

WebFOCUS

Magnify Search Quick Start Guide
Release 8.2 Version 01M

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Preface

This guide provides step-by-step instructions on indexing records using the FORMAT Magnify WebFOCUS procedure. The sample Century Electronics search application is used to illustrate each step. This guide is intended for users who need to create search applications with Magnify Search.

How This Manual Is Organized

This manual includes the following chapters:

Chapter/Appendix		Contents
1	Getting Started With Magnify Search	Describes how to get started using Magnify Search to create a search application.
2	Indexing With Format Magnify	Describes indexing using the Format Magnify procedure.
3	Organizing Magnify Search Collections	Describes how to organize collections by mapping them to a drop-down menu.
4	Verifying Magnify Search Indexes	Describes how to verify an index after it has been generated.
5	General Tips for Using Magnify Search	Describes additional ways to work with Magnify Search.

Documentation Conventions

The following table describes the documentation conventions that are used in this manual.

Convention	Description
<code>THIS TYPEFACE</code> or <code>this typeface</code>	Denotes syntax that you must enter exactly as shown.
<i>this typeface</i>	Represents a placeholder (or variable) in syntax for a value that you or the system must supply.
<u>underscore</u>	Indicates a default setting.

Convention	Description
<i>this typeface</i>	Represents a placeholder (or variable), a cross-reference, or an important term. It may also indicate a button, menu item, or dialog box option that you can click or select.
Key + Key	Indicates keys that you must press simultaneously.
{ }	Indicates two or three choices. Type one of them, not the braces.
[]	Indicates a group of optional parameters. None are required, but you may select one of them. Type only the parameter in the brackets, not the brackets.
	Separates mutually exclusive choices in syntax. Type one of them, not the symbol.
...	Indicates that you can enter a parameter multiple times. Type only the parameter, not the ellipsis (...).
.	Indicates that there are (or could be) intervening or additional commands.

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To learn about the full range of available support services, ask your Information Builders representative about InfoResponse Online, or call (800) 969-INFO.

Information You Should Have

To help our consultants answer your questions effectively, be prepared to provide the following information when you call:

- ☐ Your six-digit site code (xxxx.xx).
- ☐ Your WebFOCUS configuration:
 - ☐ The front-end software you are using, including vendor and release.
 - ☐ The communications protocol (for example, TCP/IP or HLLAPI), including vendor and release.
 - ☐ The software release.
 - ☐ Your server version and release. You can find this information using the Version option in the Web Console.
- ☐ The stored procedure (preferably with line numbers) or SQL statements being used in server access.
- ☐ The Master File and Access File.
- ☐ The exact nature of the problem:
 - ☐ Are the results or the format incorrect? Are the text or calculations missing or misplaced?

- ☐ Provide the error message and return code, if applicable.
- ☐ Is this related to any other problem?
- ☐ Has the procedure or query ever worked in its present form? Has it been changed recently? How often does the problem occur?
- ☐ What release of the operating system are you using? Has it, your security system, communications protocol, or front-end software changed?
- ☐ Is this problem reproducible? If so, how?
- ☐ Have you tried to reproduce your problem in the simplest form possible? For example, if you are having problems joining two data sources, have you tried executing a query containing just the code to access the data source?
- ☐ Do you have a trace file?
- ☐ How is the problem affecting your business? Is it halting development or production? Do you just have questions about functionality or documentation?

User Feedback

In an effort to produce effective documentation, the Technical Content Management staff welcomes your opinions regarding this document. Please use the Reader Comments form at the end of this document to communicate your feedback to us or to suggest changes that will support improvements to our documentation. You can also contact us through our website, <http://documentation.informationbuilders.com/connections.asp>.

Thank you, in advance, for your comments.

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Getting Started With Magnify Search

Building search-based applications usually requires specialized skills, mainly in information architecture and in extract, transform, and load (ETL) procedures. However, building such applications is no different from building reports. Magnify Category fields and Searchable Content are equivalent to BY fields and PRINT fields, respectively, in WebFOCUS. A Format Magnify WebFOCUS report allows you to easily transform raw data into search content from within App Studio or WebFOCUS.

In this chapter:

- ❑ [Overview of Magnify Search](#)
 - ❑ [Configuring the Century Electronics Demo Before Use](#)
 - ❑ [Introducing Magnify Search: The Century Electronics Demo](#)
-

Overview of Magnify Search

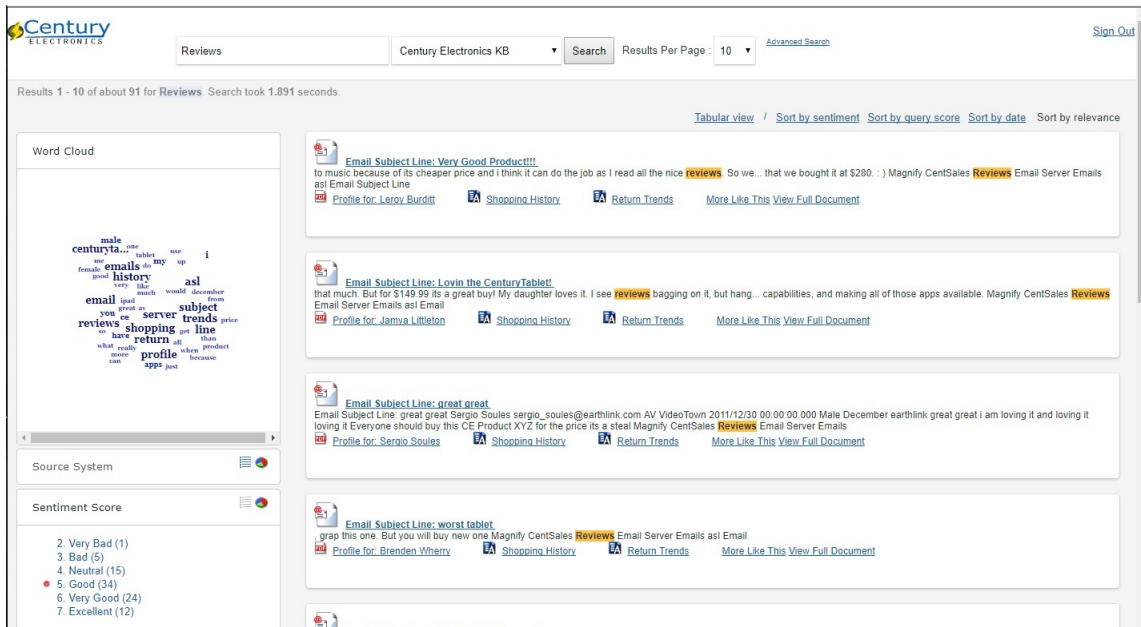
Information can be found anywhere, such as in databases and files. It can be structured or unstructured, and may have complex connections to other information. Therefore, it becomes difficult for business users to access and understand all this growing information from a single-access point. Magnify Search solves this problem by providing seamless search capabilities on various data sources with links to any application, report, or URL.

This guide demonstrates how you can use a WebFOCUS report to transform raw data into search content. This enables business users to find information and drill down into reports to better understand that information.

In the following sections, you will:

- ❑ Review how a Magnify search-based application is used. The Century Electronics sample search application is used to illustrate each feature.
- ❑ Review the objects used to build a WebFOCUS Format Magnify procedure.
- ❑ Review the naming conventions used to assign column titles, which designate how the Magnify Search interface uses the columns and their data.
- ❑ Learn how to create a highly organized and business intelligence-connected enterprise search application with various types of information.

The following image shows the Century Electronic sample search application:



Configuring the Century Electronics Demo Before Use

```
proxyreload=1
clearcache=1
collections=<any_value>
```

Introducing Magnify Search: The Century Electronics Demo

Magnify allows you to ask a question across the whole enterprise. By clicking the *Search* button, Magnify accesses relevant data, such as reports and unstructured content, across various platforms and applications.

1. To navigate to the Century Electronics Demo, use the following URL:

http://host:port/wfcontext_root/search

where:

[host:port](#)

Is the machine name and port number where WebFOCUS is installed.

[wfcontext_root](#)

Is the WebFOCUS application root.

Note: Sample or default URLs are for informational purposes only and may not resolve correctly, if at all.

The default link to the Century Electronics Demo is:

http://localhost:8080/ibi_apps/search

The search page displays, as shown in the following image.

The screenshot shows the Century Electronics Magnify Search application interface. At the top left is the Century Electronics logo. To its right is a search bar with the placeholder text "Type your search term here". Next to the search bar is a dropdown menu currently set to "Century Electronics KB", followed by a "Search" button. To the right of the search bar is a "Results Per Page" dropdown set to "10", and a link for "Advanced Search". In the top right corner is a "Sign Out" link.

Below the search bar, the text reads: "To Search Century Electronics Magnify Application: Type your keyword(s) in search box above. Click Search."

Underneath this is a section titled "Search Tips:" followed by a list of search tips:

- **Exact Match:** Use double quotation marks to search for two or more keywords that must appear together:
"CE Platform"
- **Fuzzy Match:** Use the ~ (tilde) to search for words with similar spelling to the search term.
For example, searching the term "cover" returns words like "cover", "power", or "over".
To search for results similar to "CenturyTablet" with spellings of "CenturyTabl~" or "CenturyTable~" use the query:
CenturyTablet~
- **Inclusion:** Use a + (plus sign) in front of keywords that must appear in the search results.
To search for results that must contain "plasma" and may contain "TV" use the query:
TV +plasma
- **Exclusion:** Use a - (minus sign) in front of keywords you want to exclude from your search.
To search for results that contain "stores" but not "United States" use the query:
stores ~United States"
- **ASCII Folding:** Search across ISO 8859-1 Characters with or without specific accents.
To search for results that contain "ri" use either the "n" or "r" character:
Cataluña or Cataluna
- **Boolean:** Use logical operators such as OR, AND, and NOT (case sensitive) to link groups of terms together for a more powerful search.
To search for results that contain "music teachers" or both "MP3" and "VHS", but not "New York" use the query:

2. Type *Camera* in the input field.
3. Expand and review the Collection List drop-down menu, as shown in the following image.

The Collection List points to one or more Magnify index libraries, where enterprise information has been organized and made searchable, as shown in the following image.

The screenshot shows the Magnify Search interface. At the top, there is a search input field with the placeholder text "Type your search term here". To the right of the input field is a dropdown menu for "Century Electronics KB". The dropdown menu is expanded, showing a list of search collections: "Century Electronics KB", "Product Reviews", "Customer Profiles", "Employee Directory", "Sales Records", "Shipping Centers", "Product Catalog", "Vendor Groups", and "File Assets". To the right of the dropdown menu is a "Search" button. Further right is a "Results Per Page" dropdown menu set to "10". Below the search input field, there is a section titled "To Search Century Electronics Magnify Application" and "Search Tips:". The "Search Tips:" section includes a bullet point: "Exact Match: Use double quotation marks to search for two or more keywords that must appear together: 'CE Platform'".

4. Review the *Search Tips*.
5. Change *Results Per Page* from 10 to 20.
6. Submit the search by clicking the *Search* button.

The search results display, as shown in the following image.

The screenshot shows the search results page for the term "Camera". The page header includes the Century Electronics logo, the search input field with "Camera" entered, the "Century Electronics KB" dropdown menu, the "Search" button, and the "Results Per Page" dropdown menu set to "20". There is also a link to "Advanced Search" and a "Sign Out" link. Below the header, the results are displayed in a tabular view. The results include a "Word Cloud" section on the left and a list of search results on the right. The search results list includes "Order Detail: 97041 - EMart, Rep. Franco Ricotti (Hubert Mengel)", "Catalog Item: EasyShot Digital Camera 6.1 Megapixel (DC-610)", "Catalog Item: EasyShot Digital Camera 8 Megapixel (DC-800)", and "Catalog Item: EasyShot Digital Camera (DC-100)". Each result includes a brief description and links to "See Similar Products", "Return Trends", "Product Forecasting", and "More Like This View Full Document".

The results have the following elements:

- ❑ General information, including the number of records and speed.
 - ❑ Results, including the main link, snippet, and additional links.
 - ❑ Dynamic Categorization Tree and the Breadcrumb trail.
1. Expand *Source System* to filter that category, as shown in the following image.



2. Click *Sales Records* to limit the results to sales records, as shown in the following image.



The Breadcrumb trail shows the path from Camera to Sales Records.

- ❑ **Sorting.** You can sort search results by various ranking attributes. Sort by relevance is selected by default.
 1. Click *Sort by query score*, then click *Sort by date*.
- ❑ **Facetcounts.** The category tree count includes all matching items in the entire index library, and is not limited to the maximum records returned in the search.

Note: Although only 300 records are returned due to the record limit, there are actually 2,130 records that match the search criteria associated with the Sales Records category under Source System, as shown in the following image.

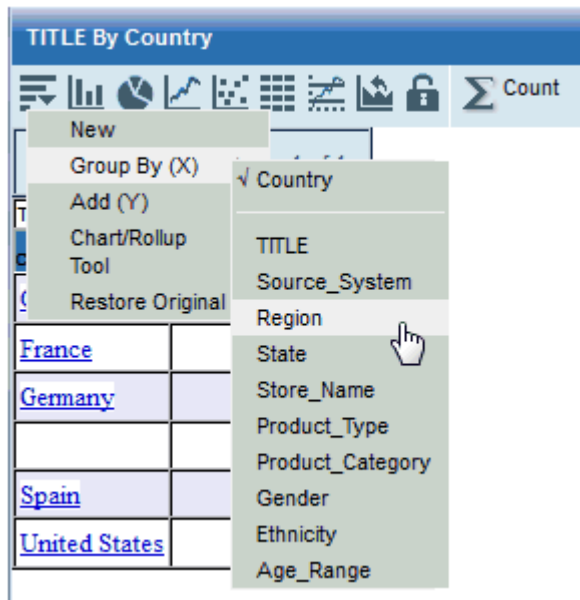


Analytics. You can use the tabular view to perform additional analytics on your search results with its embedded analytic engine. For example, you can review how many camera orders are found by country and then look deeper by region.




- 1. To see a tabular view, click *Tabular View*.
- 2. Click the drop-down arrow on the *Title* column.
- 3. Select *Rollup*, and then *Country*, as shown in the following image.

A screenshot of the Magnify Search interface. The top navigation bar includes the Century Electronics logo, search filters (Camera, Century Electronics KB), a search button, and a results per page dropdown (20). Below the navigation bar, there's a section for 'Results 1 - 20 of about 300 for Camera'. The main content area is divided into a left sidebar with filters (Word Cloud, Source System, Country, Region, State, Store Name) and a main table. The table has columns: Title, Source_System, Country, Region, State, and Store_Name. A dropdown menu is open on the 'Title' column, showing options like 'Group By (X) (COU)', 'Rollup', 'Pivot (Cross Tab)', 'Over/Under Pivot', and 'Pivot Tool'. The table displays several rows of search results, each with a link to the order details and a small icon.

4. Click the chart drop-down menu, and select *Group By (X)* and then *Region*, as shown in the following image.



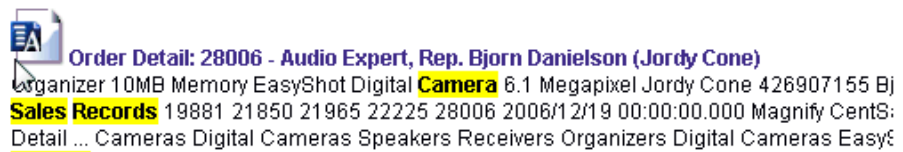
The Region field is added to the Rollup chart, as shown in the following image.

TITLE By Country		
		
 23 of 23 records, Page 1 of 3 		
TITLE By Country, Region		
Country	Region	Title
Canada	Est	31
Canada	Ouest	7
France	Ile de France	5
France	Nord-Pas-De-Calais	2
France	Pays de la Loire	3
France	Provence - Alpes du Sud	2
Germany	Nord	2
Germany	Ost	7
Germany	Süd	2

5. Click the X in the upper-right corner to close the Rollup chart.

☐ Drill Down into Business Intelligence Reports.

1. Click *Search Results View*.
2. Click on the first main title link, *Order Detail: 28006*, as shown in the following image.



Notice that multiple purchases have been aggregated into a single searchable order, as shown in the following image.

ID	Date	Customer	Store	Sales Rep	Plant	Category	Product	Quantity	Returned	Profit
19881	12/19/2006	Jordy Cone	Audio Expert	Bjorn Danielson	Dallas	Digital Cameras	EasyShot Digital Camera 8 Megapixel	58	5	\$17,342.00
19881	12/19/2006	Jordy Cone	Audio Expert	Bjorn Danielson	Dallas	Speakers	6-Piece Home Theater Speaker System	99	9	\$28,811.00
19881	12/19/2006	Jordy Cone	Audio Expert	Bjorn Danielson	Dallas	Receivers	7.1 Channel THX Home Theater Receiver	99	9	\$39,501.00
19881	12/19/2006	Jordy Cone	Audio Expert	Bjorn Danielson	Dallas	Organizers	Easyfile Electronic Organizer 10MB Memory	258	25	\$7,482.00
19881	12/19/2006	Jordy Cone	Audio Expert	Bjorn Danielson	Dallas	Digital Cameras	EasyShot Digital Camera 6.1 Megapixel	258	25	\$48,762.00
								Total Sum: 772	Total Sum: 73	Total Sum: \$141,698.00

Signing Out From Magnify Search

After you have completed performing your searches for a given session, you can sign out from Magnify Search if required.

Magnify Search includes a Sign Out hyperlink, located in the upper-right corner of the screen, as shown in the following image.

Click *Sign Out* to log out from Magnify Search. You are returned to the WebFOCUS Sign In screen.

Magnify Advanced Search Syntax

Magnify features custom query syntax, which allows you to focus searches on specific results:

- ☐ **Exact Match.** Use double quotation marks (") to search for two or more keywords that must appear together.

To search for results where the term *CE Platform* is found together, use the following query:

"CE Platform"

- ☐ **Fuzzy Match.** Use the tilde (~) to search for words with similar spellings.

To search for results similar to *CenturyTablet* but with spellings such as *CenturyTablt* or *CenturyTable*, use the following query:

CenturyTablet~

An additional, optional parameter can specify the required similarity. The accepted values are between 0 and 1, with values closer to 1 signifying higher similarity. For example:

CenturyTablet~0.7

- ❑ **Proximity Match.** Use the tilde (~) followed by a number to represent the maximum number of words apart that two terms can be found.

For example, searching for "red apple"~3 returns only results where *red* and *apple* are found within three words of each other.

To search for results where the term *Tablet* is found within five words of the term *money*, use the following query:

"Tablet money"~5

- ❑ **Inclusion.** Use a plus sign (+) in front of keywords that must appear in the search results.

To search for results that must contain *plasma* and may contain *TV*, use the following query:

TV +plasma

- ❑ **Exclusion** Use a minus sign (-) in front of keywords that you want to exclude from your search.

To search for results that contain *stores* but not *United States*, use the following query:

stores -"United States"

- ❑ **ASCII Folding.** Search across ISO 8859-1 characters with or without specific accents.

To search for results that contain ñ, use either the *n* or ñqq character, as shown in the following query:

Cataluña or Cataluna

- ❑ **Boolean.** Use logical operators, such as OR, AND, and NOT (case-sensitive), to link groups of terms together for a more powerful search.

To search for results that contain *music teachers* or both *MP3* and *VHS*, but not *New York*, use the query:

("music teachers" OR (MP3 AND VHS)) NOT "New York"

Note: You can use parentheses () to group specific clauses.

- ❑ **Wildcard:** Use an asterisk (*) or question mark (?) anywhere in a term to expand your search.

To perform a single-character wildcard search, use a question mark. This single-character wildcard search looks for terms that match with the single character replaced. To perform a multiple-character wildcard search, use an asterisk. The multiple-character wildcard search looks for zero or more characters. For example:

D?D or D*D

Notes:

- ☐ You cannot use an asterisk or question mark as the first character of a search string.
- ☐ These types of search may take longer than a typical search.

Summary

The Magnify search application gives users access to any and all enterprise information by searching it all at once and including tools to understand that information. Magnify also handles the process of delivering enterprise information for search. Magnify transforms raw data into search content by identifying relationships in the data, categorizing metadata, and making all fields, tables, and data sources searchable. At the same time, Magnify associates each result with Business Intelligence reports tailored by context. For information on how this is done with Format Magnify, see [Indexing With Format Magnify](#) on page 21.

Indexing With Format Magnify

The Format Magnify procedure allows you to create an index directly from within WebFOCUS or App Studio.

The procedure transforms data into search content and sends it to Magnify where it is processed and stored as a search result in the Magnify index library.

These topics describe using procedures to index the Movie and Car Master Files.

In this chapter:

- ☐ [Prerequisites for Indexing With the Movie and Car Files](#)
 - ☐ [Indexing the Movie File](#)
 - ☐ [Indexing the Car File](#)
 - ☐ [Writing Magnify Feed Documents to Disk](#)
-

Prerequisites for Indexing With the Movie and Car Files

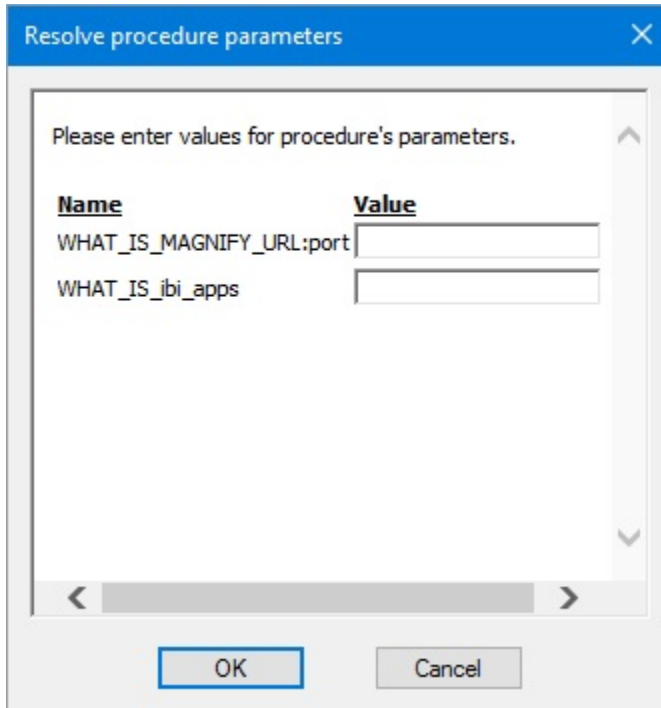
The Movie and Car files create indexes based on the WebFOCUS configuration settings. Because the WebFOCUS environment settings can vary, they first prompt for the same specific setting.

For these examples, you must initially disable procedure parameters.

Before changes are made, it is recommended that you back up the following files: carmgn.fex and moviesmgn.fex. These files are in the \ibi\apps\ibisamp folder.

Disable Procedure Parameters

You will be prompted for two parameters when the `carmgn.fex` and `moviesmgn.fex` files are opened in the Report canvas or when you execute the Format Magnify Movie and Car examples. These parameters are required in order for the WebFOCUS procedure to know where to send its output to feed Magnify Search. The first parameter is for the sever that Magnify Search is installed on (which may include a port number), and the second is the WebFOCUS context root, in which Magnify Search is defined, as shown in the following image.



Name	Value
WHAT_IS_MAGNIFY_URL:port	<input type="text"/>
WHAT_IS_ibi_apps	<input type="text"/>

WHAT_IS_MAGNIFY_URL:port. *host:port*

WHAT_IS_ibi_apps. *wfcontext_root*

where:

host:port

Is the machine name and port number where WebFOCUS is installed.

wfcontext_root

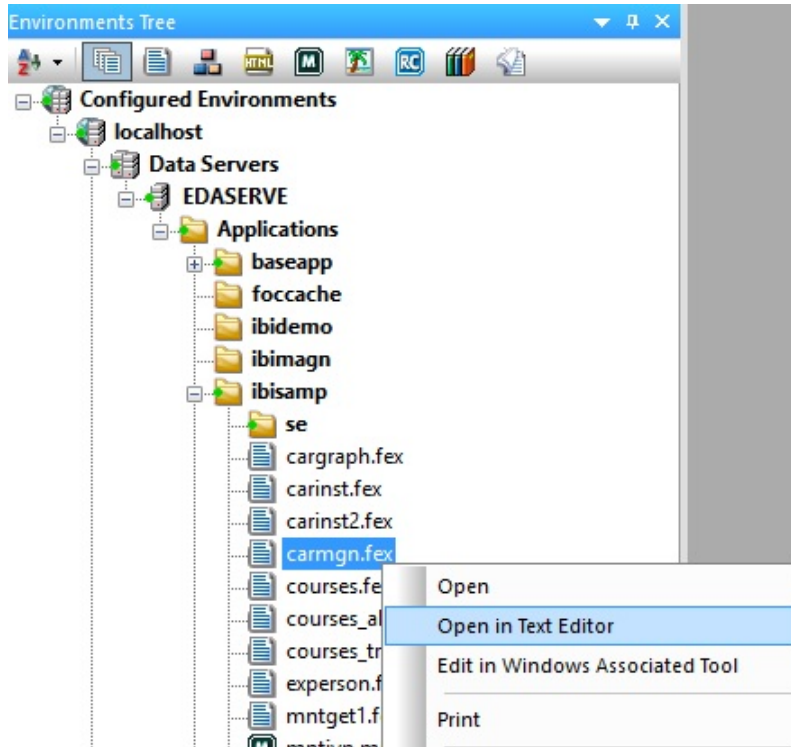
Is the WebFOCUS application root.

By default, *host:port* is *localhost:8080* and *wfcontext_root* is *ibi_apps*, but because installations can be configured differently, you may need to confirm this with your WebFOCUS Administrator.

Note: If you do not want to receive this prompt, you can edit the code of the procedure to disable these prompts.

To comment out the prompts:

1. In App Studio, navigate to *Data Servers* under *Configured Environments*, expand *Applications* and then the *ibisamp* folder.



2. Right-click the *carmgn.fex* or *moviesmgn.fex* file and then select *Open in Text Editor* from the context menu.

The file you selected (*carmgn.fex* or *moviesmgn.fex*) opens as a new tab in the main workspace area and provides you with a text view of the code.

3. Uncomment the *-*DEFAULTS* lines, as shown in the following images.
4. Enter your WebFOCUS configuration.

Note: The first image shows the original view of the code, and the second image shows the result after these lines have been uncommented.

FROM:

```
-----  
-*DEFAULTS &WHAT_IS_MAGNIFY_URL:port='localhost:8080';  
-*DEFAULTS &WHAT_IS_ibi_apps='ibi_apps';  
SET ASNAMES=MIXED  
ENGINE MAGNIFY SET CONNECTION_ATTRIBUTES MY_PC 'http://  
ENGINE MAGNIFY SET BASEURL=http://&WHAT_IS_MAGNIFY_URL:
```

TO (using your host:port and wfcontext_root):

```
-----  
-DEFAULTS &WHAT_IS_MAGNIFY_URL:port='localhost:8080';  
-DEFAULTS &WHAT_IS_ibi_apps='ibi_apps';  
SET ASNAMES=MIXED  
ENGINE MAGNIFY SET CONNECTION_ATTRIBUTES MY_PC 'http://&Wf  
ENGINE MAGNIFY SET BASEURL=http://&WHAT_IS_MAGNIFY_URL:port
```

5. Save and close the file.

Note: The prompts should no longer display.

Indexing the Movie File

This section illustrates Magnify Search indexing by feeding the Movie file. The data has already been assigned to Magnify Search Meta Tags and other reserved alias names to create a Magnify Search index library based on the Movie information.

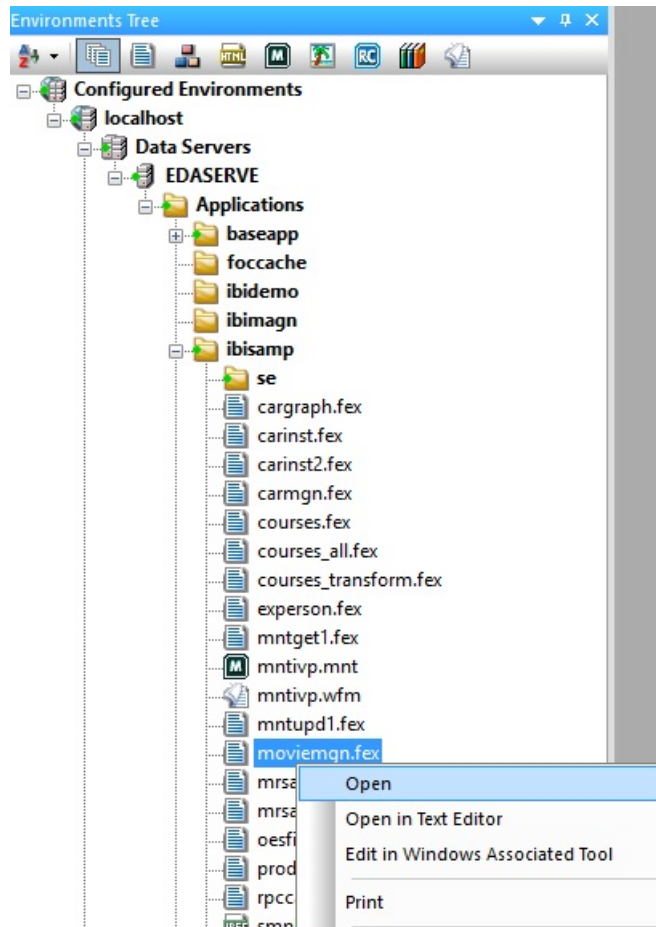
1. Open the Movie file to review all available data.

In App Studio, create a project pointing to the sample directory, *ibisamp*, if not already created.

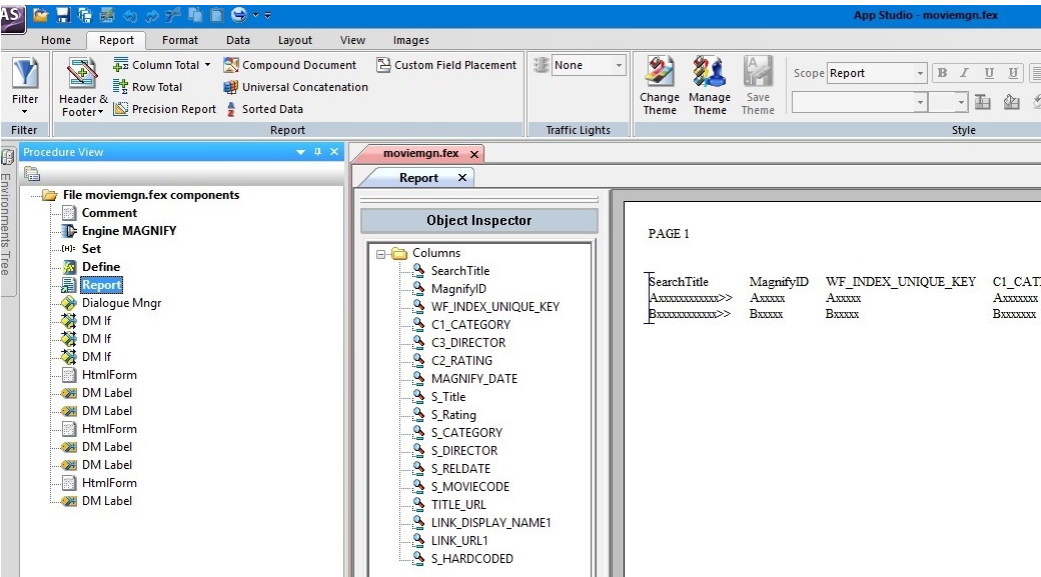
2. Review the Movie file (*moviemgn.fex*).

Note: This file is installed with the WebFOCUS Reporting Server under the *ibisamp* application directory.

- a. Right-click the *moviemgn.fex* file and select *Open* from the context menu, as shown in the following image.

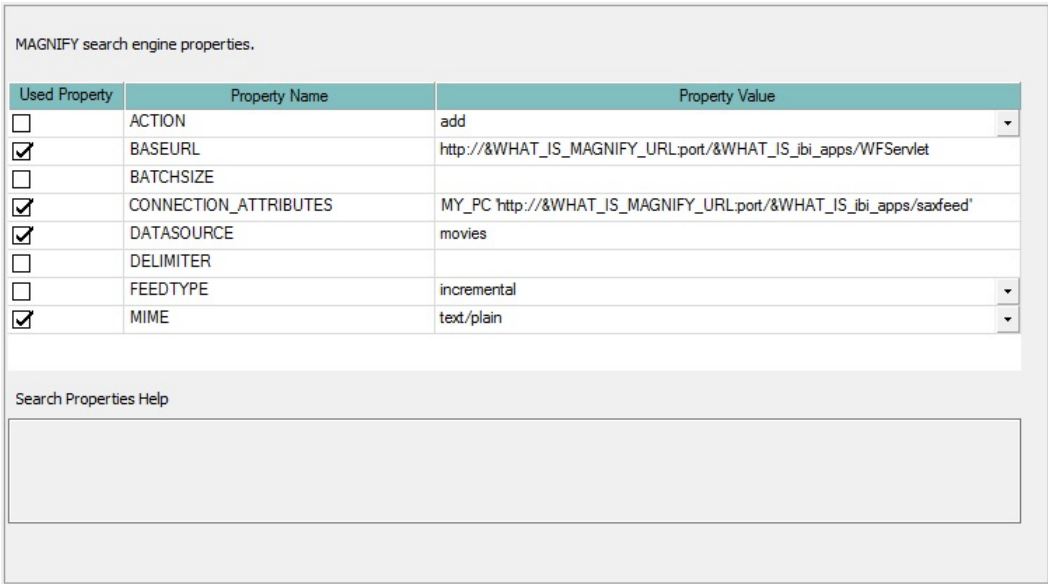


The Procedure View panel is opened for the *moviemgn.fex* file, as shown in the following image.



- b. Double-click the *Engine MAGNIFY* object in the Procedure View panel.

The MAGNIFY search engine properties dialog opens, as shown in the following image.



Review the following properties:

- ☐ **CONNECTION_ATTRIBUTES.** Magnify Search location.
- ☐ **BASEURL.** WebFOCUS procedure URL.
- ☐ **MIME.** Document type.
- ☐ **DATASOURCE.** Magnify Search index library destination directory.

- c. Double-click the Set object in the Procedure View panel.

The Set dialog opens, as shown in the following image

Used Settings

ASNAMES

Current Value

MIXED
FOCUS
MIXED
OFF
ON

Available Settings

ACCBLN	AUTOSTRATEGY	DEFINES	GRAPHENGINE	KEEPDEFINE	OVERFL
ACCESSHTML	BASEURL	DROPBLNKLIN	GRAPHSEVURL	LANG	PAGE-NI
ACCESSIBLE	BOTTOMMARGIN	DUPLICATECOL	GRMERGE	LAYOUTGRID	PAGESI
ACCESSPDF	BYDISPLAY	EMBEDHEADING	GRWIDTH	LAYOUTRTL	PANEL
ACROSSLINE	BYPANEL	EMPTYREPORT	HIDAY	LEADZERO	PASS
ACROSSPRT	CARTESIAN	ERROROUT	HIDENULLACRS	LEFTMARGIN	PCOMM
ACROSSTITLE	CDN	EXPANDBYROW	HINODATA	LINES	POPUPD
ALL	CENT-ZERO	EXTSORT	HOLDATTR	LOOKGRAPH	PRINT
AREXPIRE	COMPMISS	FIELDNAME	HOLDFORMAT	MESSAGE	PRINTD
ARPPASSWORD	COMPOUND	FILENAME	HOLDLIST	MULTIPATH	PRINTPL
ARUNITCALC	COMPUTE	FIXRETRIEVE	HOLDMISS	NODATA	QUALCH
ASNAMES	CSSURL	FOC144	HOLDSTAT	NULL	RIGHTM
AUTODRILL	CURRSYMB	FOCEXURL	HTMLARCHIVE	OFFLINE-FMT	SAVEDM
AUTOFIT	DBACSENSITIV	FOCFIRSTPAGE	HTMLCSS	ONFIELD	SAVEMA
AUTOINDEX	DEFCENT	FOCSTACK	HTMLENCODE	ONLINE-FMT	SHADOW
AUTOPATH	DEFECCHO	FOCTRANSFORM	JOINOPT	ORIENTATION	SHORTF

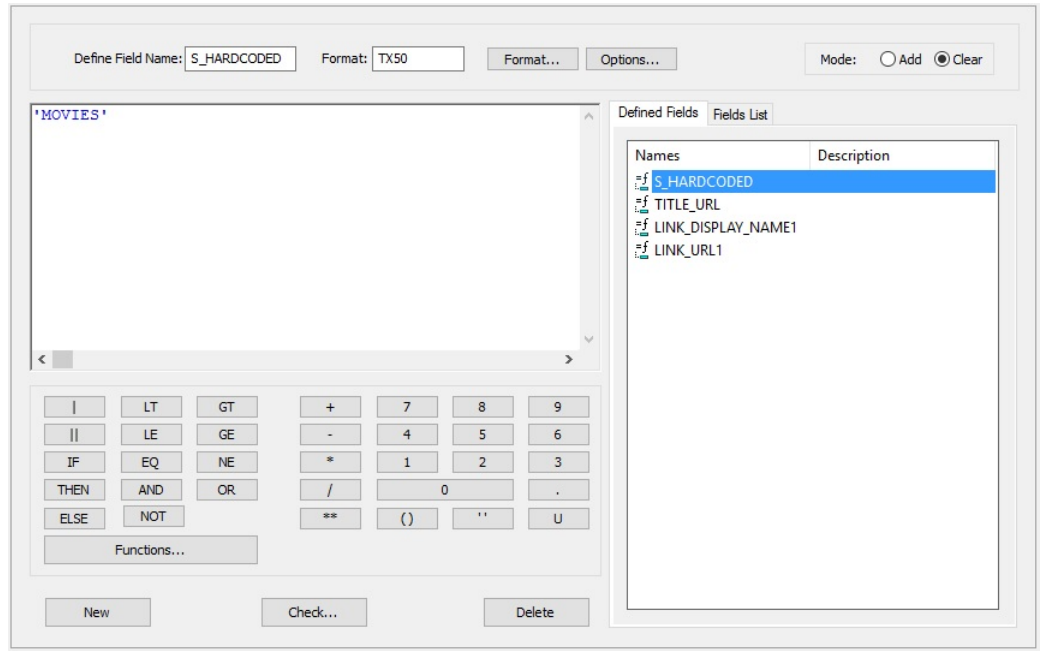
Set Help

Causes text specified in an AS phrase to be used as the fieldname in the HOLD MASTER, and to be concatenated to the beginning of the first fieldname specified in an ACROSS phrase.

Note: You must set the ASNAMES setting to MIXED in order to preserve case-sensitivity.

- d. Double-click the *Define* object in the Procedure View panel.

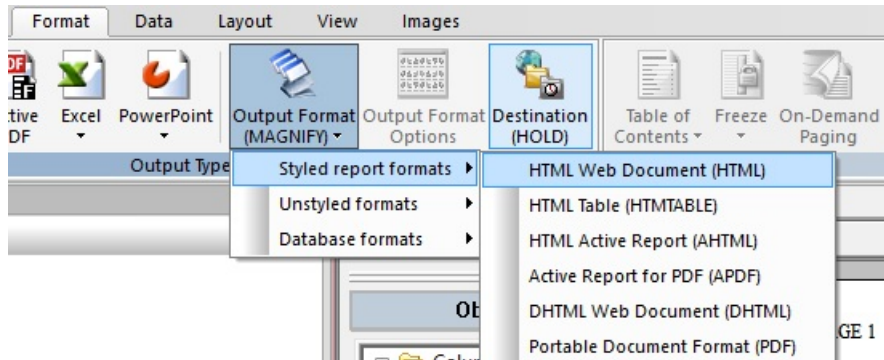
The Define dialog opens, as shown in the following image.



Review the following defined fields:

- ☐ **S_HARDCODED.** Optional hard-coded content to be included with the data being indexed. This can include values that are not otherwise found in the original data.
 - ☐ **TITLE_URL.** One or more fields to dynamically build the main title drill-down link of each search result.
 - ☐ **LINK_DISPLAY_NAME1.** One or more fields used as the string name for the first additional link.
 - ☐ **LINK_URL1.** One or more fields to dynamically build the first additional drill-down link for search result.
- e. Double-click the *Report* object in the Procedure View panel and change the output format.
- ☐ Click the *Format* tab.
 - ☐ Select the *Output Format* drop-down.

- ❑ Expand the *Styled report formats* menu and select *HTML Web document (HTML)*, as shown in the following image.



- ❑ Click *Save* and then click *Run* from the Quick Access Toolbar.
- ❑ Review how the data is modeled. Notice what mix of fields are used to define various Magnify Search elements by the naming conventions used in the column titles.

Note: The column naming conventions are discussed in more detail in [Indexing the Car File](#) on page 33

- ❑ Scroll to the rightmost side of the report to see all column names, as shown in the following image.

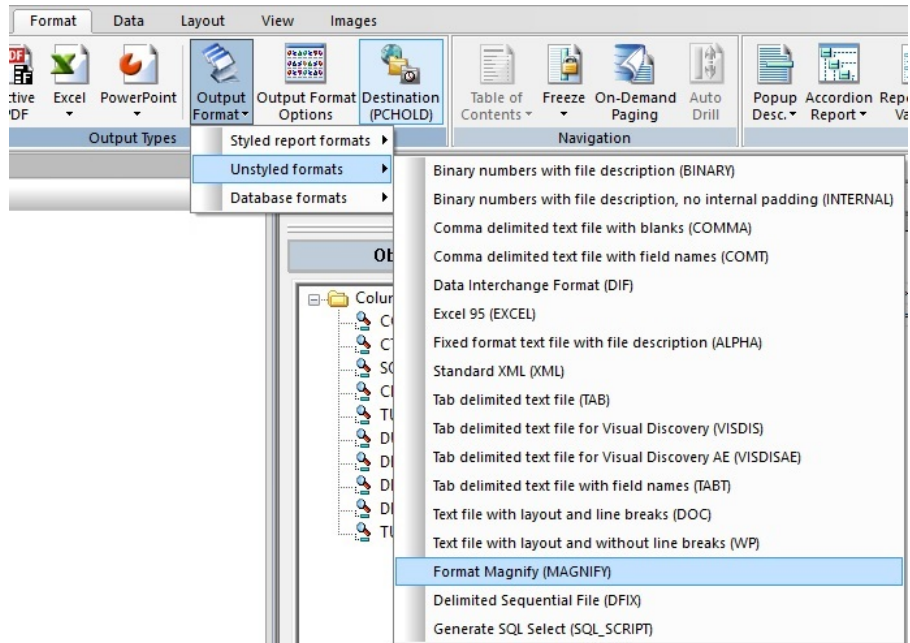
S_CATEGORY	S_DIRECTOR	S_RELDATE	S_MOVIECODE	TITLE_URL	LINK_DISPLAY_NAME1	LINK_URL1
ACTION	SPIELBERG S.	78/05/13	001MCA	http://localhost:8080/tbi_apps/search?q=001MCA	Similar ACTION Movies	http://localhost:8080/tbi_apps/search?q=ACTION
CLASSIC	KAZAN E.	55/01/12	005WAR	http://localhost:8080/tbi_apps/search?q=005WAR	Similar CLASSIC Movies	http://localhost:8080/tbi_apps/search?q=CLASSIC
CLASSIC	WELLES O.	41/08/11	020TUR	http://localhost:8080/tbi_apps/search?q=020TUR	Similar CLASSIC Movies	http://localhost:8080/tbi_apps/search?q=020TUR

- Close the browser window that is running the report.

3. Index the Movie File with Format Magnify.

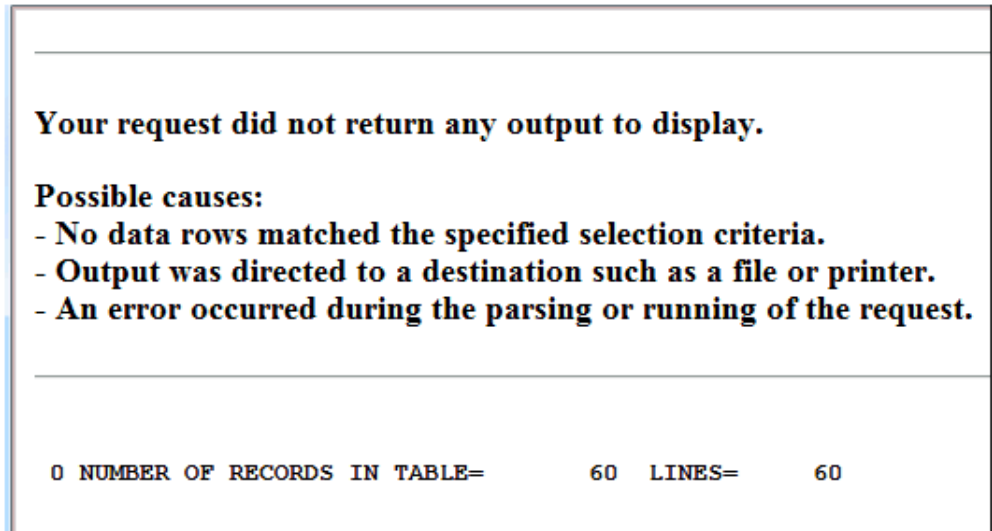
- Double-click the *Report* object in the Procedure View panel and change the output format.
 - ❑ Click the *Format* tab.
 - ❑ Select the *Output Format* drop-down.

- ❑ Expand the *Unstyled formats* menu and select *Format Magnify (MAGNIFY)*, as shown in the following image.



- ❑ Click *Save* and then click *Run* from the Quick Access Toolbar.

- b. Confirm that there are no errors, such the one shown in the following image. Note that upon execution, the Reporting Server will process the request by transforming the report output into the Magnify Search feed protocol.



- c. Close the browser window that is running the report.
- d. Close the Procedure View panel.
4. Review the search-based application generated.
- a. Open a web browser.
- b. Confirm that the *collections.xml* file is set accordingly.
- c. Navigate to the Magnify search page:

http://host:port/wfcontext_root/search

where:

[host:port](#)

Is the machine name and port number where WebFOCUS is installed.

[wfcontext_root](#)

Is the WebFOCUS application root.

Note: Sample or default URLs are for informational purposes only and may not resolve correctly, if at all.

To return to the out-of-the-box Magnify Search configuration, restore the original version of the *collections.xml* file. Restart the application server or use the *Refresh Collections* option in the Magnify Search administration console.

Go to:

http://localhost:8080/ibi_apps/search

- d. Perform a search test by typing *movies* in the Search box and clicking *Search* as shown in the following image.

The screenshot displays the WebFOCUS Magnify Search interface. At the top, the search box contains the text 'movies', and the 'Search' button is visible. Below the search bar, the results are displayed in a tabular view. The interface includes a left sidebar with filters for 'CATEGORY', 'RATING', and 'DIRECTOR'. The main content area lists search results for movies, including titles like 'SMURFS, THE', 'JAWS', 'VERTIGO', 'HOW TO GOLF', 'PSYCHO', 'BIRDS, THE', and 'CITIZEN KANE'. Each result includes a brief description, a rating, and a 'MOVIES' tag. The interface also shows the search took 0.125 seconds and displays 10 results out of about 60.

- e. Review the results returned and identify how the data from the procedure has been applied to the Magnify Search interface.
- f. Close the browser window.

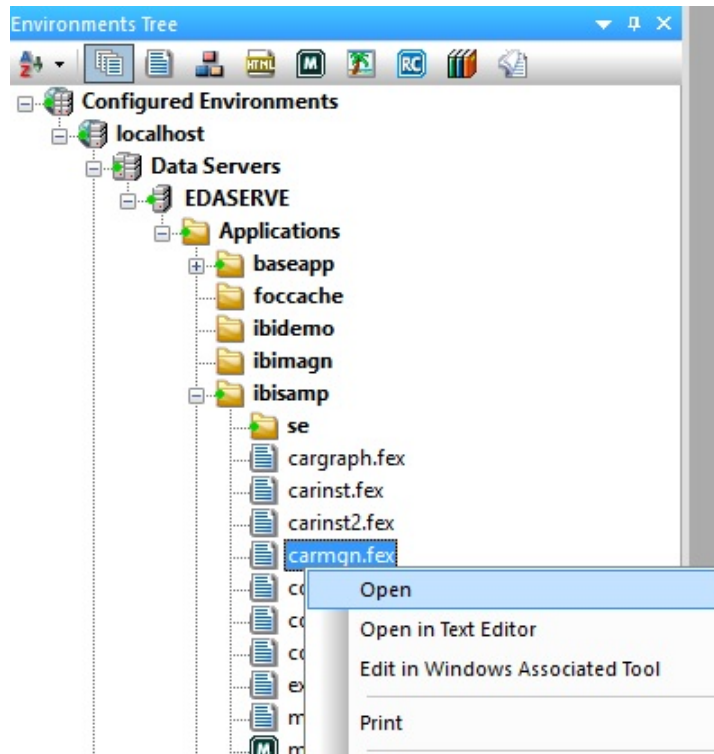
Indexing the Car File

This section illustrates Magnify indexing by feeding the Car file. In this example, multiple rows will be aggregated into a single row, in order to rollup data according to a single dimension to create a more robust, inclusive or higher-level search result. For example, this is the difference between showing a single search result for an entire order or showing a search result for each item purchased in an order.

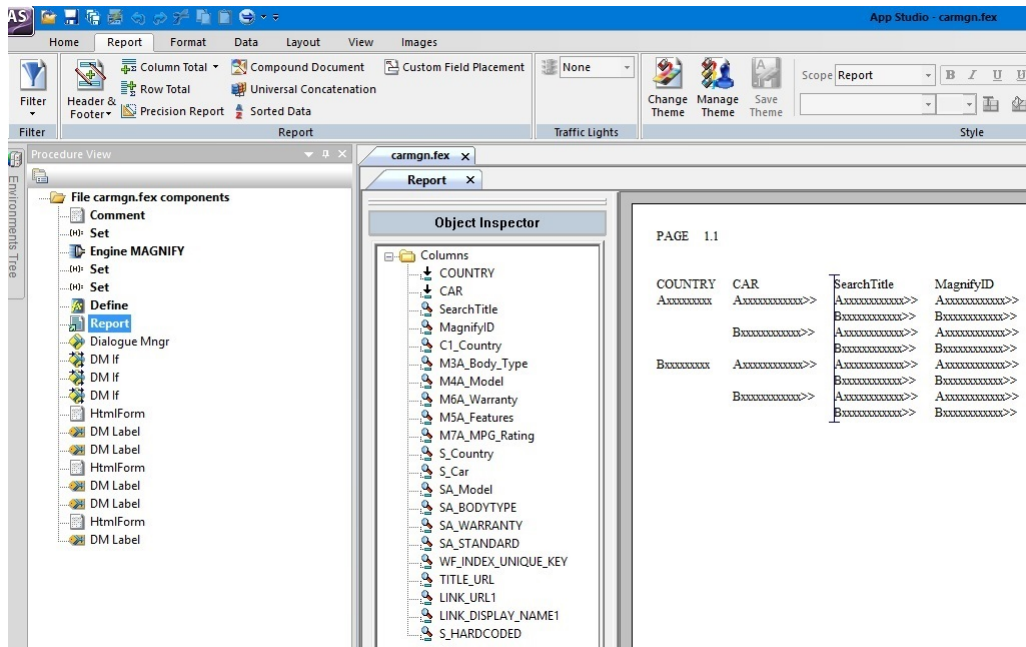
1. Open the Car file to review all available data.
 - a. In App Studio, create a project pointing to the sample directory, *ibisamp*, if not already created.
2. Review the Car file (*carmgn.fex*)

Note: This file is installed with the WebFOCUS Reporting Server under the *ibisamp* application directory.

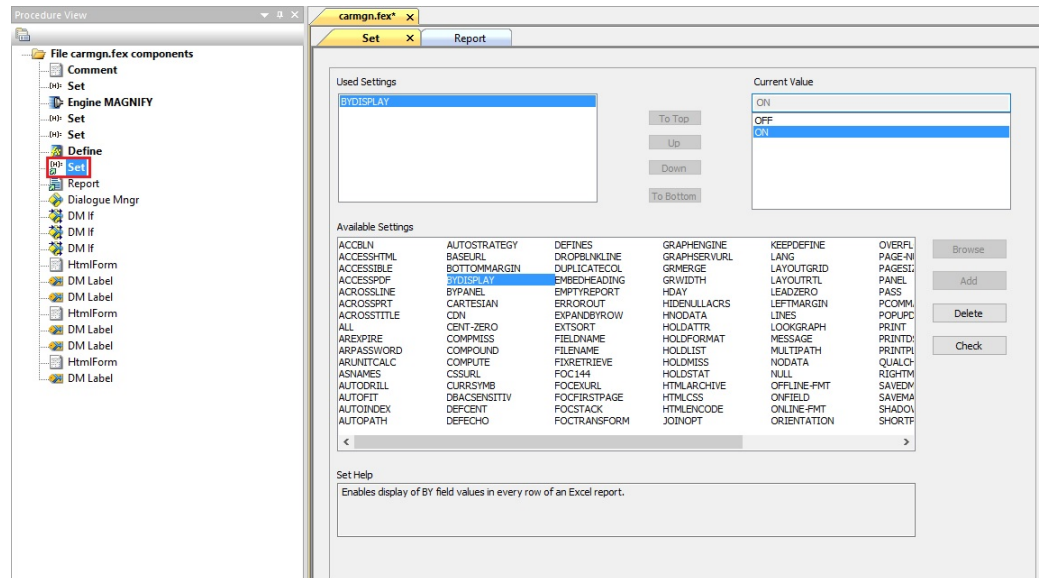
- a. Right-click the *carmgn.fex* file and select *Open* from the context menu, as shown in the following image.



The Procedure View panel is opened for the *carmgn.fex* file, as shown in the following image.

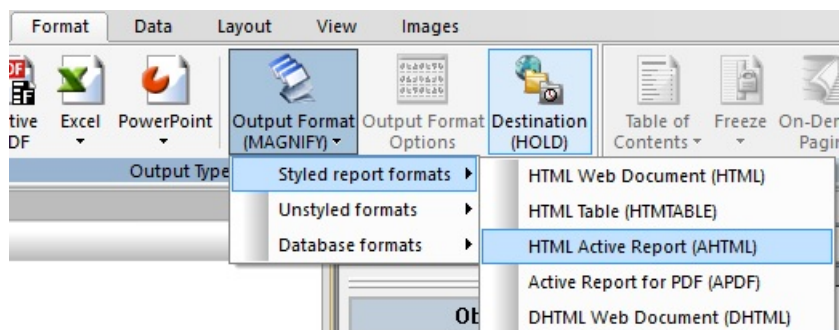


- b. Add a Set object before the Report object and set the *BYDISPLAY* parameter to *ON* to show repeated BY values, as shown in the following image.



- c. Double-click the *Report* object in the Procedure View panel to change the Output Format.

- ☐ Click the *Format* tab.
- ☐ Select the *Output Format* drop-down.
- ☐ From the Output Format drop-down list, expand *Styled report formats* and select *HTML Active Report (AHTML)*, as shown in the following image.



Note: If you are not licensed for Active Technology, select *HTML Web Document (HTML)* instead. In that case, you will not be able to run the aggregation reports.

☐ Click Save and then click *Run* from the Quick Access Toolbar.

d. Review the naming conventions and data, as shown in the following image.

COUNTRY	CAR	SearchTitle	ModelID	Country	Model Type	Model	Model Normaty	Model Features	Model MPG Rating	Country	Car
ENGLAND	JAGUAR	JAGUAR (ENGLAND)	ENGLAND-JAGUAR	ENGLAND	CONVERTIBLE	V12000 AUTO	12 MONTHS OR 12000 MILES	4 WHEEL DISC BRAKES	1. 11MPG - 20MPG	ENGLAND	JAGUAR
ENGLAND	JAGUAR	JAGUAR (ENGLAND)	ENGLAND-JAGUAR	ENGLAND	SEDAN	XJ600 AUTO		POWER STEERING	1. Less than 10 MPG	ENGLAND	JAGUAR
ENGLAND	JAGUAR	JAGUAR (ENGLAND)	ENGLAND-JAGUAR	ENGLAND				RECLINING BUCKET SEATS		ENGLAND	JAGUAR
ENGLAND	JAGUAR	JAGUAR (ENGLAND)	ENGLAND-JAGUAR	ENGLAND				WHITEWALL RADIAL PLY TIRES		ENGLAND	JAGUAR
ENGLAND	JAGUAR	JAGUAR (ENGLAND)	ENGLAND-JAGUAR	ENGLAND				WRAP AROUND BUMPERS		ENGLAND	JAGUAR
ENGLAND	JENSEN	JENSEN (ENGLAND)	ENGLAND-JENSEN	ENGLAND	SEDAN	INTERCEPTOR III	12000 MILES OR 12 MONTHS	AIR CONDITIONING	2. 11MPG - 20MPG	ENGLAND	JENSEN
ENGLAND	JENSEN	JENSEN (ENGLAND)	ENGLAND-JENSEN	ENGLAND				CHRYSLER 361 CU IN V8 ENGINE		ENGLAND	JENSEN
ENGLAND	JENSEN	JENSEN (ENGLAND)	ENGLAND-JENSEN	ENGLAND				LEAR JET AM FM 1 TRX STEREO		ENGLAND	JENSEN
ENGLAND	JENSEN	JENSEN (ENGLAND)	ENGLAND-JENSEN	ENGLAND				PIRELLI GR70 15 TIRES		ENGLAND	JENSEN
ENGLAND	TRIUMPH	TRIUMPH (ENGLAND)	ENGLAND-TRIUMPH	ENGLAND	HARDTOP	TR7	12 MONTHS OR 12000 MILES	POWER FRONT DISC BRAKES	3. Greater than 20MPG	ENGLAND	TRIUMPH
ENGLAND	TRIUMPH	TRIUMPH (ENGLAND)	ENGLAND-TRIUMPH	ENGLAND				RETRACTABLE HEADLIGHTS		ENGLAND	TRIUMPH
FRANCE	PEUGEOT	PEUGEOT (FRANCE)	FRANCE-PEUGEOT	FRANCE	SEDAN	504 4 DOOR	12 MONTHS OR 12000 MILES	ANTI SWAY BARS FRONT AND REAR	3. Greater than 20MPG	FRANCE	PEUGEOT
FRANCE	PEUGEOT	PEUGEOT (FRANCE)	FRANCE-PEUGEOT	FRANCE				FOUR WHEEL SUSPENSION		FRANCE	PEUGEOT
FRANCE	PEUGEOT	PEUGEOT (FRANCE)	FRANCE-PEUGEOT	FRANCE				BLACK AND WOOD STEERING		FRANCE	PEUGEOT
ITALY	ALFA ROMEO	ALFA ROMEO (ITALY)	ITALY-ALFA ROMEO	ITALY	SEDAN	2000 4 DOOR BERLINA			3. Greater than 20MPG	ITALY	ALFA ROMEO
ITALY	ALFA ROMEO	ALFA ROMEO (ITALY)	ITALY-ALFA ROMEO	ITALY	COUPE	2000 GT VELOCE			3. Greater than 20MPG	ITALY	ALFA ROMEO
ITALY	ALFA ROMEO	ALFA ROMEO (ITALY)	ITALY-ALFA ROMEO	ITALY	ROADSTER	2000 SPIDER VELOCE			3. Greater than 20MPG	ITALY	ALFA ROMEO
ITALY	MASERATI	MASERATI (ITALY)	ITALY-MASERATI	ITALY	COUPE	DORA 2 DOOR	60 MONTHS OR 6000 MILES	5 LITRE 88 ENGINE	1. Less than 10 MPG	ITALY	MASERATI
ITALY	MASERATI	MASERATI (ITALY)	ITALY-MASERATI	ITALY				ALL STEEL BODY		ITALY	MASERATI
ITALY	MASERATI	MASERATI (ITALY)	ITALY-MASERATI	ITALY				CAMPANOLLO LIGHT ALLOY WHEELS		ITALY	MASERATI
ITALY	MASERATI	MASERATI (ITALY)	ITALY-MASERATI	ITALY				MICHELIN 22 5/8 TRACTION TIRES		ITALY	MASERATI
JAPAN	DATSUN	DATSUN (JAPAN)	JAPAN-DATSUN	JAPAN	SEDAN	B210 2 DOOR AUTO	12 MONTHS OR 12000 MILES	POWER FRONT DISC BRAKES	1. Less than 10 MPG	JAPAN	DATSUN
JAPAN	DATSUN	DATSUN (JAPAN)	JAPAN-DATSUN	JAPAN				REAR DRUM BRAKES		JAPAN	DATSUN
JAPAN	TOYOTA	TOYOTA (JAPAN)	JAPAN-TOYOTA	JAPAN	SEDAN	COROLLA 4 DOOR DX AUTO	12 MONTHS OR 12000 MILES	BODY SIDE MOLDING	3. Greater than 20MPG	JAPAN	TOYOTA
JAPAN	TOYOTA	TOYOTA (JAPAN)	JAPAN-TOYOTA	JAPAN				MACPHERSON STRUT FRONT SUSPENSION		JAPAN	TOYOTA
WEST GERMANY	AUDI	AUDI (WEST GERMANY)	WEST GERMANY-AUDI	WEST GERMANY	SEDAN	100 LS 2 DOOR AUTO	12 MONTHS OR 20000 MILES	161 SR 14 RADIAL TIRES	3. Greater than 20MPG	WEST GERMANY	AUDI
WEST GERMANY	AUDI	AUDI (WEST GERMANY)	WEST GERMANY-AUDI	WEST GERMANY				FRONT SHOCKS DRIVE		WEST GERMANY	AUDI

☐ Review the Record Context.

Note: Notice how multiple rows in the Car data can be used to describe a single entity based on the rollup level. In this case, there are Countries and Cars. Depending on the use case, each entity can be created as its own search result. This is done by using the highest-level field as the primary BY field. Columns are named accordingly to identify where to aggregate values across multiple rows. For example, aggregating on the COUNTRY field will generate five search results, one for each country. Therefore, separate searches for *Jensen* and *Jaguar* will both return *England* as the search result.

At another level, the Car data has 18 individual models. However, if users are to search for any model, only a single car type search result would be returned.

For example, rolling up Model By Car reveals that there are 10 cars. Thus, 6 rows of data found for BMW will be aggregated into a single search result, as shown in the following image.

The screenshot shows a data browser window titled "M4A_Model By CAR". The table displays 10 records, Page 1 of 1. The table has two columns: "CAR" and "M4A_Model". The data is as follows:

CAR	M4A_Model
ALFA ROMEO	3
AUDI	1
BMW	6
DATSUN	1
JAGUAR	2
JENSEN	1
MASERATI	1
PEUGEOT	1

A context menu is open over the table, showing options: Sort Ascending, Sort Descending, Filter, Calculate, Chart, Rollup (highlighted), and Pivot (Cross Tab). The "Rollup" option is selected, and a sub-menu is visible showing "Group By (X)(COU)" with "COUNTRY" and "CAR" (highlighted by a mouse cursor) as options. Other options in the sub-menu include SearchTitle, MagnifyID, C1_Country, M3A_Body_Type, M4A_Model, M6A_Warranty, M5A_Features, and M7A_MPG_Rating.

❑ Close the browser window that is running the report.

3. Index the Car file.

a. Double-click the *Engine MAGNIFY* object in the Procedure View panel.

The MAGNIFY search engine properties dialog opens, as shown in the following image.

MAGNIFY search engine properties.

Used Property	Property Name	Property Value
<input type="checkbox"/>	ACTION	add
<input checked="" type="checkbox"/>	BASEURL	http://&WHAT_IS_MAGNIFY_URL:port/&WHAT_IS_ibi_apps/WFServlet
<input checked="" type="checkbox"/>	BATCHSIZE	100
<input checked="" type="checkbox"/>	CONNECTION_ATTRIBUTES	MY_PC http://&WHAT_IS_MAGNIFY_URL:port/&WHAT_IS_ibi_apps/saxfeed"
<input checked="" type="checkbox"/>	DATASOURCE	cars
<input checked="" type="checkbox"/>	DELIMITER	#!#
<input type="checkbox"/>	FEEDTYPE	incremental
<input type="checkbox"/>	MIME	text/plain

Search Properties Help

Review the following properties:

- ☐ **DELIMITER.** Used internally to separate a list of values generated by the Format Magnify procedure in order to aggregate multiple rows into a single search result. This value should be a unique value not found anywhere in the content that is being indexed.
- ☐ **BATCHSIZE.** Incremental number of records to feed to Magnify at a time.

Note: Batchsize is critical when indexing large volumes of data. This setting will process all records but only send feeds to Magnify in the batch size specified, thereby sending data in increments.

The remaining Engine objects were covered in the [Indexing the Movie File](#) on page 24.

- b. Double-click the Set object in the Procedure View panel.

The Set dialog opens, as shown in the following image.

The Set dialog box is shown with the following components:

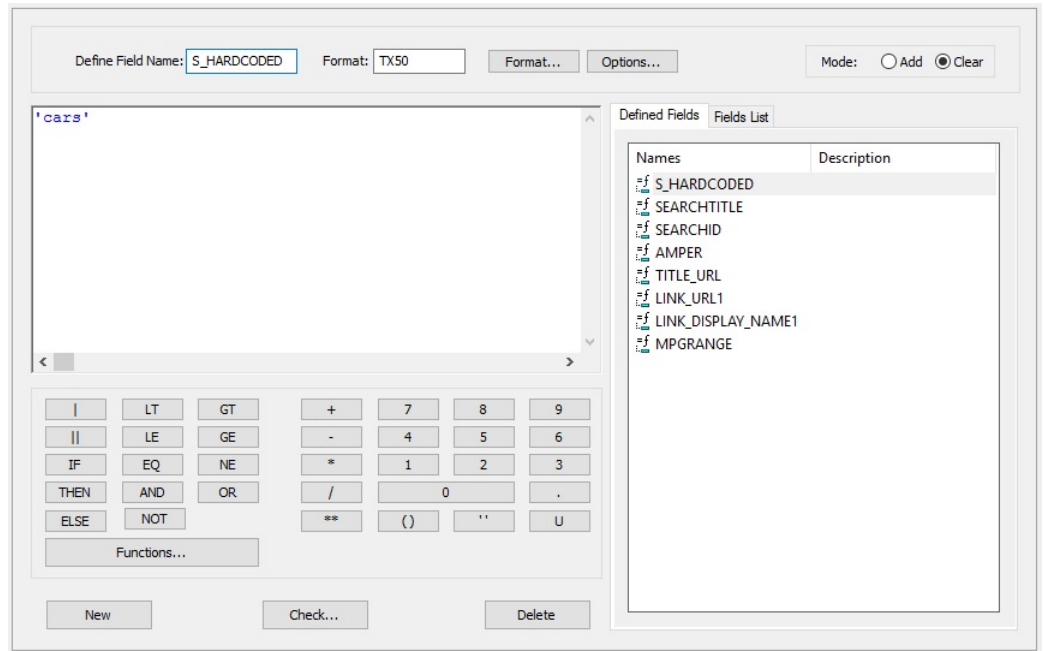
- Used Settings:** A list containing 'ASNAMES'.
- Current Value:** A list with 'MIXED' selected, and other options: 'FOCUS', 'OFF', and 'ON'.
- Available Settings:** A grid of settings including:

ACCBIN	AUTOSTRATEGY	DEFINES	GRAPHENGINE	KEEPDEFINE	OVERFL
ACCESSHTML	BASEURL	DROPLINKLINE	GRAPHSEVURL	LANG	PAGE-NI
ACCESSIBLE	BOTTOMMARGIN	DUPLICATECOL	GRMERGE	LAYOUTGRID	PAGESIZ
ACCESSPDF	BYDISPLAY	EMBEDHEADING	GRWIDTH	LAYOUTRTL	PANEL
ACROSSLINE	BYPANEL	EMPTYREPORT	HDAY	LEADZERO	PASS
ACROSSPRT	CARTESIAN	ERRORROUT	HIDENULLACRS	LEFTMARGIN	PCOMM
ACROSSTITLE	CDN	EXPANDBYROW	HINODATA	LINES	POPUPD
ALL	CENT-ZERO	EXTSORT	HOLDATTR	LOOKGRAPH	PRINT
AREXPIRE	COMPMISS	FIELDNAME	HOLDFORMAT	MESSAGE	PRINTD
ARPPASSWORD	COMPOUND	FILENAME	HOLDLIST	MULTIPATH	PRINTPL
ARUNITCALC	COMPUTE	FIXRETRIEVE	HOLDMISS	NODATA	QUALCH
ASNAMES	CSSURL	FOC144	HOLDSTAT	NULL	RIGHTM
AUTODRILL	CURRSYMB	FOCEXURL	HTMLARCHIVE	OFFLINE-FMT	SAVEDM
AUTOFIT	DBACSENSITIV	FOCFIRSTPAGE	HTMLCSS	ONFIELD	SAVEMA
AUTOINDEX	DEFCENT	FOCSTACK	HTMLENCODE	ONLINE-FMT	SHADOW
AUTOPATH	DEFECHO	FOCTRANSFORM	JOINOPT	ORIENTATION	SHORTF
- Buttons:** To Top, Up, Down, To Bottom, Browse, Add, Delete, Check.
- Set Help:** Causes text specified in an AS phrase to be used as the fieldname in the HOLD MASTER, and to be concatenated to the beginning of the first fieldname specified in an ACROSS phrase.

Note: You must set the ASNAMES setting to MIXED in order to preserve case-sensitivity.

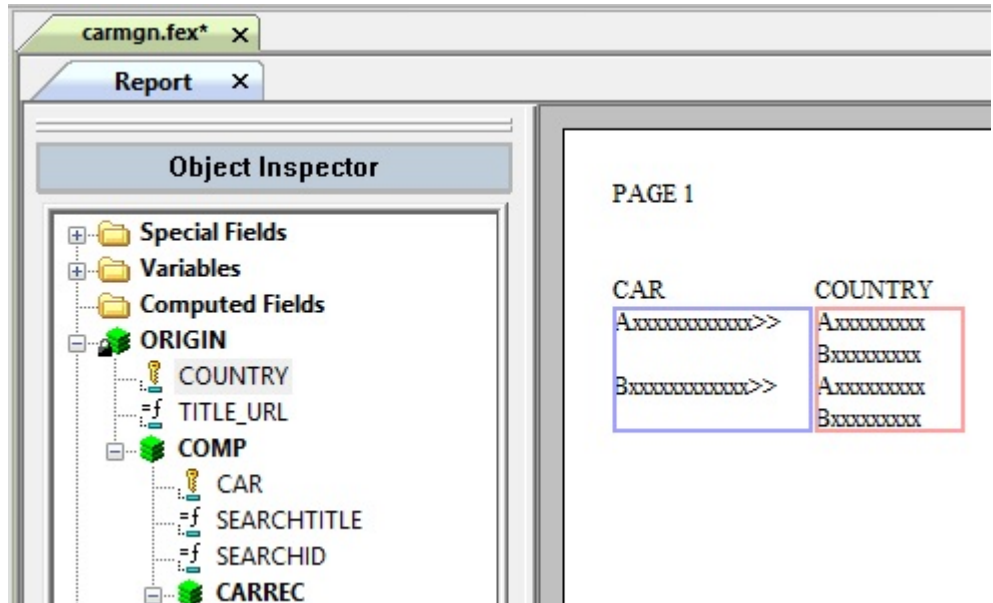
- c. Double-click the *Define* object in the Procedure View panel.

The Define dialog opens, as shown in the following image.

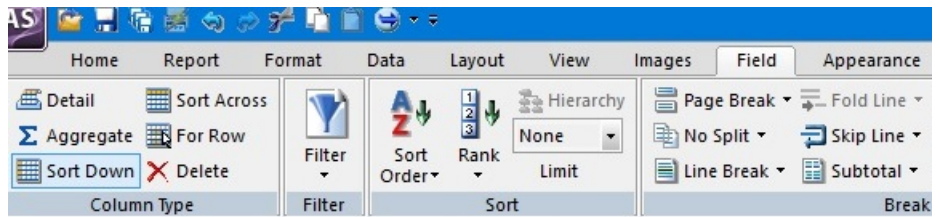


- ☐ Review each Define field.
 - ☐ Close the Define dialog.
- d. Double-click the *Report* object in the Procedure View panel.
- Note:** The following steps give you hands-on experience in recreating this procedure by starting fresh. This step can be skipped in order to follow along, similar to the hands-off approach in the [Indexing the Movie File](#) on page 24.
- e. In the Report canvas, delete all the fields by selecting all of them (or using *Ctrl+A*) and then pressing *Delete*.
 - f. Build the Format Magnify Report.
 - ☐ In the Object Inspector, double-click on the field *CAR* and the field *COUNTRY*.

- ❑ In the Report canvas, while holding Shift, select both the *COUNTRY* and *CAR* columns.

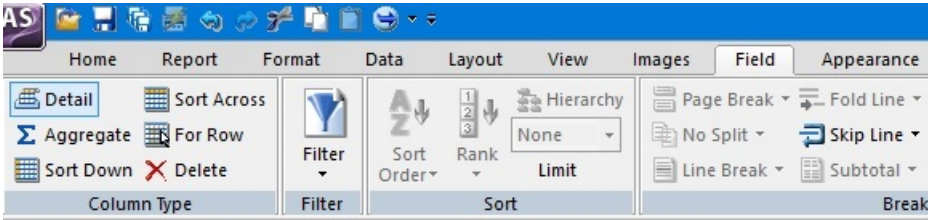


- ❑ On the toolbar, click *Sort Down*, as shown in the following image.

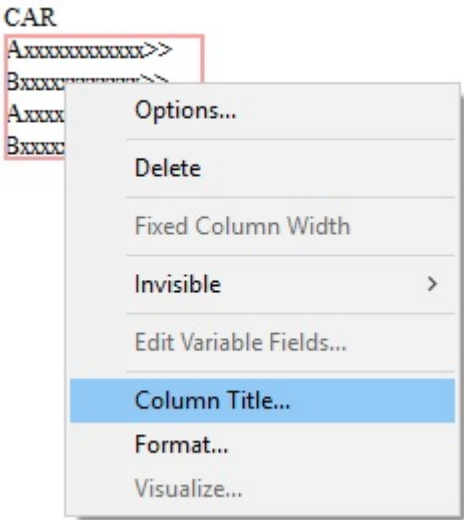


- g. In the Report canvas, click to the right side of *CAR* to begin adding more columns to the report.

h. On the toolbar, click *Detail*, as shown in the following image.



❑ In the Object Inspector, add the remaining columns. These are listed in the following table. After the column is added to the Report canvas, right-click on the column and select *Column Title*, as shown in the following image.



❑ Add Fields and Column Titles for the following:

Column	Column Title	Purpose
SEARCHTITLE	SearchTitle	Format Magnify Reserved Alias Name (case-sensitive)
SEARCHID	MagnifyID	Format Magnify Reserved Alias Name (case-sensitive)
COUNTRY	C1_Country	Category

Column	Column Title	Purpose
BODYTYPE	M3A_Body_Type	Multiple Category
MODEL	M4A_Model	Multiple Category
WARRANTY	M6A_Warranty	Multiple Category
STANDARD	M5A_Features	Multiple Category
MPGRANGE	M7A_MPG_Rating	Multiple Category
COUNTRY	S_Country	Searchable Content
CAR	S_Car	Searchable Content
MODEL	SA_Model	Aggregated Searchable Content
BODYTYPE	SA_BODYTYPE	Aggregated Searchable Content
WARRANTY	SA_WARRANTY	Aggregated Searchable Content
STANDARD	SA_STANDARD	Aggregated Searchable Content
SEARCHID	WF_INDEX_UNIQUE_KEY	Magnify Meta Tag
TITLE_URL	<not needed>	Magnify Meta Tag
LINK_URL1	<not needed>	Magnify Meta Tag
LINK_DISPLAY_NAME1	<not needed>	Magnify Meta Tag
S_HARDCODED	<not needed>	Searchable content (last because it is a TX field type)

- i. Click **Save** and then click **Run** from the Quick Access Toolbar.

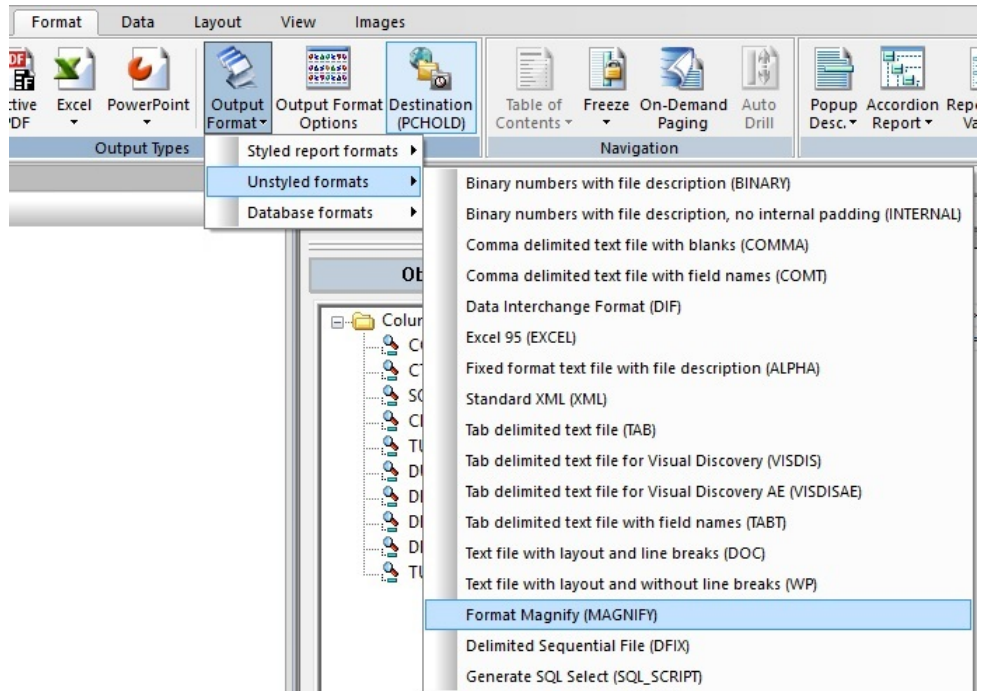
Note: Each Car will include multiple rows as part of its single search result, thereby searching either *Jaguar V12XKE Auto* or *XJ12L Auto* will return the aggregated Jaguar search result, as shown in the following image.

34 of 34 records, Page 1 of 1									
COUNTRY	CAR	SearchTitle	MagnifyID	C1_Country	M1B_Body_Type	M1B_Model	M1B_Warranty	M1B_Features	
ENGLAND	JAGUAR	JAGUAR (ENGLAND)	ENGLAND-JAGUAR	ENGLAND	CONVERTIBLE	V12XKE AUTO	12 MONTHS OR 12000 MILES	4 WHEEL DISC BRAKES	
ENGLAND	JAGUAR	JAGUAR (ENGLAND)	ENGLAND-JAGUAR	ENGLAND	SEDAN	XJ12L AUTO	.	POWER STEERING	
ENGLAND	JAGUAR	JAGUAR (ENGLAND)	ENGLAND-JAGUAR	ENGLAND	.	.	.	RECLINING BUCKET SEATS	
ENGLAND	JAGUAR	JAGUAR (ENGLAND)	ENGLAND-JAGUAR	ENGLAND	.	.	.	WHITEWALL RADIAL PLY TIRES	
ENGLAND	JAGUAR	JAGUAR (ENGLAND)	ENGLAND-JAGUAR	ENGLAND	.	.	.	WRAP AROUND BUMPER	
ENGLAND	JENSEN	JENSEN (ENGLAND)	ENGLAND-JENSEN	ENGLAND	SEDAN	INTERCEPTOR III	12000 MILES OR 12 MONTHS	AIR CONDITIONING	
ENGLAND	JENSEN	JENSEN (ENGLAND)	ENGLAND-JENSEN	ENGLAND	.	.	.	CHRYSLER 303 CU IN V8 ENGINE	
ENGLAND	JENSEN	JENSEN (ENGLAND)	ENGLAND-JENSEN	ENGLAND	.	.	.	LEAR JET AMPFM 8 TRK STEREO	
ENGLAND	JENSEN	JENSEN (ENGLAND)	ENGLAND-JENSEN	ENGLAND	.	.	.	PIRELLI GR70 15 TIRES	
ENGLAND	TRIUMPH	TRIUMPH (ENGLAND)	ENGLAND-TRIUMPH	ENGLAND	HARDTOP	TR7	12 MONTHS OR 12000 MILES	POWER FRONT DISC BRAKES	
ENGLAND	TRIUMPH	TRIUMPH (ENGLAND)	ENGLAND-TRIUMPH	ENGLAND	.	.	.	RETRACTABLE HEADLIGHTS	
FRANCE	PEUGEOT	PEUGEOT (FRANCE)	FRANCE-PEUGEOT	FRANCE	SEDAN	504 4 DOOR	12 MONTHS OR 12000 MILES	ANTI SWAY BARS FRONT AND REAR	
FRANCE	PEUGEOT	PEUGEOT (FRANCE)	FRANCE-PEUGEOT	FRANCE	.	.	.	FOUR WHEEL SUSPENSION	
FRANCE	PEUGEOT	PEUGEOT (FRANCE)	FRANCE-PEUGEOT	FRANCE	.	.	.	RACK AND PINION STEERING	
ITALY	ALFA ROMEO	ALFA ROMEO (ITALY)	ITALY-ALFA ROMEO	ITALY	SEDAN	2000 4 DOOR BERLINA	.	.	
ITALY	ALFA ROMEO	ALFA ROMEO (ITALY)	ITALY-ALFA ROMEO	ITALY	COUPE	2000 GT VELOCE	.	.	
ITALY	ALFA ROMEO	ALFA ROMEO (ITALY)	ITALY-ALFA ROMEO	ITALY	ROADSTER	2000 SPIDER VELOCE	.	.	
ITALY	MASERATI	MASERATI (ITALY)	ITALY-MASERATI	ITALY	COUPE	DORA 2 DOOR	6 MONTHS OR 6000 MILES	5 LITRE SS ENGINE	
ITALY	MASERATI	MASERATI (ITALY)	ITALY-MASERATI	ITALY	.	.	.	ALL STEEL BODY	
ITALY	MASERATI	MASERATI (ITALY)	ITALY-MASERATI	ITALY	.	.	.	CAMPAGNOLLO LIGHT ALLOY WHEELS	
ITALY	MASERATI	MASERATI (ITALY)	ITALY-MASERATI	ITALY	.	.	.	MICHELIN 21 5/70 VR15XVW TIRES	
JAPAN	DATSUN	DATSUN (JAPAN)	JAPAN-DATSUN	JAPAN	SEDAN	B210 2 DOOR AUTO	12 MONTHS OR 12000 MILES	POWER FRONT DISC BRAKES	
JAPAN	DATSUN	DATSUN (JAPAN)	JAPAN-DATSUN	JAPAN	.	.	.	REAR DRUM BRAKES	
JAPAN	TOYOTA	TOYOTA (JAPAN)	JAPAN-TOYOTA	JAPAN	SEDAN	COROLLA 4 DOOR DX AUTO	12 MONTHS OR 12500 MILES	BODY SIDE MOLDING	
JAPAN	TOYOTA	TOYOTA (JAPAN)	JAPAN-TOYOTA	JAPAN	.	.	.	MACPHERSON STRUT FRONT SUSPENSION	
W GERMANY	AUDI	AUDI (W GERMANY)	W GERMANY-AUDI	W GERMANY	SEDAN	100 LS 2 DOOR AUTO	12 MONTHS OR 20000 MILES	165 SR 14 RADIAL TIRES	
W GERMANY	AUDI	AUDI (W GERMANY)	W GERMANY-AUDI	W GERMANY	.	.	.	FRONT WHEEL DRIVE	
W GERMANY	AUDI	AUDI (W GERMANY)	W GERMANY-AUDI	W GERMANY	.	.	.	POWER FRONT BRAKES	
W GERMANY	BMW	BMW (W GERMANY)	W GERMANY-BMW	W GERMANY	SEDAN	2002 2 DOOR	.	.	
W GERMANY	BMW	BMW (W GERMANY)	W GERMANY-BMW	W GERMANY	SEDAN	2002 2 DOOR AUTO	.	.	
W GERMANY	BMW	BMW (W GERMANY)	W GERMANY-BMW	W GERMANY	SEDAN	3.0 SI 4 DOOR	.	.	
W GERMANY	BMW	BMW (W GERMANY)	W GERMANY-BMW	W GERMANY	SEDAN	3.0 SI 4 DOOR AUTO	.	.	
W GERMANY	BMW	BMW (W GERMANY)	W GERMANY-BMW	W GERMANY	SEDAN	520i 4 DOOR	.	.	

- Close the browser window that is running the report and return to the Report canvas.
- Change the Output Format as follows:

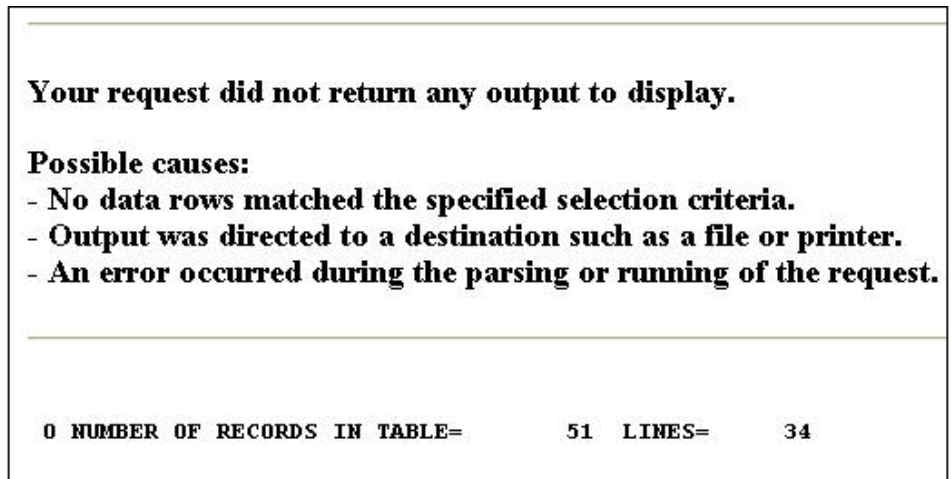
- ☐ Click the *Format* tab.
- ☐ Select the *Output Format* drop-down.

- ❑ Expand the *Unstyled formats* menu and select *Format Magnify (MAGNIFY)*, as shown in the following image.



- ❑ Click Save and then click *Run* from the Quick Access Toolbar.
- ❑ Confirm that there are no errors. Upon execution, the WebFOCUS Reporting Server will process the request by transforming the report output into the Magnify feed protocol.

Note: Not every row is sent to Magnify. Fifty-one rows are aggregated into 34, as shown in the following image.



As part of the Magnify output, the 34 records are further aggregated into 10 search results.

- ☐ Close the browser window that is running the report.
 - ☐ Close the Procedure View panel.
4. Review the search-based application generated.
- a. Open a web browser.
 - b. Navigate to the Magnify search page:

http://host:port/wfcontext_root/search

where:

[host:port](#)

Is the machine name and port number where WebFOCUS is installed.

[wfcontext_root](#)

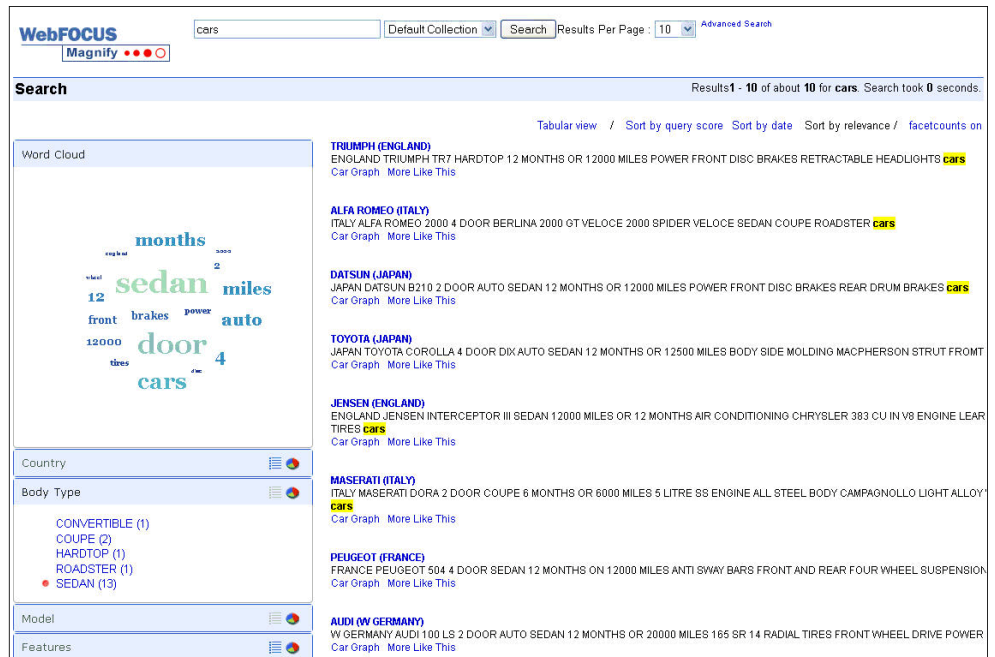
Is the WebFOCUS application root.

Note: Sample or default URLs are for informational purposes only and may not resolve correctly, if at all.

To return to the Magnify interface, the default URL is:

http://localhost:8080/ibi_apps/search

- c. Perform a search test by typing *cars* in the Search box and clicking *Search* as shown in the following image.



- d. Review the returned results and search to identify how the data has been applied to the Magnify search interface.
- e. Close the browser window.
- f. Close App Studio.

Writing Magnify Feed Documents to Disk

Modifying ENGINE MAGNIFY SET commands for FORMAT MAGNIFY that instructs the WebFOCUS Reporting Server to write Magnify feed documents to disk rather than posting through HTTP are now supported.

Procedure: How to Write Magnify Feed Documents to Disk

You can follow the same instructions that currently exist for configuring FORMAT MAGNIFY with the following differences:

1. Add the following two lines:

```
APP MAP <variable_name> "c:\ibi\WebFOCUS82\magnify\feedcache"
```

APP HOLD *<variable_name>*

2. Set the ENGINE MAGNIFY SET CONNECTION_ATTRIBUTES parameter to a blank value.
3. Ensure that the ON TABLE HOLD FORMAT MAGNIFY statement ends with:

AS <variable_name>

Otherwise, the following error is generated:

(FOC44971) Explicit SET command has to be issued for
CONNECTION_ATTRIBUTES.

Organizing Magnify Search Collections

Information can be organized into various contexts. This depends on how users understand the information that they search for. For example, an enterprise can organize information into Marketing Materials, Customer Accounts, Sales Leads, and Administrative Forms. Grouping Magnify Search index libraries to match the information architecture of the organization can help users pre-filter their searches.

This topic will demonstrate how to:

1. Map collections to index libraries.
2. Provide drop-down options for each collection.
3. Review the changes in real-time.

In this chapter:

- ☐ [Mapping Index Libraries to Collection Indexes](#)
 - ☐ [Adding Indexes to the Collections Drop-down Menu](#)
 - ☐ [Viewing the Results in Real Time](#)
-

Mapping Index Libraries to Collection Indexes

Magnify Search collections are organized and styled by files in the config\magnify folder.

Procedure: How to Map Index Libraries to Collection Indexes

1. Navigate to the Magnify Search configuration folder.
`\ibi\WebFOCUS82\config\magnify`
2. Open the collections.xml file in a text editor, such as Notepad.
3. Scroll to the end of the collections.xml file and locate the `<indexes>` section.
4. Create an index element in the collections file.
 - a. In the index element, provide a unique name for the designated index library. Typically this is the same name as the index library folder and data source name used earlier.
 - b. Use the folder of the index library created by the Format Magnify procedure as the *directory* value. This is the same as the value set in the DATASOURCE Engine Set statement.

This is the code:

```
<indexes>
  <index name="cars" directory="cars"></index>
  <index name="movies" directory="movies"></index>
</indexes>
```

5. Save and close the collections.xml file.

Adding Indexes to the Collections Drop-down Menu

You can make Magnify index libraries available from the collections drop-down menu on the Magnify search page. This allows users to focus their search to a particular set of search content.

To add the collections to the Magnify search page drop-down menu, you must edit the following variables in the Magnify stylesheet (<locale>_stylesheet.xslt):

- ❑ **collections_description variable.** Identifies the collection name that will appear in the drop-down list.
- ❑ **collections_values variable.** Identifies one or more index libraries.

Procedure: How to Add Indexes to the Collections Drop-down Menu

1. Navigate to the Magnify configuration folder for your locale. The folder for English is en.
`\ibi\WebFOCUS82\config\magnify\locale`
2. Open the *locale_stylesheet.xslt* file (en_stylesheet.xslt) in a text editor, such as Notepad.
3. Locate the *collections_descriptions* variable.

```
<xsl:variable name="collections_descriptions">
```

4. Enter names for your collection in the `<xsl:otherwise>` element. The syntax is:

```
<xsl:otherwise>Default Collection,My First Collection,My Second  
Collection,</xsl:otherwise>
```

For example:

```
<xsl:otherwise>Default Collection,Cars,Movies,</xsl:otherwise>
```

Note: Collection names must be separated with a comma, and the element must end with a comma.

5. Locate the *collections_values* variable.

```
<xsl:variable name="collections_values">
```

6. Enter the folder where your indexes reside in the `<xsl:otherwise>` element. The syntax is:

```
<xsl:otherwise>default_collection,myfolder1,myfolder2,</xsl:otherwise>
```

For example:

```
<xsl:otherwise>default_collection,cars,movies,</xsl:otherwise>
```

Note: Folder names are case-sensitive, must be separated with a comma, and the element must end with a comma.

7. Save and close the stylesheet file.

Note:

- ❑ The entries for the names and values in the collection variables must correspond to each other and appear in the same order. That is, description 1 must match value 1, description 2 must match value 2, and so on.
- ❑ Do not include spaces in the *collection_values* variable. Magnify interprets the space to be part of the variable value and will not be able to locate the intended index. Spaces are allowed in the *collections_descriptions* variable.

Viewing the Results in Real Time

After you have mapped collections to index libraries and added drop-down options for each collection, you will need to refresh the Magnify session with the application server, such as Apache Tomcat.

This can be accomplished by restarting the application server or using the *Refresh Collections* option in the Magnify administration console.

Procedure: How to View the Changes Made Using a URL Request

To view the changes, return to the sample default URL.

1. Navigate to the default Magnify search page using the following URL request:

```
http://host:port/wfcontext_root/search
```

where:

```
host:port
```

Is the machine name and port number where WebFOCUS is installed.

```
wfcontext_root
```

Is the WebFOCUS application root.

Note: Sample or default URLs are for informational purposes only and may not resolve correctly, if at all.

This is the full default URL:

http://localhost:8080/ibi_apps/search

2. With the *Default Collection* selected in the collection drop-down menu, enter the Boolean search for *movies OR cars* in the search field.
3. Click the *Search* button.

All 70 records are returned in the results, as shown in the following image.

The screenshot shows the WebFOCUS search interface. At the top, the search field contains 'cars or movies' and the collection is set to 'Default Collection'. The search button is labeled 'Search'. To the right, 'Results Per Page' is set to '10' and there is a link to 'Advanced Search'. Below the search bar, a red box highlights the text 'Results 1 - 10 of about 70 for cars or movies. Search took 0.015 seconds.' Below this, there are links for 'Tabular view', 'Sort by query score', 'Sort by date', 'Sort by relevance', and 'facetcounts on'. On the left, there is a 'Word Cloud' and a list of filters: CATEGORY, Country, RATING, Body Type, DIRECTOR, Model, Features, Warranty, and MPG Rating. On the right, there are three movie listings: 'SMURFS, THE NR CHILDREN 88/02/16 031KKV MOVIES', 'JAWS PG ACTION SPIELBERG S. 78/05/13 001MCA MOVIES', and 'VERTIGO PG MYSTERY HITCHCOCK A. 58/11/25 082MCA MOVIES'. Each listing includes links for 'Similar' and 'More Like This'.

4. Select the *Movies* collection from the drop-down menu.
5. Click the *Search* button.

The 60 records for movies are returned in the results.

6. Select the *Cars* collection from the drop-down menu.
7. Click the *Search* button.

The 10 records for cars are returned in the results, as shown in the following image.

The screenshot displays the WebFOCUS Magnify search interface. At the top, the search bar contains 'cars or movies' and a dropdown menu is set to 'Cars'. The 'Search' button is highlighted. To the right, 'Results Per Page' is set to '10' and there is a link to 'Advanced Search'. Below the search bar, the 'Search' section shows 'Results 1 - 10 of about 10 for cars or movies' and 'Search took 0 seconds'. A navigation bar includes links for 'Tabular view', 'Sort by query score', 'Sort by date', 'Sort by relevance', and 'facetcounts on'. On the left, a sidebar lists facets: Word Cloud, Country, Body Type, Model, Features, Warranty, and MPG Rating. The main results area shows three entries: 'TRIUMPH (ENGLAND)', 'ALFA ROMEO (ITALY)', and 'DATSUN (JAPAN)', each with a brief description and a 'cars' tag. Each entry also has links for 'Car Graph' and 'More Like This'.

WebFOCUS cars or movies **Cars** Search Results Per Page : 10 Advanced Search
Magnify

Search Results 1 - 10 of about 10 for cars or movies Search took 0 seconds.

[Tabular view](#) / [Sort by query score](#) [Sort by date](#) [Sort by relevance](#) / [facetcounts on](#)

Word Cloud	
Country	
Body Type	
Model	
Features	
Warranty	
MPG Rating	

TRIUMPH (ENGLAND)
 ENGLAND TRIUMPH TR7 HARDTOP 12 MONTHS OR 12000 MILES POWER FRONT DISC BRAKES
 RETRACTABLE HEADLIGHTS cars
[Car Graph](#) [More Like This](#)

ALFA ROMEO (ITALY)
 ITALY ALFA ROMEO 2000 4 DOOR BERLINA 2000 GT VELOCE 2000 SPIDER VELOCE SEDAN COUPE
 ROADSTER cars
[Car Graph](#) [More Like This](#)

DATSUN (JAPAN)
 JAPAN DATSUN B210 2 DOOR AUTO SEDAN 12 MONTHS OR 12000 MILES POWER FRONT DISC
 BRAKES REAR DRUM BRAKES cars
[Car Graph](#) [More Like This](#)

Verifying Magnify Search Indexes

You can monitor the indexing process and verify specific content in Magnify Search indexes using the Magnify Console.

In this chapter:

- ❑ [Post-Indexing Verification](#)
-

Post-Indexing Verification

This section will briefly describe some administrative features to validate the Magnify feed.

Note: For more information, see the *Magnify Search Security and Administration* manual.

1. Monitor the Indexing Process from the Magnify Console.
 - a. Launch WebFOCUS using the following URL and log on:

`http://host:port/wfcontext_root`

where:

`host:port`

Is the machine name and port number where WebFOCUS is installed.

`wfcontext_root`

Is the WebFOCUS application root. By default, this is `ibi_apps`.

Note: Sample or default URLs are for informational purposes only and may not resolve correctly, if at all.

- b. From the main menu, select *Administration*, and then *Magnify Console*.
 - ❑ Under the *Diagnostics* section, click on *Index Monitor*.
 - ❑ Notice how many records were indexed.

- ❑ Copy the Directory Name under *Index Library Status*. This will be used to locate the physical Magnify Index library files, as shown in the following image.

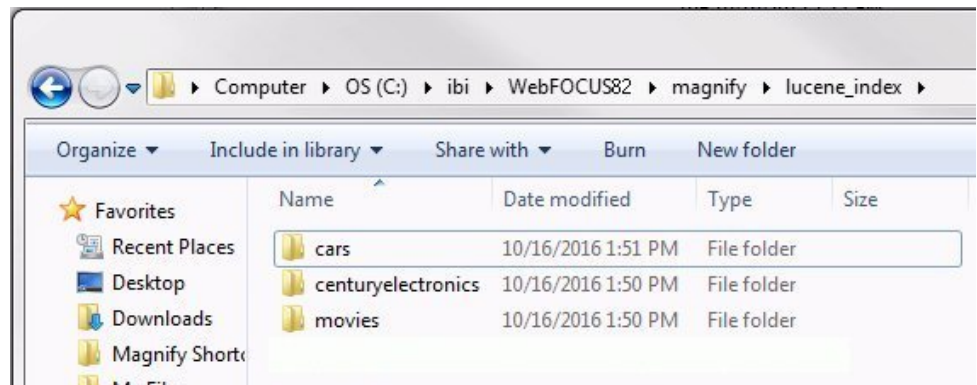
Index Library Status

The below information provides information about content feed to each Magnify index library. This information is refreshed

	Open Time	Close Time	Last Deleted Time	Minutes Open	Directory Name	Count of Records Loaded	Actual Documents in the index	Total Documents including deletes in the index
1	14:26:03	14:28:08		2.09	C:\ibi\WebFOCUS82\magnify\lucene_index\movies	60	60	60
2	14:57:44	14:59:44		2.00	C:\ibi\WebFOCUS82\magnify\lucene_index\cars	10	10	10
				4.09	Total	70	70	70

2. Close the Magnify Console and the browser window.
3. Verify the creation of the Magnify Index Library.
 - a. Navigate to Index Library folder.

Open Windows Explorer (or press the Windows logo key+E), and paste the Directory Name copied from step 1b in the browser bar. You can also type the directory path to the Magnify index libraries, for example `\ibi\WebFOCUS82\magnify\lucene_index`, by default, as shown in the following image.



Note: The path that you use depends on your configuration. If you are using the WebFOCUS Client, the preceding path is acceptable. If you are using App Studio as a stand-alone, the path will be `\ibi\AppStudio82\magnify\lucene_index\`.

4. Close Windows Explorer.

General Tips for Using Magnify Search

This topic describes additional ways to work with Magnify Search.

In this chapter:

- ❑ [Creating a Customized Magnify Configuration](#)
 - ❑ [Basic Styling Options](#)
 - ❑ [Configuring Word Lists](#)
 - ❑ [Deleting Records From the Index](#)
 - ❑ [File Indexing](#)
 - ❑ [Other Considerations for Magnify Implementation](#)
-

Creating a Customized Magnify Configuration

This section describes how to save configuration changes to the Magnify interface separately from the default settings. The following procedures provide an example of creating a new customized Magnify configuration.

Simply put, the Magnify architecture flows as follows:

- ❑ When Magnify is called, the default collections.xml file is used. In this file, the default style sheet is assigned as an attribute for each supported language. By default, each language has its own designated folder which includes its own set of translated files.
- ❑ The language-specific style sheet is the first style sheet typically called from the Magnify collection file. This file describes collection pointers, text labels, the style sheet name, and references to include a more global style sheet (typically found in the root magnify configuration folder), which describes how to style the Magnify interface.
- ❑ The global style sheet is the principle file that controls the style and behavior of the Magnify interface. By default this is the included_stylesheets.xslt file.

Procedure: How to Create a Customized Style Sheet

This procedure creates a new language-specific style sheet file with its own unique name and a pair of collection values and descriptions. The default `en_stylesheet.xslt` file will be used as a template. For a different example, see the `en_stylesheet_century.xslt` file.

1. Navigate to the `\ibi\WebFOCUS82\config\magnify\en` folder.
2. Copy the `en_stylesheet.xslt` file.
3. Rename the copied file as `en_stylesheet_myexample.xslt`.
4. Open the `en_stylesheet_myexample.xslt` file in a text editor and set the root style sheet.

- a. Find the variable for the root style sheet name.

```
<!-- Do not translated the variable rootstylesheet -->
<xsl:variable name="rootstylesheet" >default</xsl:variable>
```

- b. Change the default to a custom name, in this case, `myexample`.

```
<!-- Do not translated the variable rootstylesheet -->
<xsl:variable name="rootstylesheet" >myexample</xsl:variable>
```

- c. Navigate to the `collections_descriptions` and `collections_values` variables.
- d. Add *Files* as the collection description and *myfileindex* as collection value, as shown in the following image. Both variables must end with commas. This will be used later in the File Indexing section. For more information, see [Adding Indexes to the Collections Drop-down Menu](#) on page 50.

```
<xsl:variable name="collections_descriptions">

  <xsl:choose>
    <xsl:when test="/GSP/PARAM[@name='collections_descriptions']/@value!=''">
      <xsl:value-of select="/GSP/PARAM[@name='collections_descriptions']/@value"/>
    </xsl:when>

    <xsl:otherwise>Default Collection,Cars,Movies,Files,</xsl:otherwise>
  </xsl:choose>
</xsl:variable>

<xsl:variable name="collections_values">
  <xsl:choose>
    <xsl:when test="/GSP/PARAM[@name='collections_values']/@value!=''">
      <xsl:value-of select="/GSP/PARAM[@name='collections_values']/@value"/>
    </xsl:when>
    <xsl:otherwise>default_collection,cars,movies,myfileindex,</xsl:otherwise>
  </xsl:choose>
</xsl:variable>
```

- e. Save and close the `en_stylesheet_myexample.xslt` file.

Procedure: How to Create a Customized Collection Configuration

This procedure will create a new collection file pointing to the customized style sheet created in the previous procedure. The default collections.xml file will be used as a template. For a different example, see the collections_century.xml file.

1. Navigate to the \ibi\WebFOCUS82\config\magnify folder.
2. Copy the collections.xml file.
3. Rename the copied file as collections_myexample.xml.
4. Open the collections_myexample.xml file in a text editor and set the default language-specific style sheet.
 - a. Find the <defaults> section, as shown in the following image.

```

85 <defaults analyzer="MagnifyAnalyzer"
86   collection="default_collection"
87   feed="default"
88   feed_analyzer="MagnifyAnalyzer"
89   lang="en"
90   stylesheet_dir=""
91   stylesheet="en/en_stylesheet"
92   id="defaults">
93   <language_defaults lang="pt-BR" analyzer="Brazilian" feed_analyzer="Brazilian" stylesheet="pt_BR/pt_BR_stylesheet" id="default_pt_BR_search" />
94   <language_defaults lang="zh" analyzer="Chinese2" feed_analyzer="Chinese2" stylesheet="zh/zh_stylesheet" id="default_zh_search" />
95   <language_defaults lang="zh-TW" analyzer="Chinese2" feed_analyzer="Chinese2" stylesheet="zh_TW/zh_TW_stylesheet" id="default_zh_TW_search" />
96   <language_defaults lang="en" analyzer="MagnifyAnalyzer" feed_analyzer="MagnifyAnalyzer" stylesheet="en/en_stylesheet" id="default_en_search" />
97   <language_defaults lang="en-us" analyzer="MagnifyAnalyzer" feed_analyzer="MagnifyAnalyzer" stylesheet="en/en_stylesheet" id="default_en-us_search" />
98   <language_defaults lang="es" analyzer="MagnifyAnalyzer" feed_analyzer="MagnifyAnalyzer" stylesheet="es/es_stylesheet" id="default_es_search" />
99   <language_defaults lang="fr" analyzer="French" feed_analyzer="French" stylesheet="fr/fr_stylesheet" id="default_fr_search" />
100  <language_defaults lang="fr-CA" analyzer="French" feed_analyzer="French" stylesheet="fr_CA/fr_CA_stylesheet" id="default_fr_CA_search" />
101  <language_defaults lang="de" analyzer="German" feed_analyzer="German" stylesheet="de/de_stylesheet" id="default_de_search" />
102  <language_defaults lang="ja" analyzer="Japanese" feed_analyzer="Japanese" stylesheet="ja/ja_stylesheet" id="default_ja_search" />
103  <language_defaults lang="ru" analyzer="Russian" feed_analyzer="Russian" stylesheet="ru/ru_stylesheet" id="default_ru_search" />
104 </defaults>

```

- b. Set the stylesheet attribute to the style sheet created earlier.

```
stylesheet="en/en_stylesheet_myexample"
```

- c. Set each language_defaults stylesheet attribute to the style sheet created earlier (for English set both lang=en and lang=en-us).

```

<language_defaults lang="en"
... stylesheet="en/en_stylesheet_myexample" ... />
<language_defaults lang="en-us"
... stylesheet="en/en_stylesheet_myexample" ... />

```

- d. Save and close the collections_myexample.xml file.

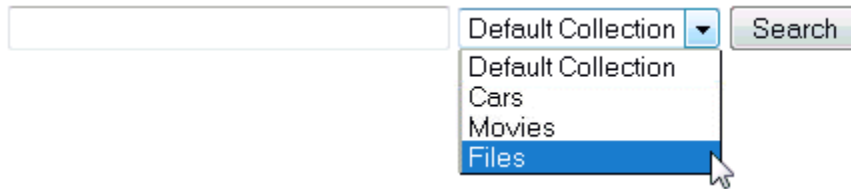
5. Refresh the Magnify session as described in [How to View the Changes Made Using a URL Request](#) on page 51.

- ☐ Navigate to the search page.

```
http://localhost:8080/ibi_apps/search
```

Note: Sample or default URLs are for informational purposes only and may not resolve correctly, if at all.

6. Confirm that the custom set of collections that you added in `collections_myexample.xml` displays in the drop-down menu, as shown in the following image.



Basic Styling Options

The Magnify interface can be customized to have a specific look and feel. The included style sheet is set up to be shared by more than one configuration. For this reason there are multiple If Then Else statements throughout the style sheet that use the value set to the root style sheet variable in order to make decisions on how to behave when a specific configuration is requested. For more information on setting the root style sheet variable, see [How to Create a Customized Style Sheet](#) on page 60.

Note: After viewing changes, you can refresh the Magnify session with a URL request or by restarting the application server.

For more information, see [How to View the Changes Made Using a URL Request](#) on page 51.

Procedure: How to Identify the Root Style Sheet Section

This procedure illustrates how to identify sections of the style sheet that control aspects of the interface based on the root style sheet in the `included_stylesheets.xslt` file.

1. Navigate to and open the `included_stylesheets.xslt` file in a text editor. By default, this file is located in `\ibi\WebFOCUS82\config\magnify`.
2. Search for `rootstylesheet`.

The first section found should be in the `fullsnippetcontent` variable:

```
<xsl:variable name="fullsnippetcontent" >
```

Note: When the `fullsnippetcontent` variable is set to true, an additional link will appear as *View Full Document*.

3. Add a section for the custom rootstylesheet created earlier (myexample).
 - a. Copy and paste the following element:

```
<xsl:when test="$rootstylesheet = 'century'">true</xsl:when>
```
 - b. Replace `century` with the custom name.

```
<xsl:when test="$rootstylesheet = 'myexample'">true</xsl:when>
```

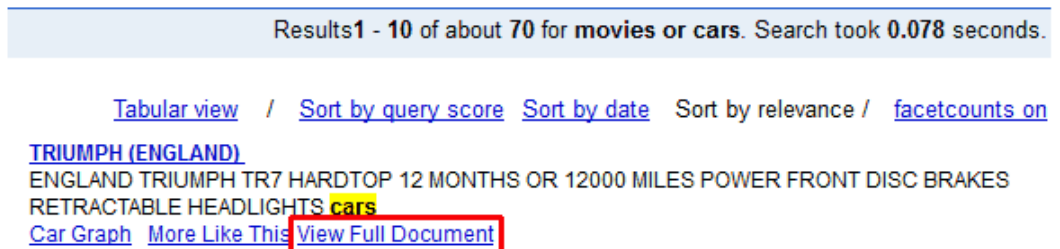
4. Save and close the included_stylesheets.xslt file.

For information on how to see the result of setting the fullsnippetcontent variable to true for the customized style sheet, see [How to View the Changes Made Using a URL Request](#) on page 51. The default URL is:

http://localhost:8080/ibi_apps/search

Note: Sample or default URLs are for informational purposes only and may not resolve correctly, if at all.

The View Full Document link is added to the results, as shown in the following image.



Note:

- ☐ This method of copying the default line of code, replacing a value with new custom rootstylesheet name (for example, myexample), and then setting it accordingly will be done for each of the following procedures.
- ☐ To see changes to the style sheet, you must restart the application server.

Procedure: How to Use a Customized Logo on the Magnify Interface

You can modify the logo that appears on the Magnify search page and create your own home page by editing the default included_stylesheets.xslt file in the \ibi\WebFOCUS82\config\magnify folder. This procedure enables you to use a custom logo on Magnify search pages that use your customized root style sheet.

1. Navigate to and open the included_stylesheets.xslt file in a text editor.
2. Search for the following:

```
<xsl:variable name="logo_url" >
```

3. Copy and paste the following element:

```
<xsl:when test="$rootstylesheet = 'default'">
images/search/magnify/logo.png
</xsl:when>
```

4. Replace *default* with the custom style sheet name.

```
<xsl:when test="$rootstylesheet = 'myexample'">
images/search/magnify/logo.png
</xsl:when>
```

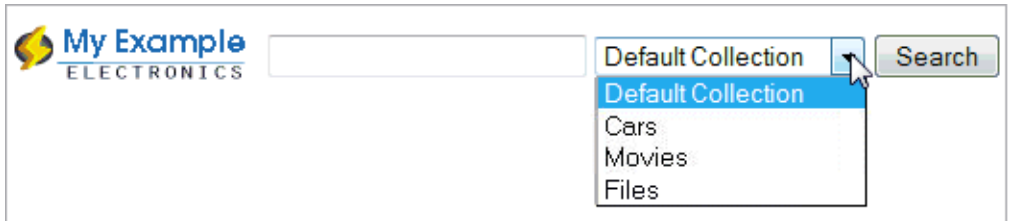
5. Replace the logo.png value with the name of your customized image.

```
<xsl:when test="$rootstylesheet = 'myexample'">
images/search/magnify/myexamplelogo.png</xsl:when>
```

Note: If you do not have a custom image, you can use the default logo.png.

For information on locating and changing the Magnify logo, see the *Magnify Search Security and Administration* manual.

6. Refresh the Magnify session as described in [How to View the Changes Made Using a URL Request](#) on page 51.
7. Confirm that your logo and custom set of collections appear on the Magnify interface, as shown in the following image.



Procedure: How to Modify the Magnify Home Page

This procedure enables you to customize the look of the Magnify home page.

1. Navigate to and open the `included_stylesheet.xslt` file in a text editor.
2. Search for the following:

```
<xsl:call-template name="customhomepage"/>
```

3. Copy the following if statement.

```
<xsl:if test="$rootstylesheet = 'century'">
  <xsl:if test="/GSP/Q = ''">
    <xsl:call-template name="customhomepage"/>
  </xsl:if>
</xsl:if>
```

4. Replace the `$rootstylesheet` and `template name` values.

```
<xsl:if test="$rootstylesheet = 'myexample'">
  <xsl:if test="/GSP/Q = '">
    <xsl:call-template name="myexamplecustomhomepage"/>
  </xsl:if>
</xsl:if>
```

5. Search for the following:

```
<xsl:template name="customhomepage">
```

6. Copy the entire template and rename it.

```
<xsl:template name="myexamplecustomhomepage">
.
.
.
</xsl:template>
```

7. Change *Century* in the `myexamplecustomhomepage` template to *My Example*.

```
<lt;p><lt;/strong>To Search Century Electronics
```

```
<lt;p><lt;/strong>To Search My Example Electronics
```

8. Refresh the Magnify session as described in [How to View the Changes Made Using a URL Request](#) on page 51.
9. Confirm that your logo, custom set of collections, and updated home page (with Century replaced with My Example) appear on the Magnify interface, as shown in the following image.



Configuring Word Lists

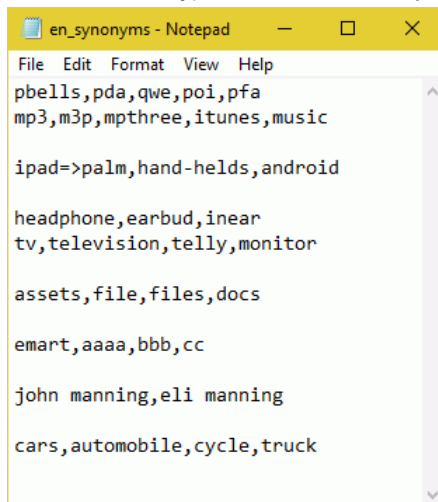
This section will illustrate how Magnify word lists can be customized. Specific areas of the interface can be configured to process searches differently. Synonyms can be added to expand search capabilities.

There is also a list of terms to ignore during a search, called a stop list. For example, if a search is submitted containing “The dog is green,” and the stop list includes the words “the” and “is”, only “dog” and “green” are searched for. This is useful in removing noise or extra words that may not be pertinent, to eliminate common words, and to increase search efficiency.

Procedure: How to Configure Synonyms

This procedure will illustrate the ability to expand search terms using synonyms. For example, by creating a synonym list for cars, searching automobile, cycle, or truck will return matches for cars as well.

1. In your file system, navigate to *drive:\ibi\WebFOCUSnn\config\magnify\en* \en_synonyms.txt, where *drive* is the drive your WebFOCUS software is saved on, and *nn* is the version number of your WebFOCUS software. Alternatively, if you are running your Magnify application in a language other than English, you can access *ln_synonyms.txt* from the associated *ln* folder, where *ln* is a two-letter language code.
2. On a new line, type *cars,automobile,cycle,truck*, as shown in the following image.



3. Save the file.
4. Navigate to the search page and search for one of the added synonyms, such as *truck*.

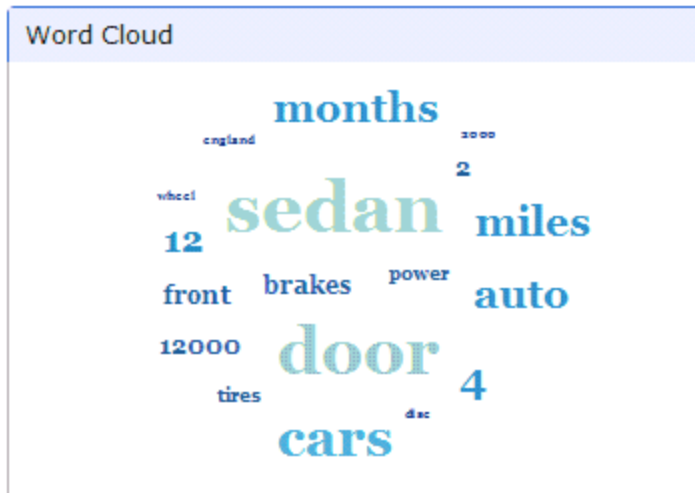
The results will be identical to a search for *cars*, as shown in the following image.

The screenshot displays the WebFOCUS Magnify search interface. At the top, the search bar contains the text 'truck'. To the right of the search bar are options for 'Default Collection', a 'Search' button, 'Results Per Page: 10', and a link to 'Advanced Search'. Below the search bar, the 'Search' section shows 'Results 1 - 10 of about 10 for truck. Search took 0 seconds'. On the left side, there is a 'Word Cloud' section with a list of filters: Country, Body Type, Model, Features, Warranty, and MPG Rating. The main results area displays a list of car models and their specifications, including 'TRIUMPH (ENGLAND)', 'ALFA ROMEO (ITALY)', 'DATSUN (JAPAN)', 'TOYOTA (JAPAN)', 'JENSEN (ENGLAND)', and 'MASERATI (ITALY)'. The word 'cars' is highlighted in yellow in the results.

Configuring Word Cloud Stop Words

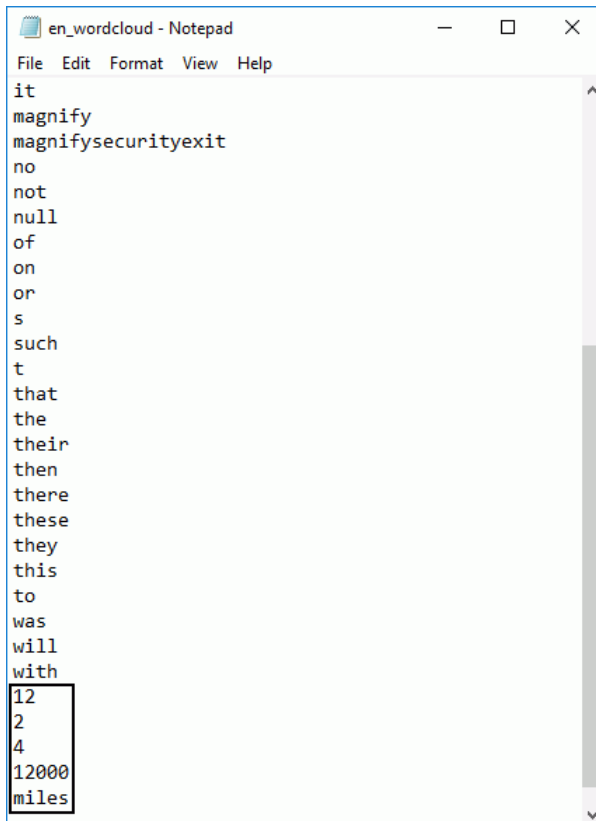
Stop words are a predefined list of words or numbers that will not be shown in the Word Cloud when a search is performed. You can edit your list of stop words by accessing a file named `en_wordcloud.txt`.

The following image shows an example of a Word Cloud when the search term *cars* is submitted.



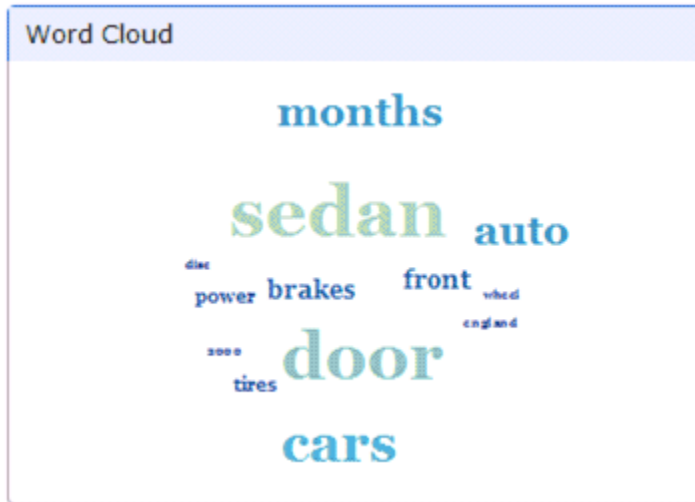
To access the `en_wordcloud.txt` file, navigate to `drive:/ibi/WebFOCUSnn/config/magnify/en/en_wordcloud.txt`, where *drive* is the drive your WebFOCUS software is saved on, and *nn* is the version number of your WebFOCUS software. Alternatively, if you are running your Magnify application in a language other than English, you can access `ln_wordcloud.txt` from the associated *ln* folder, where *ln* is a two-letter language code.

The following image shows the stop words 12, 2, 4, 12000, and miles added to the list of stop words saved in the en_wordcloud.txt file. Each stop word is added on a separate line.



```
en_wordcloud - Notepad
File Edit Format View Help
it
magnify
magnifysecurityexit
no
not
null
of
on
or
s
such
t
that
the
their
then
there
these
they
this
to
was
will
with
12
2
4
12000
miles
```

After saving the en_wordcloud.txt file, navigating back to the search page, and searching for the term *cars* again, the Word Cloud does not display the words that were added to the list of stop words in the text file. The updated Word Cloud is shown in the following image.



Deleting Records From the Index

As part of the Format Magnify indexing process, each search result is assigned a unique ID by the value assigned to the WF_INDEX_UNIQUE_KEY Magnify Meta tag. If no record in the index exists for the value assigned to WF_INDEX_UNIQUE_KEY, Magnify will add the record to the index library. Otherwise, Magnify will update the record, essentially overwriting the previous entry. The WF_INDEX_UNIQUE_KEY value can also be used to locate a search result in order to remove it from the index library. A deletion action can be defined at the procedure or global level to apply to all records, or on a record-by-record level.

Note: If the Magnify action is not defined, it defaults to the add action. That is why this is typically not required.

The Magnify action can be set at two levels, the feed level and the record level. The record-level value, if present, will always override the global-level value set for the overall Format Magnify procedure.

Procedure: How to Set Feed- and Record-Level Actions

This procedure will illustrate how to set the action for the entire feed, while at the same time overwriting the feed-level action by setting the record-level action for only a specific set of records. Once complete, those records with the value ENGLAND will be updated in the index library while all other records are removed.

1. Launch App Studio.
2. Edit the carmgn procedure in the Procedure Viewer.

For information of where to locate the carmgn procedure, see [Indexing the Car File](#) on page 33.

3. Add a new ENGINE object.
 - a. Enter *MAGNIFY* in the *Engine* field.
 - b. Set – *no connection* – as the *Connection*.
 - c. Enter *ACTION=DELETE* in the *SET parameters* field.
 - d. Click *Test* (no errors) and *OK*.
4. Create a new DEFINE named MagnifyAction (case-sensitive).
 - a. Use a format of A10.
 - b. Use the following expression.


```
IF CAR.ORIGIN.COUNTRY EQ 'ENGLAND' THEN 'add' ELSE ''
```
 - c. Click *Check* (no errors) and then *OK*.
5. Open the Define object and change the value of LINK_DISPLAY_NAME1 to My Car Graph.
6. Add MagnifyAction to the Report Painter canvas as a PRINT field toward the end of the report, anywhere between SearchTitle and S_HARDCODED.

Note: S_HARDCODED must be the last PRINT field because it is a TX field.

7. Save and Run the procedure.
8. Verify that records have been removed from search.
 - a. Navigate to the search page.

http://localhost:8080/ibi_apps/search

Note: Sample or default URLs are for informational purposes only and may not resolve correctly, if at all.

For more information, see [How to View the Changes Made Using a URL Request](#) on page 51.

- b. Select *Cars* from the collection drop-down menu and search for *cars*.

Notice only the two records for England still exist and no other records are found, as shown in the following image.



Note: It can take a minute or two to refresh.

- c. Close the browser and App Studio.

File Indexing

This section illustrates how to use the Fixed File adapter to monitor a file directory. This allows you to catalog and track changes in a given directory in order to index the content of files and make it searchable with Magnify.

For more information, see the *Magnify Search Developer's Guide*.

Note: Sample code for a WebFOCUS procedure that is required to complete [How to Setup File Indexing](#) on page 72 is available from the following link:

http://documentation.informationbuilders.com/masterindex/html/zip_wf80/myappmapexample.txt

Procedure: How to Setup File Indexing

This procedure will copy the Master File description template for the Fixed File adapter to point to a new file repository, index the content of those files, and monitor those directories for any changes.

1. Create a new application mapping named *myappmapexample*.
 - a. Log on to the Reporting Server console.
 - b. Select *Applications*.
 - c. Right-click *Application Directories* in the left pane, select *New*, and then *Application Directory*.

The Create New Application pane opens.

- d. Select *Application Mapping to Disk* from the *Application Type* drop-down menu.
- e. In the *Application Name* field, enter *myappmapexample*.
- f. Select a physical location. For this example, use *\ibi\apps\ibisamp*.

Note: It is important to note that for file indexing to work, this directory must also be a virtual path. For more information, see the *Magnify Search Security and Administration* manual.

- g. Uncheck the *Add directory to APPPATH* check box, as shown in the following image.

Create New Application

Application Type: Application Mapping to Disk

Application Name: myappmapexample

Physical location: C:\ibi\apps\ibisamp

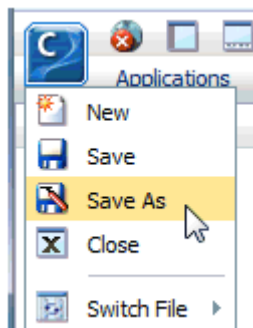
Create or Map to existing: Map to existing application

Description:

☐ Add directory to APPPATH

OK Cancel

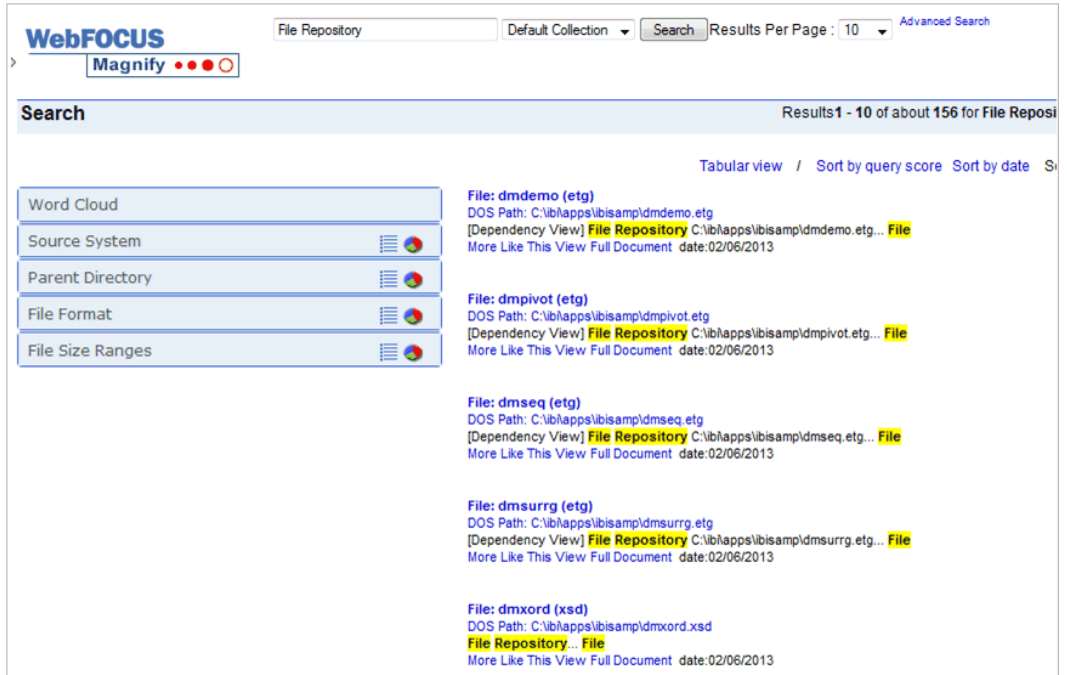
- h. Click OK.
2. In the Reporting Server console, create the *myfileindexing* synonym:
 - a. Select *Applications* if it is not already selected.
 - b. From the *ibisamp* directory, right-click the *filemnr.mas* file and select *Open*.
 - c. Click the console icon and select *Save As*, as shown in the following image.



- d. Use the *Save in* drop-down menu to navigate to the *ibisamp* folder.
 - e. Save the file as *myfileindexing*
 - f. Expand the *Variables* folder.
 - ☐ Double-click the `&&FL_DIRECTORY` variable, enter *myappmapexample* in the *Default* field, and click *Apply*. This is the same value as the APP MAP name set in step 1e.
 - ☐ Double-click the `&&FL_POLLING` variable, enter '1' in the *Values* field, and click *Apply*.
 - ☐ Double-click the `&&FL_TIMEOUT` variable, enter '2' in the *Values* field, and click *Apply*.
 - g. Save and close the Master File.
3. In the Reporting Server console, create the file indexing procedure:
 - a. Right-click the *ibisamp* folder and select *New*, then *Procedure*.
 - b. Paste the sample code that is provided in the following referenced file:
http://documentation.informationbuilders.com/masterindex/html/zip_wf80/myappmapexample.txt
Note:
 - ☐ You may have to change the `CONNECTION_ATTRIBUTES` and `BASEURL` accordingly.
 - ☐ You may need to change the `ROOT_DOS_PATH` and `ROOT_WEB_PATH` `DEFINE` fields to accommodate the known base system and virtual path of the files being evaluated.
 - ☐ This file will read a directory's file list and pass it to this procedure where the file system path is replaced by its URL path.
 - ☐ Magnify will use the URL to access the file via HTTP protocol and index the content found.
 - c. Save the procedure as *myfileindexing*.
4. Add a new index to the `collections_myexample.xml` file. For more information, see [How to Add Indexes to the Collections Drop-down Menu](#) on page 50 and [How to Create a Customized Collection Configuration](#) on page 61.
5. Navigate to the search page and validate the changes and files indexed by searching for *File Repository*.
http://localhost:8080/ibi_apps/search

Note: Sample or default URLs are for informational purposes only and may not resolve correctly, if at all.

A sample of the results are shown in the following image.



Other Considerations for Magnify Implementation

When beginning a Magnify implementation, you need to understand the full set of requirements. Most important is where does the information reside, how do users contextualize it, and how are they expected to understand the information through reporting?

1. Where does the data reside (one or more databases, file repositories, email server, and so on)?
2. What is the current quality of the data? Are there missing relationships, is cleansing required, and so on?
3. What is the physical size of the original data? How many tables, fields, and rows are involved? At what rate does it grow, and what is the expected size in the future? How many records are added, updated, or deleted at specific intervals?
4. Of the raw data, what is structured versus unstructured?
5. What types of informational concepts will be expected (people, places, things, etc)? How does the raw data correlate? Will the data be aggregated?

6. What mechanisms provide alerts that new information is available, has been updated, or is ready to expire (flag, date, and so on)?
7. At what frequency should search engine index feeds occur (real-time, scheduled, and so on)?
8. What hardware is available (64-bit, 16GB memory, and so on), is new hardware being purchased for this?
9. How many users are expected, total users and concurrent users?
10. What level of security is required?
11. What type of business intelligence reporting is expected when drilling down on a search result?

Reference: Examples Provided with WebFOCUS

Procedures installed with the Reporting Server and App Studio: (\ibi\apps\ibisamp)

☐ carmgn.fex

☐ moviesmgn.fex

Century Electronics Magnify Search Example: (Installed with WebFOCUS 7.7.03 and higher)

Navigate to (adjusting for your own WebFOCUS configuration):

http://localhost:8080/ibi_apps/search

Note: Sample or default URLs are for informational purposes only and may not resolve correctly, if at all.

You can search on terms in the help section. This can also be accessed from any mobile device.

If App Studio is not installed, you will need to unzip the ibimagn archive to the \ibi\apps directory. This is found in \ibi\WebFOCUS\utilities\demos. It includes all Format Magnify procedures used to create the example, which includes an example for indexing files.

Recommendation: Change the output of each procedure to HTML to see how the data is being transformed into search results and back to MAGNIFY to index the data

Note: To return to default search page, use the following URL:

http://localhost:8080/ibi_apps/search

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Magnify Search Quick Start Guide
Release 8.2 Version 01M