Thesaurus dialog box. Select the list to which you want to apply a thesaurus.

3. In the right side of the dialog box, find the thesaurus you want to use. The thesauri are usually located in a folder named "Thesaurus" in your VantagePoint installation folder (e.g., C:\Program Files\VantagePoint\Thesaurus). Select the thesaurus to be used.

4. 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.

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. If your original list has groups, choose how you would like to preserve those groups in the new list.

   At the simplest level, applying a thesaurus combines one or more list items in the original list into one list item in the new list. If the group memberships of the original list items disagree, VantagePoint needs to know how you want to handle it.
   - "Mark neutral" will leave group membership (or exclusion) of the new list item blank if
there is any disagreement among the original list items.
- "Based on record count" will decide group inclusion (or exclusion) based on a "vote" of the number of records included (or excluded) using the original list items.
- "Mark include" will include (check-mark) the new list item in the group if any of the original list items are included in that group.

8. Click **Use** to apply the thesaurus.

Once the action 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 the section on the *VantagePoint 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 **Fields** and **Find and Replace ...** from the Main Menu. The user interaction is the same as described earlier in the section "Applying a Thesaurus to a list."
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 Groups and Create Thesaurus Using Groups… from the Main Menu.

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).

3. 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.

4. Click OK to continue.

5. 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.
6. If you choose to merge the results with an existing thesaurus, refer to the next section: “Merging List Cleanup and Thesaurus Using Groups operations 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 “List Cleanup” and “Thesaurus Using Groups” into an Existing Thesaurus**

When you click **Save As Thesaurus** in the Cleanup Confirm dialog box or create a thesaurus using groups (Menu item **Groups** and **Create Thesaurus Using Groups** ...) and select an existing thesaurus file (*.the) for the operation, you see the following warning:

![Warning Dialogue Box]

**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 on “Managing Multiple Matches in a Thesaurus”).

**Overwrite** will erase the contents of the existing thesaurus before continuing. If you are creating a thesaurus using groups, you may still encounter multiple matches.
Managing Multiple Matches in a Thesaurus

When automatically adding to a thesaurus (from “List Cleanup” or “Create 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 (Menu item Fields 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 - Create Thesaurus” or “Create Thesaurus Using Groups” action results in multiple matches, you will see the following dialog box:

In this example, the user is creating a thesaurus from a set of groups in a list. (Incidentally, you can tell that the user selected “Require exact match,” as evidenced by the regular expression tags “^” at the beginning and “$” at the end of the item in question – “Air navigation”.) The list item “Air navigation” belongs to two groups – “Map: Air navigation” and “Map: Optical Flows”. Earlier in the “thesaurus from groups” process, the group membership of “Air navigation” in “Map: Air navigation” was automatically entered into the thesaurus. The multiple matches occurred when VantagePoint encountered the second group membership for “Air navigation” (“Map: Optical Flows”).

Here is an explanation of the dialog box:

Under New Match:

**Main Item:** In “thesaurus” terminology, this is the “alias” to which the Sub Item will be changed whenever the thesaurus is applied. In the Thesaurus Editor, this is also called the “top level item.”

**Sub Item:** This is the list item that, if found in a list when you apply the thesaurus, will be changed to the Main Item (or alias). In the Thesaurus Editor, you can use Regular Expressions to make flexible matches. Only two Regular Expressions are allowed here – “exact match” (for example, “^Air navigation$”) or “contains” (for example, “Air navigation”).

**Top Level Items Matched to the Sub Item:** This is a list of aliases for the Sub Item that exist in the thesaurus already. Notice that the new alias in question (in this case “Map:
Optical Flows") is also included in the list.

**Keep Only New** – Clicking this button will keep only the new match and delete all others. In this example, the thesaurus relation between "^Air navigation$" and "Map: Air navigation" would be deleted, and the thesaurus relation between "^Air navigation$" and "Map: Optical Flows" would be added.

**Keep Only Existing** – Clicking this button will keep only the existing matches and not enter the new one. In this example, the thesaurus relation between "^Air navigation$" and "Map: Air navigation" would be retained, and the thesaurus relation between "^Air navigation$" and "Map: Optical Flows" would not be added. If there were other matches shown in the “All Matches” list (other than the one in question), they would also 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 Matches:” list).

**Keep Selected Matches** – You can select the matches you want to keep in the “Top Level Items Matched” dialog box 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 multiple matches in this operation. When this box is checked, here are the functions of each of the buttons:

- **Keep Only New** – When any multiple match occurs, 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.

- **Keep Only Existing** – When any multiple match occurs, 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 Matches** – This button is disabled when “Use This Answer for All” is checked.
Thesaurus Editor

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

To edit or create a thesaurus, open the Thesaurus Editor dialog box by selecting Tools and Thesaurus Editor... from the Main Menu.

Source List Window – You can load any list from an 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 new **Load Field** and **Load Text File** shortcut icons in the Field window:

![Thesaurus Editor](image)

The “Display” buttons below the window control the content of the Source List Window. After you **Apply Thesaurus** (see the “Results List” below), the “Display” buttons allow you to view a) the entire list, b) only the terms that were matched by the thesaurus, or c) only the terms that were not matched by the thesaurus.

**Note:** The “Display” buttons work after applying the thesaurus to the source list. Also, if you then make changes to the thesaurus, you need to **Apply Thesaurus** again to refresh the matched or unmatched view (as well as the “Results List”).

**Thesaurus Editor Window** – You create and edit your thesauri in this window. To edit an existing thesaurus, click **File** and **Open Thesaurus** from the Thesaurus Editor Menu and select the thesaurus from the selection dialog box. To save the changes you have made to the thesaurus, click **File** and **Save Thesaurus** from the Thesaurus Editor Menu. See “Editing a Thesaurus” (next section) 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 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 alias. (In the illustration, Can and Canada are shown.)
Editing a Thesaurus

Expanding/Collapsing Aliases – In the Thesaurus Editor window (see Thesaurus Editor), you can click on the “+” sign in the box to the left of an alias, to expand the list of patterns. You can collapse the alias 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 sub item. Or you can use the shortcut Ctrl+C. You can also click and drag sub item to another top level item.

Cut – Cuts the selected item to be removed or pasted to another top level item. You can also use the shortcut Ctrl+X.

Paste – Pastes the sub item previously copied. You can also use the shortcut Ctrl+V.

Find – Displays the “Find” dialog box.

Insert Top Level Item – Adds a new alias to the thesaurus. The default name for the new alias is “New Item n,” where “n” is a number. You change this to the alias you want using the “Rename Item” menu item (see below). Notice the new Insert Major Item icon on the toolbar. You can also use the Insert key as a shortcut.

Insert Sub Item – Adds a new pattern to the selected...
alias. Again, the default name for the new pattern is “New Item n.” You change this to the pattern you want using the edit controls at the bottom of the Thesaurus Editor window (see “Editing a Thesaurus Pattern”). Notice the new Insert Sub Item icon on the toolbar. You can also use the Shift + Insert keys as a shortcut. Or you can click and drag a sub item to another top level item.

**Rename Item** – Opens the alias or pattern for editing. You can also use the shortcut Ctrl+R.

**Delete Item** – Deletes the selected alias or pattern. You can also use the Delete key as a shortcut.

**Collapse All Items** – Collapses all branches of the thesaurus, leaving only the aliases viewable.

**Expand All Items** – Expands all branches of the thesaurus, showing the aliases and all of the patterns 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 Top Level Items** – Identifies sets of top level items that are potential matches for thesaurus reduction. This uses the fuzzy matching algorithm based on the fuzzy rule set you specify.

**Remove Redundant Sub Items** – Searches for and removes redundant Sub Items from your thesaurus.

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

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

**Resolve Duplicate Sub Items** - Searches your thesaurus for identical sub items that are assigned to more than one top level item. Each sub item is presented one-at-a-time along with the top level items that contain the sub item. You can select to keep one or more of the assignments, or if you choose none of the top level items, you are prompted to confirm the removal of the sub item from the thesaurus.

Under 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 Sub Items only.

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

After you insert a sub item to an alias (see “Editing a Thesaurus”), you enter the pattern that you want a list item to match in order to be merged into the alias.

In the following illustration, the user is entering a sub item to the alias “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 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 “\.” (“back slash” followed by “period”). For example, to match “Inst.” you must enter “Inst\.”. Other reserved characters include the following:

\( ([\{\}^]\*\?\+)\)
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 Module Editor is accessed from the Main Menu by selecting Tools and 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.
Tools for working with Groups in a List

Creating Groups by Comparing two lists

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

1. To compare two lists, you first open the VantagePoint file(s) you want to compare.
2. Create (or open) a view of the first list (Sheets and Add List…).
3. From the Main Menu, select Groups and List Comparison... to open the List/Group Comparison dialog box.
   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 (see below).

This 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. Click “Case sensitive” 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 Main Menu choose Groups and Group Using Thesaurus…. The following wizard dialog box will appear.

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 Corporate Source). 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 the full list or one of the groups) and click Next.

In Step 2 of the wizard, select the thesaurus you want to use to create the groups.

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 example below).

Group For Each Alias: Choose this option to create a group for each alias in the thesaurus (see example 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**: Click this ON if you want to give precedence to pre-existing group exclusions. With this OFF (default), 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 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 “Academic,” “Government/NGO,” and “Corporate” groups in one instance, and the “Known” group in the other.
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. From the Main Menu, select Groups and Group Using Stemming with either AND or OR.

Alternatively, you can select these menu items from the right-click menu:
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”.

![Diagram showing the results of "Control systems" and "Computer software" groups created using "AND" and "OR" respectively.]
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.
Working with Child Fields

Some List View operations (for example, Thesaurus, Cleanup, and Further Processing) produce a new field. In the same way, these operations can be performed on a Child Field in a Table View. When you do this, a new Child Field is produced. In the following illustration, the user is performing a “Further Processing” operation in the Number field to extract the Country Code.
This operation changes the Child Field to the following:

![Table View of the Publication Number (long) field](image)

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:
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.

<table>
<thead>
<tr>
<th># Records</th>
<th># Instances</th>
<th>Number: Pa</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>4</td>
<td>United States of America</td>
<td>20130432</td>
</tr>
<tr>
<td>2</td>
<td>1</td>
<td>United States of America</td>
<td>20130328</td>
</tr>
<tr>
<td>3</td>
<td>1</td>
<td>United States of America</td>
<td>20130326</td>
</tr>
<tr>
<td>4</td>
<td>1</td>
<td>United States of America</td>
<td>20130321</td>
</tr>
<tr>
<td>5</td>
<td>6</td>
<td>United States of America</td>
<td>20130319</td>
</tr>
<tr>
<td>6</td>
<td>2</td>
<td>United States of America</td>
<td>20130314</td>
</tr>
<tr>
<td>7</td>
<td>1</td>
<td>WIPO (PCT)</td>
<td>20130314</td>
</tr>
<tr>
<td>8</td>
<td>1</td>
<td>European Patent Office</td>
<td>20130313</td>
</tr>
<tr>
<td>9</td>
<td>5</td>
<td>United States of America</td>
<td>20130312</td>
</tr>
<tr>
<td>10</td>
<td>2</td>
<td>European Patent Office</td>
<td>20130306</td>
</tr>
<tr>
<td>11</td>
<td>2</td>
<td>Japan</td>
<td>20130306</td>
</tr>
</tbody>
</table>

In the Summary View, it now looks like this:

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:
Changing the Order of Child Fields in the Parent Field/Table View

The dialog to change the order of the 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, 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”.)

![Matrix column headings](image-url)
DETAIL WINDOWS

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 Window – Lists and Charts.

The List-type Detail Windows display three columns. The first column shows the co-occurrence values, the second column shows the “expectancy arrows”, and the third column has the text of the co-occurring items. The Chart-type Detail Windows show the same data as the List-type Detail Window, except that the co-occurrence values are displayed graphically and expectancy arrows are not shown.

You can switch between view types, change the chart type, zoom the column charts, copy and/or print the data, and perform other operations using menus accessed by right-clicking on the Detail Window. Each menu is described in detail in following sections.

This illustration shows four Detail Windows on the right-hand side of the screen, each showing details about the records selected in the co-occurrence matrix. 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 View. In the illustration shown above, the user has clicked on the year “1998” in the “Family Member Years” Detail Window, and the 12 record titles (out of the 122 selected in the co-occurrence matrix) from 1998 are highlighted in the Title View.
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.

Meta tags can also be shown in Detail Windows, provided that ALL fields associated with that Meta tag have a Data Type = Number. If the Meta tag has even one field that does not have Data Type = Number, then the Meta tag is not available for displaying purposes in the Detail Windows.

The initial menu command for working with Detail Windows is located under the Main Menu item View, as shown here:

From the Main Menu select View and Detail Windows – shows or hides all Detail Windows.

From the Main Menu select View and Add Detail Window – adds a new Detail Window. If Detail Windows are hidden, they will be shown and a new window added.
Detail Window – Expectancy Arrows

An expectancy arrow appears in a List-type Detail Window 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.

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** – leads you to select the chart type from the following list: Vertical Bar, Horizontal Bar, Pie Chart, or 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 column chart.

- **Chart Style** – Leads you to select the chart style from the following list: Vertical Bar, Horizontal Bar, Pie Chart, or Line Graph.

- **Use Selection Time Frame**: Limits the chart’s timeframe 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 column chart by number of records (descending order).

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

- **Zoom out** – After you have zoomed in on a column 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 column 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 Window – Record/Parent Item Scope in Detail Windows

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.
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).
Detail Window – Meta Tag Pop-up Menu

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

**Chart Style...** – Change the Chart Style displayed in the Detail Window to one of the following charts:

- **Vertical Bar** - Displays the data as a vertical bar chart.
- **Horizontal Bar** - Displays the data as a horizontal bar chart.
- **Pie Chart** - Displays the data as a pie chart.
- **Line Graph** - Displays the data as a line graph.

**Chart Data...** – Defines the presentation of the data in the Detail Window:

- **Sum** - Displays a summation of the items associated with each field.
- **Min** - Displays the minimum value of the items associated with each field.
- **Max** - Displays the maximum value of the items associated with each field.
- **Mean** - Displays the average value of the items associated with each field.
- **Cumulative Sum** - Displays a cumulative summation of the items associated with each field.

**Sort by value, Ascending / Descending** - Sorts by the values in ascending or descending order.

**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 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:

![Family Member Countries](image)

Detail Window – Zooming in a Column Chart
When you click and drag across a range of columns, the view zooms to display only those columns selected, as shown in the following illustrations:

![Family Member Countries](image)

You can zoom out again using the right-click menu, and choosing **Zoom Out All**.
Detail Window – Colors for Charts

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

From the Main Menu, Select **Tools** and **Detail Window Colors**.

The upper half of the dialog box contains the settings for Chart colors in 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).
**CO-OCCURRENCE MATRIX**

**The 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.

![Co-occurrence Matrix Illustration](image)

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.

With a Co-occurrence matrix, you can Sort, Make Heat Map, List Cells in a Matrix, Paint cells, "Flood" the matrix, Select multiple cells, or Find a string. Those topics are explained in this section. You can also Zoom – see "Zooming in a List or Matrix" under the "Main Workspace" section.
Creating a co-occurrence matrix of list items or groups

1. Open the Create Matrix dialog box by selecting Sheets and Add Matrix from the Main Menu,
or Click the Create Matrix button on the toolbar or press Ctrl+M on the keyboard.

You are presented with the Create Matrix dialog box showing two identical views of the list items that are available in the current dataset. 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.

Clicking on the field name selects “All Items” as the default. If a list has groups defined, click on the “+” box next to the name and the list item will be expanded to reflect the following for selection:
- All Items – all of the list items
- Select Groups / Show Items - Select Group(s) with list items as labels
- Select Groups / Show Groups - Select Group(s) using group names as labels

By default, all groups are selected. If you want to select a particular group or groups, click or multi-select the groups desired from the Select Groups window.

2. In the first window, click on the list item you want to appear on the rows of the co-occurrence/correlation matrix. If you want to select groups of a list item, expand the list item and click the desired “Select Groups” option. Another window, Select Groups, appears with a listing of groups defined with the list item.
3. In the “Columns” window, select the list item (or group) you want to appear in the Columns of the co-occurrence/correlation matrix.

Notice the matrix definition (below the windows) is built as choices are made. This allows you to get an idea of the size of the matrix you are creating.

4. Click on the type of matrix you want to create (Co-occurrence, Auto-correlation, or Cross-correlation).

5. Select the Basis for the Matrix – either # of Records or # of Instances. Usually you should choose # of Records.

6. Select the Scope, if enabled. 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 Item - 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.

7. Click OK to create the matrix. If the OK button is not enabled, you have not made a selection in either the row or column selection boxes.
Sorting rows or columns in a co-occurrence view

You can sort the rows or columns in a Co-occurrence View by:

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. **Double-click on the “Reset” cell (top left corner).** Both the rows and columns of the co-occurrence view are sorted by “# Records” in decreasing order.
Flooding a co-occurrence matrix

You can “flood” a co-occurrence matrix to remove the rows and columns that fall outside a min/max range.

In a co-occurrence 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 lower set of arrows manipulates the minimum value to be included in the matrix. Click on the arrows to change the values displayed, which directly affects the matrix, removing those cells falling outside the parameters.

Here is the same matrix after the lower limit was changed to 5. Any entries with values of less than five were removed.
Heat Map

You can 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 choose Make Heat Map….

You are presented with a color chart from which to select 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:

![Image of matrix with colors applied]

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

(See about setting a Heat Map as the default in the Tools/Options dialog under "[Heat Maps Settings](#)".)
Painting cells in a co-occurrence view

With a Co-occurrence view active:

1. Select the cell or cells to be painted by clicking in the cell or multi-selecting cells.
2. On the toolbar, select the color by clicking the color selection icon (the arrow beside the paintbrush) and clicking on the color you want to use. This color will be used until you select another color.

3. Paint the cells by clicking on the Paint icon (the paintbrush).

Selecting multiple cells in a co-occurrence view

You can select multiple cells in a Co-occurrence view by using the shift or control keys while you click on the cells.

To add selections one at a time: Press the control 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 co-occurrence view

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.
Exporting a co-occurrence matrix

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, selecting **Edit** and **Copy** from the menu (or using the keyboard shortcut Ctrl+C) 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 and click **File** and **Export 3D Co-occurrence Matrix**, as shown below:

You will then be prompted to select the third field, as illustrated here.
If saving the output to a File, you would click the ellipses button, which would bring up the “Save As” dialog, where you would enter the file name and location for the exported data file. (You can also copy the output to the Clipboard, which can be pasted into another application.)

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

![Matrix List](image)

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:

Each row represents one cell in the matrix.

The Matrix List interacts with its underlying matrix view. When the user selects a line in a Matrix List, the corresponding row and column are selected in the underlying matrix view, as shown in the next illustration. See also “Detail Window Colors (Matrix View)”, below.
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.

**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 (Matrix View)

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 colors can be defined by the user via the Main Menu item Tools and Detail Window Colors....

The lower half of the dialog box controls the colors displayed in a Detail Window list for a matrix view.
CORRELATION MATRIX

The 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, author Kelly (row 5) shows high correlation with Stentz, and Nebot (row 19) shows high correlation with Whyte.

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, “Make Heat Map” was used to identify Authors showing 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.

With an Auto-Correlation matrix, you can Sort, Make a Heat Map, List Cells in a Matrix, Paint cells, Show Values to include in the matrix, Select multiple cells, or Find a string. Refer to those topics under the “Co-occurrence Matrix” section. You can also Zoom – see “Zooming in a List or Matrix” under the “Main Workspace” section.
Creating an Auto-Correlation Matrix

1. Open the Create Matrix dialog box by selecting Sheets and Add Matrix... from the Main Menu.

or Click the Create Matrix button on the toolbar
or press Ctrl+M on the keyboard.

You are presented with the Create Matrix dialog box showing a view of the list items that are available in the current dataset.

2. Click on the type of Matrix you want to create (Co-occurrence, Auto-Correlation, or Cross-Correlation).

3. From the Rows and Columns window, choose the field and/or groups for which you want to show correlations. 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. If a list has groups defined, click on the "+" box next to the name and the list item will be expanded to reflect the following for selection:

- **All Items** - all of the list items
- **Select Groups / Show Items** - Select Group(s) with list items as labels
- **Select Groups / Show Groups** - Select Group(s) using group names as labels

By default, all groups are selected. If you want to select a particular group or groups,
click or multi-select the groups desired from the Select Groups window.

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.

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 either Pearson’s r (the default), Cosine or Max Proportional.

6. Click OK.
The 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 this example, “Make Heat Map” was used to identify items showing high correlation.

With a Cross-Correlation matrix, you can Sort, Make a Heat Map, List Cells in a Matrix, Paint cells, Show Values to include in the matrix, Select multiple cells, or Find a string. Refer to those topics under the “Co-occurrence Matrix” section. You can also Zoom – see “Zooming in a List or Matrix” under the “Main Workspace” section.
Creating a Cross-Correlation Matrix

1. Open the **Create Matrix** dialog box by selecting **Sheets** and **Add Matrix...** from the Main Menu.

   or Click the **Create Matrix** button on the toolbar

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

   You are presented with the **Create Matrix** dialog box showing a view of the list items that are available in the current dataset.

   ![Create Matrix dialog box]

   - **Matrix**: Cross-correlation (based on Record counts) using Pearson’s R
   - **Rows**: Author (Cleaned) — All Groups
   - **Columns**: Author (Cleaned) — All Groups

   Items in groups will appear as row labels.

2. Click on the type of Matrix you want to create (Co-occurrence, Auto-Correlation, or Cross-Correlation).

3. From the Rows and Columns window, choose the field and/or groups for which you want to show correlations. These items will appear on the **Row** and **Column** headers on the matrix.

   Clicking on the field name selects “All Items” as the default. If a list has groups defined, click on the "+" box next to the name and the list item will be expanded to reflect the following for selection:

   - **All Items** - all of the list items
   - **Select Groups / Show Items** - Select Group(s) with list items as labels
   - **Select Groups / Show Groups** - Select Group(s) using group names as labels

   By default, all groups are selected. If you want to select a particular group or groups, click or multi-select the groups desired from the Select Groups window.
4. In the "Cross with" window choose the field and/or groups that you want to use to determine the correlation between items. In general, row and column items that share many of the same "Cross with" 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.

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 Pearson's r (the default), Cosine or Max Proportional.

7. Click OK.
The 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.

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 sort, make a Heat Map (as illustrated above), select multiple cells, and find a string. You can also zoom – see the “Zooming in a List or Matrix” topic under the “Main Workspace” section. Topics for “Sorting rows and columns” and “Selecting multiple cells” appear below.

Creating a Factor Matrix

1. From the Main Menu, select Sheets and Add 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.

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, if offered).
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 new group does not show up on the factor matrix view. However, a list view of the items in your analysis will show the new group.
Selecting multiple cells in a Factor Matrix view

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 control 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.
MAPS

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 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 Autocorrelation 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.

[Diagram of a cross-correlation map showing relationships between different corporate sources like Caspian Corp, US Air Force, Toyota Motor Corp, etc.]

© Search Technology, Inc. 1997-2015
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 Factors 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 Main Menu, select **Sheets** and **Add Map**...

   *or* Click the **Create Map** button on the toolbar.

3. From the **Mapping Wizard** dialog box, select **Cross-correlation Map**.

4. Click **Next**.
5. Select the group you created for this map. Clicking on the field name selects “All Items” as the default. If a list has groups defined, click on the “+” box next to the name and the list item will be expanded to reflect the following for selection:

- **All Items** – this selects all of the list items
- **Select Groups** – use to select more than one group (see bottom picture). This brings up another window where you can select all groups or multi-select particular groups. By default, all groups are selected. If you want to select particular groups, Shift-click or Ctrl-click to multi-select the groups desired.
- **Group: (group name)** – use to select one particular group

Notice the map definition (under the windows) is built as choices are made. This allows you to get an idea of the size of the map you are creating.

6. Click **Next**.
7. Then, select the field or group you would like to use to relate the mapped items (e.g., Descriptors).

8. Click **Finish** to begin creating your map.
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 keywords 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 keywords 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). The lines between nodes represent a measure of similarity between the two clusters of terms. 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 Factors Map, all of the items you select will appear on the Auto-correlation Map. Typically, 15 to 20 terms is the most that can fit on a map and still be readable.

2. From the Main Menu, select **Sheets** and **Add Map**...

   or Click the **Create Map** button on the toolbar.

3. From the **Mapping Wizard** dialog box, select **Auto-correlation Map**.

4. Click **Next**.

![Mapping Wizard dialog box]
Select the group you created for this map. Clicking on the field name selects “All Items” as the default. If a list has groups defined, click on the “+” box next to the name and the list item will be expanded to reflect the following for selection:

- **All Items** – this selects all of the list items
- **Select Groups** – use to select more than one group. This brings up another window where you can select all groups or multi-select particular groups. By default, all groups are selected. If you want to select particular groups, Shift-click or Ctrl-click to multi-select the groups desired.
- **Group:** *(group name)* – use to select one particular group

Notice the map definition (under the windows) is built as choices are made. This allows you to get an idea of the size of the map you are creating.

5. Click **Finish** to begin creating your map.
Factors Maps

*VantagePoint* can be used to create visual maps of data. The following is an example of a Factors Map.

A Factors 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. As with auto-correlation maps, the lines reflect the similarity between the nodes. 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.
Creating a Factors Map

To create a factors 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.

   **Note**: As another rule of thumb, do not include in your analysis group any list items that occur in most of the records.

   **Note**: 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 Main Menu, select **Sheets** and **Add Map**…

   or Click the **Create Map** button on the toolbar

3. From the **Mapping Wizard** dialog box select **Factors Map**.

4. Click **Next**.

![Mapping Wizard dialog box](image_url)
Under **1. Choose what to analyze**, select the group you created for this map.

Clicking on the field name selects “All Items” as the default. If a list has groups defined, click on the “+” box next to the name and the list item will be expanded to reflect the following for selection:

- **All Items** – this selects all of the list items
- **Select Groups** – use to select more than one group. This brings up another window where you can select all groups or multi-select particular groups (see next illustration). By default, all groups are selected. If you want to select particular groups, Shift-click or Ctrl-click to multi-select the groups desired.
  - **Group: (group name)** – use to select one particular group

Notice the map definition (under the window) is built as choices are made. This allows you to get an idea of the size of the map you are creating.

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 Groups** if you would like to create a group for each node on the map. *(Note: this is disabled if you choose “Select Groups”).*

7. Click **Finish** to begin creating your map.
Using 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 Factors 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 the “Changing Preferences for Map Display” section.

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. 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.

(Also see the Section entitled “Changing Preferences for Map Display”).

The similarity is shown when you “hover” the cursor over a link, as shown in this illustration:
When you right-click on the map, a pop-up menu appears.

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

**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” in this User Guide for details on this topic.
When you choose to display a field of type “Year”, a histogram of the data is shown, as in this illustration:

When you 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 the mouse 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.

**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.
Under the **Dropdowns** tab:

![Map Preferences Dropdowns tab](image)

**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, 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.
Under the **Fonts** tab:

![Map Preferences window](image)

**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 list for each node. To change, click the **Change Font...** button.
Under the **Defaults** tab:

![Map Preferences dialog box](image)

**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.
Creating a Principal Components Decomposition (PCD)

Principal Components Decomposition 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 Main Menu select Groups and **Principal Components Decomposition (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.

3. You may also **Exclude the most frequent item** using the check box 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.

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

5. 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).

6. 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.

7. 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.

8. 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.
AUTOMATION AND SCRIPTS

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

You can run scripts in several ways:
- from the Main Scripts Menu,
- using “Hot Keys” (set in the “Modify Script Menu…”), or
- from the Run Script… dialog box.

Running scripts

The VantagePoint Script dialog box is accessed from the Main Menu: Scripts and Run Script… or from the Run Script (or “Automation”) button on the toolbar.

The scripting 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 or *.tmf. 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*.

---

**Note:** For detailed scripting commands and syntax, refer to the Help Topic “VantagePoint Scriptwriter Reference”, found within the “Automation and Scripts” topic in *VantagePoint*s On-line Help.

---

**Modify scripts menu**

The Modify Scripts Menu dialog is accessed from the Main Menu: Scripts and Modify Scripts…. This dialog is used to arrange scripts on the Scripts Menu and to assign “Hot Keys,” which can be assigned to Control-1 through Control-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 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 this button will remove the selected script from the menu (after a confirmation question). If you press and hold the Control key, the Remove Script button changes to Remove All, which will remove all the scripts from the menu (after a confirmation question).

Add Separator – Visually enhances the display of the menu by adding a separator between menu items. See the respective “Before & After” screen shots below.

When you click Add Separator, "<<SEPARATOR>>" appears at the bottom of the list. 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 Control-1 through Control-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.

![Modify Scripts Menu](image)

Click **OK** to accept changes or click **Cancel** to dismiss all changes.
The user accesses the Import Filter Editor by selecting it from the Main Menu: **Tools** and **Import Filter Editor**. 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 function as follows: select a Database and the fields are shown; select a Field and the commands are shown. 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.

**Menus**

**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**.

**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 tab is 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.
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:

<table>
<thead>
<tr>
<th>Database Settings tab</th>
<th>To enter descriptive information about this database</th>
</tr>
</thead>
<tbody>
<tr>
<td>Database Information</td>
<td></td>
</tr>
<tr>
<td>Data Provider</td>
<td>Enter the name of the data provider.</td>
</tr>
<tr>
<td>Confirm text of each record at run time</td>
<td>[Yes or No] – “Yes” causes the “Confirm Record Text” dialog to be presented for each record during import.</td>
</tr>
<tr>
<td>Ignore During Auto-Sense</td>
<td>[Yes or No] – “Yes” causes this database import filter to be ignored when attempting to autosense the appropriate filter for the raw dataset. This is necessary when “record start” is easily matched (e.g., “.” for columnar import).</td>
</tr>
<tr>
<td>Remove carriage returns (\r) from data on import</td>
<td>[Yes or No] – “Yes” strips all carriage return (\r) characters from the raw data before importing it.</td>
</tr>
<tr>
<td>Feature</td>
<td>Description</td>
</tr>
<tr>
<td>----------------------------------------------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Auto-assign fields based on column header names</td>
<td>[Yes or No] – For import of columnar data. “Yes” assigns import filter fields to columns based on matches between the text string in “Field Settings” and first row column header names in the raw data file.</td>
</tr>
<tr>
<td>[Auto-Assign] Row # Containing Column Headers</td>
<td>Integer – (Auto Assign) Enter the row number that contains the column headers.</td>
</tr>
<tr>
<td>[Auto-Assign] Column Delimiter (regex)</td>
<td>Regular Expression</td>
</tr>
<tr>
<td>[Auto-Assign] Use Text Qualifier</td>
<td>[Yes or No]</td>
</tr>
<tr>
<td>[Auto-Assign] Text Qualifier</td>
<td>Single Character</td>
</tr>
<tr>
<td>Generate Key Field</td>
<td>[Yes or No]</td>
</tr>
<tr>
<td>Run Script After Import</td>
<td>Enter the Script name to run after Import (if any).</td>
</tr>
<tr>
<td>Expect Long Records</td>
<td>[Yes or No] Set this option to “Yes” if your filter works on records that are commonly &gt;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.</td>
</tr>
</tbody>
</table>
**Record Definition**

The Record Definition tab 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.

### Record Definition tab

<table>
<thead>
<tr>
<th><strong>Select Text (Special)</strong></th>
<th>Defines how to extract records from the raw data file.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Start regex</strong></td>
<td>Enter the <em>regular expression</em> that uniquely identifies the beginning of the record.</td>
</tr>
<tr>
<td><strong>Include Start</strong></td>
<td><em>Yes</em> or <em>No</em> – Does the record include the text matched by the Start regex? Typically “Yes”.</td>
</tr>
<tr>
<td><strong>Start regex case sensitive</strong></td>
<td><em>Yes</em> or <em>No</em> – Require the match to be case sensitive?</td>
</tr>
<tr>
<td><strong>End regex</strong></td>
<td>Enter the <em>regular expression</em> that uniquely identifies the end of the record. This could be the beginning of another record.</td>
</tr>
<tr>
<td><strong>Include End</strong></td>
<td><em>Yes</em> or <em>No</em> – 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.</td>
</tr>
</tbody>
</table>
### End regex case sensitive

<table>
<thead>
<tr>
<th>Yes or No</th>
<th>Require the match to be case sensitive?</th>
</tr>
</thead>
</table>

### Must find end regex

**[End of File is an acceptable match or Must find ending regex]**

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)

**[Yes or No]** - 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 General text manipulation commands.

---

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.
Field Definition

The Field Definition tab opens the field definition sheet for the selected field in the Command Stack window, showing the command sequence for identifying field start, end, and other processing actions that define the field.

Commands are entered and managed on the Stack through Right-Click walking menus or via keyboard shortcuts. The Text Manipulation Commands topic contains detailed explanations of the commands and/or setting that appear in the Command Stack window, and their options.
Field Settings

Field Settings: Opens the field settings sheet for the selected field in the Command Stack window, showing several field-specific parameters, and opening controls for assigning meta tags to fields.

Buttons:

Set Meta Tags. Click this button to assign meta tags to the selected field. (See the Add/Remove Meta tags illustration in the “Adding Meta tags for fields” section.)

Set Child Field Order. When more than one Field is defined as a Compound Child, you can arrange the order of the siblings. Clicking this button will bring up the children associated with the field.

When the “Field Settings” tab is selected, the Command Stack Window allows you to enter information or set attributes for the selected field.
### Field Settings tab

Defines attributes for the selected field.

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is Template Field</td>
<td>[Yes or No]</td>
</tr>
<tr>
<td>(Template) Template Field</td>
<td>(Regex)</td>
</tr>
<tr>
<td>(Template) Case Sensitive</td>
<td>[Yes or No]</td>
</tr>
<tr>
<td>(Template) Field Name</td>
<td>from Which SubExpression</td>
</tr>
<tr>
<td>Abstract Field</td>
<td>[Yes or No] – Use this field for Cluster Summaries. Only one field should have this set to “Yes”.</td>
</tr>
<tr>
<td>Confirm Entities on Import</td>
<td>[Yes or No] – “Yes” causes the “Entity Confirmation” dialog to be presented for each record during import.</td>
</tr>
<tr>
<td>Data Type</td>
<td></td>
</tr>
<tr>
<td>Category</td>
<td>For data items that have a relatively small number of discrete values.</td>
</tr>
<tr>
<td>Link</td>
<td>For data items that are links to file names.</td>
</tr>
<tr>
<td>General</td>
<td>This is the default data type.</td>
</tr>
<tr>
<td>Number</td>
<td>For data items that are numbers.</td>
</tr>
<tr>
<td>Year</td>
<td>For data items that are years.</td>
</tr>
<tr>
<td>(Automatically Set Internally)</td>
<td></td>
</tr>
<tr>
<td>Display in fielded record view</td>
<td>[Yes or No] – Set to “Yes” to include this field in the Fielded Record View.</td>
</tr>
<tr>
<td>Display Position in Fielded Record View</td>
<td>Integer – Enter an integer for the relative position of this field in the Fielded Record View (“1” at the top).</td>
</tr>
<tr>
<td>Secondary Field</td>
<td>[Yes or No] – Set to “Yes” for fields that are not usually imported.</td>
</tr>
<tr>
<td>Title View Field</td>
<td>[Yes or No] – Use this field in Title View. Only one field should have this set to “Yes”.</td>
</tr>
<tr>
<td>Turn Results into Record Numbers</td>
<td>[Yes or No]</td>
</tr>
<tr>
<td>Description</td>
<td>Not Used – for future capability</td>
</tr>
<tr>
<td>Field is Library Procedure</td>
<td>(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”.)</td>
</tr>
<tr>
<td>Trim Whitespace</td>
<td>[Yes or No]</td>
</tr>
<tr>
<td>Wrap Text in Record View</td>
<td>[Yes or No]</td>
</tr>
<tr>
<td>Field Type</td>
<td></td>
</tr>
<tr>
<td>Field Type</td>
<td>Description</td>
</tr>
<tr>
<td>----------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Regular</td>
<td>Field is not a compound field</td>
</tr>
<tr>
<td>Compound Parent</td>
<td>Field is defined as the Parent of a Compound Field. This field should be defined before a Compound Child Field is defined.</td>
</tr>
<tr>
<td>Compound Child</td>
<td>Field is defined as the Child of a Compound Field.</td>
</tr>
<tr>
<td>Compound Field’s Parent</td>
<td>Dropdown box offers previously-defined Compound Parent Field from which to select as Parent.</td>
</tr>
<tr>
<td>Compound Field Display Delimeter</td>
<td></td>
</tr>
<tr>
<td>Compound Field Child Display Order</td>
<td>Order of rank when Child field has siblings.</td>
</tr>
<tr>
<td>User Can Delete Field</td>
<td>[Yes or No]</td>
</tr>
<tr>
<td>Fill Empty Records with Value</td>
<td>[Yes or No]</td>
</tr>
<tr>
<td>Fill Empty Records with this value</td>
<td>Insert a string. Default is &quot;&lt;None&gt;&quot;.</td>
</tr>
<tr>
<td>Field Name ((Language))</td>
<td>(Optional). Enter the name of this field in other languages. This will be displayed as the field name when the user chooses that language.</td>
</tr>
</tbody>
</table>
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.

<table>
<thead>
<tr>
<th>Import Variables tab</th>
<th>This segment is required as the first command in the Import Variable.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Select Text (Special)</td>
<td>Parameters and values are the same as &quot;Select Text (Special)&quot; – in <strong>Record Definition Tab</strong> (see above)</td>
</tr>
<tr>
<td>(parameters)</td>
<td>The &quot;Select Text (Special)&quot; command may be followed by General text manipulation commands, with the exception of &quot;Read from Variable&quot;.</td>
</tr>
</tbody>
</table>
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 setting that appear in the Command Stack window, and their options.
Text Manipulation Commands

When you right-click in the Command window, this menu appears. An explanation of each command appears in the table below.

<table>
<thead>
<tr>
<th>Right-Click Menus</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Insert Command</strong> – Place a command onto the stack. This leads to another menu …</td>
</tr>
<tr>
<td><strong>Before (or After) this Command</strong> – 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.</td>
</tr>
<tr>
<td>An extensive table presented later (&quot;Text Manipulation Commands&quot;) defines each of these commands:</td>
</tr>
<tr>
<td>- Select Text</td>
</tr>
<tr>
<td>- Select Text from Rear</td>
</tr>
<tr>
<td>- Select Text from Table</td>
</tr>
<tr>
<td>- Change Case</td>
</tr>
<tr>
<td>- Clean Text</td>
</tr>
<tr>
<td>- Dictionary Lookup</td>
</tr>
<tr>
<td>- Divide Text</td>
</tr>
</tbody>
</table>
- 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

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.

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

### Text Manipulation Commands

<table>
<thead>
<tr>
<th>Select Text</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Input Data</td>
<td>Define what portion of text you want to work with.</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Use the record as input data</td>
<td>Uses the entire record. You usually use this as the first command in the stack.</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Use the output from the previous command as input data</td>
<td>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.</td>
</tr>
<tr>
<td>Start regex</td>
<td>Regular Expression – Enter the Regular Expression that specifies the beginning of the text you want to select.</td>
</tr>
<tr>
<td>Include Start</td>
<td>[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.</td>
</tr>
<tr>
<td>Start regex case sensitive</td>
<td>[Yes or No]</td>
</tr>
<tr>
<td>End Strategy</td>
<td>What defines the end of the text you want to select?</td>
</tr>
<tr>
<td>Feature</td>
<td>Description</td>
</tr>
<tr>
<td>----------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Match regular expression</td>
<td>You can use another regular expression to end your selection.</td>
</tr>
<tr>
<td>End regex</td>
<td><strong>Regular Expression</strong></td>
</tr>
<tr>
<td>Include End</td>
<td>[Yes or No] – When your End RegEx matches a chunk of text, do you want to keep the chunk of text with your selection?</td>
</tr>
<tr>
<td>End regex case sensitive</td>
<td>[Yes or No]</td>
</tr>
<tr>
<td>Must find end regex</td>
<td>[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”).</td>
</tr>
<tr>
<td>Find text before a specified column</td>
<td>This option is very useful for text that is field-structured using “hang-indent.” This alternative has no arguments.</td>
</tr>
<tr>
<td>Read until a line without the start indicator</td>
<td>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-“:</td>
</tr>
<tr>
<td>Read a certain number of lines</td>
<td><strong>Integer</strong></td>
</tr>
<tr>
<td>Read until the end of the current record</td>
<td>This option selects everything to the end of the record.</td>
</tr>
<tr>
<td>Find all occurrences</td>
<td>[Yes or No] – Do you want to select all occurrences in the record or only the first?</td>
</tr>
<tr>
<td>Keep selected text</td>
<td>[Yes or No] – Do you want to keep the selected text (“yes”) or keep everything except the selected text (“No”).</td>
</tr>
<tr>
<td>Insert Text if Nothing Matched</td>
<td>[Yes or No]</td>
</tr>
<tr>
<td>Text to Insert if Nothing Selected</td>
<td>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.</td>
</tr>
<tr>
<td>Select Text from Rear</td>
<td>Select a portion of the text, but start from the end of the string instead of the beginning.</td>
</tr>
<tr>
<td>Input Data</td>
<td></td>
</tr>
<tr>
<td>Use the record as input data</td>
<td>Uses the entire record. You usually use this as the first command in the stack.</td>
</tr>
<tr>
<td>Use the output from the previous command as input data</td>
<td>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.</td>
</tr>
<tr>
<td>Regex</td>
<td><strong>Regular Expression</strong> – Enter the RegEx that will terminate the selection. In other words, select from the end of the string until you encounter this RegEx.</td>
</tr>
<tr>
<td>Regex case sensitive</td>
<td>[Yes or No]</td>
</tr>
<tr>
<td>Include Start</td>
<td>[Yes or No] – Once the RegEx is matched, do you want to include the matching text?</td>
</tr>
<tr>
<td>---------------------------------------------------</td>
<td>-----------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Keep selected text</td>
<td>[Yes or No] (see earlier)</td>
</tr>
<tr>
<td>Must find regex</td>
<td>[Yes or No] (see earlier)</td>
</tr>
<tr>
<td>Insert Text if Nothing Matched</td>
<td>[Yes or No]</td>
</tr>
<tr>
<td>Text to Insert if Nothing Selected</td>
<td>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.</td>
</tr>
</tbody>
</table>

**Select Text from Table**  
Select text from a delimited columnar table (e.g., *.csv or *.tab).

<table>
<thead>
<tr>
<th><strong>Input Data</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Use the record as input data</td>
<td>Uses the entire record. You usually use this as the first command in the stack.</td>
</tr>
<tr>
<td>Use the output from the previous command as input data</td>
<td>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.</td>
</tr>
<tr>
<td>Delimiter (regex)</td>
<td><strong>Regular Expression</strong> (e.g., a comma for *.csv or tab \t for *.tab)</td>
</tr>
<tr>
<td>Delimiter Case Sensitive</td>
<td>[Yes or No]</td>
</tr>
<tr>
<td>Use Text Qualifier</td>
<td>[Yes or No] – Frequently, text in a cell includes the delimiter. Most tools allow this by using text qualifiers to surround text in a cell. Frequently, this qualifier is a pair of double quotes.</td>
</tr>
<tr>
<td>Text Qualifier</td>
<td>Single character</td>
</tr>
<tr>
<td>Select Column by Name</td>
<td>[Yes or No] – Yes to accept Column Name or No to accept Column Number</td>
</tr>
<tr>
<td>Column Name</td>
<td><strong>Regular Expression</strong></td>
</tr>
<tr>
<td>Column Name is Regex</td>
<td>[Yes or No]</td>
</tr>
<tr>
<td>Column Number</td>
<td><strong>Positive integer</strong> – the column from which to select the data. When using “Auto-assign fields based on column header names”, use zero (0). (See Database Settings.)</td>
</tr>
<tr>
<td>Insert Text if Nothing Matched</td>
<td>[Yes or No]</td>
</tr>
<tr>
<td>Text to Insert if Nothing Selected</td>
<td>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.</td>
</tr>
</tbody>
</table>

**Change Case**

<table>
<thead>
<tr>
<th>Change to</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Upper Case</td>
<td></td>
</tr>
<tr>
<td>Lower Case</td>
<td></td>
</tr>
<tr>
<td>Proper Case</td>
<td></td>
</tr>
</tbody>
</table>
### Clean Text

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.

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Change newline to space</td>
<td>[Yes or No] – Change all occurrences of newline to a single space. This removes line wrap inserted in some records.</td>
</tr>
<tr>
<td>Only allow single spaces</td>
<td>[Yes or No] – Removes all multiple spaces (e.g., “between words”) and leaves only one space (e.g., “between words”).</td>
</tr>
<tr>
<td>Search from front</td>
<td>[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”.</td>
</tr>
<tr>
<td>Search until regex – front</td>
<td>[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?</td>
</tr>
<tr>
<td>Read until regex – front</td>
<td><strong>Regular Expression</strong> – 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.</td>
</tr>
<tr>
<td>Include front regex in searchable text</td>
<td>[Yes or No] – When you match the regular expression, do you want to also clean the matched text or not?</td>
</tr>
<tr>
<td>Search until regex Case Sensitive</td>
<td>[Yes or No]</td>
</tr>
<tr>
<td>Process text if regex not found - front</td>
<td>[Yes or No] – When the Regular Expression is not found, do you still want to clean the entire selection?</td>
</tr>
<tr>
<td>Search from rear</td>
<td>[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”.</td>
</tr>
<tr>
<td>Search until regex – rear</td>
<td>[Yes or No] – (see above)</td>
</tr>
<tr>
<td>Read until regex – rear</td>
<td><strong>Regular Expression</strong> – (see above)</td>
</tr>
<tr>
<td>Include rear regex in searchable text</td>
<td>[Yes or No] – (see above)</td>
</tr>
<tr>
<td>Search until regex Case Sensitive</td>
<td>[Yes or No] – (see above)</td>
</tr>
<tr>
<td><strong>Process text if regex not found - rear</strong></td>
<td>[Yes or No] – (see above)</td>
</tr>
<tr>
<td>-------------------------------------------</td>
<td>--------------------------</td>
</tr>
<tr>
<td><strong>Search entire string</strong></td>
<td>[Yes or No] – An alternative to searching from front and rear is to clean the whole string.</td>
</tr>
<tr>
<td><strong>Remove alphanumeric characters</strong></td>
<td>[Yes or No] – Finally, what to clean? This removes all alphanumeric characters, leaving for example symbols, punctuation, and non-printables.</td>
</tr>
<tr>
<td><strong>Remove letters</strong></td>
<td>[Yes or No] – Remove all letters (A-Z and a-z).</td>
</tr>
<tr>
<td><strong>Remove numeric</strong></td>
<td>[Yes or No] – Remove all numbers (0-9)</td>
</tr>
<tr>
<td><strong>Remove non-printable characters</strong></td>
<td>[Yes or No] – Remove any non-printing characters (usually garbage)</td>
</tr>
<tr>
<td><strong>Remove punctuation</strong></td>
<td>[Yes or No] – Remove all punctuation.</td>
</tr>
<tr>
<td><strong>Remove whitespace</strong></td>
<td>[Yes or No] – Remove all whitespace (spaces and tabs)</td>
</tr>
<tr>
<td><strong>Remove specific characters</strong></td>
<td>[Yes or No] – Remove specific characters</td>
</tr>
<tr>
<td><strong>Characters to remove (Not a regex)</strong></td>
<td>String – The list of characters to remove.</td>
</tr>
</tbody>
</table>

| **Dictionary Lookup**                     | Looks for specific terms within the selected text. If a match is found, the entire selected text is either kept (a filter list) or removed (a stopwords list). The list of terms is in an external file (the Dictionary). |
| **Filename**                              | String (path + filename) – 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 stopword list). |
| **Treat as regex**                        | [Yes or No] – Does the dictionary contain Regular Expressions or straight text? |
| **Case sensitive**                        | [Yes or No] |

| **Divide Text**                           | For multi-valued fields, how are the items divided? |
| **Delimiting regex**                      | Regular Expression – 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 multi-valued field does not have the delimiter following it. This is typically “yes”. |
### Entity Extraction

Looks for specific terms within the selected text. If a match is found, the term is either kept (a filter list) or removed (a stopwords list). The list of terms is in an external file (the Dictionary).

<table>
<thead>
<tr>
<th><strong>Filename</strong></th>
<th>Name of the file (with path) that contains the dictionary of entities</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Keep Entities</strong></td>
<td>[Yes or No] – Keep the entities that are found (Yes) or discard the entities and keep everything else (No)</td>
</tr>
<tr>
<td><strong>Treat as regex</strong></td>
<td>[Yes or No] – The contents of the file (dictionary) are Regular Expressions (Yes) or plain text (No)</td>
</tr>
<tr>
<td><strong>Case sensitive</strong></td>
<td>[Yes or No] – Make the matches sensitive to case (Yes) or not (No)</td>
</tr>
</tbody>
</table>
| **Match whole word** | [Yes or No] – Require all matches to end on word boundaries (e.g., white space or punctuation) (Yes) or not (No).  
**Note:** “No” allows sub-string match, which may produce erroneous results for short strings (e.g., “sea” would match “research”) |

### Find and Replace

Use this to edit data.

| **Read from File** | [Yes or No] |
| **Thesaurus File to Read** | Enter the filename and path of the thesaurus file to use. |
| **Regex case sensitive** | [Yes or No] – Should thesaurus file be used in a case-sensitive manner? Only for sub-items – not implemented or supported. |
| **Regex to find** | Regular Expression – Specify the regular expression to match. |
| **String to replace with** | Regular Expression – Specify the regular expression to replace the matched string. |
| **Regex case sensitive** | [Yes or No] |

### Thesaurus

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

### Math - Average Results

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.

**Math - Count Results**

Count the number of items that would be retrieved. For example, number of authors, number of IPCs, or number of cited references.
<table>
<thead>
<tr>
<th><strong>Include Duplicates</strong></th>
<th>[Yes or No] If a given item appears more than once in a record, set this option to &quot;Yes&quot; to include those repeating terms in the count, or &quot;No&quot; to count only the unique entities. (Default is &quot;Yes&quot;)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Case Sensitive for determining duplicates</strong></td>
<td>[Yes or No]</td>
</tr>
<tr>
<td><strong>Math - Sum Results</strong></td>
<td>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.)</td>
</tr>
<tr>
<td><strong>NLP</strong></td>
<td>Run the selected text through the Natural Language Processor to extract Words and/or Noun Phrases.</td>
</tr>
<tr>
<td><strong>Whether to output words or phrases from NLP</strong></td>
<td>[Words or Phrases or Words and Phrases]</td>
</tr>
<tr>
<td><strong>Extract entities before NLP</strong></td>
<td>[Yes or No] – “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. <strong>Note:</strong> 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.</td>
</tr>
<tr>
<td><strong>Filename</strong></td>
<td>Name of the file (with path) that contains the dictionary of entities</td>
</tr>
<tr>
<td><strong>Treat as regex</strong></td>
<td>[Yes or No] – The contents of the file (dictionary) are Regular Expressions (Yes) or plain text (No)</td>
</tr>
<tr>
<td><strong>Case sensitive</strong></td>
<td>[Yes or No] – Make the matches sensitive to case (Yes) or not (No)</td>
</tr>
<tr>
<td><strong>Match Whole Word</strong></td>
<td>[Yes or No] – Require all matches to end on word boundaries (e.g., white space or punctuation) (Yes) or not (No). <strong>Note:</strong> “No” allows sub-string match, which may produce erroneous results for short strings (e.g., “sea” would match “research”)</td>
</tr>
<tr>
<td><strong>Read from Variable</strong></td>
<td>Read a value from an Import Variable</td>
</tr>
<tr>
<td><strong>Variable Name</strong></td>
<td>Select the Import Variable to use</td>
</tr>
<tr>
<td><strong>Which Instance</strong></td>
<td>Select which value of the Import Variable to use …</td>
</tr>
<tr>
<td><strong>First Instance</strong></td>
<td>Use the very first value found in the raw data file for this Import Variable.</td>
</tr>
<tr>
<td><strong>Previous Instance</strong></td>
<td>Use the value that occurred closest to and before this record.</td>
</tr>
<tr>
<td><strong>Next Instance</strong></td>
<td>Use the value that occurred closest to and after this record.</td>
</tr>
<tr>
<td><strong>Closest Instance</strong></td>
<td>Use the value that occurred closest to this record (either before or after).</td>
</tr>
<tr>
<td><strong>Last Instance</strong></td>
<td>Use the very last value found in the raw data file for this Import Variable.</td>
</tr>
<tr>
<td><strong>Insert Text if Nothing Matched</strong></td>
<td>[Yes or No]</td>
</tr>
</tbody>
</table>
**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.

**Get File Name**
Reads the name of the raw data file being imported. Mostly useful when importing multiple files where the filename is a topic or record number.

**Get full path name**
[Yes or No] – Option to include the location of the file being imported [Yes] or the file name only [No].

**Build Results**
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

<table>
<thead>
<tr>
<th>Create New Import Buffer</th>
<th>Adds a new empty import buffer. (See note below on Buffer commands.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Buffer Name</td>
<td>Name for the new buffer (cannot be &quot;VP-Main-Import-Buffer&quot;)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Activate Import Buffer</th>
<th>Loads a buffer to memory so that general text manipulation commands can be performed. (See note below on Buffer commands.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Buffer to Activate</td>
<td>Select buffer to activate from dropdown menu</td>
</tr>
</tbody>
</table>
## Copy Import Buffer
Copies the contents from one buffer to another (See note below on Buffer commands.)
- **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]

## Combine Text
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**: Enter any text here that you want to add between the 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]

## Convert Text
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”).
Creating or Editing Library Procedures

**Note:** See the “Further Processing” section 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.

4. 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.

5. The *.conf file which contains the library procedure is saved to the VP installation’s “...\Import Filters\Library Procedures” folder.
**CHANGING DATABASE CONFIGURATIONS IN A VANTAGEPOINT FILE**

Beginning with Version 3.0, *VantagePoint* retains database configurations (now called “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.

The process of changing import filters in a *VantagePoint* file begins in the Dataset Properties dialog box (see the Section entitled Dataset Properties). You may reach the Dataset Properties dialog box in two ways:

1. From the Main Menu, select **File** and **Dataset Properties**.
2. During the “Import More Fields” operation, in the Choose Database and Fields dialog box, click on **Change Dataset Properties**.

There are typically two situations that require you to change import filters in a *VantagePoint* file:

1. **Old Dataset**: You are attempting to import more fields in a *.vpt file that was imported using *VantagePoint* version 2.x. In this case, there are no database configurations in the *.vpt file, and you must add them in. In this case you will see the following message when you attempt to Import More Fields:

   ![VantagePoint Warning Message]

   *This dataset has records with no database assigned. To fix this go to Dataset Properties and click on "Change Import Filter". Import More Fields will not work until every record has an assigned database.*

   Or…

2. **Updated Import Filter**: 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.

   We will illustrate these two scenarios:

   **Add Import Filters to an Old Dataset (from VantagePoint v2.x)**:

   1. After you click **OK** on the message shown above, you will see the Choose Database and Fields dialog box, but the **OK** button is disabled. Click the button labeled **Change Dataset Properties**.
   2. This brings up the Dataset Properties dialog box. Click **Change Import Filter**.
3. This leads to the **Assign Import Filters** dialog, shown below. The list shown in the dialog box gives the database configurations currently contained in your *.vpt* file (if any) and the number of records associated with each database configuration. Each record is associated with no more than one database configuration. In this case there are no databases assigned to any records. Click on the “[No Database Assigned]” line and then click **Replace Import Filter**.

![Assign Import Filters dialog](image)

4. From the **Choose Config** dialog, find the *.conf* file (import filter) that you want to use and click **Open**.

![Choose Config dialog](image)
5. In the **Choose Database** dialog, find the database configuration you want to use and click **OK**.

![Choose Database dialog]

6. You will then see the following message:

![VantagePoint message]

**Yes** – Assigns the selected database configuration/import filter to all records selected in the **Assign Import Filters** 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**.
7. *VantagePoint* will search the records and make database assignments as appropriate. Then you will again see the **Assign Import Filters** dialog, as illustrated below.

Note that in this example 96 records were found to match. Seventeen remain unassigned. You can then repeat the prior steps to assign an appropriate database configuration to the remaining unassigned records:

![Assign Import Filters dialog](image1)

When all is done, there should be no unassigned records, as illustrated here:

![Assign Import Filters dialog](image2)

8. 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 **Cancel** in **Dataset Properties**.
The second scenario is:

**Update Import Filters in a Dataset:**

We will begin with the **Assign Import Filters** dialog, which can be accessed by clicking **Change Import Filter** in the **Dataset Properties** dialog. The list shown in the dialog box gives the database configurations/import filters currently contained in your *.vpt file and the number of records associated with each. Each record is associated with no more than one database configuration.

1. In this example, we want to update the import filter for some of the records in an existing dataset. First, select the set of records you want to update and click **Replace Import Filter**.

In this illustration 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 (illustrated earlier), and in the Choose Database dialog, select the new database to use and click OK.

3. You will then see the following message:

These options were explained earlier. Usually you should answer No to this question.
4. After the new assignments are made, you should see a message box stating how many changes were made. Then the **Assign Import Filters** dialog is updated with new database name associated with the records you selected, as illustrated below.

**Hint:** If you find it difficult to get *VantagePoint* to assign the databases to the set of records you selected, carefully examine several records in the Raw Record 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.

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 **Cancel** in **Dataset Properties**.
MISCELLANEOUS OPERATIONS

View Options

The Options dialog box (displayed below) displays information such as the user name, company name, registration code, native language, and the set method for importing data. It is also where the user sets whether to show the startup dialog when starting VantagePoint (see the section entitled “Getting Started”) and whether VantagePoint should first prompt the user before sheets are deleted.

The “Include Record/Instance Columns when Copying Lists” checkbox sets the default behavior for using the Ctrl C hot-key to copy in a List View. If it is checked, the Record and Column headers, including #Records and #Instances, are always copied to the clipboard, along with the List Items being copied. If this box is not checked, only the List Items are copied to the clipboard.

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 disabled or enabled as follows:

From the Main Menu, select Tools and Options...
The Options dialog box is displayed.

Check or uncheck the box “Show Startup Dialog” and click OK.
Changing import data method

Using the same **Options** dialog box above, you can change the default Import Data method to one of the following selections:

- Ask me each time
- Classic Interface
- Import Wizard

Click **OK** to complete the action.
Confirmations Settings

Confirm When Deleting
Using the same Options dialog box, you can choose whether VantagePoint will prompt you for confirmation when deleting sheets in a dataset. (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.)

You can select to be prompted when deleting all sheets or just sheets of a certain type.

Unchecking all 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 can edit the item, you will receive this Warning:

If you are sure you want to proceed, click **Edit Item**.
Heat Maps Settings

Using the Options dialog box, you can set as a default to make Heat Maps for every list and/or matrix you create. You can be selective if you want this to only apply to matrices, as the User has done in this example:

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.
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 is a “group” in that field.

Access the Record Classification Management dialog by selecting Tools and Record Classifications... from the Main Menu.

In the following illustration, the user has created three classification categories: Rating (e.g., good, fair, poor), Routing (e.g. peoples’ names for distribution of sub-datasets), and Topics.

Under User Defined Fields:

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

Delete - Delete the selected category of classification

Edit – Edit 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

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

Delete - Delete the selected classification

Edit – Edit the selected classification

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.
A new field is created for each classification category. The field name is the classification category name preceded by two semi-colons ("::" - see the following illustration).

<table>
<thead>
<tr>
<th>Field</th>
<th>Number of times</th>
<th>Derived</th>
<th>Data Type</th>
<th>Meta Tags</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rating</td>
<td>1302</td>
<td>*</td>
<td>Record Cia</td>
<td>Incremental Import</td>
</tr>
<tr>
<td>Roasting</td>
<td>1302</td>
<td>*</td>
<td>Record Cia</td>
<td></td>
</tr>
<tr>
<td>Topics</td>
<td>1302</td>
<td>*</td>
<td>Record Cia</td>
<td></td>
</tr>
<tr>
<td>Raw Record</td>
<td>1302</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>#</th>
<th>Records</th>
<th>Instances</th>
<th>Topics</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>104aev</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>107cpzd</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>10kdhch</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>10qntuf</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

Records are assigned to a classification in two places: the Record Display and the Title View. The mechanics of each is described below:

Assigning Records to Record Classifications Using the Title View:

1. Select (or multi-select) records in the Title View.
2. Right-click on one of the selected records, and select Classify Records from the right-click menu.
3. "Walk" the menu, and place a check in the box next to the desired classification(s).
Assigning Records to Record Classifications Using Record Display:

1. In Record Display, click the **Classify** button.
2. The user-defined classifications appear.
3. Click the checkboxes to add the classification(s) to the record(s).

See the topic “**Sorting rows in a list view**” for information on Sorting unclassified (ungrouped) items.
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 **Fields** and **Create Key Field** from the Main Menu.
Edit Keyboard Shortcuts

To edit keyboard shortcuts within VantagePoint, select Tools and Edit Keyboard Shortcuts from the Main Menu.

From the Categories window, select the action. From the Commands window, select the command for which the Hotkey or shortcut will be assigned.

To assign a Hotkey, the cursor must appear in the "Press New Hotkey" window. Then press whatever control key you want to use (in this case, F4). To accept the change, press Assign. The "F4" then moves to the "Current" window.

If you assign a Hotkey that is already assigned, you will be notified in the area below the "Press New Hotkey" window.

If you wish to delete an assigned Hotkey, click on it in the "Current" window and press Delete.

Press OK to complete the changes.
**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 Create TFIDF Matrix dialog is accessed by using the hot-key combination 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 three 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 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.
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:
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”. (Your Registration Code should automatically appear in the Registration Code box):

Repair Automatically through the Internet:

For those with an internet connection, click the Repair Now! button. You will receive a “License successfully activated!” message box. Click OK. VantagePoint should open.

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, 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.

(Continued next page.)
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.)

3. Copy and Paste the Repair Codes 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.
APPENDIX: ADDITIONAL NOTICES

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

VantagePoint uses Regex++ from Dr John Maddock, Copyright (c) 1998-2001 under the following permission notice: "Permission to use, copy, modify, distribute and sell this software and its documentation for any purpose is hereby granted without fee, provided that the above copyright notice appear in all copies and that both that copyright notice and this permission notice appear in supporting documentation. Dr John Maddock makes no representations about the suitability of this software for any purpose. It is provided "as is" without express or implied warranty."

VantagePoint uses: xerces-c_2_7.dll ("software" and “file”) from the Apache Software Foundation under the following permission notice:

Copyright 1997-2008 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) 1990-1999 Info-ZIP. All rights reserved.

For the purposes of this copyright and license, “Info-ZIP” is defined as the following set of individuals:

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 following restrictions:

1. Redistributions of source code must retain the above copyright notice, definition, disclaimer, and this list of conditions.

2. Redistributions in binary form must reproduce the above copyright notice, definition, disclaimer, and this list of conditions in documentation and/or other materials provided with the distribution.

3. Altered versions--including, but not limited to, ports to new operating systems, existing ports with new graphical interfaces, and dynamic, shared, or static library versions--must be plainly marked as such and must not be misrepresented as being 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 of the Info-ZIP URL(s).

“Pocket Zip,” and “MacZip” for its own source and binary releases.

Some VantagePoint Macros distributed by Search Technology, Inc. use the ChartDirector API, which is distributed with VantagePoint 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).

Some VantagePoint Macros distributed by Search Technology, Inc. use prefuse.jar, which is distributed with VantagePoint under following permission notice:

Copyright (c) 2004-2006 Regents of the University of California.
All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:
1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice and this list of conditions.
3. The name of the University may not be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE REGENTS 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 REGENTS 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.

Some VantagePoint Macros distributed by Search Technology, Inc. use aduna-clustermap-2006.1.jar and aduna-clustermap-2006.1-resources.jar from Aduna Software (http://www.aduna-software.com), which are distributed with VantagePoint under Open Software License (OSL) v. 3.0.

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.