MadCap Software

Search Guide

Flare 10

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CONTENTS

CHAPTER 1 Introduction 7

Search Features and Capabilities 8
Searching the Outputs 15
Optimizing Search 16
Steps for Setting Up Search 17

CHAPTER 2 Enabling Search in Skins 19

CHAPTER 3 Include/Exclude Topics in Search 21

CHAPTER 4 Configuring the Search Database 23

Chunking Large Search Database Files 24
Excluding Index Entries From Search 28
Setting the N-Gram Size for Search 29
Excluding Non-words from Search 30
Enabling Partial-word Search 31
Pre-merging Search Database Files 33
Including an SQL Search Database 34
Including Stop Words in Search 35

CHAPTER 5 Search Filter Sets 41

Adding Search Filter Set Files to Projects 42
Inserting Concepts 44
Creating Search Filters 49
Associating a Search Filter Set with a Target 50
Importing Search Filter Sets 51
Opening a Search Filter Set 52
Search Filter Set Example 53

CHAPTER 6 Synonyms 57
Tasks for Using Synonyms 59
Adding Synonym Files 60
Creating Synonyms to Enhance Search Results 62
Exporting Synonyms 66
Opening Synonym Files 67
CHAPTER 7 Search Highlighting 69
How Search Hits are Highlighted in Different Output Types 70
Customizing the Highlight Color for Search Hits 71
Customizing Highlighted Search Terms 73
Search Results in HTML5 Skins 76
CHAPTER 8 HTML5 Server-based Output 83
Enabling HTML5 Server-based Output 84
Installing IIS and ASP.NET 85
Setting Up an HTML5 Target 95
Configuring IIS on Production Server 96
Starting Microsoft Indexing Service 98
Starting Microsoft Windows Search 99
Enabling HTML5 Server-based Search 100
Testing HTML5 Server-based Search 101
Including Non-XHTML Files in HTML5 Search 102
CHAPTER 9 WebHelp Plus Server-based Output 107
Enabling WebHelp Plus Output 108
Installing IIS and ASP.NET 109
Setting Up a WebHelp Plus Target 119
Configuring IIS on Production Server 121
Starting Microsoft Indexing Service 123
Starting Microsoft Windows Search 124
Enabling WebHelp Plus Search 125
Testing WebHelp Plus Search 126
Including Non-XHTML Files in Search 127
CHAPTER 10 Searching the Outputs 131
Search Methods and Syntax 132
Searching a DotNet Help System 146

Searching a Microsoft HTML Help System 151
Searching an HTML5 System 161
Searching a WebHelp System 166
Searching a WebHelp Mobile System 170
Searching for Community Results 172

CHAPTER 11 Optimizing Search 175

Ranking Search Results 176
Optimizing Your Content 179
Meta Descriptions for Topics 195
Optimizing Your Site 197

APPENDIX PDF Guides 201

CHAPTER 1

Introduction

This feature is supported in DotNet Help, Microsoft HTML Help, HTML5, WebHelp, WebHelp AIR, WebHelp Mobile, and WebHelp Plus output.

You can add the search feature to any of your online output targets. When users want to find information about a specific subject, they enter key words in the Search field. A search engine looks through every topic in your project to find the term(s) entered by the user. When it finds the terms, it presents the user with a list of topics to open. The way that search works differs depending on the output type. There are also special features that you can use to enhance search, such as synonyms, partial-word search, filters, reports, and excluding topics from search.

This chapter discusses the following:

Search Features and Capabilities 8
Searching the Outputs 15
Optimizing Search 16
Steps for Setting Up Search 17

Search Features and Capabilities

The search features and capabilities that are available in your published Flare output depends on the output type. In addition, you can perform search queries using different search methods and syntax when you publish client- or server-based output:

- **Client-based Output** With the WebHelp output types, search operations are supported by a Flare search database. This database consists of an array of JavaScript and XML files that are built and published with the Flare output in the Data folder. With WebHelp AIR, search is built-into the Adobe AIR package. With Microsoft HTML Help, the Microsoft Compiled HTML (CHM) Help file format also offers a built-in search engine. With DotNet Help, an array of XML files is published to the Data folder in the Flare output, or you can publish an SQL Server database.
- **Server-based Output** Search features can be enabled/disabled in Flare and search operations are supported by server-based tools. For example, the server-based WebHelp and HTML5output types can be enabled in Flare, and then published to an Internet Information Services (IIS) server. For these outputs, search operations are supported by the Microsoft Indexing Service or Windows Search.
- **Eclipse Help** End user search features are supported by the Eclipse Help Viewer and search operations are provided by a plug-in that you develop using the Eclipse platform (see **org.eclipse.help.ui.searchEngine**). The Flare search engine does not handle Eclipse Help search operations.

END USER SEARCH FEATURES

The table below summarizes the key search features and capabilities for each output type. With HTML5 and WebHelp outputs, you can distribute either client- or server-based outputs. This is why the table below lists them twice—under client- and server-based output.

✓ Supported

✓ Supported with limitations

✗ Not supported

	CLIENT-BASED OUTPUT						SERVER-BASED OUTPUT	
	DotNet Help	Microsoft HTML Help	WebHelp	HTML 5	AIR	WebHelp Mobile	WebHelp Plus	HTML 5
Additional Requirements	Help Viewer SQL Server Compact (for asterisk (*) wildcard search and boolean operators)	Internet Explorer			Java Runtime Environment (JRE) Adobe AIR		IIS ASP.NET Microsoft Indexing Service or Windows Search	IIS ASP.NET Microsoft Indexing Service or Windows Search
Glossary Search—Find Matching Terms	✓	✓	✗	✓	✗	✗	✗	✓
Index Search—Find Matching Terms	✓	✓	✓	✓	✓	✗	✓	✓
Search Favorites—Save Queries to Favorites List	✓	✗	✓	✗	✓	✗	✓	✗
Search Query—Asterisk (*) Wildcard Character	✓ Requires SQL Server Compact.	✓	✓	✓	✗	✗	✗	✗

	CLIENT-BASED OUTPUT						SERVER-BASED OUTPUT	
	DotNet Help	Microsoft HTML Help	WebHelp	HTML	AIR	WebHelp Mobile	WebHelp Plus	HTML
Search Query—Boolean Operators See **Search Methods and Syntax**.	✓ Requires SQL Server Compact.	✓ Select operator from built-in list. See "Searching a Microsoft HTML Help System" on page 151.	✓	✓	✓	✓	✗	✗
Search Query—Full-text Search (not case sensitive) See **Search Methods and Syntax**.	✓	✓	✓	✓	✓	✓	✓	✓
Search Query—Enclose Terms in Quotes (" ") See **Search Methods and Syntax**.	✓	✓	✓	✓	✓	✓	✓	✓
Search Results—Narrow Search Scope Using Search Filter Sets See **Search Filter Set Example**.	✓	✗	✓	✓	✓	✗	✓	✓

	CLIENT-BASED OUTPUT						SERVER-BASED OUTPUT	
	DotNet Help	Microsoft HTML Help	WebHelp	HTML 5	AIR	WebHelp Mobile	WebHelp Plus	HTML 5
Search Results—Results Listed in Ranked Order and Show Rank Number See Optimizing Search.	✓	✓ Results are listed in order. Rank number is not visible.	✓	✓ Results are listed in order. Rank number is not visible.	✓	✓ Results are listed in order. Rank number is not visible.	✓	✓ Results are listed in order. Rank number is not visible.
Search Results—Search Hits Highlighted in Topics See Search Highlighting.	✓	✓	✓	✓	✓	✓	✓	✓

CONTENT DEVELOPER SEARCH OPTIONS

This table summarizes the key search features and capabilities that are available to you, the content developer, for each output type. With HTML5 and WebHelp outputs, you can distribute either client- or server-based outputs. This is why the table below lists them twice—under client- and server-based output.

✓ Supported

✓ Supported with limitations

✗ Not supported

	CLIENT-BASED OUTPUT						SERVER-BASED OUTPUT	
	DotNet Help	Microsoft HTML Help	WebHelp	HTML5	AIR	WebHelp Mobile	WebHelp Plus	HTML5
Enable Search Feature See **Enabling Search in Skins**	✓ Search cannot be disabled.	✓ Standard skin	✓ Standard skin	✓ HTML5 skin	✓ Standard skin	✓ Mobile skin	✓ Standard skin	✓ HTML5 skin
Search Highlighting—Set Highlight Color **For HTML5 output, see Search Results in HTML5 Skins.** **For all other outputs, see Customizing Highlighted Search Terms.**	✓	✓	✓	✓	✓	✓	✓	✓
Search Performance—Chunk Large Search Database Files See **Chunking Large Search Database Files.**	✓	✗	✓	✓	✓	✓	✓	✓

	CLIENT-BASED OUTPUT						SERVER-BASED OUTPUT	
	DotNet Help	Microsoft HTML Help	WebHelp	HTML 5	AIR	WebHelp Mobile	WebHelp Plus	HTML 5
Search Performance—Enable Partial-word Searching and Set Minimum Word Size See Enabling Partial-word Search.	✓	✗	✓	✓	✓	✓	✓	✓
Search Performance—Enable Stop Words in Search See Including Stop Words in Search.	✓	✓ Stop words always enabled.	✓	✓	✓	✓	✓	✓
Search Performance—Exclude Index Entries from Search See Excluding Index Entries From Search.	✓	✓ Index entries always excluded.	✓	✓	✓	✓	✓	✗
Search Performance—Exclude Non-words from Search See Excluding Non-words from Search.	✓	✓ Non-words always excluded.	✓	✓	✓	✓	✓	✓
Search Performance—Include SQL Search Database See Including an SQL Search Database.	✓ Requires SQL Server Compact.	✗	✗	✗	✗	✗	✗	✗
Search Performance—Pre-merge Search Database See Pre-merging Search Database Files.	✓	✗	✓	✓	✓	✓	✓	✓

	CLIENT-BASED OUTPUT						SERVER-BASED OUTPUT	
	DotNet Help	Microsoft HTML Help	WebHelp	HTML 5	AIR	WebHelp Mobile	WebHelp Plus	HTML 5
Search Performance—Set N-Gram Size for Chinese, Japanese, and Korean Projects See Setting the N-Gram Size for Search.	✓	✗	✓	✓	✓	✓	✓	✓
Search Toolbar—Include and Customize a Quick Search Field and/or Select Search Button	✓	✗	✓	✗	✓	✗	✓	✗

Searching the Outputs

Depending on the output type, the user interface for your published output offers different search features and functionality. See "Searching the Outputs" on page 131.

When compiling your online output, the build process generates a search database with your target's output files. When an end user searches for information, the search process looks through this database to retrieve a list of topics containing matching criteria.

Depending on the output type being searched, end users can perform a variety simple text and phrase searches. Some output types also support the use of boolean operators, the asterisk (*) wildcard character, and other syntax. See "Search Methods and Syntax" on page 132.

Optimizing Search

You have a variety of options when it comes to improving topic and page ranking for search results. We have a collected a wide variety of tips and best practices for optimizing results when using the Flare engine. You'll also find tips for optimizing content for search engine providers. See "Optimizing Search" on page 175.

Steps for Setting Up Search

1. **Enable Search in the Skin** Open the skin being used to generate the output type and enable the search feature. See "Enabling Search in Skins" on page 19.
2. **(Optional) Include or Exclude Topics in Search** You can include or exclude a topic when full-text search is generated. If you disable this feature, the topic will be excluded from the search, but it will still be included in the generated output. See "Include/Exclude Topics in Search" on page 21.
3. **(Optional) Configure the Search Database** In a Flare target, you have a variety of options that you can enable or disable to define how the search database performs. See "Configuring the Search Database" on page 23.
4. **(Optional) Narrow the Scope of a Search Using a Search Filter Set** Your target output can include a search filter set. A filter set works with the concepts feature. Each set includes filters that you define to limit the scope of the end user's search query to only the topics that are associated with the selected filter. See "Adding Search Filter Set Files to Projects" on page 42, "Creating Search Filters" on page 49, "Associating a Search Filter Set with a Target" on page 50, and "Search Filter Set Example" on page 53.
5. **(Optional) Create Synonyms for Search** You can make improvements to your output so that, in the future, users are able to find the search results they need. One way to enhance your output is to create synonyms for search phrases. This way, even if a user enters a search term that is not included anywhere in the project, that person will still be able to find the appropriate information. See "Tasks for Using Synonyms" on page 59 and "Creating Synonyms to Enhance Search Results" on page 62.
6. **(Optional) Customize Search Highlighting** You can make improvements to your output so that, in the future, users are able to find the search results they need. One way to enhance your output is to create synonyms for search phrases. This way, even if a user enters a search term that is not included anywhere in the project, that person will still be able to find the appropriate information. See "Search Highlighting" on page 69, "Customizing the Highlight Color for Search Hits" on page 71, and "Search Results in HTML5 Skins" on page 76.
7. **(Optional) Set Up the Server-based Features** Server-based outputs provide faster searching and give you the ability to include non-XHTML files in search.
   - **HTML5** See "HTML5 Server-based Output" on page 83 and "Including Non-XHTML Files in HTML5 Search" on page 102.
   - **WebHelp Plus** See "WebHelp Plus Server-based Output" on page 107 and "Including Non-XHTML Files in Search" on page 127.

CHAPTER 2

Enabling Search in Skins

The first step in making search accessible in your online documentation is to enable the feature in the skin that you want to use for your output target. This setting might already be selected by default in your skin.

HOW TO ENABLE SEARCH IN A SKIN—HTML HELP, WEBHELP, WEBHELP AIR, WEBHELP MOBILE, AND WEBHELP PLUS

1. From the Project Organizer, open the Standard or Mobile skin.
2. Select the **General** tab.
3. In the **Features** list, click the **Search** check box.
4. (Optional) If you are creating Microsoft HTML Help, you can include advanced search options. To enable or disable these options, open the skin. In the Skin Editor, click the **HTML Help Setup** tab, then place a check in the **Show Advanced Search** box.
5. Click to save your work.

HOW TO ENABLE SEARCH IN A SKIN—HTML5 OUTPUT

1. From the Project Organizer, open the HTML5 skin.
2. Select the **Styles** tab.
3. In the **Header** section, expand **Search Bar**.
4. Expand **Layout**.
5. In the **Display** field, make sure **block** is selected.
6. Click to save your work.

Important: Unlike other online outputs, DotNet Help packages your content so it is accessible to end users with theHelp Viewer redistributable. As such, the Help Search Window and Help Index Window are always enabled. These features cannot be disabled using the controls that are visible in the **General** tab of the Skin Editor.

Note: If you are generating WebHelp Mobile output, please note that search is not supported in LG WebOS (Palm WebOS).

CHAPTER 3

Include/Exclude Topics in Search

This feature is supported in DotNet Help and in all WebHelp outputs (HTML5, WebHelp, WebHelp AIR, WebHelp Mobile, and WebHelp Plus).

You can include or exclude a topic when full-text search is generated. If you disable this feature, the topic will be excluded from the search, but it will still be included in the generated output.

HOW TO INCLUDE OR EXCLUDE TOPICS IN SEARCH

1. Make sure the Content Explorer is open.
2. Locate and click on the topic file.
3. In the local toolbar, click . The Properties dialog for the file opens.
4. Click the **Topic Properties** tab.
5. Click the check box labeled **Include topic when full-text search database is generated**.
6. Click **OK**.

Note: In Microsoft HTML Help, all topics are always searchable.

CHAPTER 4

Configuring the Search Database

In a Flare target, you have a variety of options that you can enable or disable to define how the search database performs.

This chapter discusses the following:

Chunking Large Search Database Files 24
Excluding Index Entries From Search 28
Setting the N-Gram Size for Search 29
Excluding Non-words from Search 30
Enabling Partial-word Search 31
Pre-merging Search Database Files 33
Including an SQL Search Database 34
Including Stop Words in Search 35

Chunking Large Search Database Files

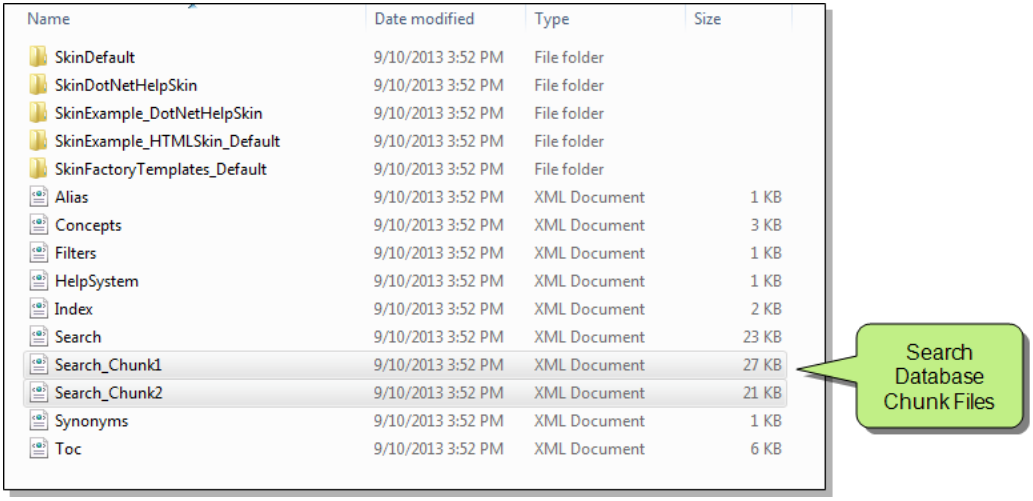
This feature is supported in DotNet Help, HTML5, WebHelp, WebHelp AIR, WebHelp Mobile,and WebHelp Plus output.

When Flarebuilds your output files, it also automatically generates a search index. The search database is split into a series of chunk files with the XML file name extension. These "chunks" are very important to your project, because they help to improve the performance of the search feature.

SEARCH DATABASE FILES AND MAXIMUM CHUNK SIZE

Important things to know about chunk files include:

- **Chunk Files are Automatically Created in Sequential Order** The build process automatically creates a search database and then splits the database information into individual chunks. Each chunk is represented by a chunk file. The naming convention used for these files is sequential (e.g., Search_Chunk1.xml. Search_Chunk2.xml, Search_Chunk_3.xml). After running a build, these files are required by the target output and stored in the target's Output\Data folder.

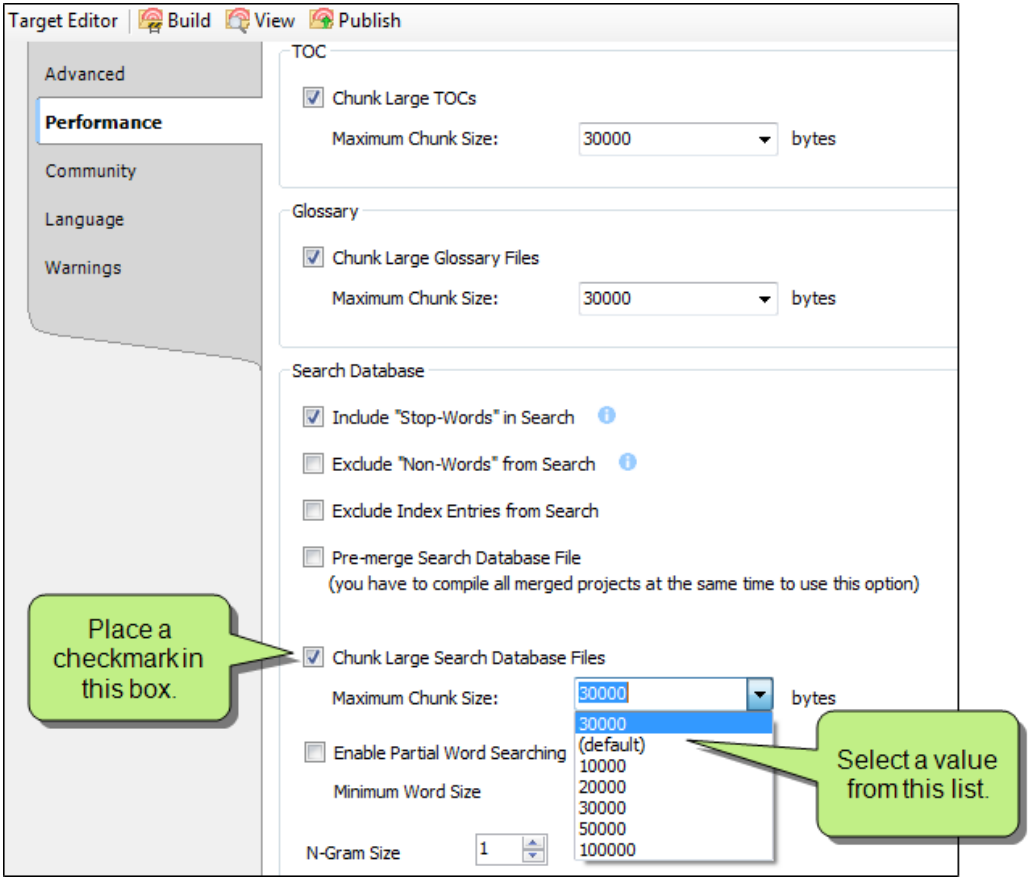


If you installed Flare in the default location, the path to the Output\Data folder is: `C:\Users\[user name]\Documents\My Projects\[project name]\Output\[user name]\[target name]\Data`

- **Number of Chunk Files Depends on Project Content and Settings** The total number of chunk files generated by the build process depends entirely on the size of your project and the search performance settings that you enable. As a general rule, smaller projects have fewer chunk files than larger projects. Other factors to consider include the maximum chunk size setting and whether the partial-word search feature is enabled. See "Enabling Partial-word Search" on page 31.
- **New Chunk Files are Generated With Every Build** When you update your content and build new output files, Flare generates new chunk files to ensure your updated content can be retrieved when end users perform a search. If you are publishing server-based output, always ensure that your publishing and upload process for your output includes the updated chunk files.

HOW TO SET THE MAXIMUM CHUNK SIZE FOR SEARCH DATABASE FILES

1. In the Project Organizer, open the desired target.
2. In the Target Editor, click the **Performance** tab.
3. In the **Search Database** section, place a check mark in the **Chunk Large Search Database Files** box. Then select a value in the **Maximum Chunk Size** box.



Note: The smallest maximum file size for a chunk file is 10,000 bytes. The largest maximum file size is 100,000 bytes.The default setting for the maximum chunk file size is set to 30,000 bytes.

4. Click to save your work.

Excluding Index Entries From Search

This feature is supported in DotNet Help and in all WebHelp outputs (HTML5, WebHelp, WebHelp AIR, WebHelp Mobile, and WebHelp Plus).

If you insert index markers in your project, those markers by default are included in searches that users perform in your output. If you want to exclude index entries from searches, you can do so.

HOW TO EXCLUDE INDEX ENTRIES FROM SEARCH

1. Open the target.
2. Select the **Performance** tab.
3. In the **Search Database** section, click **Exclude Index Entries from Search**.
4. Click to save your work.

Setting the N-Gram Size for Search

This feature is supported in DotNet Help, HTML5, WebHelp, WebHelp AIR, WebHelp Mobile,and WebHelp Plus output.

N-grams can be applied to the search database to improve its ability to retrieve more accurate matches for Chinese, Japanese, and Korean languages.

ABOUT N-GRAMS

In the English language, sentences are composed of a sequence of words. Because English words are separated by spaces, search engines have a reliable pattern for detecting word boundaries when retrieving search results. In other languages, such as Chinese, Japanese, and Korean, spaces are not used to separate words. This makes the task of retrieving accurate matches for these languages more challenging for search engines.

To address this issue efficiently, the search database can be set to use the n-gram model to help it more accurately predict word patterns. This improves the search feature's ability to retrieve accurate search results for the Chinese, Japanese, and Korean languages.

HOW TO SET THE N-GRAM SIZE

1. In the Project Organizer, open the desired target.
2. In the Target Editor, click the **Performance** tab.
3. In the **Search Database** section, select a value between 1- 5 from the **N-Gram Size** box. Typically, the default value of one (1) is optimal for most projects.

   Tip: Applying an n-gram value to a project affects the size of the search database. It also affects the quantity and accuracy of the search results. In general, lower n-gram values (e.g., 1-2) result in a smaller database. As a result, end user search queries will typically retrieve a higher number results with less accurate matches. Similarly, larger n-gram values (e.g., 4-5) result in a larger database. Therefore, search queries will typically retrieve a smaller number of results with more accurate matches.

4. Click to save your work.

Excluding Non-words from Search

This feature is supported in DotNet Help, HTML5, WebHelp, WebHelp AIR, WebHelp Mobile,and WebHelp Plus output.

Flare has a non-words list that works behind the scenes to omit common non-words from user searches (for example, angle brackets [ ]). When you set this option and a user enters non-words in a search query, the system won't look for those non-words.

HOW TO EXCLUDE NON-WORDS FROM SEARCH

1. In the Project Organizer, open the desired target.
2. In the Target Editor, click the **Performance** tab.
3. In the **Search Database** section, place a check mark in the **Exclude "Non-Words" from Search** box. To include non-words in search, clear the check mark.
4. Click to save your work.

Enabling Partial-word Search

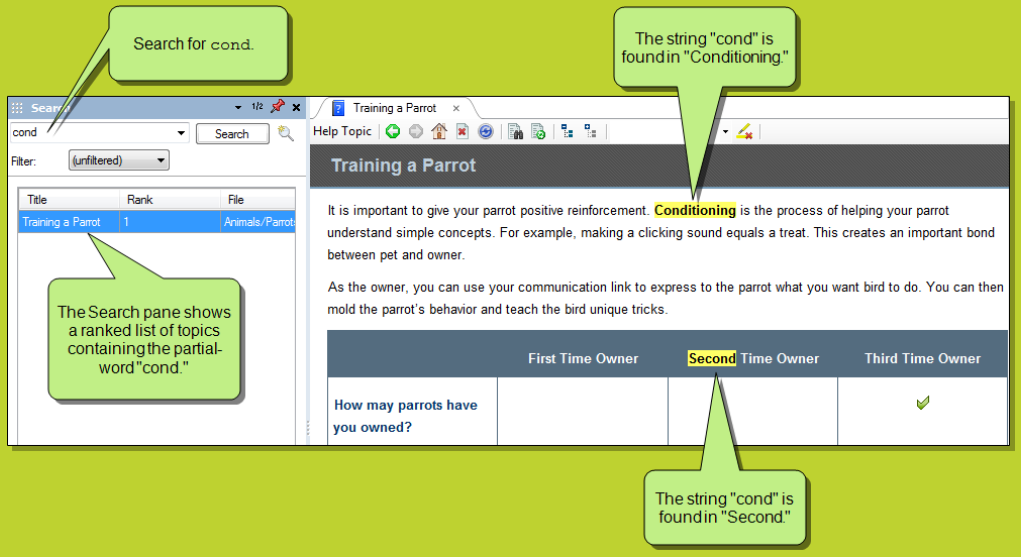
This feature is supported in DotNet Help, HTML5, WebHelp, WebHelp AIR, WebHelp Mobile,and WebHelp Plus output.

For some online outputs, you can provide end users with partial-word search capabilities. This lets users type part of a word or any string (including numbers), press **Enter** or click the **Search** button, and see search results matching those characters.

E X A M P L E

Partial search for: `cond`

Search finds matches in "conditioning" and "second."



This feature is not limited to words only. It works with any string (including numbers) that starts and ends with a space. For example, let's say that the IP address numbered "192.168.10.1" is included in one of your topics. To find the topic that includes the match, simply type `10.1` in the search field.

HOW TO ENABLE PARTIAL-WORD SEARCH

1. In the Project Organizer, open the target.
2. Select the **Performance** tab.
3. In the **Search Database** section, place a check mark in the **Enable Partial Word Searching** box.
4. In the **Minimum Word Size** field, enter the number of characters a user must type before seeing results. The minimum value is 3.

   Note: The higher the minimum word size that you enter, the smaller the search database.

5. Click to save your work.

Important: Enabling partial-word search in client-based outputs increases the size of the search database included with your target output. It also increases the amount of time it takes to build and publish the output.

Pre-merging Search Database Files

This feature is supported in DotNet Help, HTML5, WebHelp, WebHelp AIR, WebHelp Mobile,and WebHelp Plus output.

If you have multiple projects and plan to merge their outputs when building the "master" project, you can pre-merge the search database files.

HOW TO PRE-MERGE SEARCH DATABASE FILES

1. In the Project Organizer, open the target.
2. Select the **Performance** tab.
3. In the **Search Database** section, place a check mark in the **Pre-merge Search Database File** box.
4. Click to save your work.

Including an SQL Search Database

This feature is supported in DotNet Help output.

You have the option to include an SQL database to support search with the published output. This can improve search performance and permit users to use the asterisk (*) wildcard with search. For example, if you type `Mad*` in the Search field, Flare will list all topics with words that have "Mad" followed by any other letters (e.g., MadCap, Madagascar, madness, Madrid).

HOW TO INCLUDE AN SQL SEARCH DATABASE

1. In the Project Organizer, open the target.
2. Select the **Performance** tab.
3. In the **Search Database** section, place a check mark in the **Include SQL Search Database** box.
4. Click to save your work.

Including Stop Words in Search

This feature is supported in DotNet Help, HTML5, WebHelp, WebHelp AIR, WebHelp Mobile,and WebHelp Plus output.

Flare has a hard-coded stop words list that works behind the scenes to filter out common structure-class words (i.e., function words) from search operations. This means the Flare search engine excludes words (e.g., "an," "for," "of, and "the") by default. However, if you want the search engine to search for queries with these words, you can include the stop words list in search.

Below is the list of hard-coded English stop words that the Flare search engine excludes from search by default. If you want to create a custom stop words list, you can create one on your local computer using Language Skins as described below.

a	been	have	may	several	under
about	between	he	me	she	until
after	but	her	med	some	use
against	by	his	more	such	was
all	can	however	most	than	we
also	come	in	near	that	were
among	do	include	no	the	when
an	during	into	non	their	where
and	each	is	not	then	which
are	early	it	of	there	who
as	for	its	on	these	with
at	found	late	only	they	you
be	from	later	or	this	your
became	had	made	other	through	
because	has	many	over	to	

Note: The stop words list applies to English projects only. If you wish to create a custom stop words list for another language, use the instructions below to create a custom list of stop words.

Note: For best results, it is recommended that you use the default setting (i.e., stop words are automatically excluded from search). This typically returns the most relevant search results.

HOW TO INCLUDE THE STOP WORDS LIST IN SEARCH

By default, the words on the stop words list are excluded from search. To include them, complete the following steps.

1. In the Project Organizer, open the desired target.
2. In the Target Editor, click the **Performance** tab.
3. In the **Search Database** section, place a check mark in the **Include "Stop-Words" in Search** box.
4. Click to save your work.

CREATING A CUSTOM STOP WORDS LIST

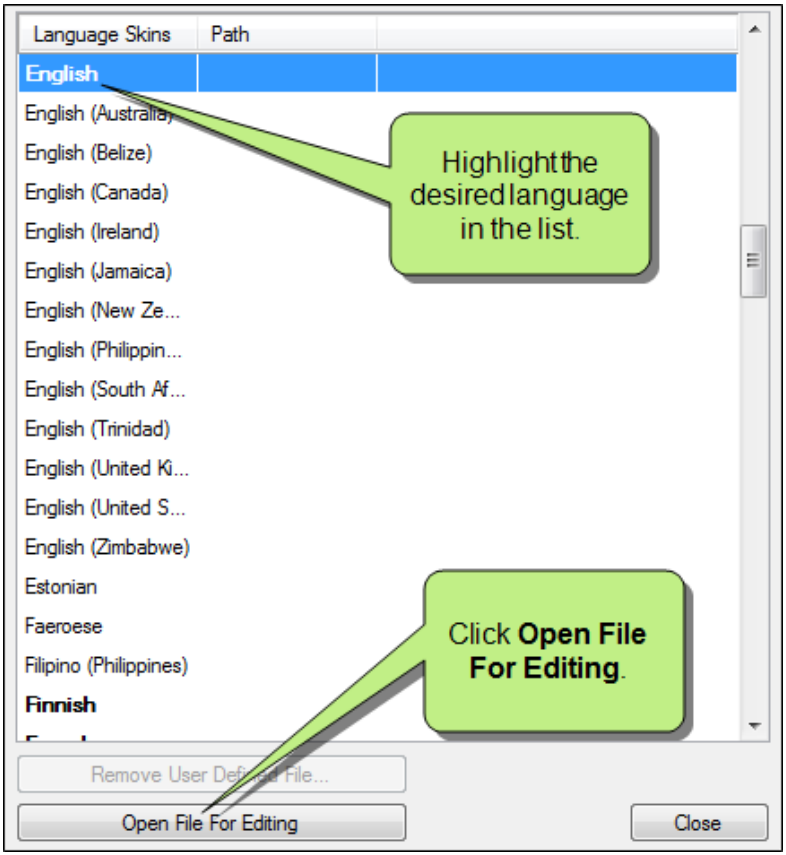
In Flare, the stop words list is hard-coded. However, you can create your own stop words list on your local computer using language skins.

Note: While the language skins feature is not otherwise supported by the HTML5 output type, Flare will permit you to use the instructions below to create a custom stop words list for your HTML5 output as well.

HOW TO CREATE A LOCAL COPY OF THE STOP WORDS LIST

These instructions show you how to create a stop words list for an English language skin. You can also use these instructions to create a custom stop word list for other languages.

1. Open a Flare project.
2. In the **Tools** ribbon, click **Manage Language Skins**. The Language Skins dialog opens.
3. Highlight the desired language in the list.
4. Click **Open File For Editing**.



This creates a copy of the project language skin file and places it in your AppData folder: C:\Users\[Username]\AppData\Roaming\MadCap Software\Flare\Language Skins. The language skin file name uses the two-letter language code and the *.fllng file name extension (e.g., af.fllng, en.fllng, es.fllng).

5. Close the Language Skin Editor.

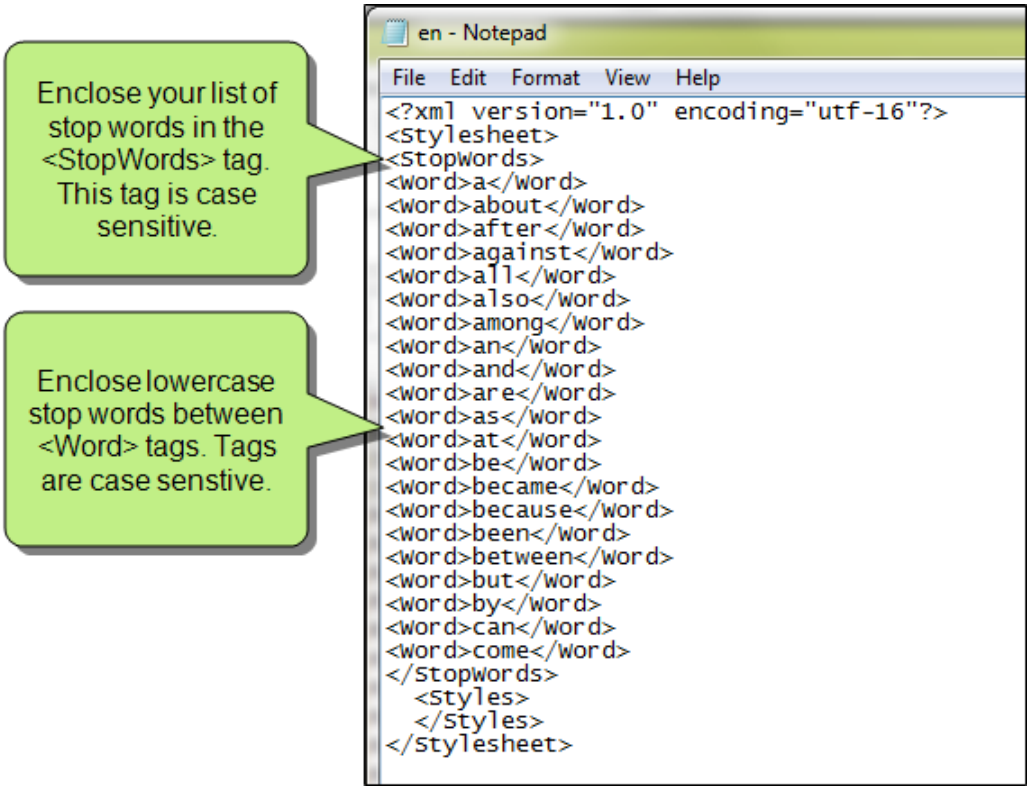
Important: If you work in a collaborative environment, each content developer must place a copy of the final language skin file containing your custom stop words on their local system at: C:\Users\[Username]\AppData\Roaming\MadCap Software\Flare\Language Skins. For the stop words list to go into effect, this must be done prior to building and publishing the target output.

HOW TO MODIFY THE LOCAL COPY OF THE STOP WORDS LIST

1. In Windows Explorer, browse to your AppData folder:

   C:\Users\[Username]\AppData\Roaming\MadCap Software\Flare\Language Skins

2. Open the language skin file in a text editor.
3. In the text editor, enclose your list of stop words in the <StopWords> </StopWords> tag. All tags are case sensitive and all stop words must be typed in lowercase.
4. Enclose each stop word in the <Word></Word> tag.



5. Save and close the file on your local system.

HOW TO BUILD THE TARGET AND TEST THE CUSTOM STOP WORDS LIST

1. Open the target in your Flare project.
2. Select the **Language** tab, and choose the appropriate language.
3. Build the target.
4. Perform searches in the output to test if stop words are being found.

CHAPTER 5

Search Filter Sets

A filter can be included in the search feature to let users narrow their search based on concepts that you have inserted into topics. Concepts are simply markers that you insert into topics that have some kind of relationship with each other. They are also used for inserting concept links into topics.

This chapter discusses the following:

Adding Search Filter Set Files to Projects 42
Inserting Concepts 44
Creating Search Filters 49
Associating a Search Filter Set with a Target 50
Importing Search Filter Sets 51
Opening a Search Filter Set 52
Search Filter Set Example 53

Adding Search Filter Set Files to Projects

This feature is supported in DotNet Help, HTML5, WebHelp, WebHelp AIR, and WebHelp Plus output.

The first step to using a search filter set is to add a special file for it to your project. A search filter set file has an .flsfs extension and is stored in the Project Organizer under the Advanced folder.

Adding Search Filter Sets to Projects

1. Do one of the following, depending on the part of the user interface you are using:
   - **Ribbon** Select the **Project** ribbon. In the **Content** section select **New>Advanced>Search Filter Set**.

     You can use the Options dialog to switch between ribbons and the classic tool strip layout. For more information see the online Help.

     Keep in mind that the smaller the application window becomes, the more the options in a ribbon shrink. Therefore, you might only see a small icon instead of text, or you might see only a section name displayed with a down arrow to access the options in it. You can hover over small icons to see tooltips that describe them. You can also enlarge the application window or click one of the section drop-downs in the ribbon to locate a hidden feature.
   - **Menu** Select **Project>Advanced>Add Search Filter Set**.
   - **Right-click** In the Project Organizer, right-click on the **Advanced** folder and from the context menu select **Add Search Filter Set**.

   The Add File dialog opens.
2. In the **File Type** field at the top, make sure **Search Filter Set** is selected.
3. In the **Source** area select one of the following:
   - **New from template** This lets you choose either the factory template file or one of your own customized template files as a starting point. The new file will take on all of the settings contained in the template. If you want to use the factory template provided by Flare, expand the **Factory Templates** folder and click on a template file. If you want to use your own customized template file, expand the appropriate folder and click on a file. For more information about templates, see the online Help.

> **Note:** In some dialogs and wizards you can click the **Manage Templates** button if you want to open the Template Manager. This lets you manage any of your template files (e.g., add new templates, enter descriptions for templates). For more information see the online Help.

» **New from existing** This lets you choose an existing file of the same type as a starting point for your new file. As with template files, your new file will take on all of the settings contained in the file you select. To use this option, click the browse button ..., use the Open File dialog to find a file, and double-click it.

4. (Optional) If you want to place the file into a subfolder that you previously created in the Project Organizer, in the **Folder** field click ... and select the subfolder. Otherwise, keep the default location.
5. In the **File Name** field, type a new name for the search filter set.
6. Click **Add**. The search filter set is added to the Advanced folder in the Project Organizer. The Search Filter Set Editor opens to the right, with an initial search filter entry shown.

After you add the new search filter set, you need to insert concepts into topics (if you have not already done so). After that, you can create search filters based on the concepts that you inserted. For more information about inserting concepts, see the online Help.

Inserting Concepts

There are a few different ways to insert an index keyword into a topic or snippet, and each has its own advantages.

Drag-and-Drop Method

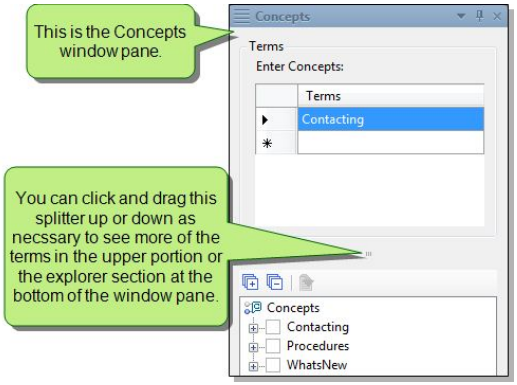
Use this method to quickly insert a concept that already exists in your project.

- **Advantage** It is extremely fast.
- **Disadvantage** The concept that you want to insert must already exist in the project. This means you must first insert the concept into a topic using one of the other methods.

HOW TO INSERT AN CONCEPT USING THE DRAG-AND-DROP METHOD

1. Open the content file (e.g., topic, snippet).
2. Do one of the following, depending on the part of the user interface you are using:
   - **Ribbon** Select the **View** ribbon. In the **Reference** section select **Concept Window**.
   - **Menu** Select **View>Concept Window**.
   - **Keyboard Shortcut** Press **SHIFT+F9**.

   The Concept window pane opens. The window pane is split into two sections—the Terms area at the top and the Explorer area at the bottom. If you want to see more or less of either section, you can click the splitter between them and drag it up or down.



3. In the bottom (explorer) area of the Concept window pane, click the concept and drag it to the location in the topic where you want to insert it. As you drag the concept into the topic, a vertical red bar acts as a guide to help you place the concept in the topic.

   The concept is displayed within a marker in front of the word where you added it (as long as markers are turned on). A marker can hold multiple concepts, but most times you only need one concept per marker.

4. Click to save your work.

Concept Window Pane Method

Use this method to insert a concept in the Concept window pane.

- **Advantage** It lets you continue to perform other tasks in the topic without having to "switch modes."
- **Disadvantage** It is not quite as fast as the other methods.

HOW TO INSERT AN CONCEPT USING THE CONCEPT WINDOW PANE METHOD

1. Open the content file (e.g., topic, snippet).
2. Click at the location where you want to insert a concept.
3. Do one of the following, depending on the part of the user interface you are using:
   - **Ribbon** Select the **View** ribbon. In the **Reference** section select **Concept Window**.
   - **Menu** Select **View>Concept Window**.
   - **Keyboard Shortcut** Press **SHIFT+F9**.

   The Concept window pane opens.
4. Click in an empty field in the **Terms** column.
5. Type the concept as you want it to appear.
6. Press **Enter**. The concept is displayed within a marker in front of the word where you added it (as long as markers are turned on). A marker can hold multiple concepts, but most times you only need one keyword per topic.
7. Click to save your work.

Concept Entry Mode Method

Use this method to accomplish the same thing as the Concept window pane method. The difference is that, with this method, you do not need to move your cursor from the topic to the Concept window pane. You simply click at the spot in the text where you want to insert the keyword and start typing. The words you type are added directly into the Concept window pane. This is a good method to use if you plan to create concepts in a lot of topics all at once, without performing any other tasks in the topic.

- **Advantage** It is extremely fast.
- **Disadvantage** If you are adding a concept as you work on a topic, you need to remember to switch off the Concept Entry Mode so that you can return to editing your topic.

HOW TO INSERT AN CONCEPT USING THE CONCEPT ENTRY MODE METHOD

1. Open the content file (e.g., topic, snippet).
2. Do one of the following, depending on the part of the user interface you are using:
   - **Menu** Select **Tools>Concepts>Concept Entry Mode**.

     You can use the Options dialog to switch between ribbons and the classic tool strip layout. For more information see the online Help.
   - **Local Toolbar** In the local toolbar of the XML Editor click .

   The cursor changes, displaying a small boxed "c" next to it.
3. Click at the place in your topic where you want to add a concept.
4. Type the phrase that you want to add as the concept.

   As you start typing, the Concept window pane opens (if it was not previously opened), and the phrase is added to the first empty field under the Terms column.

> **Note:** As you type in the Concept window pane, notice that the cursor does not lose focus in the XML Editor. It merely turns gray so that you know for certain where you are adding the concept. When you return to the XML Editor, the cursor returns to its previous state.

5. Press **Enter**. The concept is displayed within a marker in front of the word where you added it (as long as markers are turned on). A marker can hold multiple concepts, but most times you only need one keyword per topic.
6. If you want to add more concepts in the topic, repeat steps 3-5.
7. Click to save your work.

Note: To turn off the Concept Entry Mode and return to regular editing, you can click again.

Note: If you want to see all of the concepts that you have inserted in your project, they are displayed in the bottom portion of the Concept window pane.

Creating Search Filters

After you add a new search filter set and insert concepts into topics, you can create search filters, which let users narrow their search based on concepts that you have inserted into topics.

HOW TO CREATE A SEARCH FILTER

1. Make sure the Project Organizer is open.
2. Double-click the **Advanced** folder. Any search filter sets that you have added are listed.
3. Double-click the search filter set in which you want to create a search filter. The Search Filter Set Editor opens to the right. By default, Flare provides you with an initial search filter called "subset," which you can rename and use.
4. To create a new search filter, click in the local toolbar. A new search filter row is added, with a temporary name for the search filter.
5. To enter a new name or comment for a search filter, do one of the following.
   - Double-click in the appropriate cell and type the name or comment.
   - Click once in the appropriate cell and press **F2** on your keyboard. Then type the name or comment.
6. To associate a concept with the search filter, click the **Concepts** cell. The Select Concepts for Search Filter dialog opens. The concepts that you have inserted into topics are listed on the right side of the dialog.
7. In the **All Concepts** section, click on a concept that you want to add to the search filter. Then click .

   The concept is added to the "Selected Concepts" section on the right side of the dialog. Do this for each concept that you want to add to the search filter.
8. Click **OK**.
9. Click to save your work.

Associating a Search Filter Set with a Target

After you create search filters, you need to associate the search filter set with the target that you want to build.

HOW TO ASSOCIATE A SEARCH FILTER SET WITH A TARGET

1. Open the target that you plan to build.
2. In the Target Editor, click the **Advanced** tab.
3. Click the drop-down arrow in the **Filter File** field, and select the search filter set that you want to associate with the target.
4. Click to save your work.

Importing Search Filter Sets

Not only can you add new search filter sets, but you can also import an existing search filter set (FLSFS file).

HOW TO IMPORT A SEARCH FILTER SET

1. Do one of the following, depending on the part of the user interface you are using:
   - **Ribbon** Select the **Project** ribbon. In the **Content** section select **New>Advanced>Search Filter Set**.
   - **Menu** Select **Project>Advanced>Add Search Filter Set**.
   - **Right-Click** In the Project Organizer, right-click on the **Advanced** folder and from the context menu select **Add Search Filter Set**.

   The Add File dialog opens.
2. Select **New from existing** and click ...
3. Find and select the FLSFS file that you want to import.
4. Click **Open**. The Source File field now contains the path to the file that you are importing. Also, the name of the file is displayed in the File Name field.
5. If you want to give the search filter set a different name than that for the imported file, click in the **File name** field and replace the text.
6. Click **Add**. The search filter set is added and opens in the Search Filter Set Editor.

Opening a Search Filter Set

The following steps show you how to open a search filter set that you have added to your project.

HOW TO OPEN A SEARCH FILTER SET

1. Make sure the Project Organizer is open.
2. Double-click the **Advanced** folder. The search filter sets in your project are displayed.
3. Double-click the search filter set that you want to open. The Search Filter Set Editor opens to the right.

Search Filter Set Example

Concepts and search filters might seem a little confusing to you at first. The following example is designed to help make these ideas clearer and guide you through the steps for creating your own search filter by using concepts.

Scenario

Let's say we have a Flare project called "Pets." In this project, we have dozens of topics about all kinds of animals (cats, dogs, parrots, hamsters, and so on). We have written five topics about dogs. These are:

- Choosing a Dog
- Feeding a Dog
- Training a Dog
- Grooming a Dog
- Walking a Dog

We want our users to be able to search for information about dogs. However, we want to limit their search to these five topics (so that they aren't bothered with seeing search results in other "non-dog" topics). We'll use a concept to tie our five "dog" topics together, and then we'll customize the search feature to include this concept.

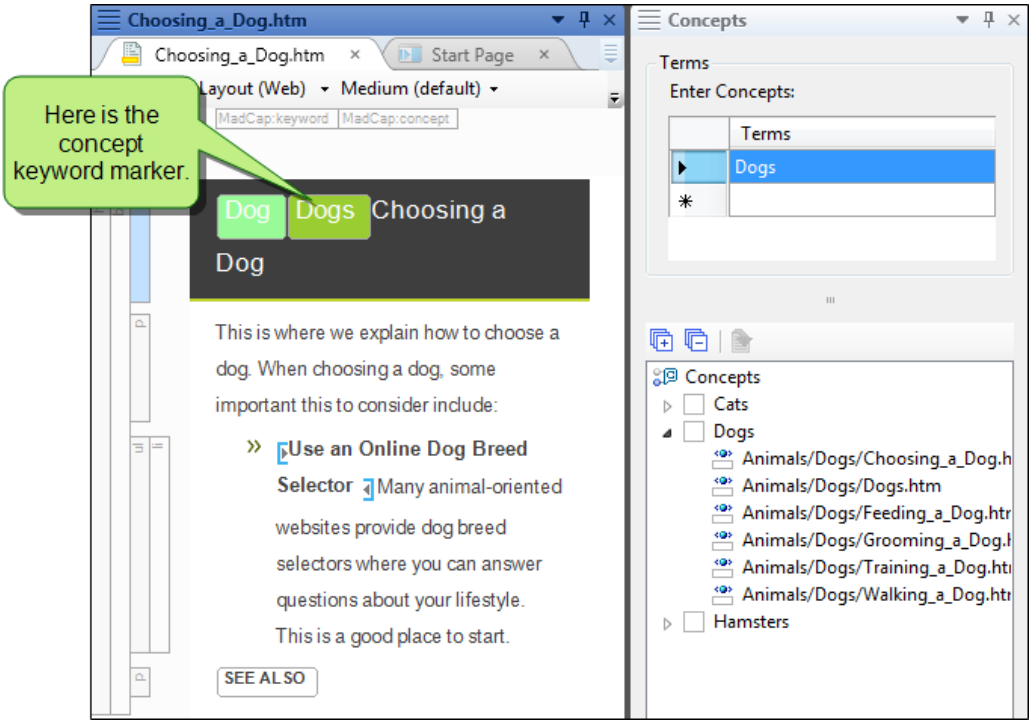
Step 1—Create and Insert a Concept

First, we need to create a concept to tie these five topics together. We can create a concept with any name that we want, but it helps to name the keyword something that is obvious and all topics have in common. Therefore, we'll give our concept the name "dogs."

1. Open any of the five topics. In this example, we'll open the topic "Choosing a Dog."
2. Click in the location in the topic where you want to insert the concept. Typically, you'll insert the concept somewhere near the top of the topic. In our example, we will click right before our topic title "Choosing a Dog."
3. Do one of the following, depending on the part of the user interface you are using:
   - **Ribbon** Select the **View** ribbon. In the **Reference** section select **Concept Window**.
   - **Menu** Select **View>Concept Window**.
   - **Keyboard Shortcut** Press **SHIFT+F9**.

   The Concept window pane opens.

4. The cursor should already be placed in the **Terms** cell. If not, click in that cell. Then type `dogs` and press **Enter**. A concept marker labeled "dogs" is added before the topic title. If you cannot see the marker, you need to turn your markers on by clicking the down arrow next to the **Show tags** button in the XML Editor. Then select **Show Markers**.



Step 2—Copy and Paste the Concept Marker into All Relevant Topics

Next, we need to place the same concept marker in our other four "dog" topics. We could repeat the same steps above for each topic, but we'll copy and paste our first concept marker instead.

1. In the "Choosing a Dog" topic, click on the concept marker and choose **Select**.
2. Press **CTRL+C** on your keyboard.
3. Open another "dog" topic ("Feeding a Dog," "Training a Dog," etc.). Click in front of the topic title (or somewhere near the top of the topic), and press **CTRL+V** on your keyboard. Repeat this until you've pasted the concept marker into all five of the "dog" topics.

Step 3—Add a Search Filter Set and Create a Filter

Now that we have the concepts in place, we can create a search filter for the "dog" topics.

1. Do one of the following, depending on the part of the user interface you are using:
   - **Ribbon** Select the **Project** ribbon. In the **Content** section select **New>Advanced>Search Filter Set**.
   - **Menu** Select **Project>Advanced>Add Search Filter Set**.
   - **Right-Click** In the Project Organizer, right-click on the **Advanced** folder and from the context menu select **Add Search Filter Set**.

   The Add File dialog opens.
2. Click **Add**. The search filter set is added to the Advanced folder in the Project Organizer. The Search Filter Set Editor opens to the right, with an initial search filter entry shown.
3. Click in the cell under the **Filter Name** column until "My Subset" is highlighted. Type `Dog Topics` and press **Enter**.
4. Click in the cell under the **Concepts** column. The Select Concepts for Search Filter dialog opens.
5. In the **Selected Concepts** section, double-click **dogs**. The concept is added to the "All Concepts" section on the left side of the dialog.
6. Click **OK**.
7. Click to save your work.

Step 4—Associate the Search Filter Set with a Target

Finally, we need to make sure the search filter set that we created is associated with the target that we plan to build.

1. Open the target that you plan to build.
2. In the Target Editor, click the **Advanced** tab.
3. Click the drop-down arrow in the **Filter File** field, and select the search filter set that you want to associate with the target.
4. Click to save your work.

Now when people use the search feature in our output, they can select "Dog Topics" from the Filter field to limit their search to our five "dog" topics.

CHAPTER 6

Synonyms

This feature is supported in DotNet Help and in all WebHelp outputs (HTML5, WebHelp, WebHelp AIR, WebHelp Mobile, and WebHelp Plus).

If users enter search phrases in your online output and those phrases are not returning results, this does not need to be the end of the story. You can make improvements to your output so that, in the future, users are able to find the search results they need. One way to make an enhancement is to add the information that your users are looking for (if that information does not yet exist in your Flare project). Another way to enhance your output is to create synonyms for search phrases.

You can create synonyms within the Flare project, with the browser Admin for Pulse, or within Feedback Explorer. It is not mandatory that you have MadCap Pulse or Feedback in order to use synonyms in Flare output, but using MadCap Pulse or Feedback makes it much easier to determine which words require synonyms based on the search results of your users. Using the browser Admin for Pulse or the Feedback Explorer to create synonyms is appealing because the synonyms become immediately available for users searching in your output (without needing to republish the output). Be aware, however, that creating synonyms in Pulse or Feedback Explorer works for the output as long as you continue to publish output to the same server. If you create synonyms in Pulse or Feedback Explorer, it is recommended that you also create those synonyms at the source (i.e., within the Flare project), in case you ever publish to a different server. The easiest way to do this is to export the synonym file from the browser Admin for Pulse or the Feedback Explorer to the Project\Advanced folder in the Flare project.

EXAMPLE

Let's say that you view search keyword results from your users and find that many are entering the search term "sofa." Unfortunately, you have not used that word in your project, so users are unable to find the topics that they need. However, you have used a similar word, "couch." Therefore, in the Synonyms Editor, you enter "couch" as a synonym for "sofa." The next time a reader enters "sofa" as a search keyword, topics containing the word "couch" will be returned in the results.

This chapter discusses the following:

Tasks for Using Synonyms 59
Adding Synonym Files 60
Creating Synonyms to Enhance Search Results 62
Exporting Synonyms 66
Opening Synonym Files 67

Tasks for Using Synonyms

Following are the primary tasks in Flare for using synonyms:

- **Add Synonym File** The first step to creating synonyms for enhanced search is to add a synonym file to the Flare project. See "Adding Synonym Files" on the next page.
- **Create Synonyms** After adding a synonym file to your project, you can create synonyms within it. See "Creating Synonyms to Enhance Search Results" on page 62.
- **Export Synonym Files** If you are using Feedback and have created synonyms, you may want to export the synonyms file (MCSYNS) to another location. Those synonyms can then be added to a different Flare project. See "Exporting Synonyms" on page 66.
- **Open Synonym Files** After a synonym file is created, you can open it at any time to make adjustments to it. See "Opening Synonym Files" on page 67.

Note: After you create synonyms, there is nothing else you need to do in order to make them available in the output. If you create synonyms in Flare, they are automatically applied at the project level, so all targets will incorporate those synonyms when you generate and publish the new Flare output. If you create the synonyms in Pulse or Feedback Explorer instead, the synonyms become immediately incorporated into the output (even if you do not republish your Flare target). Please note that if you are testing synonyms in Pulse or Feedback Explorer, you may need to refresh the interface to see the changes.

Note: Depending on the browser being used, the cache may need to be cleared in order to see the synonym results.

Note: For more information about MadCap Pulse or Feedback, see the online Help.

Adding Synonym Files

This feature is supported in DotNet Help and in all WebHelp outputs (HTML5, WebHelp, WebHelp AIR, WebHelp Mobile, and WebHelp Plus).

The first step to creating synonyms for enhanced search is to add a synonym file to the Flare project.

HOW TO ADD A SYNONYM FILE

1. Do one of the following, depending on the part of the user interface you are using:
   - **Ribbon** Select the **Project** ribbon. In the **Content** section select **New>Advanced>Synonym File**.

     You can use the Options dialog to switch between ribbons and the classic tool strip layout. For more information see the online Help.

     Keep in mind that the smaller the application window becomes, the more the options in a ribbon shrink. Therefore, you might only see a small icon instead of text, or you might see only a section name displayed with a down arrow to access the options in it. You can hover over small icons to see tooltips that describe them. You can also enlarge the application window or click one of the section drop-downs in the ribbon to locate a hidden feature.
   - **Menu** Select **Project>Advanced>Add Synonym file**.
   - **Right-click** In the Project Organizer, right-click on the **Advanced** folder and from the context menu select **Add Synonym File**.

   The Add File dialog opens.
2. In the **File Type** field at the top, make sure **Synonym File** is selected.
3. In the **Source** area select one of the following:
   - **New from template** This lets you choose either the factory template file or one of your own customized template files as a starting point. The new file will take on all of the settings contained in the template. If you want to use the factory template provided by Flare, expand the **Factory Templates** folder and click on a template file. If you want to use your own customized template file, expand the appropriate folder and click on a file. For more information about templates, see the online Help.

Note: In some dialogs and wizards you can click the **Manage Templates** button if you want to open the Template Manager. This lets you manage any of your template files (e.g., add new templates, enter descriptions for templates). For more information see the online Help.

» **New from existing** This lets you choose an existing file of the same type as a starting point for your new file. As with template files, your new file will take on all of the settings contained in the file you select. To use this option, click the browse button ..., use the Open File dialog to find a file, and double-click it.

4. (Optional) If you want to place the file into a subfolder that you previously created in the Project Organizer, in the **Folder** field click ... and select the subfolder. Otherwise, keep the default location.
5. In the **File Name** field, type a new name for the synonym file.
6. Click **Add**. The synonym file is added to the Advanced folder in the Project Organizer. The Synonyms Editor opens to the right.

Note: You can create synonyms within the Flare project, with the browser Admin for Pulse, or within Feedback Explorer. It is not mandatory that you have MadCap Pulse or Feedback in order to use synonyms in Flare output, but using MadCap Pulse or Feedback makes it much easier to determine which words require synonyms based on the search results of your users. Using the browser Admin for Pulse or the Feedback Explorer to create synonyms is appealing because the synonyms become immediately available for users searching in your output (without needing to republish the output). Be aware, however, that creating synonyms in Pulse or Feedback Explorer works for the output as long as you continue to publish output to the same server. If you create synonyms in Pulse or Feedback Explorer, it is recommended that you also create those synonyms at the source (i.e., within the Flare project), in case you ever publish to a different server. The easiest way to do this is to export the synonym file from the browser Admin for Pulse or the Feedback Explorer to the Project\Advanced folder in the Flare project.

Note: If you merge projects, synonym files will remain separate in each project. For example, if you create synonyms in Project A but not in project B, only the topics from Project A will use the synonyms when users perform searches in the output.

Creating Synonyms to Enhance Search Results

Following are steps for creating synonyms.

HOW TO CREATE SYNONYMS

1. Do one of the following to add or open a synonym file:

   ADD A SYNONYM FILE

   a. If you have not done so already, add a synonym file to the project. Start by selecting **Project>New>Advanced>Synonym File** (if using ribbon view) or **Project>Advanced>Synonym File** (if using menu view).

   b. Enter a name for the synonym file and click **Add**.

   OPEN A SYNONYM FILE

   a. Make sure the Project Organizer is open.

   b. Double-click the **Advanced** folder.

   c. Double-click the synonym file.

2. In the Synonyms Editor, you can create directional synonyms or synonym groups for single words.

> **Note:** The synonyms feature supports the use of single words only. You cannot use phrases with the synonyms feature. For example, you cannot create a synonym named "tool bar" for the word "toolbar." An example of a valid use of the synonyms feature would be to add the synonym "hound" for the word "dog" or "kitty" for the word "cat."

SYNONYM GROUP

This is a collection of synonyms that produces the same search results for all of the words in the group. It is a useful method if you have multiple terms in your project that are similar, and you want the same search results to be returned when users enter any of those phrases. In the Synonyms Editor, you enter the terms with an equal sign between each one (Synonym1=Synonym2=Synonym3). When users enter any of those terms in future searches, all topics containing any of those words are found.

E X A M P L E

Let's say that you have written some content about sports, and many of your topics include the words "sports," "athletics," or "games." If a user enters the word "athletics" as the search term, it will return not only topics containing that word, but also topics containing the words "sports" or "games" (even if "athletics" does not occur in those other topics).

HOW TO CREATE A SYNONYM GROUP

a. Select the **Groups** tab.

b. Click in the empty **Group** cell and press **F2** on your keyboard.

c. Type the words that you want to include in the group, with an equal sign between each (e.g., sports-s=athletics=games). Press **Enter** when you are finished.

d. (Optional) Click in the **Stem** check box if you want Flare to find other variations of the synonyms that have the same stems.example.

E X A M P L E

Let's say you enter "hike=walk" in the Group cell. Then you select the Stem check box. In the future, if users search for the word "hike," it will find all topics containing the words "hike" or "walk." However, it will also find topics containing words that have the same stem as those terms, such as "hiked," "hiking," or "walking."

DIRECTIONAL SYNONYM

This is a synonym that works in one direction (Word—>Synonym). It is a useful method if readers enter a search term that is not contained in your project, but you have a similar word that is contained in the project. It works like this… In the Synonyms Editor, you enter the word that is not producing search results (because it is NOT contained in your project content). Next to it, you enter a synonym—a word that will produce search results (because it IS contained in your project content). When users enter the original word again in future searches, topics containing the synonym are found.

E X A M P L E

Let's say that you use MadCap Pulse to view search keyword results from your users and find that many are entering the search term "sofa." Unfortunately, you have not used that word in your project, so users are unable to find the topics that they need. However, you have used a similar word, "couch." Therefore, in the Synonyms Editor, you enter "couch" as a synonym for "sofa." The next time a reader enters "sofa" as a search keyword, topics containing the word "couch" will be returned in the results.

HOW TO CREATE A DIRECTIONAL SYNONYM

a. Select the **Directional** tab.
b. Click in the empty **Word** cell and press **F2** on your keyboard.
c. Type the phrase that does not produce search results (e.g., sofa). Press **Enter**.
d. Click in the empty **Synonym** cell and press **F2** on your keyboard.
e. Type the parallel search phrase that is contained in the project content (e.g., couch). Press **Enter** when you are finished. In the future, when users perform a search and enter the term from the Word cell (e.g., sofa), Flare will find all topics that contain the term that you entered in the Synonym cell (e.g., couch).
f. (Optional) Click in the **Stem** check box if you want Flare to accept other variations of the search term that have the same stem.

E X A M P L E

Let's say you enter "hike" in the Word cell, and you enter "walk" in the Synonym cell. Then you select the Stem check box. In the future, if users search for the word "hike," it will find all topics containing the word "walk." The same will happen if users enter other search phrases with the same stem, such as "hiked" or "hiking."

3. Click to save your work.

Note: After you create synonyms, there is nothing else you need to do in order to make them available in the output. If you create synonyms in Flare, they are automatically applied at the project level, so all targets will incorporate those synonyms when you generate and publish the new Flare output. If you create the synonyms in Pulse or Feedback Explorer instead, the synonyms become immediately incorporated into the output (even if you do not republish your Flare target). Please note that if you are testing synonyms in Pulse or Feedback Explorer, you may need to refresh the interface to see the changes.

Note: Depending on the browser being used, the cache may need to be cleared in order to see the synonym results.

Exporting Synonyms

After creating synonyms in a Flare project, you may want to export the synonyms file (MCSYNS) to another location. Those synonyms can then be added to a different Flare project.

HOW TO EXPORT SYNONYMS

1. Make sure the Project Organizer is open.
2. Double-click the **Advanced** folder.
3. Double-click the synonym file. The Synonyms Editor opens.
4. Select the **File** drop-down.
5. Click the down arrow on the **Save** button.
6. Select **Save As** or **Save To**.
7. In the Save As dialog, navigate to the folder where you want to save the exported file. If you want to add the synonym file to another Flare project, you can navigate to the Project\Advanced subfolder where that project is stored.
8. In the **File name** field, enter a name for the synonym file.
9. Click **Save**.

Opening Synonym Files

After a synonym file is created, you can open it at any time to make adjustments to it.

HOW TO OPEN A SYNONYM FILE

1. Make sure the Project Organizer is open.
2. Double-click the **Advanced** folder.
3. Double-click the synonym file. The Synonyms Editor opens to the right.

CHAPTER 7

Search Highlighting

This feature is supported in DotNet Help, Microsoft HTML Help, HTML5, WebHelp, WebHelp AIR, WebHelp Mobile, and WebHelp Plus output.

When users initiate a search query, the search hits (i.e., the matching keywords and phrases) are highlighted when the individual topics are opened. This feature is called "search highlighting" and it is supported for simple text search and phrase search. Note that when searching with wildcard characters, the search feature will not apply highlighting to search hits. See "Search Methods and Syntax" on page 132.

This chapter discusses the following:

How Search Hits are Highlighted in Different Output Types 70
Customizing the Highlight Color for Search Hits 71
Customizing Highlighted Search Terms 73
Search Results in HTML5 Skins 76

How Search Hits are Highlighted in Different Output Types

Online output types use a highlight color when revealing search hits.

In Eclipse Help, search highlighting is provided by the Eclipse platform and cannot be changed using Flare.

For other online output types, you can customize the available colors using Flare. See "Customizing the Highlight Color for Search Hits" on the facing page.

Output Type	Customize Up to 10 Highlight Colors?
DotNet Help	✓
Microsoft HTML Help	✗
HTML5	✓
WebHelp	✓
WebHelp AIR	✓
WebHelp Mobile	✓
WebHelp Plus	✓

Customizing the Highlight Color for Search Hits

This feature is supported in DotNet Help, Microsoft HTML Help, HTML5, WebHelp, WebHelp AIR, WebHelp Mobile, and WebHelp Plus output.

When users perform searches in your online output, the keywords that are found are highlighted in the topics. The background for each term found in a topic is highlighted in a different color. In Flare you can use styles to change not only the color background, but other settings as well (e.g., font style, text decoration).

Customizing the highlight color for search hits is useful when you want to coordinate the visual elements of your online target with a color palette or scheme. It can also be used to improve the accessibility of your documentation. For example, if you are developing a project for an audience with impaired vision, you might want to customize the search highlighting to provide users with a higher color contrast.

HOW TO CUSTOMIZE THE HIGHLIGHT COLOR—DOTNET HELP, WEBHELP, WEBHELP AIR, WEBHELP MOBILE, WEBHELP PLUS

For DotNet Help, WebHelp, WebHelp AIR, WebHelp Mobile and WebHelp Plus output types, you can create styles to use for the highlight color for search hits or you can import these styles from a factory template and then modify them to meet a preference. You can customize up to 10 highlight colors. See "Customizing Highlighted Search Terms" on page 73.

E X A M P L E

Let's say that you have the following three classes: span.SearchHighlight1, span.SearchHighlight2, and span.SearchHighlight3. For span.SearchHighlight1, you change the background color to blue. For span.SearchHighlight2, you change the background color to orange. And for span.SearchHighlight3, you change the background color to yellow.

If a user enters "topic information help find" in the search field, the term "topic" will be displayed with a blue background everywhere it occurs in a topic. The term "information" will be displayed with an orange background, and the term "help" will be displayed with a yellow background. The term "find" will be displayed with the default background color specified by Flare (since you did not change it).

If another user enters "help find topic information" in the search field, the term "help" will be displayed with a blue background. The term "find" will be displayed with an orange background, and the term "topic" will be displayed with a yellow background. The term "information" will be displayed with the default background color specified by Flare (since you did not change it).

HOW TO CUSTOMIZE THE HIGHLIGHT COLOR—WEBHELP 2.0 (HTML5)

1. In the Project Organizer, open the **Skins** folder.
2. Open the desired HTML5 skin.
3. In the Skin Editor, click the **Styles** tab.
4. On the left side of the editor, in the **Search Results** section, expand the **Search Highlight** style.
5. If you want the setting(s) to be applied to all of the items, complete the fields under the Search Highlight style itself. Otherwise, expand any of the child styles (Search Highlight 01 to 10) to apply settings to them individually. Each search highlight style is numbered to coordinate with the order search terms are entered. For example, the style named "Search Highlight 01" will be used for matches to the first search term entered and "Search Highlight 10" would coordinate with the tenth entered term. You can customize up to 10 highlight colors.

Note: You also have the option modify a number of different styles related to the search elements. See "Search Results in HTML5 Skins" on page 76.

Note: Search highlighting for Eclipse Helpis provided by the Eclipse platform. Highlight colors for search cannot be modified in Flare.

Customizing Highlighted Search Terms

This feature is supported in DotNet Help, WebHelp, WebHelp AIR, WebHelp Mobile, and WebHelp Plus output.

When users perform searches in your online output, the keywords that are found are highlighted in the topics. The background for each term found in a topic is highlighted in a different color. In Flare you can use styles to change not only the color background, but other settings as well (e.g., font style, text decoration).

HOW TO CHANGE THE STYLE OF HIGHLIGHTED SEARCH TERMS

1. From the Content Explorer, open the stylesheet that you want to modify. By default, stylesheets are stored in the Resources\Stylesheets folder, but you can store them elsewhere if you like.
2. In the local toolbar, make sure the first button displays Simplified View (which means that the Advanced view is currently shown in the editor). If the button displays Advanced View instead, then click it.

   Note: For steps using the Simplified View, see the online Help.

3. In the upper-left corner of the editor, click in the **Show Styles** field and select Show Character Styles.
4. Create new classes to hold the style information for the search terms found in a topic. You can do this for the first 10 terms that users enter in the search field, naming each class "span.SearchHighlight1," "span.SearchHighlight2," and so on until you create "span.SearchHighlight10." The easiest way to create these classes is to import them from a Flare factory stylesheet, but you can also create them manually.

   E X A M P L E

   Let's say that you have the following three classes: span.SearchHighlight1, span.SearchHighlight2, and span.SearchHighlight3. For span.SearchHighlight1, you change the background color to blue. For span.SearchHighlight2, you change the background color to orange. And for span.SearchHighlight3, you change the background color to yellow.

   If a user enters "topic information help find" in the search field, the term "topic" will be displayed with a blue background everywhere it occurs in a topic. The term "information" will be displayed with an orange background, and the term "help" will be displayed with a yellow background. The term "find" will be displayed with the default background color specified by Flare (since you did not change it).

If another user enters "help find topic information" in the search field, the term "help" will be displayed with a blue background. The term "find" will be displayed with an orange background, and the term "topic" will be displayed with a yellow background. The term "information" will be displayed with the default background color specified by Flare (since you did not change it).

TO IMPORT THESE CLASSES FROM A FLARE FACTORY STYLESHEET

i. In the local toolbar, click the **Options** button and select **Import Styles**. The Import Styles dialog opens.

ii. In the **Library Folders** section, make sure **Factory Stylesheets** is selected.

iii. In the **Stylesheets** section, select **SearchHighlight**.

iv. (Optional) In the **[Medium]** drop-down list, you can select a specific medium. This determines the medium to which the styles are imported in your current stylesheet. If you select "default," the imported style properties will be applied to all of the mediums in the other stylesheet. If you select a custom medium, the imported style properties will be imported to that medium in the other stylesheet.

v. In the section below, click the **Import** check box next to each style class named **span.SearchHighlight** followed by a number. There are 10 of these style classes.

vi. Click **OK**. The style classes are added to the current stylesheet.

TO CREATE THESE CLASSES MANUALLY

i. In the **Styles** section on the left side of the editor, select the **span** tag.

ii. In the local toolbar, click Add Class. The New Style dialog opens.

iii. Enter `SearchHighlight1` (or replace 1 with another number at the end, up to 10).

iv. Click **OK**.

5. Select the new style class that you want to modify.

6. From the **Show** drop-down list on the upper-right side of the editor, select Show: Property Groups.

7. In the **Properties** section to the right, locate the specific property that you want to change. Not only can you change the background color, but you can change any other property for the class as well. The property name is shown in the left column. The right column is used for selecting and entering values for the property.

8. Click in the value column on the right side. Depending on the type of property, you can either type the value, select it from a drop-down list, or complete the values in a dialog or popup box.If you completed values in a popup, click **OK** at the bottom of the box.

E X A M P L E

Let's say that you want to change the background color for the class span.SearchHighlight1. After you select that class on the left you can double-click the **Background** property group on the right side of the editor. Then in the cell to the right of **background-color**, click the down arrow and choose the color you want.

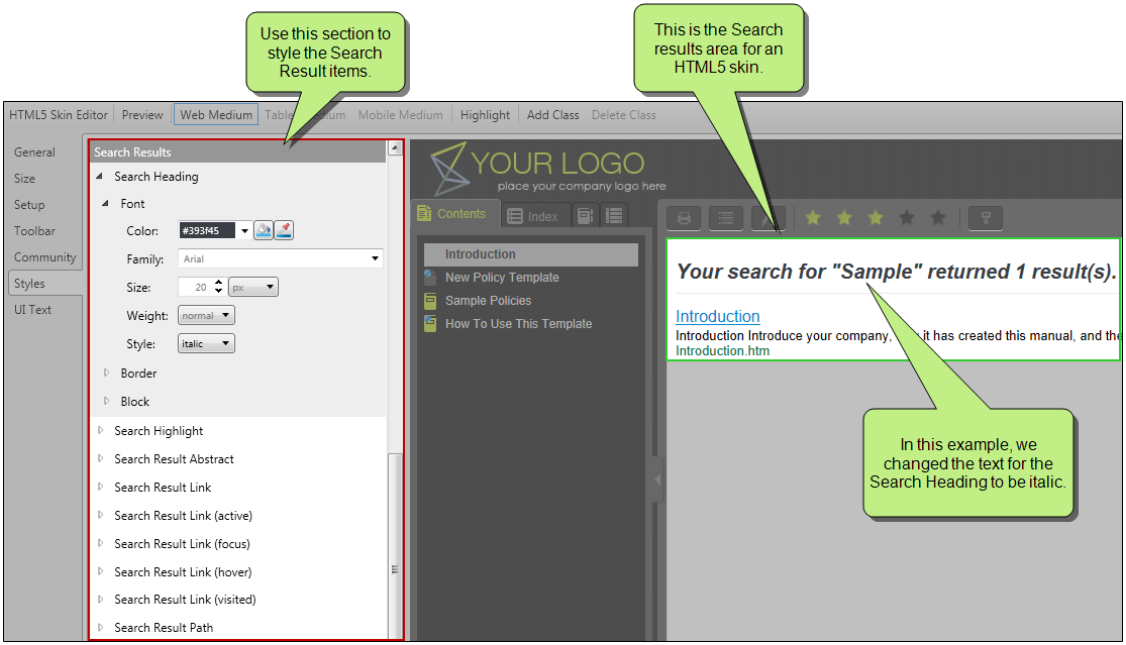
9. Click to save your work.

Note: You can also modify search highlight styles for HTML5 output. However, it is done in the Skin Editor instead of the Stylesheet Editor. See "Search Results in HTML5 Skins" on the next page.

Search Results in HTML5 Skins

This feature is supported in HTML5 output.

You can use an HTML5 skin to change the appearance of the search result items.



HOW TO SPECIFY STYLE SETTINGS FOR SEARCH RESULTS IN HTML5

1. Open an HTML5 skin.
2. (Optional) If you are using responsive output, make sure you select the appropriate medium—Web, Tablet, or Mobile—in the local toolbar before making changes to styles. If the skin has not been enabled for responsive output, you can make changes only for the Web medium.
3. Select the **Styles** tab.
4. On the left side of the editor, in the **Search Results** section, expand any of the following styles:

Style	Description
Search Heading	This is the heading at the beginning of the search results, indicating how many search results were found.
Search Highlight	When users perform searches in your online output, the keywords that are found are highlighted in the topics. The background for each term found in a topic is highlighted in a different color. In Flare you can use styles to change not only the color background, but other settings as well (e.g., font style, text decoration). The Search Highlight style has properties both at the root and on children nodes. If you want the setting(s) to be applied to all of the items, complete the fields under the Search Highlight style itself. Otherwise, expand any of the child styles (Search Highlight 01 to 10) to apply settings to them individually. Each search highlight style is numbered to coordinate with the order search terms are entered. For example, the style named "Search Highlight 01" will be used for matches to the first search term entered and "Search Highlight 10" would coordinate with the tenth entered term. You can customize up to 10 highlight colors. **EXAMPLE** Let's say that, for "Search Highlight 01" in ths skin, you change the background color to blue. For "Search Highlight 02," you change the background color to orange. And for "Search Highlight 03," you change the background color to yellow. If a user enters "topic information help find" in the search field, the term "topic" will be displayed with a blue background everywhere it occurs in a topic. The term "information" will be displayed with an orange background, and the term "help" will be displayed with a yellow background. The term "find" will be displayed with the default background color specified by Flare (since you did not change it). If another user enters "help find topic information" in the search field, the term "help" will be displayed with a blue background. The term "find" will be displayed with an orange background, and the term "topic" will be displayed with a yellow background. The term "information" will be displayed with the default background color specified by Flare (since you did not change it).

Style	Description
Search Result Abstract	This is the opening paragraph text for a search result, giving you context.
Search Result Link	This is the link at the top of the search result.
Search Result Link (active)	This is the search result link when it is in an active state.
Search Result Link (focus)	This is the search result link when it has focus.
Search Result Link (hover)	This is the search result link when a user hovers over it.
Search Result Link (visited)	This is the search result link after it has been selected.
Search Result Path	This shows the path to the file containing the search result.

5. Expand any of the nodes and complete the necessary fields. The properties and fields that you see are different for each node. Following is a general list in alphabetical order:

BACKGROUND

You can change any of the following to affect the background:

- **Gradient** This lets you change the background color using a progression effect. Select the beginning gradient color in the first field, and then select a second gradient color in the second field. You can use any of the following to enter or select a color.

transparent	You can type a hexadecimal number (e.g., #000000) directly in this field. Alternatively, you can click the down arrow and choose a color or make the background transparent.
	This opens the Color Picker dialog, which lets you choose a color in many ways.
	This temporarily adds a small bar above the cursor. As you move the cursor over any area of your computer screen, the color changes in the bar to reflect the color that is directly behind the tip of the cursor. When you click, that color is automatically loaded into the Color Picker dialog.

- **Color** This lets you select a single color.
- **Image** This lets you select an image for the background. Click and use the dialog to select an image file.
- **Repeat** Use this field to tell Flare whether the image should repeat or not.

Note: The Image field has the highest precedence, which means that if you enter settings in all of the Background fields, the image will win. Gradient has the next highest precedence. If you want to use the Color field, you need to make sure the Gradient fields are set to transparent and that there is no image selected.

BLOCK

This is the container (or "block") holding content in an element. You can change any of the following to affect the block:

- **Line Height** This is how tall the container is that holds the content. In the first field type a number or use the arrows. Then click in the second field and select the unit of measurement (e.g., pixels, points, centimeters).
- **Text Align** This changes the alignment of the content. Click in the field and select an option (center, justify, left, right).

BORDER

You can change any of the following to affect the border on the element:

- **Border Edge Fields (Top, Right, Bottom, Left)** You can add a border line around any of the edges of the element. You can use any of the following. The first three fields are used to control the type and size of the border line. The last three fields are alternative ways to choose a color for the border.

solid	You can select a type of line for the border (e.g., solid, dashed, dotted).
1	Type a number in the field or use the arrows to increase or decrease it.
px	Click in this field and select a unit of measurement (e.g., pixels, points, centimeters).
#000000	You can type a hexadecimal number (e.g., #000000) directly in this field. Alternatively, you can click the down arrow and choose a color.
	This opens the Color Picker dialog, which lets you choose a color in many ways.
	This temporarily adds a small bar above the cursor. As you move the cursor over any area of your computer screen, the color changes in the bar to reflect the color that is directly behind the tip of the cursor. When you click, that color is automatically loaded into the Color Picker dialog.

- **Border Radius Fields (Top Left, Top Right, Bottom Right, Bottom Left)** If you want the element to have rounded corners, you can enter values in any of these fields. In the first field type a number or use the arrows. Then click in the second field and select the unit of measurement (e.g., pixels, points, centimeters). The higher the number, the more of a curve the corner will have.

FONT

You can change any of the following to affect the font:

- **Color** This lets you select a color for the font. You can use any of the following:

#000000	You can type a hexadecimal number (e.g., #000000) directly in this field. Alternatively, you can click the down arrow and choose a color.
	This opens the Color Picker dialog, which lets you choose a color in many ways.
	This temporarily adds a small bar above the cursor. As you move the cursor over any area of your computer screen, the color changes in the bar to reflect the color that is directly behind the tip of the cursor. When you click, that color is automatically loaded into the Color Picker dialog.

- **Family** You can select or type a specific font family (e.g., Arial, Tahoma, Verdana).
- **Size** You can change the size of the font. In the first field type a number or use the arrows. Then click in the second field and select the unit of measurement (e.g., pixels, points, centimeters).
- **Weight** You can click in this field and make the font normal or bold.
- **Style** You can change click in this field and make the font normal or italic.

TEXT DECORATION

You can click in the **Decoration** field and select a text decoration (e.g., underline, line-through, overline, underline).

6. Click to save your work.

Note: If you want to style the search bar and its elements, you can use the Header section in the Skin Editor.

CHAPTER 8

HTML5 Server-based Output

You can enable server-based output for HTML5 targets. This allows for searching of non-XHTML content and faster searching.

This chapter discusses the following:

Enabling HTML5 Server-based Output 84
Installing IIS and ASP.NET 85
Setting Up an HTML5 Target 95
Configuring IIS on Production Server 96
Starting Microsoft Indexing Service 98
Starting Microsoft Windows Search 99
Enabling HTML5 Server-based Search 100
Testing HTML5 Server-based Search 101
Including Non-XHTML Files in HTML5 Search 102

Enabling HTML5 Server-based Output

You can create HTML5 output in its regular state, or you can select an option in the Publishing tab of the Target Editor to enable server-based functionality. This allows you to accomplish the same results as WebHelp Plus output—searching of non-XHTML content, faster server-side search, and automatic runtime merging.

If you want to take advantage of the advanced server-side features of HTML5 (i.e., automatic runtime project merging, faster search, searching of non-XHTML files), you must enable HTML5server-based output. This includes performing the following tasks: (1) installing Microsoft Internet Information Services (IIS) and ASP.NET, (2) setting up the HTML5 target and generating/publishing, (3) configuring IIS on the production server, (4) starting Microsoft Indexing Service or Microsoft Windows Search (depending on the operating system), and (5) enabling HTML5 search.

It is not necessary to install these in order to simply build HTML5 server-based output. However, if you want to be able to view and display HTML5 server-based output, the following steps are necessary. You must perform these steps on the machine that will be hosting the published HTML5 server-based output. If you want to view the output on your local machine to test the results, then you also need to perform these steps on your local computer, except for the procedure "Configuring IIS on Production Server."

Installing IIS and ASP.NET

The following steps show you how to install IIS and ASP.NET, depending on the operating system.

WINDOWS 8

The following steps show you how to install IIS and ASP.NET 4.5 for Windows 8.

INSTALLING IIS

1. Open the Control Panel. On many computers, you can do this by clicking **Start>Control Panel**.
2. Select **Programs and Features**.
3. Click **Turn Windows features on or off**.
4. Select **Internet Information Services**.
5. Expand **Internet Information Services>Web Management Tools>IIS 6 Management Compatibility**.
6. Click **IIS Metabase and IIS 6 configuration compatibility**.

INSTALLING ASP.NET 4.5

7. Under **Internet Information Services** expand **World Wide Web Services**.
8. Expand **Application Development Features**.
9. Click the check box next to **ASP.NET 4.5** to add a check mark.
10. Click **OK**.

WINDOWS 7

The following steps show you how to install IIS and ASP.NET for Windows 7.

INSTALLING IIS

1. Open the Control Panel. On many computers, you can do this by clicking **Start>Control Panel**.
2. Select **Programs and Features**.
3. Click **Turn Windows features on or off**.
4. Select **Internet Information Services**.
5. Expand **Internet Information Services>Web Management Tools>IIS 6 Management Compatibility**.
6. Click **IIS 6 Metabase and IIS 6 configuration compatibility**.

INSTALLING ASP.NET

7. Under **Internet Information Services** expand **World Wide Web Services**.
8. Expand **Application Development Features**.
9. Click the check box next to **ASP.NET** to add a check mark.
10. Click **OK**.
11. Click **Start**.
12. In the search field enter `run`.
13. Click **Run**. The Run dialog opens.
14. In the **Open** field, copy and paste one of the following into the field, depending on whether you have a 32-bit or 64-bit system:

    32-BIT

    ```
    C:\WINDOWS\Microsoft.NET\Framework\v4.0.30319\aspnet_regiis -i
    ```

    64-BIT

    ```
    C:\WINDOWS\Microsoft.NET\Framework64\v4.0.30319\aspnet_regiis -i
    ```

15. Click **OK**.

    A window opens, displaying the installation progress of ASP.NET. The window will close automatically when the installation finishes.

WINDOWS SERVER 2012

The following steps show you how to install IIS and ASP.NET 4.5 for Windows Server 2012.

INSTALLING IIS

1. Open the Server Manager.
2. Click **Add roles and features**. The Add Roles and Features Wizard opens.
3. Click **Next** two times until you ge to the Server Roles page.
4. Click the check box next to **Web Server (IIS)**.
5. In the dialog that opens click **Add Features**.

INSTALLING ASP.NET 4.5

6. In the Add Roles Wizard click **Next**.
7. Expand **.NET Framework 4.5 Features** and click **ASP.NET 4.5**.
8. Click **Next**.
9. At the Web Server Role (IIS) tab, click **Next** again.
10. Expand **Management Tools>IIS 6 Management Compatibility** and click **IIS 6 Metabase Compatibility**.
11. On the Confirm Installation Selections page of the wizard, click **Install**.
12. After the installation is completed, the Installation Results page opens. Click **Close**.

WINDOWS SERVER 2008 R2

The following steps show you how to install IIS and ASP.NET for Windows Server 2008 R2.

INSTALLING IIS

1. From the Start menu open the Server Manager dialog.
2. Click **Add roles**. The Add Roles Wizard opens.
3. Click **Next**.
4. Click the check box next to **Web Server (IIS)**.
5. In the dialog that opens click **Add Required Features**.
6. In the Add Roles Wizard click **Next**.
7. Click **Next** again.
8. On the "Select Role Services" page of the wizard, expand **Management Tools>IIS 6 Management Compatibility** and click **IIS 6 Metabase Compatibility**.
9. On the Confirm Installation Selections page of the wizard, click **Install**.
10. After the installation is completed, click **Finish**.

INSTALLING ASP.NET

1. In the Server Manager dialog, expand **Roles**.
2. Select **Web Server IIS**.
3. In the **Role Services** section, click **Add Role Services**.
4. Click the check box next to **ASP.NET** to add a check mark.
5. Click **Next**.
6. Click **Install**.
7. Click **Close**.
8. In the search field enter `run`.
9. Click **Run**.The Run dialog opens.

10. In the **Open** field, copy and paste one of the following into the field, depending on whether you have a 32-bit or 64-bit system:

    32-BIT

    ```
    C:\WINDOWS\Microsoft.NET\Framework\v4.0.30319\aspnet_regiis -i
    ```

    64-BIT

    ```
    C:\WINDOWS\Microsoft.NET\Framework64\v4.0.30319\aspnet_regiis -i
    ```

11. Click **OK**.

    A window opens, displaying the installation progress of ASP.NET. The window will close automatically when the installation finishes.

WINDOWS SERVER 2008

The following steps show you how to install IIS and ASP.NET for Windows Server 2008.

INSTALLING IIS

1. From the Start menu open the Server Manager dialog.
2. Click **Add roles**. The Add Roles Wizard opens.
3. Click **Next**.
4. Click the check box next to **Web Server (IIS)**.
5. In the dialog that opens click **Add Required Features**.
6. In the Add Roles Wizard click **Next**.
7. Click **Next** again.
8. On the "Select Role Services" page of the wizard, expand **Management Tools>IIS 6 Management Compatibility** and click **IIS 6 Metabase Compatibility**.
9. On the Confirm Installation Selections page of the wizard, click **Install**.
10. After the installation is completed, click **Finish**.

INSTALLING ASP.NET

1. In the Server Manager dialog, expand **Roles**.
2. Select **Web Server IIS**.
3. In the **Role Services** section, click **Add Role Services**.
4. Click the check box next to **ASP.NET** to add a check mark.
5. Click **Next**.
6. Click **Install**.
7. Click **Close**.

WINDOWS SERVER 2003

The following steps show you how to install IIS and ASP.NET for Windows Server 2003.

INSTALLING IIS VIA THE MANAGE YOUR SERVER DIALOG

1. From the Start menu open the Manage Your Server dialog.
2. Click **Add or remove a role**.The Configure Your Server Wizard opens.
3. Click **Next**.
4. Select **Application server (IIS, ASP.NET)** and click **Next**.
5. Click **Enable ASP.NET** and click **Next**.Your selections are summarized.
6. Click **Next**.The Windows Components Wizard opens, displaying the status of the installation.
7. After the installation is completed, click **Finish**.

INSTALLING IIS VIA THE CONTROL PANEL

1. Open the Control Panel. On many computers, you can do this by clicking **Start>Control Panel**.
2. Double-click **Add or Remove Programs**.The Add or Remove Programs window opens.
3. Click **Add/Remove Windows Components**.The Windows Components Wizard opens.
4. In the list of components select **Application Server** and then click **Details**.The Application Server Dialog opens.
5. Click the check box next to **Internet Information Services (IIS)** to add a check mark.
6. In the Windows Component Wizard, "Application Server" should now be selected. Click **Next**.
7. Click **Finish**.

INSTALLING ASP.NET

1. Click **Start>Run**.The Run dialog opens.
2. In the **Open** field, copy and paste one of the following into the field, depending on whether you have a 32-bit or 64-bit system:

   32-BIT

   ```
   C:\WINDOWS\Microsoft.NET\Framework\v4.0.30319\aspnet_regiis -i
   ```

   64-BIT

   ```
   C:\WINDOWS\Microsoft.NET\Framework64\v4.0.30319\aspnet_regiis -i
   ```

3. Click **OK**.

   A window opens, displaying the installation progress of ASP.NET. The window will close automatically when the installation finishes.

> **Note:** ASP.NET pages by default are prohibited in IIS. Therefore, you must set these pages to be allowed if you are running Windows Server 2003. To do this: (1) In Internet Information Services (IIS) Manager, select **Web Service Extensions** from the left pane; (2) in the right pane, make sure that **ASP.NET v4.0.30319** is set to **Allowed**. If it is not, select it and click the **Allow** button.

WINDOWS XP

The following steps show you how to install IIS and ASP.NET for Windows XP.

INSTALLING IIS

1. Open the Control Panel. On many computers, you can do this by clicking **Start>Control Panel**.
2. Double-click **Add or Remove Programs**.The Add or Remove Programs window opens.
3. Click **Add/Remove Windows Components**.The Windows Components Wizard opens.
4. In the list of components select **Application Server** and then click **Details**.The Application Server Dialog opens.

> **Note:** The options in step 4 do not apply to the process for installing IIS on Windows XP Professional. If you are installing IIS on Windows XP Professional, skip step 4 and move on to step 5.

5. Click the check box next to **Internet Information Services (IIS)** to add a check mark.
6. In the Windows Component Wizard, "Application Server" should now be selected. Click **Next**.
7. Click **Finish**.

INSTALLING ASP.NET

1. Click **Start>Run**.The Run dialog opens.
2. In the **Open** field, copy and paste one of the following into the field, depending on whether you have a 32-bit or 64-bit system:

   32-BIT

   ```
   C:\WINDOWS\Microsoft.NET\Framework\v4.0.30319\aspnet_regiis -i
   ```

   64-BIT

   ```
   C:\WINDOWS\Microsoft.NET\Framework64\v4.0.30319\aspnet_regiis -i
   ```

3. Click **OK**.

   A window opens, displaying the installation progress of ASP.NET. The window will close automatically when the installation finishes.

WINDOWS VISTA

The following steps show you how to install IIS and ASP.NET for Windows Vista.

INSTALLING IIS

1. Open the Control Panel. On many computers, you can do this by clicking **Start>Control Panel**.
2. Double-click **Programs and Features**.
3. Click **Turn Windows features on or off**.
4. Select **Internet Information Services**.
5. Expand **Internet Information Services>Web Management Tools>IIS 6 Management Compatibility**
6. Click **IIS 6 Metabase and IIS 6 configuration compatibility**.

INSTALLING ASP.NET

7. Under **Internet Information Services** expand **World Wide Web Services**.
8. Expand **Application Development Features**.
9. Click the check box next to **ASP.NET** to add a check mark.
10. Click **OK**.
11. Click **Start>Run**.The Run dialog opens.
12. In the **Open** field, copy and paste one of the following into the field, depending on whether you have a 32-bit or 64-bit system:

    32-BIT

    ```
    C:\WINDOWS\Microsoft.NET\Framework\v4.0.30319\aspnet_regiis -i
    ```

    64-BIT

    ```
    C:\WINDOWS\Microsoft.NET\Framework64\v4.0.30319\aspnet_regiis -i
    ```

13. Click **OK**.

    A window opens, displaying the installation progress of ASP.NET. The window will close automatically when the installation finishes.

Setting Up an HTML5 Target

The following steps show you how to set up your HTML5 target for server-based output.

HOW TO SET UP THE HTML5 TARGET

1. In Flare, open the HTML5 target.The Target Editor opens.
2. Select the **Publishing** tab.
3. In the **Server-based Output** section, click the check box.
4. In the **Indexing Service Catalog Name** field, type the catalog that you are using for the output. In most cases, this will be `Web`, which is the default value. However, if you or someone in your company (e.g., network administrator) creates a custom catalog, you need to enter that name in the field.

   What is a catalog? Microsoft Indexing Service stores all of its index information in catalogs. A catalog comprises index information and stored properties for a particular group of file system directories. When Indexing Service is installed with Windows XP, it automatically builds a catalog, called the System catalog, listing contents of all permanently attached disk drives. The System catalog contains an index for all documents except certain system and temporary files. If Internet Information Services (IIS) is installed, the Indexing Service also creates a web catalog, which contains an index of IIS, the default virtual server of the World Wide Web.

   Note: This step is necessary only for Windows XP and Windows Server 2003.

5. Click to save your work.
6. Generate the target.
7. Publish the output to any location on the web server. If you want to use the default location that was created after you installed IIS, you can publish the output to C:\Inetpub\wwwroot. If you do this, you can use the "Default Web Site" folder that you will encounter when performing the next set of steps (i.e., configuring IIS on the production server).

   If you are working on your local machine for testing purposes, you do not need to publish the output. You can simply view your WebHelp Plus output. When you view HTML5 output on your local computer, you need to create a special folder called "MCPreview" within your "C:\Inetpub\wwwroot" folder. Place a copy of your HTML5 output files in it. This enables you to test the advanced features of HTML5 on your local machine. (For Windows Vista users testing locally, the physical location is C:\MadCap\[Name of Project]\[Name of Main Entry File].htm.)

Configuring IIS on Production Server

The following steps show you how to configure IIS, depending on the operating system. These steps are necessary only for the server where you will be publishing the final output. It is not necessary to perform these steps on your local computer for testing HTML5 server-based output.

WINDOWS SERVER 2003 AND WINDOWS XP

1. Open the Control Panel. On many computers, you can do this by clicking **Start>Control Panel**.
2. Double-click **Administrative Tools**.The Administrative Tools dialog opens.
3. Double-click **Internet Information Services**.The Internet Information Services dialog opens.
4. Find your output folder and right-click the **Service** subfolder. Then select **Properties**.The Service Properties dialog opens.
5. Select the **Virtual Directory** tab.
6. Next to the **Application name** field, click the **Create** button.

> **Note:** If this button has already been selected, it will display as "Remove" instead. In this case, you do not need to click the button.

7. In the **Execute Permissions** drop-down, make sure **Scripts only** is selected. It should already be selected by default.
8. Click **OK**.

WINDOWS SERVER 2008 AND 2008 R2, WINDOWS 2012, WINDOWS 7, WINDOWS 8, AND WINDOWS VISTA

1. Open the Control Panel.
2. Select **System and Security**.
3. Select **Administrative Tools**. The various operating systems have different ways to find this option.
4. Open the Internet Information Services (IIS) Manager.
5. Expand the node with the computer name.
6. Expand the **Sites** folder.
7. Expand the website folder corresponding to the one that you published.
8. Find your output folder and right-click the **Service** subfolder. Then select **Convert to Application**.

9. Make sure the the application pool is using the .NET 4 framework.
    a. In the dialog click **Select**.
    b. From the drop-down select an application pool that is using the .NET 4 framework.
    c. Click **OK**.
10. Click **OK**.

Starting Microsoft Indexing Service

The following steps show you how to start the Microsoft Indexing Service on machines that are running Windows XP and Windows Server 2003. This procedure is not necessary for the other operating systems.

1. Open the Control Panel. On many computers, you can do this by clicking **Start>Control Panel**.
2. Double-click **Administrative Tools**.The Administrative Tools dialog opens.
3. Double-click **Computer Management**.The Computer Management dialog opens.
4. Expand **Services and Applications**.
5. Right-click **Indexing Service**.
6. In the context menu, click **Start**. The Indexing Service is now started.

Starting Microsoft Windows Search

The following steps show you how to start the Microsoft Windows Search on machines that are running Windows Server 2008. This procedure is not necessary for the other operating systems.

1. From the Start menu open the Server Manager dialog.
2. Click **Add roles**.The Add Roles Wizard opens.
3. Click **Next**.
4. Click the check box next to **Files Services**.
5. Click **Next** twice.
6. Click the check box next to **Windows Search Service**.
7. Click **Next** twice.
8. Click **Install**.
9. Click **Close**.

Enabling HTML5 Server-based Search

The following steps show you how to enable HTML5 server-based search. These steps must be done for each catalog that you are using on the server (or on your local machine, if you are viewing HTML5 server-based output on your computer for testing purposes).

1. Navigate to the output folder for the HTML5 target on the server or on your local machine.

   If you are enabling HTML5 server-based output on your local machine, you can quickly find the output folder by doing the following.

   a. Open the Project Organizer.
   b. Double-click the **Targets** folder.
   c. Right-click on the target and select **Open Output Folder**.
2. In the output folder, double-click the **Service** folder.
3. Double-click the folder labeled **Console.ConfigureSearch**.
4. Double-click **ConfigureSearch.exe**. A window appears very briefly and then disappears.
5. Create a folder called "AutoMergeCache" at the root of the site. Then you must set security preferences on the AutoMergeCache folder so the application can create and update files.

   a. Right-click on the root folder and choose **Explore** to open Windows Explorer.
   b. Right-click on **AutoMergeCache** and choose **Properties**.
   c. On the **Security** tab click the **Edit** button.
   d. Click **Add**.

      i. Type `Everyone` and click **Check Names**, making sure it gets underlined.
      ii. Click **OK**.
   e. Make sure **Everyone** is highlighted and check the option for **Full Control**.
   f. Click **Apply**.
   g. Click **OK** to exit the Permission dialog.
   h. Click **OK** to exit the Properties dialog.

Testing HTML5 Server-based Search

The following steps are optional for testing HTML5 server-based search (for Microsoft Windows Search).

1. In IIS right-click on the directory where your HTML5 project is published to and choose **Explore**.
2. In the upper-right corner of the window you will see a Search input box. Perform a search for a term that is commonly found in your project.
3. If you see results, your project is ready to go live.

Including Non-XHTML Files in HTML5 Search

This feature is supported in HTML5 output.

When end users perform a search in your online output, you can ensure that non-XHTML files (e.g. PDF, DOC, XLS) are included in that search. The files do not even need to be linked to any of the content in your Flare project. This feature is available if you publish HTML5 server-based output to a web server running Microsoft Internet Information Services (IIS).

HOW TO INCLUDE NON-XHTML FILES IN SEARCH

1. **Enable HTML5 Server-Based Output** If you want to take advantage of the advanced server-side features of HTML5 (i.e., automatic runtime project merging, faster search, searching of non-XHTML files), you must enable HTML5server-based output. This includes performing the following tasks: (1) installing Microsoft Internet Information Services (IIS) and ASP.NET, (2) setting up the HTML5 target and generating/publishing, (3) configuring IIS on the production server, (4) starting Microsoft Indexing Service or Microsoft Windows Search (depending on the operating system), and (5) enabling HTML5 search. For more information see the online Help.
2. **Generate HTML5 Server-Based Output** In Flare, generate a target using the WebHelp Plus output format.
3. **Publish HTML5 Output to Server** Publish the HTML5 server-based output to your Microsoft IIS Web server.
4. **(Optional) Add IFilter** File types that are automatically supported for HTML5 server-based search include: Microsoft Office files, HTML files, and TXT files. For other non-supported file types, such as PDF documents, you can download and install a simple IFilter in order to include that file type in the search. To find and download the IFilter for the file type that you want to include, go to a website that provides these (such as http://www.ifilter.org) and follow the instructions for downloading IFilters. You must install the appropriate IFilters on the server where the output files will be published, and if you are testing HTML5 server-based output on your computer, you need to install the IFilter(s) locally as well.
5. **Copy and Paste Non-XHTML Files to Appropriate Folder** Copy all of the non-XHTML files that you want to be included in the search. Then paste them in the appropriate subfolder of the HTML5 server-based output that you published. By default, HTML5 server-based will find any files located in the project output folder, as well as the "AutoSearch" subfolder. Therefore, you can paste your extra non-XHTML files in the AutoSearch subfolder.

E X A M P L E

http://www.xyzincorporated.com/help systems/MyTargetName/AutoSearch.

However, if there are any other folders where you want either XHTML or non-XHTML files to be stored (instead of, or in addition to, AutoSearch), you can perform some extra steps to allow this.

Let's say you also want searches in the Help system to provide results from files in the folder C:\ExternalSearchFolder. Here are the steps to allow this:

1. This folder must be accessible by IIS. Therefore, create a virtual directory in IIS for it. Following are steps for doing this.

    a. Open the Control Panel. On many computers, you can do this by clicking **Start>Control Panel**.

    b. Double-click **Administrative Tools**. The Administrative Tools dialog opens.

    c. Double-click **Internet Information Services**. The Internet Information Services (IIS) Manager dialog opens.

    d. Expand the **Web Sites** folder.

    e. Right-click on the **Default Web Site** folder and select **New>Virtual Directory**.

    f. Click **Next**.

    g. In the **Alias** field, enter a name for the subfolder (e.g., SearchFolder).

    h. Click **Next**.

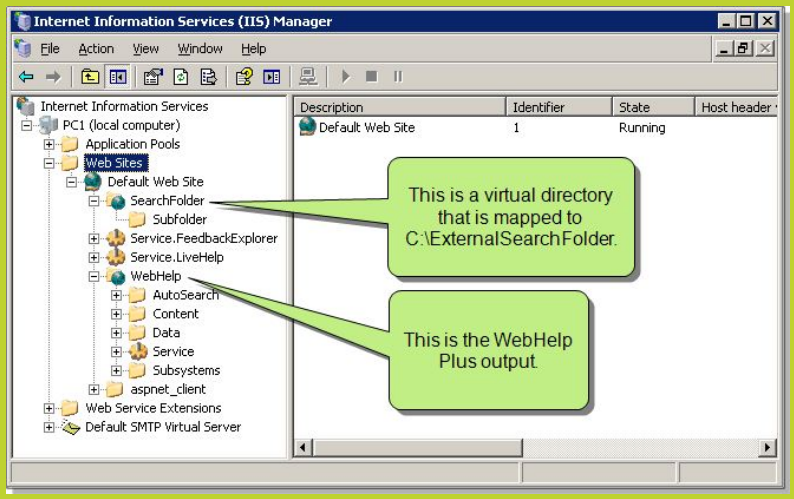
    i. Click the **Browse** button, then find and select the folder holding the content that you want to publish (e.g., C:\ExternalSearchFolder).

    j. Click **Next**.

    k. Make sure a check mark is next to **Read**.

    l. Click **Next**.

    m. Click **Finish**.



2. Create an XML file called "SearchFolders.xml" and place it in the "AutoSearch" folder in the HTML5 server-based output directory. The contents of this file will specify any virtual directories that HTML5 should search. Following is what you would type in the SearchFolders.xml file. This example specifies just one folder, but you can add references to as many virtual directories as you need.

```
<?xml version="1.0" encoding="utf-8"?>

  <SearchFolders>

     <Url>/SearchFolder</Url>

  </SearchFolders>
```

When users perform a search in your output, those non-XHTML files will also be scanned and become accessible to the users.

Note: If you are testing WebHelp Plus output on your local machine, you need to view the output at least one time. When you view HTML5 output on your local computer, you need to create a special folder called

"MCPreview" within your "C:\Inetpub\wwwroot" folder. Place a copy of your HTML5 output files in it. This enables you to test the advanced features of HTML5 on your local machine. (For Windows Vista users testing locally, the physical location is C:\MadCap\[Name of Project]\[Name of Main Entry File].htm.) When testing this search feature on your computer, you need to place the non-XHTML files in the AutoSearch subfolder at this location (as opposed to the output folder that was generated where your Flare project is located).

Note: If you are testing HTML5 server-based output on your local machine, you may need to wait a few minutes after viewing the output for the Indexing Service to fully scan your files. Otherwise, you may not immediately see the effects of the scan (e.g., searches of non-XHTML files, incorporation of merged output files) in the output. If you avoid performing other tasks during this period, the scanning of the files will be completed more quickly.

Note: If you want to test HTML5 server-based output on your local computer,the advanced search features of HTML5 are not operable.

CHAPTER 9

WebHelp Plus Server-based Output

You can enable server-based output for WebHelp Plus targets. This allows for searching of non-XHTML content and faster searching.

This chapter discusses the following:

Enabling WebHelp Plus Output 108
Installing IIS and ASP.NET 109
Setting Up a WebHelp Plus Target 119
Configuring IIS on Production Server 121
Starting Microsoft Indexing Service 123
Starting Microsoft Windows Search 124
Enabling WebHelp Plus Search 125
Testing WebHelp Plus Search 126
Including Non-XHTML Files in Search 127

Enabling WebHelp Plus Output

If you want to take advantage of the advanced server-side features of WebHelp Plus (i.e., automatic runtime project merging, faster search, searching of non-XHTML files), you must enable WebHelp Plus output. This includes performing the following tasks: (1) installing Microsoft Internet Information Services (IIS) and ASP.NET, (2) setting up the WebHelp Plus target and generating/publishing, (3) configuring IIS on the production server, (4) starting Microsoft Indexing Service or Microsoft Windows Search (depending on the operating system), and (5) enabling WebHelp Plus search.

It is not necessary to install these in order to simply build WebHelp Plus output. However, if you want to be able to view and display WebHelp Plus output, the following steps are necessary. You must perform these steps on the machine that will be hosting the published WebHelp Plus output. If you want to view the output on your local machine to test the results, then you also need to perform these steps on your local computer, except for the procedure "Configuring IIS on Production Server."

Installing IIS and ASP.NET

The following steps show you how to install IIS and ASP.NET, depending on the operating system.

WINDOWS 8

The following steps show you how to install IIS and ASP.NET 4.5 for Windows 8.

INSTALLING IIS

1. Open the Control Panel. On many computers, you can do this by clicking **Start>Control Panel**.
2. Select **Programs and Features**.
3. Click **Turn Windows features on or off**.
4. Select **Internet Information Services**.
5. Expand **Internet Information Services>Web Management Tools>IIS 6 Management Compatibility**.
6. Click **IIS Metabase and IIS 6 configuration compatibility**.

INSTALLING ASP.NET 4.5

7. Under **Internet Information Services** expand **World Wide Web Services**.
8. Expand **Application Development Features**.
9. Click the check box next to **ASP.NET 4.5** to add a check mark.
10. Click **OK**.

WINDOWS 7

The following steps show you how to install IIS and ASP.NET for Windows 7.

INSTALLING IIS

1. Open the Control Panel. On many computers, you can do this by clicking **Start>Control Panel**.
2. Select **Programs and Features**.
3. Click **Turn Windows features on or off**.
4. Select **Internet Information Services**.
5. Expand **Internet Information Services>Web Management Tools>IIS 6 Management Compatibility**.
6. Click **IIS 6 Metabase and IIS 6 configuration compatibility**.

INSTALLING ASP.NET

7. Under **Internet Information Services** expand **World Wide Web Services**.
8. Expand **Application Development Features**.
9. Click the check box next to **ASP.NET** to add a check mark.
10. Click **OK**.
11. Click **Start**.
12. In the search field enter `run`.
13. Click **Run**. The Run dialog opens.
14. In the **Open** field, copy and paste one of the following into the field, depending on whether you have a 32-bit or 64-bit system:

    32-BIT

    ```
    C:\WINDOWS\Microsoft.NET\Framework\v4.0.30319\aspnet_regiis -i
    ```

    64-BIT

    ```
    C:\WINDOWS\Microsoft.NET\Framework64\v4.0.30319\aspnet_regiis -i
    ```

15. Click **OK**.

    A window opens, displaying the installation progress of ASP.NET. The window will close automatically when the installation finishes.

WINDOWS SERVER 2012

The following steps show you how to install IIS and ASP.NET 4.5 for Windows Server 2012.

INSTALLING IIS

1. Open the Server Manager.
2. Click **Add roles and features**. The Add Roles and Features Wizard opens.
3. Click **Next** two times until you ge to the Server Roles page.
4. Click the check box next to **Web Server (IIS)**.
5. In the dialog that opens click **Add Features**.

INSTALLING ASP.NET 4.5

6. In the Add Roles Wizard click **Next**.
7. Expand **.NET Framework 4.5 Features** and click **ASP.NET 4.5**.
8. Click **Next**.
9. At the Web Server Role (IIS) tab, click **Next** again.
10. Expand **Management Tools>IIS 6 Management Compatibility** and click **IIS 6 Metabase Compatibility**.
11. On the Confirm Installation Selections page of the wizard, click **Install**.
12. After the installation is completed, the Installation Results page opens. Click **Close**.

WINDOWS SERVER 2008 R2

The following steps show you how to install IIS and ASP.NET for Windows Server 2008 R2.

INSTALLING IIS

1. From the Start menu open the Server Manager dialog.
2. Click **Add roles**. The Add Roles Wizard opens.
3. Click **Next**.
4. Click the check box next to **Web Server (IIS)**.
5. In the dialog that opens click **Add Required Features**.
6. In the Add Roles Wizard click **Next**.
7. Click **Next** again.
8. On the "Select Role Services" page of the wizard, expand **Management Tools>IIS 6 Management Compatibility** and click **IIS 6 Metabase Compatibility**.
9. On the Confirm Installation Selections page of the wizard, click **Install**.
10. After the installation is completed, click **Finish**.

INSTALLING ASP.NET

1. In the Server Manager dialog, expand **Roles**.
2. Select **Web Server IIS**.
3. In the **Role Services** section, click **Add Role Services**.
4. Click the check box next to **ASP.NET** to add a check mark.
5. Click **Next**.
6. Click **Install**.
7. Click **Close**.
8. In the search field enter `run`.
9. Click **Run**.The Run dialog opens.

10. In the **Open** field, copy and paste one of the following into the field, depending on whether you have a 32-bit or 64-bit system:

    32-BIT

    ```
    C:\WINDOWS\Microsoft.NET\Framework\v4.0.30319\aspnet_regiis -i
    ```

    64-BIT

    ```
    C:\WINDOWS\Microsoft.NET\Framework64\v4.0.30319\aspnet_regiis -i
    ```

11. Click **OK**.

    A window opens, displaying the installation progress of ASP.NET. The window will close automatically when the installation finishes.

WINDOWS SERVER 2008

The following steps show you how to install IIS and ASP.NET for Windows Server 2008.

INSTALLING IIS

1. From the Start menu open the Server Manager dialog.
2. Click **Add roles**. The Add Roles Wizard opens.
3. Click **Next**.
4. Click the check box next to **Web Server (IIS)**.
5. In the dialog that opens click **Add Required Features**.
6. In the Add Roles Wizard click **Next**.
7. Click **Next** again.
8. On the "Select Role Services" page of the wizard, expand **Management Tools>IIS 6 Management Compatibility** and click **IIS 6 Metabase Compatibility**.
9. On the Confirm Installation Selections page of the wizard, click **Install**.
10. After the installation is completed, click **Finish**.

INSTALLING ASP.NET

1. In the Server Manager dialog, expand **Roles**.
2. Select **Web Server IIS**.
3. In the **Role Services** section, click **Add Role Services**.
4. Click the check box next to **ASP.NET** to add a check mark.
5. Click **Next**.
6. Click **Install**.
7. Click **Close**.

WINDOWS SERVER 2003

The following steps show you how to install IIS and ASP.NET for Windows Server 2003.

INSTALLING IIS VIA THE MANAGE YOUR SERVER DIALOG

1. From the Start menu open the Manage Your Server dialog.
2. Click **Add or remove a role**.The Configure Your Server Wizard opens.
3. Click **Next**.
4. Select **Application server (IIS, ASP.NET)** and click **Next**.
5. Click **Enable ASP.NET** and click **Next**.Your selections are summarized.
6. Click **Next**.The Windows Components Wizard opens, displaying the status of the installation.
7. After the installation is completed, click **Finish**.

INSTALLING IIS VIA THE CONTROL PANEL

1. Open the Control Panel. On many computers, you can do this by clicking **Start>Control Panel**.
2. Double-click **Add or Remove Programs**.The Add or Remove Programs window opens.
3. Click **Add/Remove Windows Components**.The Windows Components Wizard opens.
4. In the list of components select **Application Server** and then click **Details**.The Application Server Dialog opens.
5. Click the check box next to **Internet Information Services (IIS)** to add a check mark.
6. In the Windows Component Wizard, "Application Server" should now be selected. Click **Next**.
7. Click **Finish**.

INSTALLING ASP.NET

1. Click **Start>Run**.The Run dialog opens.
2. In the **Open** field, copy and paste one of the following into the field, depending on whether you have a 32-bit or 64-bit system:

   32-BIT

   ```
   C:\WINDOWS\Microsoft.NET\Framework\v4.0.30319\aspnet_regiis -i
   ```

   64-BIT

   ```
   C:\WINDOWS\Microsoft.NET\Framework64\v4.0.30319\aspnet_regiis -i
   ```

3. Click **OK**.

   A window opens, displaying the installation progress of ASP.NET. The window will close automatically when the installation finishes.

> **Note:** ASP.NET pages by default are prohibited in IIS. Therefore, you must set these pages to be allowed if you are running Windows Server 2003. To do this: (1) In Internet Information Services (IIS) Manager, select **Web Service Extensions** from the left pane; (2) in the right pane, make sure that **ASP.NET v4.0.30319** is set to **Allowed**. If it is not, select it and click the **Allow** button.

WINDOWS XP

The following steps show you how to install IIS and ASP.NET for Windows XP.

INSTALLING IIS

1. Open the Control Panel. On many computers, you can do this by clicking **Start>Control Panel**.
2. Double-click **Add or Remove Programs**.The Add or Remove Programs window opens.
3. Click **Add/Remove Windows Components**.The Windows Components Wizard opens.
4. In the list of components select **Application Server** and then click **Details**.The Application Server Dialog opens.

> **Note:** The options in step 4 do not apply to the process for installing IIS on Windows XP Professional. If you are installing IIS on Windows XP Professional, skip step 4 and move on to step 5.

5. Click the check box next to **Internet Information Services (IIS)** to add a check mark.
6. In the Windows Component Wizard, "Application Server" should now be selected. Click **Next**.
7. Click **Finish**.

INSTALLING ASP.NET

1. Click **Start>Run**.The Run dialog opens.
2. In the **Open** field, copy and paste one of the following into the field, depending on whether you have a 32-bit or 64-bit system:

   32-BIT

   ```
   C:\WINDOWS\Microsoft.NET\Framework\v4.0.30319\aspnet_regiis -i
   ```

   64-BIT

   ```
   C:\WINDOWS\Microsoft.NET\Framework64\v4.0.30319\aspnet_regiis -i
   ```

3. Click **OK**.

   A window opens, displaying the installation progress of ASP.NET. The window will close automatically when the installation finishes.

WINDOWS VISTA

The following steps show you how to install IIS and ASP.NET for Windows Vista.

INSTALLING IIS

1. Open the Control Panel. On many computers, you can do this by clicking **Start>Control Panel**.
2. Double-click **Programs and Features**.
3. Click **Turn Windows features on or off**.
4. Select **Internet Information Services**.
5. Expand **Internet Information Services>Web Management Tools>IIS 6 Management Compatibility**
6. Click **IIS 6 Metabase and IIS 6 configuration compatibility**.

INSTALLING ASP.NET

7. Under **Internet Information Services** expand **World Wide Web Services**.
8. Expand **Application Development Features**.
9. Click the check box next to **ASP.NET** to add a check mark.
10. Click **OK**.
11. Click **Start>Run**.The Run dialog opens.
12. In the **Open** field, copy and paste one of the following into the field, depending on whether you have a 32-bit or 64-bit system:

    32-BIT

    ```
    C:\WINDOWS\Microsoft.NET\Framework\v4.0.30319\aspnet_regiis -i
    ```

    64-BIT

    ```
    C:\WINDOWS\Microsoft.NET\Framework64\v4.0.30319\aspnet_regiis -i
    ```

13. Click **OK**.

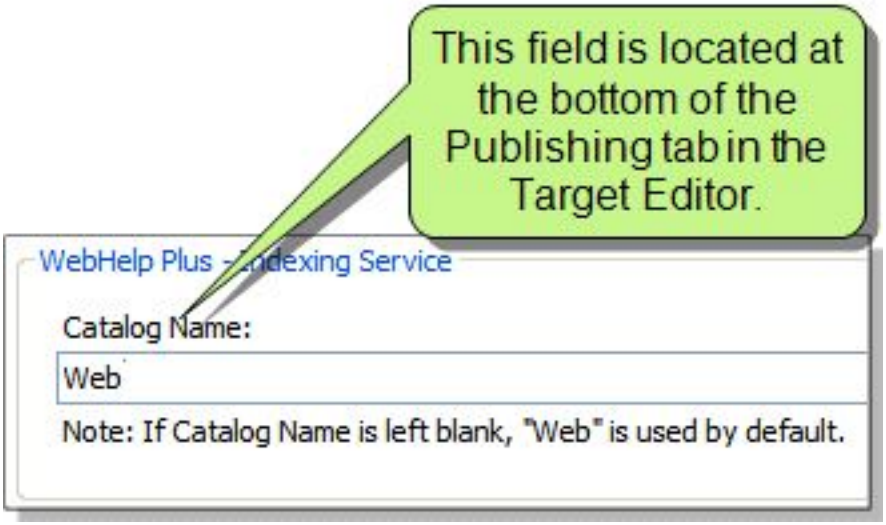
    A window opens, displaying the installation progress of ASP.NET. The window will close automatically when the installation finishes.

Setting Up a WebHelp Plus Target

The following steps show you how to set up your WebHelp Plus target for server-based output.

HOW TO SET UP THE WEBHELP PLUS TARGET

1. In Flare, open the WebHelp Plus target.The Target Editor opens.
2. Select the **Publishing** tab.
3. In the **Indexing Service Catalog Name** field, type the catalog that you are using for the output. In most cases, this will be `Web`, which is the default value. However, if you or someone in your company (e.g., network administrator) creates a custom catalog, you need to enter that name in the field.



What is a catalog? Microsoft Indexing Service stores all of its index information in catalogs. A catalog comprises index information and stored properties for a particular group of file system directories. When Indexing Service is installed with Windows XP, it automatically builds a catalog, called the System catalog, listing contents of all permanently attached disk drives. The System catalog contains an index for all documents except certain system and temporary files. If Internet Information Services (IIS) is installed, the Indexing Service also creates a web catalog, which contains an index of IIS, the default virtual server of the World Wide Web.

Note: This step is necessary only for Windows XP and Windows Server 2003.

4. Click to save your work.
5. Generate the target.
6. Publish the output to any location on the web server. If you want to use the default location that was created after you installed IIS, you can publish the output to C:\Inetpub\wwwroot. If you do this, you can use the "Default Web Site" folder that you will encounter when performing the next set of steps (i.e., configuring IIS on the production server).

   If you are working on your local machine for testing purposes, you do not need to publish the output. You can simply view your WebHelp Plus output. When you view WebHelp Plus output on your local computer, Flare creates a special folder called "MCPreview" within your "C:\Inetpub\wwwroot" folder, and it places a copy of your WebHelp Plus output files in it. This enables you to test the advanced features of WebHelp Plus on your local machine. (For Windows Vista users testing locally, the physical location is C:\MadCap\[Name of Project]\[Name of Main Entry File].htm.)

Configuring IIS on Production Server

The following steps show you how to configure IIS, depending on the operating system. These steps are necessary only for the server where you will be publishing the final output. It is not necessary to perform these steps on your local computer for testing WebHelp Plus output.

WINDOWS SERVER 2003 AND WINDOWS XP

1. Open the Control Panel. On many computers, you can do this by clicking **Start>Control Panel**.
2. Double-click **Administrative Tools**.The Administrative Tools dialog opens.
3. Double-click **Internet Information Services**.The Internet Information Services dialog opens.
4. Find your output folder and right-click the **Service** subfolder. Then select **Properties**.The Service Properties dialog opens.
5. Select the **Virtual Directory** tab.
6. Next to the **Application name** field, click the **Create** button.

> **Note:** If this button has already been selected, it will display as "Remove" instead. In this case, you do not need to click the button.

7. In the **Execute Permissions** drop-down, make sure **Scripts only** is selected. It should already be selected by default.
8. Click **OK**.

WINDOWS SERVER 2008 AND 2008 R2, WINDOWS 2012, WINDOWS 7, WINDOWS 8, AND WINDOWS VISTA

1. Open the Control Panel.
2. Select **System and Security**.
3. Select **Administrative Tools**. The various operating systems have different ways to find this option.
4. Open the Internet Information Services (IIS) Manager.
5. Expand the node with the computer name.
6. Expand the **Sites** folder.
7. Expand the website folder corresponding to the one that you published.
8. Find your output folder and right-click the **Service** subfolder. Then select **Convert to Application**.

9. Make sure the the application pool is using the .NET 4 framework.
    a. In the dialog click **Select**.
    b. From the drop-down select an application pool that is using the .NET 4 framework.
    c. Click **OK**.
10. Click **OK**.

Starting Microsoft Indexing Service

The following steps show you how to start the Microsoft Indexing Service on machines that are running Windows XP and Windows Server 2003. This procedure is not necessary for the other operating systems.

1. Open the Control Panel. On many computers, you can do this by clicking **Start>Control Panel**.
2. Double-click **Administrative Tools**.The Administrative Tools dialog opens.
3. Double-click **Computer Management**.The Computer Management dialog opens.
4. Expand **Services and Applications**.
5. Right-click **Indexing Service**.
6. In the context menu, click **Start**. The Indexing Service is now started.

Starting Microsoft Windows Search

The following steps show you how to start the Microsoft Windows Search on machines that are running Windows Server 2008. This procedure is not necessary for the other operating systems.

1. From the Start menu open the Server Manager dialog.
2. Click **Add roles**.The Add Roles Wizard opens.
3. Click **Next**.
4. Click the check box next to **Files Services**.
5. Click **Next** twice.
6. Click the check box next to **Windows Search Service**.
7. Click **Next** twice.
8. Click **Install**.
9. Click **Close**.

Enabling WebHelp Plus Search

The following steps show you how to enable WebHelp Plus search. These steps must be done for each catalog that you are using on the server (or on your local machine, if you are viewing WebHelp Plus output on your computer for testing purposes).

1. Navigate to the output folder for the WebHelp PlusHTML5 target on the server or on your local machine.

   If you are enabling WebHelp PlusHTML5 on your local machine, you can quickly find the output folder by doing the following.

   a. Open the Project Organizer.
   b. Double-click the **Targets** folder.
   c. Right-click on the target and select **Open Output Folder**.
2. In the output folder, double-click the **Service** folder.
3. Double-click the folder labeled **Console.ConfigureSearch**.
4. Double-click **ConfigureSearch.exe**. A window appears very briefly and then disappears.
5. Create a folder called "AutoMergeCache" at the root of the site. Then you must set security preferences on the AutoMergeCache folder so the application can create and update files.
   a. Right-click on the root folder and choose **Explore** to open Windows Explorer.
   b. Right-click on **AutoMergeCache** and choose **Properties**.
   c. On the **Security** tab click the **Edit** button.
   d. Click **Add**.
      i. Type `Everyone` and click **Check Names**, making sure it gets underlined.
      ii. Click **OK**.
   e. Make sure **Everyone** is highlighted and check the option for **Full Control**.
   f. Click **Apply**.
   g. Click **OK** to exit the Permission dialog.
   h. Click **OK** to exit the Properties dialog.

Testing WebHelp Plus Search

The following steps are optional for testing WebHelp Plus search (for Microsoft Windows Search).

1. In IIS right-click on the directory where your WebHelp Plus project is published to and choose **Explore**.
2. In the upper-right corner of the window you will see a Search input box. Perform a search for a term that is commonly found in your project.
3. If you see results, your project is ready to go live.

Including Non-XHTML Files in Search

This feature is supported in WebHelp Plus output.

When end users perform a search in your online output, you can ensure that non-XHTML files (e.g. PDF, DOC, XLS) are included in that search. The files do not even need to be linked to any of the content in your Flare project. This feature is available if you publish WebHelp Plus output to a web server running Microsoft Internet Information Services (IIS).

HOW TO INCLUDE NON-XHTML FILES IN SEARCH

1. **Enable WebHelp Plus Output** If you want to take advantage of the advanced server-side features of WebHelp Plus (i.e., automatic runtime project merging, faster search, searching of non-XHTML files), you must enable WebHelp Plus output. This includes performing the following tasks: (1) installing Microsoft Internet Information Services (IIS) and ASP.NET, (2) setting up the WebHelp Plus target and generating/publishing, (3) configuring IIS on the production server, (4) starting Microsoft Indexing Service or Microsoft Windows Search (depending on the operating system), and (5) enabling WebHelp Plus search. For more information see the online Help.
2. **Generate WebHelp Plus Output** In Flare, generate a target using the WebHelp Plus output format.
3. **Publish WebHelp Plus Output to Server** Publish the WebHelp Plus output to your Microsoft IIS Web server.
4. **(Optional) Add IFilter** File types that are automatically supported for WebHelp Plus search include: Microsoft Office files, HTML files, and TXT files. For other non-supported file types, such as PDF documents, you can download and install a simple IFilter in order to include that file type in the search. To find and download the IFilter for the file type that you want to include, go to a website that provides these (such as **http://www.ifilter.org**) and follow the instructions for downloading IFilters. You must install the appropriate IFilters on the server where the output files will be published, and if you are testing WebHelp Plus output on your computer, you need to install the IFilter(s) locally as well.
5. **Copy and Paste Non-XHTML Files to Appropriate Folder** Copy all of the non-XHTML files that you want to be included in the search. Then paste them in the appropriate subfolder of the WebHelp Plus output that you published. By default, WebHelp Plus will find any files located in the project output folder, as well as the "AutoSearch" subfolder. Therefore, you can paste your extra non-XHTML files in the AutoSearch subfolder.

E X A M P L E

http://www.xyzincorporated.com/help systems/MyTargetName/AutoSearch.

However, if there are any other folders where you want either XHTML or non-XHTML files to be stored (instead of, or in addition to, AutoSearch), you can perform some extra steps to allow this.

Let's say you also want searches in the Help system to provide results from files in the folder C:\ExternalSearchFolder. Here are the steps to allow this:

1. This folder must be accessible by IIS. Therefore, create a virtual directory in IIS for it. Following are steps for doing this.

    a. Open the Control Panel. On many computers, you can do this by clicking **Start>Control Panel**.

    b. Double-click **Administrative Tools**. The Administrative Tools dialog opens.

    c. Double-click **Internet Information Services**. The Internet Information Services (IIS) Manager dialog opens.

    d. Expand the **Web Sites** folder.

    e. Right-click on the **Default Web Site** folder and select **New>Virtual Directory**.

    f. Click **Next**.

    g. In the **Alias** field, enter a name for the subfolder (e.g., SearchFolder).

    h. Click **Next**.

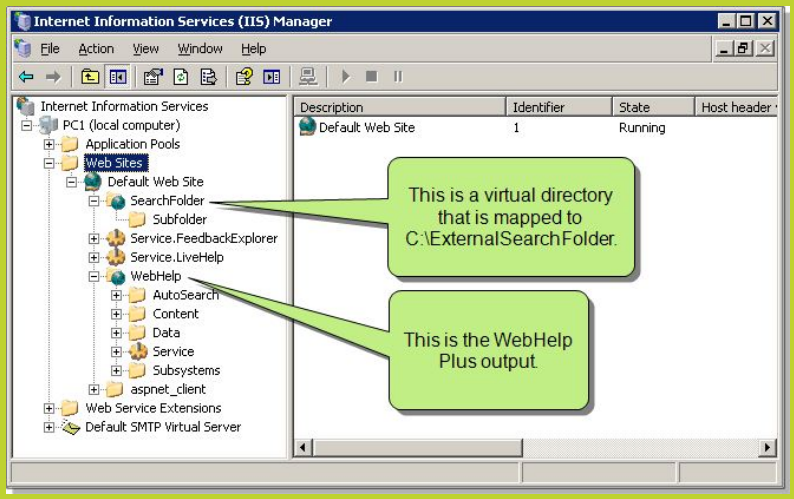
    i. Click the **Browse** button, then find and select the folder holding the content that you want to publish (e.g., C:\ExternalSearchFolder).

    j. Click **Next**.

    k. Make sure a check mark is next to **Read**.

    l. Click **Next**.

    m. Click **Finish**.



2. Create an XML file called "SearchFolders.xml" and place it in the "AutoSearch" folder in the WebHelp Plus output directory. The contents of this file will specify any virtual directories that WebHelp Plus should search. Following is what you would type in the SearchFolders.xml file. This example specifies just one folder, but you can add references to as many virtual directories as you need.

```
<?xml version="1.0" encoding="utf-8"?>

  <SearchFolders>

     <Url>/SearchFolder</Url>

  </SearchFolders>
```

When users perform a search in your output, those non-XHTML files will also be scanned and become accessible to the users.

Note: If you are testing WebHelp Plus output on your local machine, you need to view the output at least one time. When you view WebHelp Plus output on your local computer, Flare creates a special folder called

"MCPreview" within your "C:\Inetpub\wwwroot" folder, and it places a copy of your WebHelp Plus output files in it. This enables you to test the advanced features of WebHelp Plus on your local machine. (For Windows Vista users testing locally, the physical location is C:\MadCap\[Name of Project]\[Name of Main Entry File].htm.) When testing this search feature on your computer, you need to place the non-XHTML files in the AutoSearch subfolder at this location (as opposed to the output folder that was generated where your Flare project is located).

Note: If you are testing WebHelp Plus output on your local machine, you may need to wait a few minutes after viewing the output for the Indexing Service to fully scan your files. Otherwise, you may not immediately see the effects of the scan (e.g., searches of non-XHTML files, incorporation of merged output files) in the output. If you avoid performing other tasks during this period, the scanning of the files will be completed more quickly.

Note: If you want to test WebHelp Plus on your local computer,the advanced search features of WebHelp Plus are not operable.

Note: The information just provided revolves around WebHelp Plus output. However, you can also perform these same steps for HTML5 output if you have enabled the server-based option. For more information see the online Help.

CHAPTER 10

Searching the Outputs

Depending on the output type of your target, there are different search features available. This chapter discusses the following:

Search Methods and Syntax 132
Searching a DotNet Help System 146
Searching a Microsoft HTML Help System 151
Searching an HTML5 System 161
Searching a WebHelp System 166
Searching a WebHelp Mobile System 170
Searching for Community Results 172

Note: End user search features are supported by the Eclipse Help Viewer and search operations are provided by a plug-in that you develop using the Eclipse platform (see **org.eclipse.help.ui.searchEngine**). The Flare search engine does not handle Eclipse Help search operations.

Search Methods and Syntax

When entering a search query, each output type supports different search methods and syntax.

Full-Text Search

All online output types support full-text search.

For Eclipse Help targets, search is provided by the Eclipse platform. For server-based output, search is provided by the either the Microsoft Indexing Service or Windows Search.

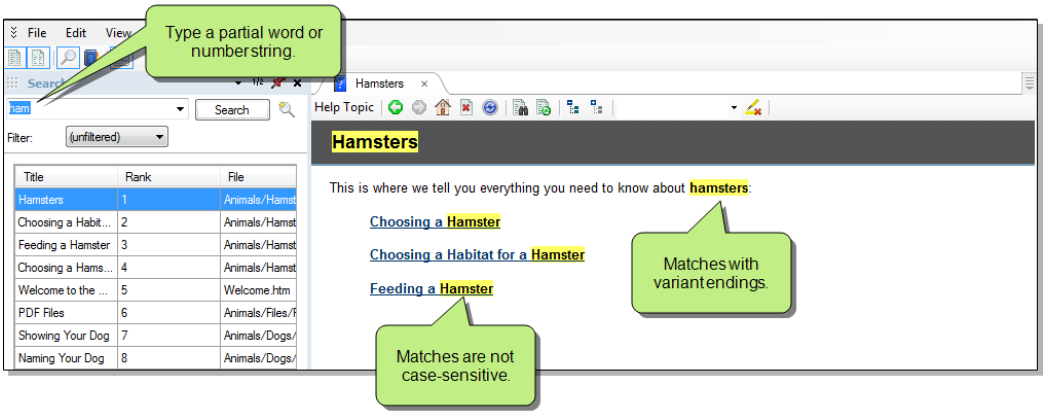
For all other output types, Flare scans all of the target content and creates a database index for search. When a user enters a search query, the search engine in the index to retrieve a list of topics with matches. In Flare, search results include these matches:

- **Case-insensitive Matches** Search is not case-sensitive. For example, a search for the word "run" will find matches for "Run" and "run."
- **Matches With Variant Endings** For example, a search for the word "run" will also find matches for words such as, "runner," "running," and "runs." Since matches are not case-sensitive, the results will include topics containing matches such as, "Runner," "Running," and "Runs."

HOW TO PERFORM A FULL TEXT SEARCH

1. Open the online output.
2. In the search field, type a partial word or number string.

   For example, type `ham`.
3. Press **Enter** or click **Search**.



Note: Search highlighting reveals the matches in the topic. In supported output types, you can change the highlighting color for search hits. See "Search Highlighting" on page 69.

Phrase Search

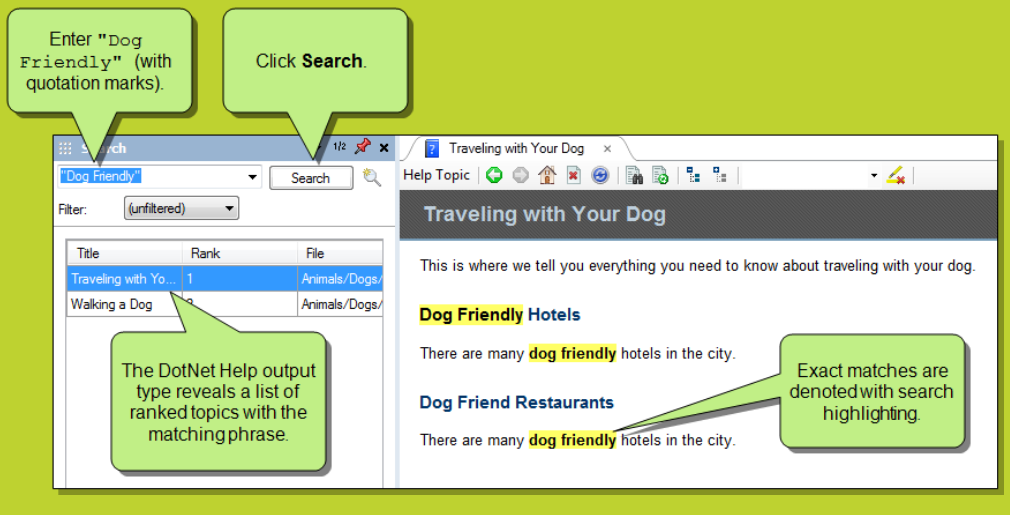
All online output types support phrase search.

For Eclipse Help targets, search is provided by the Eclipse platform. For server-based outputs, search is provided by the either the Microsoft Indexing Service or Windows Search.

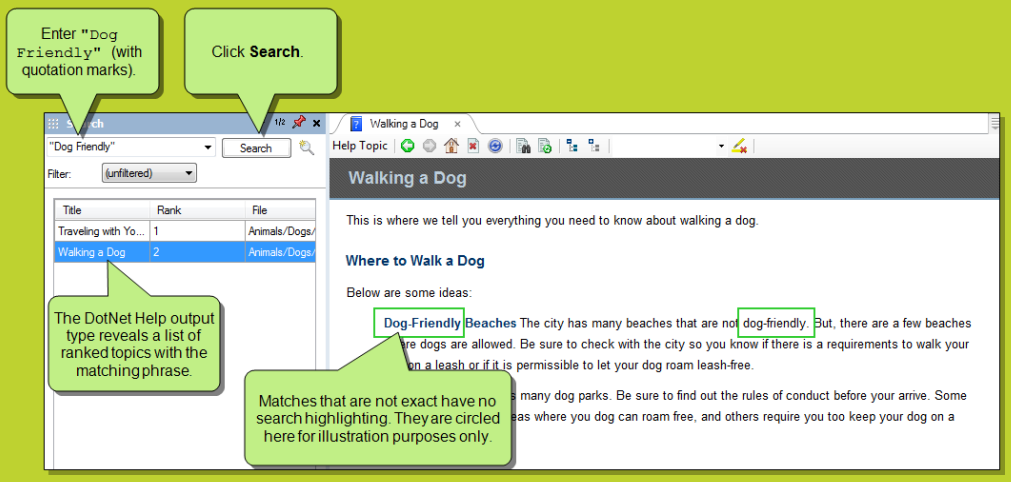
End users can search for phrases by enclosing their search terms in quotation marks. This is useful when end users want to restrict a search to locate terms that appear in an exact order. For example, you might want to search for a phrase such as "Dog Friendly."

E X A M P L E

Let's say you search for the phrase `"Dog Friendly"`. When you open the highest ranking topic, search highlighting reveals both "Dog Friendly" and "dog friendly" as a match.



In a lower ranking topic, notice the topic contains two similar matches (i,e., a hyphenated form of "dog-friendly" is found in the topic). Also observe that when matches are not exact, there is no search highlighting.



HOW TO PERFORM A PHRASE SEARCH

1. Open the online output.
2. In the search field, type a word, number, or character string.
3. Press **Enter** or click the **Search** button.
4. Double-click a match in the list to open the corresponding topic.

> **Important:** If you have enabled the stop words feature, search will not find matches for queries containing stop words in quotes. For example, if you search for the phrase "Pets are fun," search will only include topics with the words "pets" and "fun." This is because the word "are" is part of the stop word list. See "Including Stop Words in Search" on page 35.

> **Note:** Search highlighting reveals the matches in the topic. In supported output types, you can change the highlighting color for search hits. See "Search Highlighting" on page 69.

Boolean Operators

The DotNet Help, Microsoft HTML Help, WebHelp, and HTML5 output types support boolean operators —e.g., AND, OR, NEAR, NOT, and ( ). Note that when providing users with server-based WebHelp or HTML5 output, boolean operators are not supported. Operators can be used in combination with search terms to increase or decrease the number of search results.

REQUIREMENTS AND DEPENDENCIES

- **DotNet Help** Boolean search is supported on Microsoft Windows XP (and newer operating systems) when SQL Server Compact is installed on the computer building the Flare output .
- **Eclipse Help** Boolean search is supported by the search engine that you configure in the Eclipse platform. See the Eclipse documentation at **org.eclipse.help.ui.searchEngine**.
- **HTML Help** Boolean search is provided by the viewer in accordance with the Microsoft Compiled HTML (CHM) specification. You must select the supported boolean operator from a pre-defined drop-down list. See "Searching a Microsoft HTML Help System" on page 151.
- **HTML5** Boolean search is provided by Flare in client-based output only. When delivering server-based output, the Microsoft Indexing Service or Windows Search handles search. See the Microsoft documentation for information about the Indexing Service (**http://msdn.microsoft.com/en-us/library/ee805985(v=vs.85).aspx**) or Windows Search (**http://msdn.microsoft.com/en-us/library/windows/desktop/ff628790(v=vs.85).aspx**). See also "HTML5 Server-based Output" on page 83.
- **WebHelp and WebHelp Plus** Boolean search is provided by Flare in client-based output only. When delivering server-based output (WebHelp Plus), the Microsoft Indexing Service or Windows Search service handles search. See the Microsoft documentation for information about the Indexing Service (**http://msdn.microsoft.com/en-us/library/ee805985(v=vs.85).aspx**) or Windows Search (**http://msdn.microsoft.com/en-us/library/windows/desktop/ff628790(v=vs.85).aspx**). See also "WebHelp Plus Server-based Output" on page 107.

HOW TO SEARCH WITH BOOLEAN OPERATORS

In the table below, a check mark shows the operators supported by each client-based output type. It also details any supported variables and provides usage examples:

Operators	Description	Usage	DotNet Help	Microsoft HTML Help	HTML	WebHelp	AIR	WebHelp Mobile
AND	Use to narrow the search and retrieve only the topics that contain all of the words it separates.	Type `AND` between two or more terms. This is not case sensitive.	✓	✓	✓	✓	✓	✓
		Instead of the word `AND`, type the plus symbol (`+`).	✓	✓	✓	✓	✓	✓
		Instead of the word `AND`, type the ampersand symbol (`&`).	✓	✓	✓	✓	✓	✓

Operators	Description	Usage	DotNet Help	Microsoft HTML Help	HTML	WebHelp	AIR	WebHelp Mobile
OR	Use to search for two or more words. This broadens the search results by retrieving topics that contain any of the words it separates.	Type `or` between two or more terms. This operator is not case sensitive. When separating terms with a blank space, the OR is always inferred.	✓	✓	✓	✓	✓	✓
		Type the pipe symbol (|) instead of typing OR.	✓	✗	✓	✓	✓	✓
NEAR	Select from the operator list to find topics that contain matches that are in close proximity to each other.	This is only available in Microsoft HTML Help. The operator must be selected from a list.	✗	✓	✗	✗	✗	✗

Operators	Description	Usage	DotNet Help	Microsoft HTML Help	HTML	WebHelp	AIR	WebHelp Mobile
NOT	Use to search only for matching topics that do not contain the term following the operator.	Type `NOT` before a term. This operator is not case-sensitive.	✓	✓	✓	✓	✓	✓
		Type the exclamation mark (`!`) instead of the word NOT.	✓	✗	✓	✓	✓	✓
	Use to find topics that contain one term, but not the other.	Type a term, followed by the carat symbol (`^`), and then type another term.	✓	✗	✓	✓	✓	✓
	Use parentheses to combine boolean phrases and search terms.	Type parentheses `(` `)` around the combined terms.	✓	✗	✓	✓	✓	✓

Asterisk (*) Wildcard Search

In the DotNet Help, Microsoft HTML Help, HTML5, and WebHelp output types, end users can use the asterisk (*) wildcard character with the search feature as detailed below:

REQUIREMENTS AND DEPENDENCIES

- **DotNet Help** Asterisk (*) wildcard search is supported on Microsoft Windows XP (and newer operating systems) when SQL Server Compact is installed on the local computer building the Help .
- **Eclipse Help** Asterisk (*) wildcard search is supported by the search engine that you configure in the Eclipse platform. For details, see the Eclipse documentation at **org.eclipse.help.ui.searchEngine**.
- **HTML5 and WebHelp** For asterisk (*) wildcard search capabilities to be supported, you must enable the partial-word search feature. See "Enabling Partial-word Search" on page 31.

HOW TO SEARCH WITH THE ASTERISK (*) WILDCARD

In the table below, a check mark shows the different ways you can use the asterisk (*) wildcard in search. It also provides usage guidelines and examples. (Dot Net Help requires SQL Compact).

Placement	Usage	DotNet Help	Microsoft HTML Help	WebHelp	HTML
Before a Term	Place the asterisk (*) in front of a term to represent unknown characters.	✓	✓ **Note:** In Microsoft HTML Help, the asterisk (*) wildcard cannot be used in combination with other characters and symbols. For example, instead of searching for `*.doc`, end users must search for `*doc`.	✓	✓

Placement	Usage	DotNet Help	Microsoft HTML Help	WebHelp	HTML
Inside a Term	Place the asterisk (*) inside a term to represent unknown characters.	✓	✓	✗	✗
After a Term	Place the asterisk (*) after a term to represent unknown characters.	✓	✓	✓	✓

Partial-Word Search

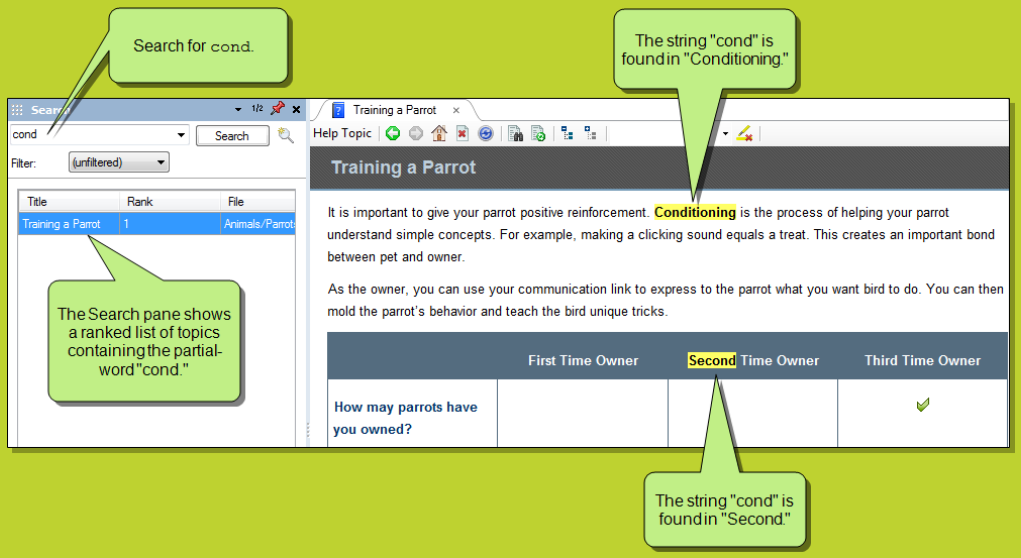
The DotNet Help, HTML5, WebHelp, WebHelp AIR, WebHelp Mobile, and WebHelp Plus output types support partial-word searches in their target outputs. This search method is similar to simple text search, only it allows users to search for partial-word and number strings. This feature can be enabled in the Performance tab of the Target Editor. See "Enabling Partial-word Search" on page 31.

For Eclipse Help, partial-search is provided by the Eclipse platform.

E X A M P L E S

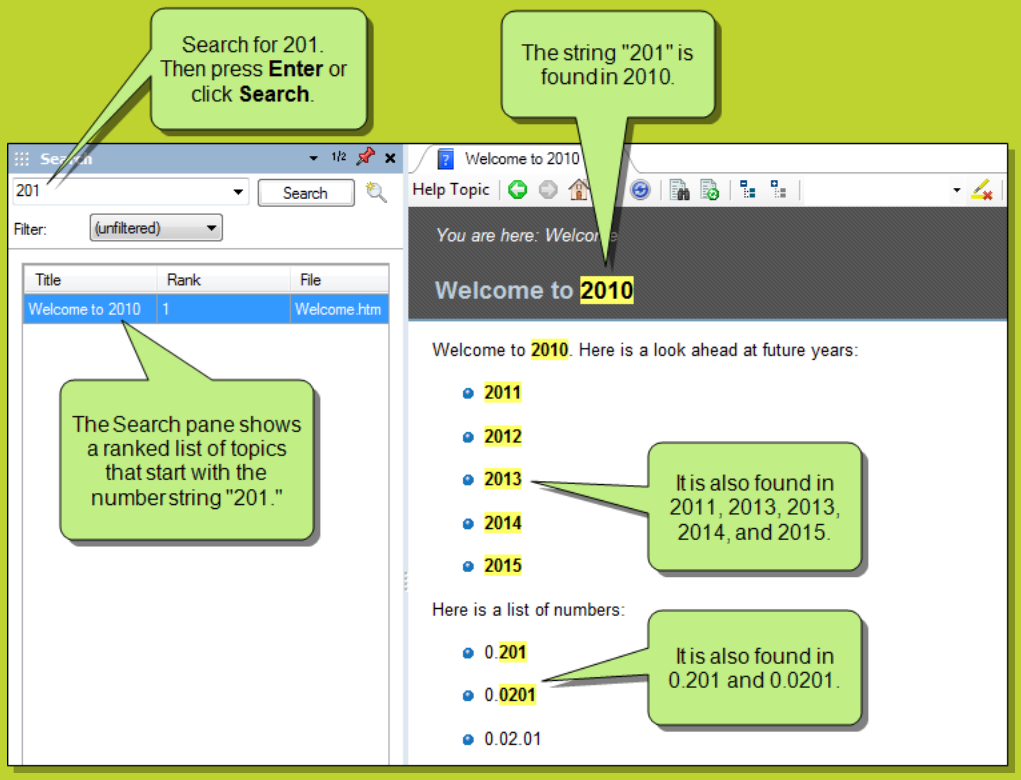
Search for `cond`.

As shown below, search retrieves topics containing the string "cond," such as "condition" and "second."



Search for 201.

As shown below, the search retrieves topics containing the number string "201," such as 2010, 2011, 2012, 2013, 2014, 2015, 0.201, and 0.0201.



HOW TO PERFORM A PARTIAL-WORD SEARCH

1. In the search field, type part of a word or number string.

   For example, type `cond`.

   > **Note:** The minimum number of characters that you can set for partial searches is 3. See "Enabling Partial-word Search" on page 31.

2. Press **Enter** or click **Search**.

   The system reveals a list of ranked topics that include matches for the entered search string.

3. Double-click a topic in the list to open it.

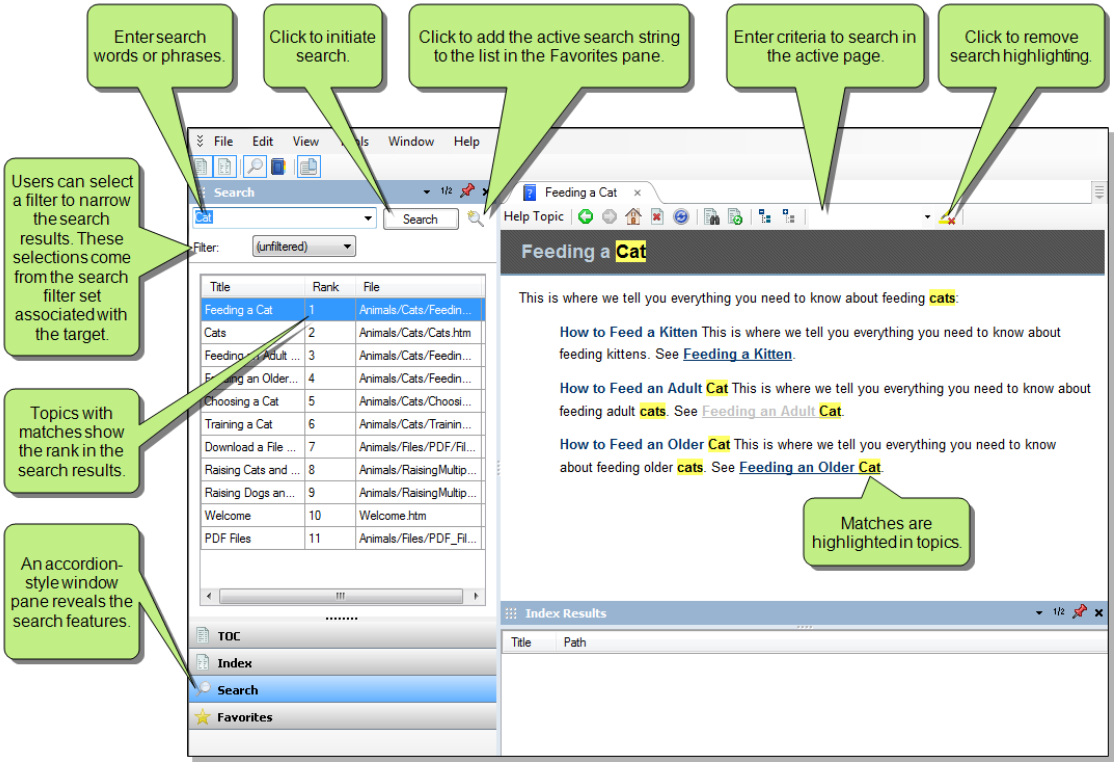
   > **Note:** Search highlighting reveals the matches in the topic. In supported output types, you can change the highlighting color for search hits. See "Search Highlighting" on page 69.

Searching a DotNet Help System

End users have a variety of options when searching a DotNet Help system.

Search Experience

The user interface for the DotNet Help system is provided by a proprietary viewer (i.e., the Help Viewer) which is designed specifically for use with Windows .NET applications. When an end user searches a DotNet Help system for information, the results show both the topic rank and title. Search highlighting also lets users quickly pinpoint the matches in topics. The example below shows you the DotNet Help output:



Features and Capabilities

This table details the search features and capabilities of the DotNet Help system. It also describes the options that you have for customizing the user interface:

Feature	Description	Content Developer Options
Search Pane	An accordion-style window pane that reveals the search features.	Cannot be turned on and off.
Search Field and Button	Type a search query. Then click the button or press **Enter** to initiate a search. **Note:** Asterisk (*) wildcard and boolean search capabilities are available. See "Search Methods and Syntax" on page 132.	Cannot be turned on and off.
Filter List	Provides users with the ability to narrow the scope of their search results to categories defined by a search filter set.	Cannot be turned on and off. Define the highlight color in the project's stylesheet. See "Search Highlighting" on page 69.
Add to Favorites Button	A button that lets users add the current search query to a Favorites list.	Cannot be turned on and off.
Favorites Pane	An accordion-style window pane that reveals the end user's favorite topics and searches.	Cannot be turned on and off.
Search Results	Lists search results in ranked order.	Cannot be turned on and off. Optimize topics to improve search results. See "Optimizing Search" on page 175.

Feature	Description	Content Developer Options
Search Highlighting	Highlights matching keywords in topics. **Note:** Matches are not highlighted when users perform searches with the asterisk (*) wildcard character.	Cannot be turned on and off. Define the highlight color in the project's stylesheet. See "Search Highlighting" on page 69.
Quick Search Field	Limits the scope of the search to the active topic.	Cannot be turned on and off.
Select Search Button	Opens the Search pane.	Cannot be turned on and off.
Remove Highlighting Button	Removes search highlighting from topics.	Cannot be turned on and off.

How to Search

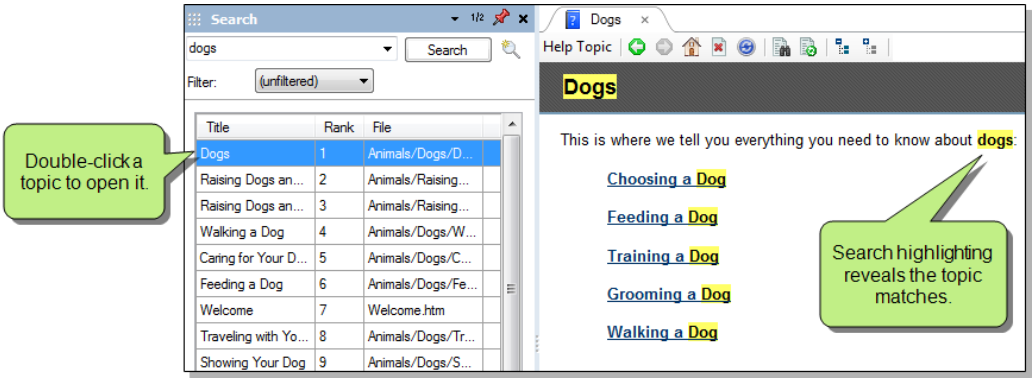
1. Open the DotNet Help system.
2. In the navigation pane, click the **Search** pane.
3. In the search field, type your query. Then click **Search** or press **Enter**.

> **Note:** Searches are not case-sensitive. See "Search Methods and Syntax" on page 132.

> **Note:** The search query can include boolean operators or the asterisk (*) wildcard character. See "Search Methods and Syntax" on page 132.

> **Note:** If a search filter set is added to the project, users can narrow the scope of the search by selecting an item from the **Filter** list. This limits the scope to search only the topics assigned to the selected filter. See "Search Filter Set Example" on page 53.

4. In the search results list, double-click one of the topics to open it. Search highlighting reveals the matches in the topic.



Note: The search highlighting colors can be customized by the content developer. See "Customizing the Highlight Color for Search Hits" on page 71.

Note: If you want to remove the highlighting from the active topic, click the **Remove all search highlighting** button in the Topic toolbar.

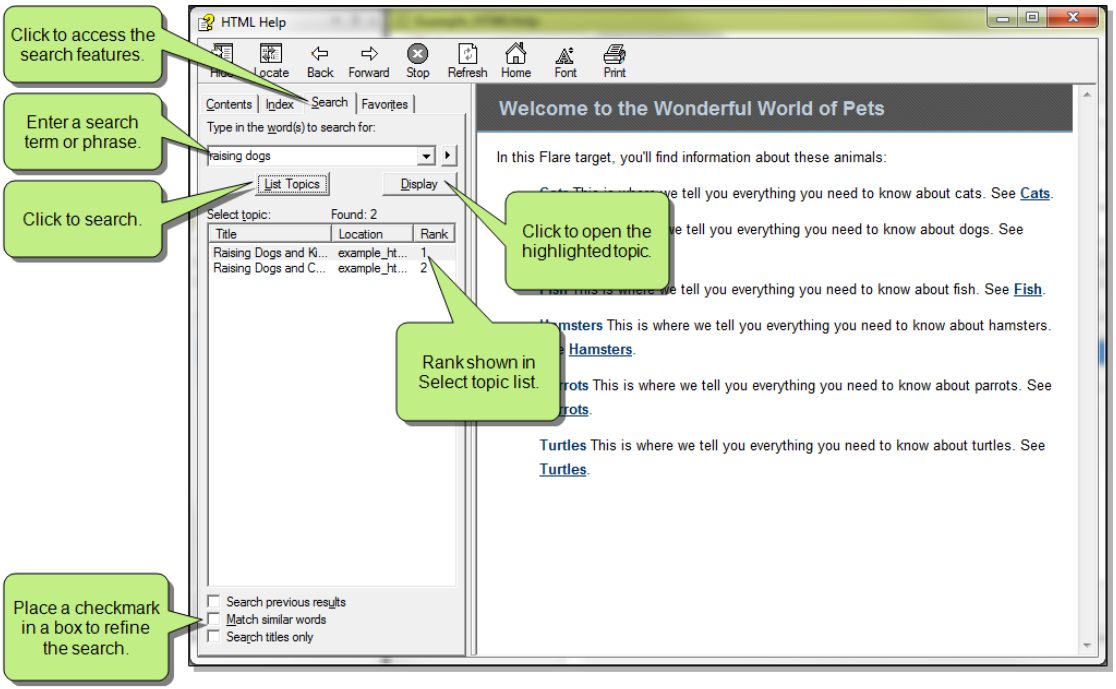
Searching a Microsoft HTML Help System

End users have a variety of options when performing a search in a Microsoft HTML Help system.

Search Experience

A Standard skin provides the user interface for a Microsoft HTML Help system. It also includes features defined by the Compiled HTML (CHM) specification.

When an end user searches a Microsoft HTML Help system for information, it reveals a list of topics containing the matching term or phrase. The search results shows matches by title, location, and rank. When an end user clicks a topic to open it, the matching terms are highlighted in the topic.



Features and Capabilities

This table details the search features and capabilities of the Microsoft HTML Help system. It also describes the options that you have for customizing the user interface:

Feature	Description	Content Developer Options...
Search Tab	A tab that reveals the search feature.	Enable the search feature using the Skin Editor. See "Enabling Search in Skins" on page 19.
Search Field and Button	Type a search query. Then click the button or press **Enter** to initiate a search. **Note:** Asterisk (*) wildcard and boolean search capabilities are available. See "Search Methods and Syntax" on page 132.	Cannot be turned on and off.
Boolean Operators List	A drop-down list of boolean operators that can be used with search.	Cannot be turned on and off. Supports the listed boolean operators only. See "Search Methods and Syntax" on page 132.
Advanced Search Check Boxes	A series of three advanced search check boxes: » Search previous results » Match similar words » Search titles only	Enable or disable these options in the Skin Editor by clicking the **HTML Help Setup**tab. Under **MisOptions**, place a check mark in the**Show Advanced Search** box.
Search Results	Lists search results in ranked order.	Cannot be turned on and off. Optimize topics to improve search results. See "Optimizing Search" on page 175.
Display Button	Opens the highlighted topic. End users can alternatively double-click a topic to open it.	Cannot be turned on and off.

Feature	Description	Content Developer Options...
Search Highlighting	Highlights matching keywords in topics.	Cannot modify search highlight color.

How to Search

1. Open the Microsoft HTML Helpsystem.
2. In the navigation pane, click the **Search** tab.
3. Type the search query. Then click **List Topics** or press **Enter**.

> **Note:** Searches are not case-sensitive. See "Search Methods and Syntax" on page 132.

> **Note:** The search query can include boolean operators or the asterisk (*) wildcard character. See "Search Methods and Syntax" on page 132.

HOW TO USE THE ADVANCED SEARCH OPTIONS

If you enabled the Advanced Search check boxes, users have option to refine the search query as follows:

- **Search Previous Results** If you want to search only the topics included in the previous results list, place a check mark in the **Search previous results** box.
- **Match Similar Words** To find words with similar spelling, place a check mark in the **Match similar words** box. For example, if you type `puppy` and select this check box, the search finds "puppy" and "puppies."
- **Search Titles Only** To search topics only for matches in the topic title, place a check mark in the **Search titles only** box.

4. In the search results, open the desired topic using one of these methods:
   a. Highlight a topic in the list. Then click **Display**.

      OR

   b. Double-click a topic in the list. Search highlighting reveals the matches in the topic.

> **Note:** If you want to remove the highlighting from the active topic, click the **Remove all search highlighting** button in the Topic toolbar.

Note: Unlike other output types, you cannot modify the search highlighting color in Microsoft HTML Help. See "Search Highlighting" on page 69.

Troubleshooting the No Topics Found Issue

A common issue encountered by Microsoft HTML Help developers is when a "No Topics Found" message appears while searching a CHM file.

Typically, this is the result of an unregistered dynamic link library (DLL) file on the computer building the Help file. The DLL is named "itcc.dll" and is a component of Microsoft's CHM specification. Its purpose is to supply the operating system running Flare with the ability to build a CHM file with index and search capabilities.

A variety of software vendors (particularly those that develop Help authoring tools) distribute a copy of the itcc.dll file along with their program installation files. Should you happen to install or uninstall program with a copy of this file (e.g., a Help tool or software program from another vendor or another MadCap software tool that requires this file), it is possible for other copies of the itcc.dll file to become unregistered.

To resolve this issue, the Flare \bin directory contains a batch file named RegisterItcc.bat. You can run this batch file to re-register the DLL in Windows.

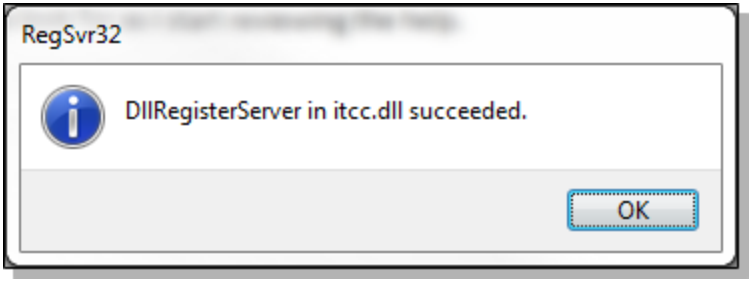
Note: Users running Windows Vista or Windows 7 may need to switch off the computer's User Account Control (UAC) settings before beginning. For instructions, visit the appropriate link: **http://windows.microsoft.com/en-us/windows-vista/turn-user-account-control-on-or-off** or **http://windows.microsoft.com/en-us/windows7/products/features/user-account-control**.

HOW TO REGISTER THE DLL USING THE BATCH FILE

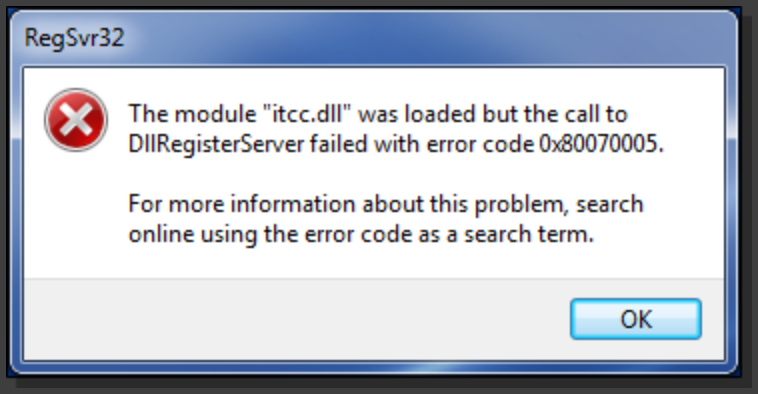
1. In Windows Explorer, navigate to the Flare installation's \bin directory. Typically, the path is as follows (where [#]= the Flare version number):
   - **Windows XP, Vista, 7, or 8 (64-bit versions)** `C:\Program Files (x86)\MadCap Software\MadCap Flare V[#]\Flare.app\Resources\Bin`
   - **Windows XP, Vista, 7 or 8 (32-bit versions)** `C:\Program Files\MadCap Software\MadCap Flare V[#]\Flare.app\Resources\Bin`

     Note: The path that you use depends on your specific system configuration. For users running the 64-bit version of Windows, you will see two folders named Program Files on your C: drive. Typically, the folder named "\Program Files (x86)" stores non-native 32-bit applications, such as Flare, and the "\Program Files" folder stores native 64-bit applications. If you installed Flare in a different location, you need to determine the appropriate path to the \bin directory.
2. In the bin directory, double-click the file named **RegisterItcc.bat**.

This runs the batch file. If the registration is successful, the following message appears:



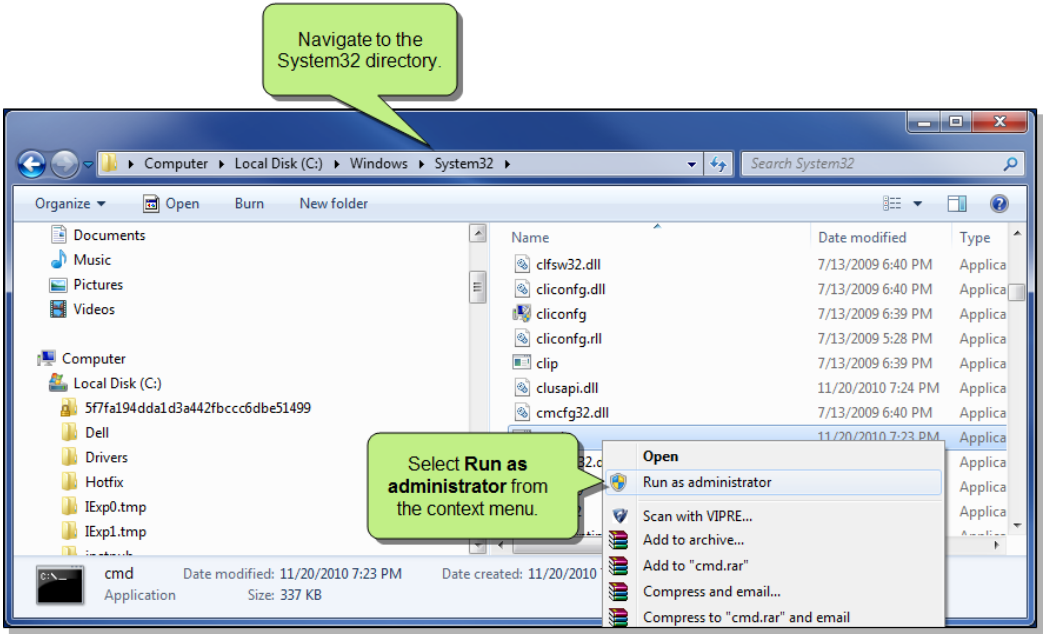
Note: If the following error message appears, the account you are using may not have sufficient permissions to run the batch file on the computer.



You will need to use your computer's command line utility to register the DLL as described below or contact your Windows administrator for assistance with registering the DLL.

HOW TO REGISTER THE DLL USING THE COMMAND LINE UTILITY

1. In Windows Explorer, open the computer's System32 directory. The path is **C:\Windows\System32**.
2. Right-click the application file named **cmd.exe** and select **Run as administrator** from the context menu.



3. If the User Account Control message appears, click **Yes**. This allows you to use the command prompt to make changes on the system.

> **Note:** In Windows 7, you can use this method to run the command prompt as an administrator when you are using an account that does not have administrative credentials. This typically allows most users to make changes to the itcc.dll file in the Flare \bin directory.

4. At the command prompt, do the following:

a. Type `cd` to change directories and press the **SPACEBAR**. Then type the path to the Flare \bin directory as shown in this example:

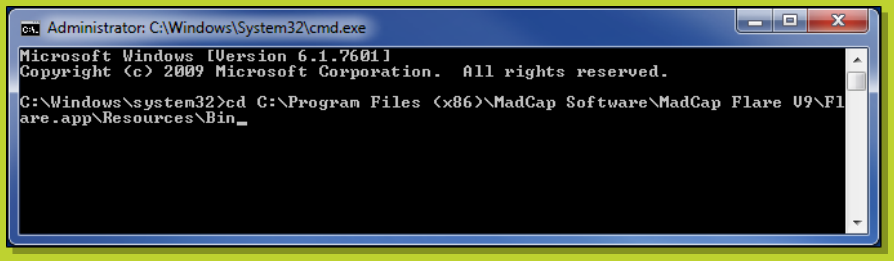
E X A M P L E

Use this information to enter the path:

```
C:\Program Files (x86)\MadCap Software\MadCap Flare V[#]\Flare.ap-
p\Resources\Bin
```

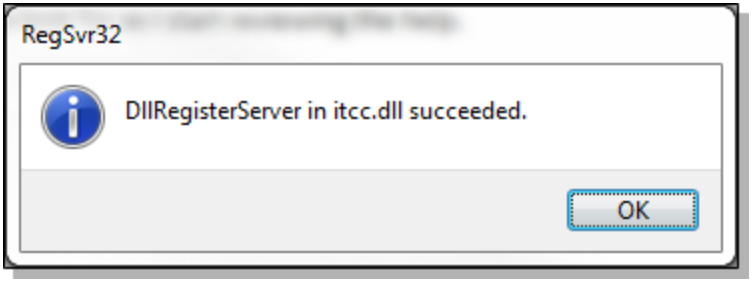
Where [#] appears above, you must enter the correct Flare version number when typing the system path (e.g., V8, V9, V10.). Below is an example:

```
C:\Program Files (x86)\MadCap Software\MadCap Flare V9\Flare.ap-
p\Resources\Bin
```



b. Press **Enter**.

5. At the command prompt, type: `registeritcc.bat`. Then press **Enter**. This runs the batch file. If the registration is successful, this message appears:



6. Click **OK** to acknowledge the message.
7. Close the command prompt.

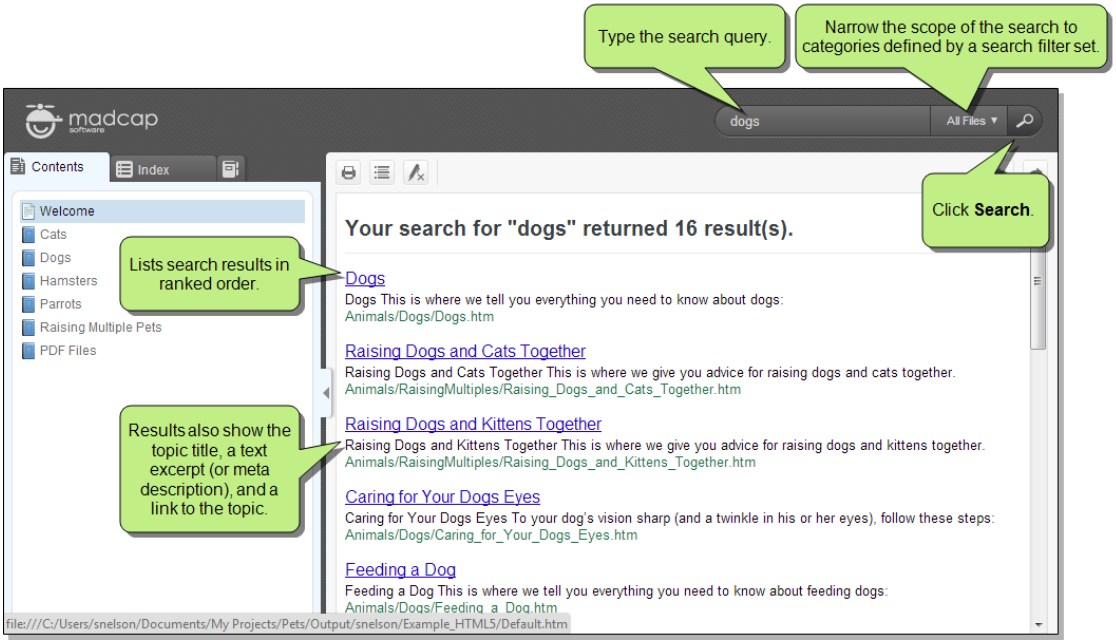
After registering the DLL, build your Microsoft HTML Help output again. Then retry your search in the output.

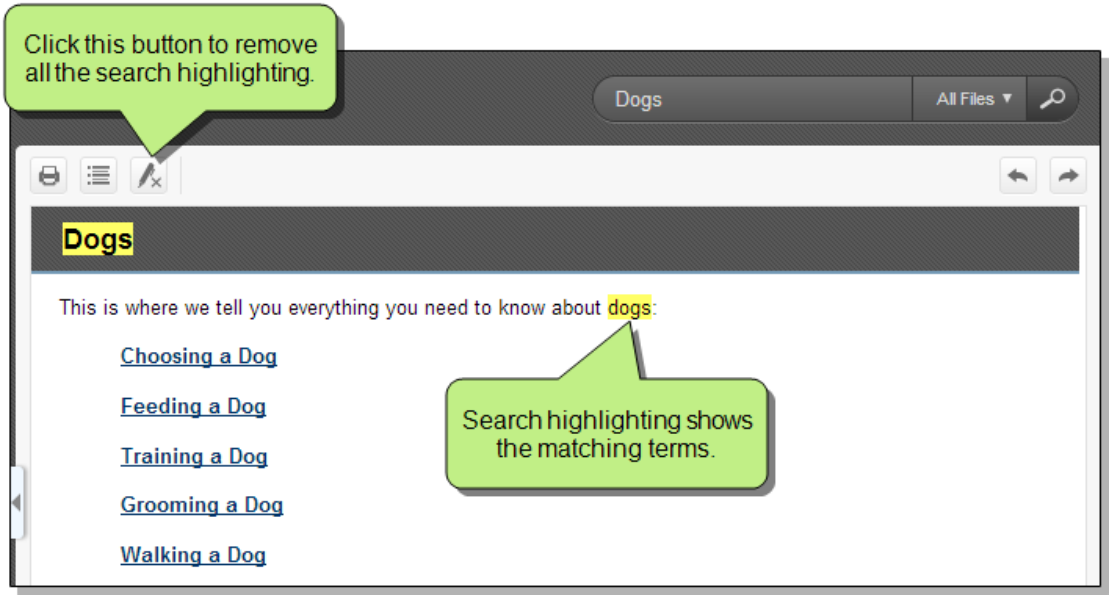
Searching an HTML5 System

End users have a variety of options when performing a search in a HTML5 system.

Search Experience

An HTML5 skin provides the user interface for an HTML5 system. When an end user searches an HTML5 system for information, it reveals a list of topics containing the matching term or phrase. The search results show the topic title and the topics are listed in ranked order. The results also include an excerpt of the paragraph text from the topic (or you can opt to use the meta description that you add to the topic properties). This helps users decide if the page contains the information they were looking for. When a user clicks a topic to open it, the matching terms are highlighted in the topic.




Click this button to remove all the search highlighting.
Dogs
All Files
Dogs
This is where we tell you everything you need to know about dogs:
Choosing a Dog
Feeding a Dog
Training a Dog
Grooming a Dog
Walking a Dog
Search highlighting shows the matching terms.

Features and Capabilities

This table details the search features and capabilities of the HTML5 system. It also describes the options that you have for customizing the user interface:

Feature	Description	Content Developer Options
Search Field and Button	Type a search query. Then click the button or press **Enter** to initiate a search. **Note:** Asterisk (*) wildcard and boolean search capabilities are available. See "Search Methods and Syntax" on page 132.	Change the look of the field and button. See "Search Results in HTML5 Skins" on page 76.
Filters List	Provides users with the ability to narrow the scope of their search results to categories defined by a search filter set.	Create filter selections by adding a search filter set and associating it with the Flare target. See "Creating Search Filters" on page 49 and "Associating a Search Filter Set with a Target" on page 50. Change the appearance of the drop-down in the Skin Editor. See "Search Results in HTML5 Skins" on page 76.
Search Results	Lists search results in ranked order. **Note:** If you are using Pulse, your search results list may include community results. See "Searching for Community Results" on page 172.	Change the appearance of your search results. See "Search Results in HTML5 Skins" on page 76. If you are using Pulse, you have the option to display community results in search.
Search Highlighting	Highlights matching keywords in topics. **Note:** Matches are not highlighted when users perform searches with the asterisk (*) wildcard character.	Define the highlight color in the project's stylesheet. See "Search Highlighting" on page 69.

Feature	Description	Content Developer Options
Remove Highlighting Button	Removes search highlighting from topics.	Include this button in the toolbar.
Search Non-HTML Files and Faster Search **(Server-Based Output Only)**	When end users perform a search in your online output, you can ensure that non-XHTML files (e.g. PDF, DOC, XLS) are included in that search. Search performance is also faster.	Include non-HTML files in search results and enjoy faster search performance when publishing server-based output. See "Including Non-XHTML Files in HTML5 Search" on page 102.

How to Search

1. Open the HTML5 system.
2. In the search field, type the search query. Then click the **Search** button or press **Enter**.

> **Note:** Searches are not case-sensitive. See "Search Methods and Syntax" on page 132.

> **Note:** If a search filter set is added to the project, users can narrow the scope of the search by selecting an item from the **Filter** list. This limits the scope to search only the topics assigned to the selected filter. See "Search Filter Set Example" on page 53.

3. In the search results list, double-click one of the topics to open it. Search highlighting reveals the matches in the topic.

> **Note:** The search highlighting colors can be customized by the content developer. See "Customizing the Highlight Color for Search Hits" on page 71.

> **Note:** If you want to remove the highlighting from the active topic, click the **Remove all search highlighting** button in the Topic toolbar.

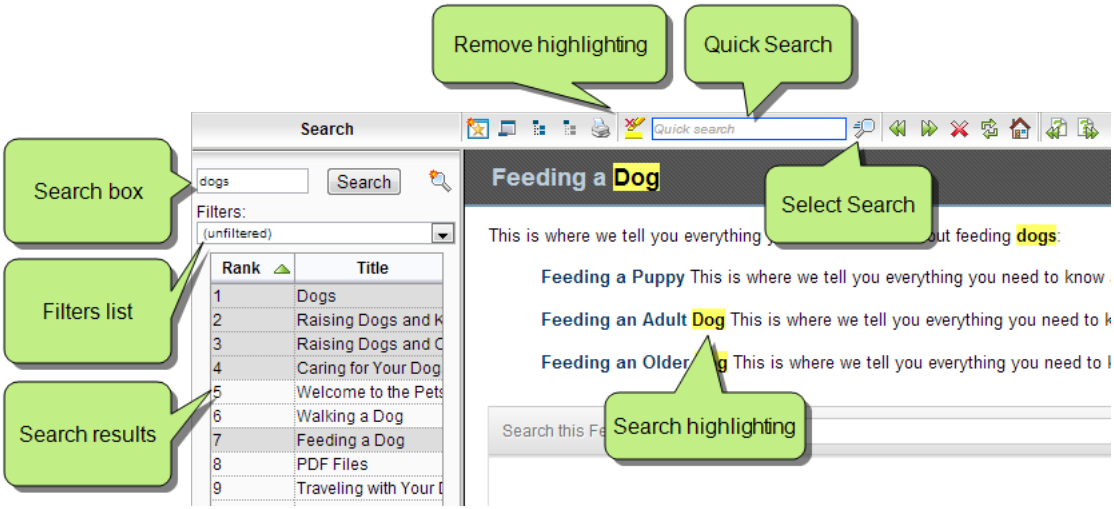
Searching a WebHelp System

This feature is supported in WebHelp, WebHelp AIR, and WebHelp Plus output.

End users have a variety of options for searching a WebHelp, WebHelp AIR, or WebHelp Plus system. To learn about the WebHelp 2.0 (HTML5) system, see "Searching an HTML5 System" on page 161.

Search Experience

A Standard skin provides the user interface for a published WebHelp system. When an end user searches a WebHelp system for information, the results show the topic rank and title. When the user opens a topic, search highlighting reveals the matches.



Features and Capabilities

This table details the search features and capabilities of the WebHelp system. It also describes the options that you have for customizing the user interface:

Feature	Description	Content Developer Options
Search Pane	An accordion-style window pane that reveals the search features.	Enable the search feature using the Skin Editor. See "Enabling Search in Skins" on page 19.
Search Field and Button	Type a search query. Then click the button or press **Enter** to initiate a search. **Note:** Asterisk (*) wildcard and boolean search capabilities are available. See "Search Methods and Syntax" on page 132.	Change the tooltip and button. .
Filter List	Provides users with the ability to narrow the scope of their search results to categories defined by a search filter set.	Create filter selections by adding a search filter set and associating it with the Flare target. See "Creating Search Filters" on page 49 and "Associating a Search Filter Set with a Target" on page 50.
Add to Favorites Button	A button that lets users add the current search query to a Favorites list.	Enable the Favorites feature to give users the ability to save search strings to the favorites list.
Favorites Pane	An accordion-style window pane that reveals the end user's favorite topics and searches.	Enable the Favorites feature to give users the ability to save search strings to the favorites list.
Search Results	Lists search results in ranked order. **Note:** If you are using Pulse, your search results list may include community results. See "Searching for Community Results" on page 172.	If you are using Pulse, you have the option to display community results in search.

Feature	Description	Content Developer Options
Search Highlighting	Highlights matching keywords in topics. **Note:** Matches are not highlighted when users perform searches with the asterisk (*) wildcard character.	Define the colors used for search highlighting. See "Search Highlighting" on page 69.
Quick Search Field and Button	Users can search for matches in the active topic by entering terms in the field. Asterisk (*) wildcard and boolean search is not supported.	Enable this field in the toolbar.
Remove Highlighting Button	Users can remove any search highlighting.	Include this button in the toolbar.
Search Non-HTML Files and Faster Search **(WebHelp Plus Only)**	When end users perform a search in your online output, you can ensure that non-XHTML files (e.g. PDF, DOC, XLS) are included in that search. Search performance is also faster.	Include non-HTML files in search results and enjoy faster search performance when publishing server-based output. See "Including Non-XHTML Files in Search" on page 127.

How to Search

1. Open the WebHelp, WebHelp AIR, or WebHelp Plus system.
2. In the navigation pane, click **Search**.
3. In the entry field, type the search query. Then press **Enter** or click **Search**.

> **Note:** Searches are not case-sensitive. See "Search Methods and Syntax" on page 132.

> **Note:** The search query can include boolean operators or the asterisk (*) wildcard character. See "Search Methods and Syntax" on page 132.

> **Note:** If a search filter set is added to the project, users can narrow the scope of the search by selecting an item from the **Filter** list. This limits the scope to search only the topics assigned to the selected filter. See "Search Filter Set Example" on page 53.

4. In the search results list, double-click one of the topics in the search list to open it. Search highlighting reveals the matches in the topic.

> **Note:** The search highlighting colors can be customized by the content developer. See "Customizing the Highlight Color for Search Hits" on page 71.

Searching a WebHelp Mobile System

End users have a variety of options when performing a search in a WebHelp Mobile system.

Search Experience

A WebHelp Mobile skin provides the user interface for a published WebHelp Mobile system. When an end user searches a WebHelp Mobile system for information, it reveals a list of topics containing the matching term or phrase. These search results show the topic title results in ranked order. When an end user clicks a topic to open it, search highlighting reveals the matches.

Features and Capabilities

This table details the search features and capabilities of the WebHelp Mobile system. It also describes the options that you have for customizing the user interface:

Feature	Description	Content Developer Options...
Search Field and Button	Type a search query. Then tap the button to initiate a search.	Enable the search feature using the Skin Editor. See "Enabling Search in Skins" on page 19. Change the appearance of the Search field and button.
Search Results	Lists search results in ranked order.	Optimize topics to improve search results. See "Optimizing Search" on page 175.
Search Highlighting	Highlights matching keywords in topics.	Define the highlight color in the project's stylesheet. See "Search Highlighting" on page 69.

How to Search

1. Open a WebHelp Mobile system on a device.
2. In the search field, type a search query. Then tap **Search**.

   Note: Searches are not case-sensitive. See "Search Methods and Syntax" on page 132.

3. In the search results, tap the desired topic to open it. Search highlighting reveals the matches in the topic.

Note: If you are generating WebHelp Mobile output, please note that search is not supported in LG WebOS (Palm WebOS).

Searching for Community Results

This feature is available to the following types of Pulse users: **Administrators**, **Employees**, and **Customers**.

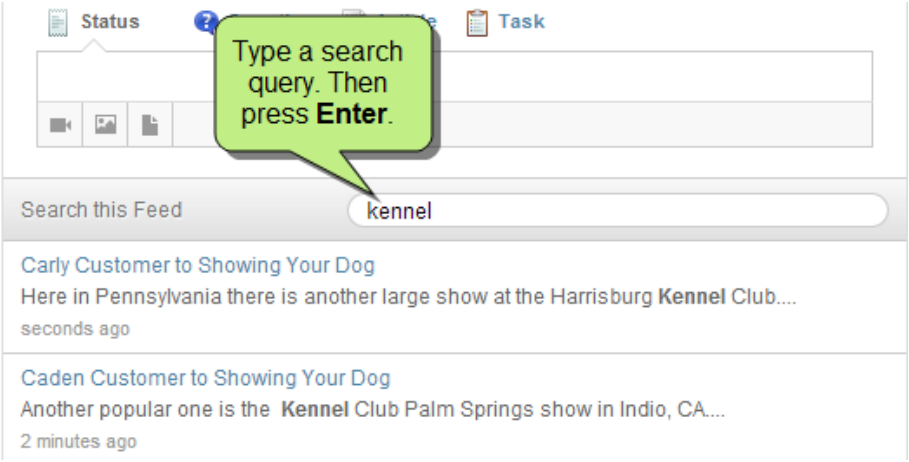
When integrating a Pulse system with a Flare community, you have two different search options. You can search a feed in Pulse or, if you enable the feature, you can extend the scope of a Flare search to include the Flare community results stored in Pulse.

Searching a Pulse Feed

In the Flare output, users can search a Pulse feed for matches. With this method of search, the scope of the search is limited to the active topic feed.

HOW TO SEARCH A PULSE FEED

1. Log into the Flare output or Pulse dashboard using a registered Pulse account.
2. In the embedded discussion form, type a search query in the **Search this Feed** box.
3. Press **Enter**. This searches only the active feed.



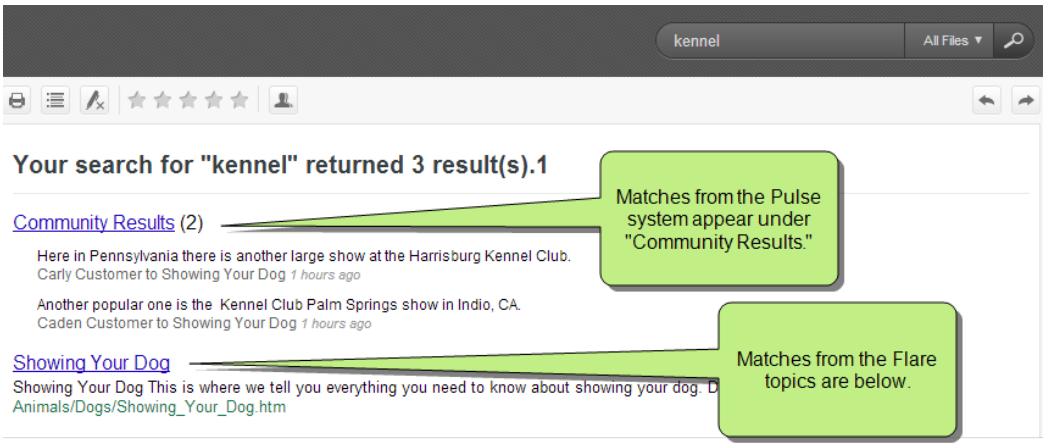
Searching the Flare Output for Community Results

If you enable the display of community search results in the Flare skin (i.e., select **Display community search results**), the scope of a Flare search can be extended to include matching community activity from Pulse.

HOW TO SEARCH THE FLARE OUTPUT FOR COMMUNITY RESULTS

1. Log into the Flare output using a registered Pulse account.
2. In the search entry field associated with the Flare output, type your search query and then press **Enter**.

3. In the search results page, any posts containing your search terms appears under a heading titled "Community Results." Any matching Pulse activity is listed beneath the heading.



CHAPTER 11

Optimizing Search

There are several optimization tasks you can follow to improve the quality of your search results.

This chapter discusses the following:

Ranking Search Results 176
Optimizing Your Content 179
Meta Descriptions for Topics 195
Optimizing Your Site 197

Ranking Search Results

The Flare search database generates organic search results and looks at numerous signals, factors, and metrics to determine how relevant the results are to the query terms. Understanding how searches are ranked in the different output types helps you determine strategies for optimizing your search results.

RANKING RESULTS—DOTNET HELP, WEBHELP, WEBHELP AIR, WEBHELP MOBILE, AND HTML5

Below is a general explanation about the Flare search engine:

CONTENT SIGNALS

When end users enter their query terms in output, the search engine looks at a variety of signals, such as:

- Do the search term(s) occur as the first word (or first words) of the topic title?
- Do the search term(s) occur in the topic title?
- Do the search term(s) occur in the file name?
- Do the search term(s) occur in a heading tag?
- Do the search term(s) occur in the body of a topic?
- How many times do the search term(s) occur in the body of the topic?
- Do the search term(s) occur in an index marker in the topic?
- Do the search term(s) occur in close proximity to one another (i.e., how close together are the keywords?) in the body of a topic?

CONTENT WEIGHTING

As with most search engines, Flare takes a variety of factors into account to when ranking its search results. Since retrieved results are relative to the search query and indexed content, the table below describes in general terms how different content elements are weighted:

Content Elements	Description
Title Tags	The topic title lets readers know the topic of a particular page. It is placed in a <title> tag, within a <head> tag in HTML documents. You can add a topic title by right-clicking the topic in the Content Explorer, and selecting **Properties** from the context menu. In the Properties dialog, click the **Topic Properties** tab, and enter text in the **Topic Title** field. You also have the option to leave the Topic Title field blank, in which case the first topic heading will be used as the topic title by default.
H1 Heading Tags	Keywords contained in the <h1> tag are given less weight than the topic title, but they are still an important factor.
File Names	Keywords included in a file name are factored into search.
Index Keywords in Topics	The search engine looks at topics for index keywords. Index keywords in a topic have less weight than <h1> tags, but more weight than subsequent heading tags (e.g., <h2> through <h6> **Note:** If you do not want index keywords to be considered when retrieving search results, you can exclude them from the search. See "Excluding Index Entries From Search" on page 28.
Subsequent Heading (H2-H6) Tags	The search engine also looks for keywords in <h2> through <h6> tags in your topics.
In the Body Text	The search engine also gives weight to factors such as keyword density, frequency, proximity, and the use of styles or emphasis in the body of document (i.e., text contained within the <body> tag on an HTML page).

RANKING RESULTS—SERVER-BASED HTML5 AND WEBHELP PLUS

If you enable server-based output for HTML5 or WebHelp Plus, the Flare the search engine is supported by one of these tools:

- **Microsoft Indexing Service** To learn about the Microsoft Indexing Service, see Microsoft's documentation. Here is a link to get you started: **http://technet.microsoft.com/en-us/library/cc723263.aspx#XSLTsection123121120120**
- **Windows Search Service** To learn about the Windows Search Service, see Microsoft's documentation. Here is a link to get you started: **http://msdn.microsoft.com/en-us/library/windows/desktop/aa965362(v=vs.85).aspx**

See "HTML5 Server-based Output" on page 83 or "WebHelp Plus Server-based Output" on page 107.

RANKING RESULTS—ECLIPSE HELP

Search is provided by the Eclipse platform. You can configure a variety of different search options in Eclipse. For more information, see the Eclipse documentation: **org.eclipse.help.ui.searchEngine**.

Optimizing Your Content

There are a variety of tasks you can perform to optimize your content. This includes adjusting topic titles, heading tags, file names, index keywords, body text, and meta descriptions.

TOPIC TITLES

For Flare and for search engine providers, the topic title is one of the most important considerations taken into account when the ranking search results. Topic titles are important because in addition to including important keywords, as shown below, titles are also highly visible elements in search results:

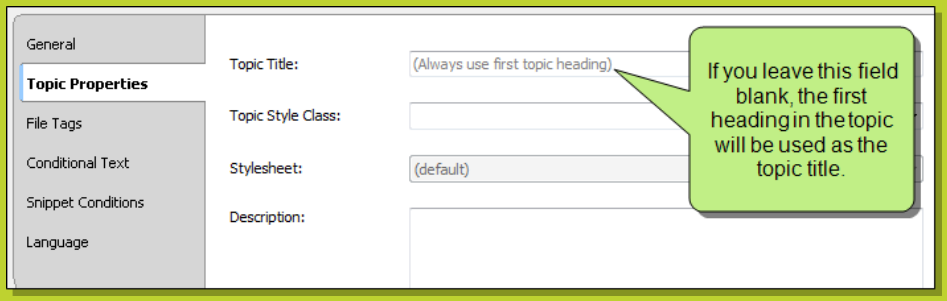
Where Topic Titles are Visible
Flare Search Results
Web Browsers
Search Engine Results
Social Media Bookmarks

Here are some recommendations for improving the quality of your topic titles for search optimization:

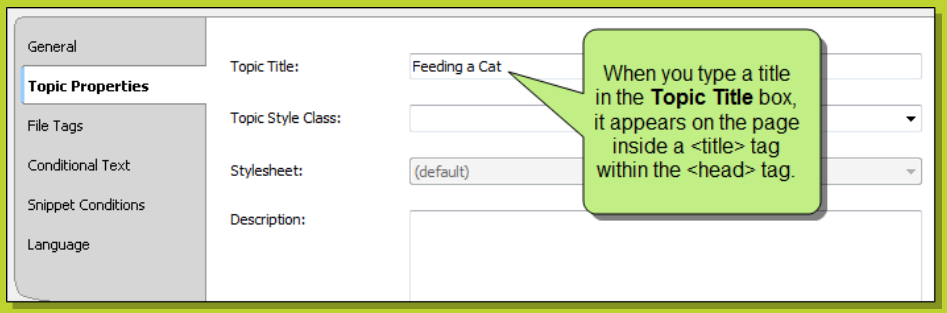
- **Give Each Topic a Unique Title** Every page in your output should have a unique topic title. It should also accurately describe the page content.
- **Add Only One Title Per Topic** A page should have only one title. For best results, it should be contained in the <Title> tag. In Flare, you can set the topic title in the Topic Properties tab of the Properties dialog. You have the option to always use the first topic as the title or you can manually enter a topic title.

EXAMPLES

In the topic Properties dialog, you can use the first heading in each topic as the topic title by default. When you use this option, the topic title is not included within a <head> tag on the page.



You also have the option of manually typing a topic title in the Topic Title field of the Topic Properties tab. When you use this option, the topic title is included in a <title> tag within the <head> tag on the page.



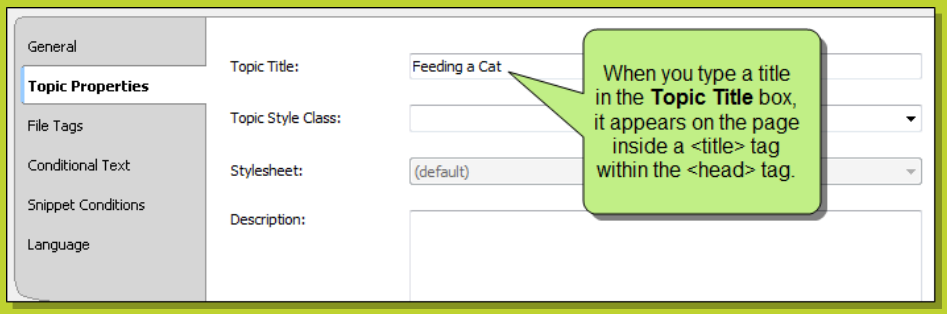
» **Contain the Title Tag in the Head Tag** Most search engine optimization (SEO) experts agree that you can improve page rank if you include the topic <title> tag within the <head> tag.

E X A M P L E

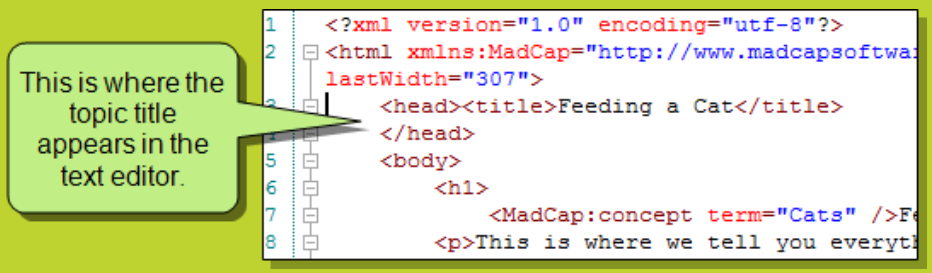
Below is an example of the HTML code for a topic title:

```
<head><title>Feeding a Cat</title></head>
```

In order for the title "Feeding a Cat" to appear in a <title> tag within the <head> tag, open the Properties dialog for the topic. In the Topic Properties tag, type the title:



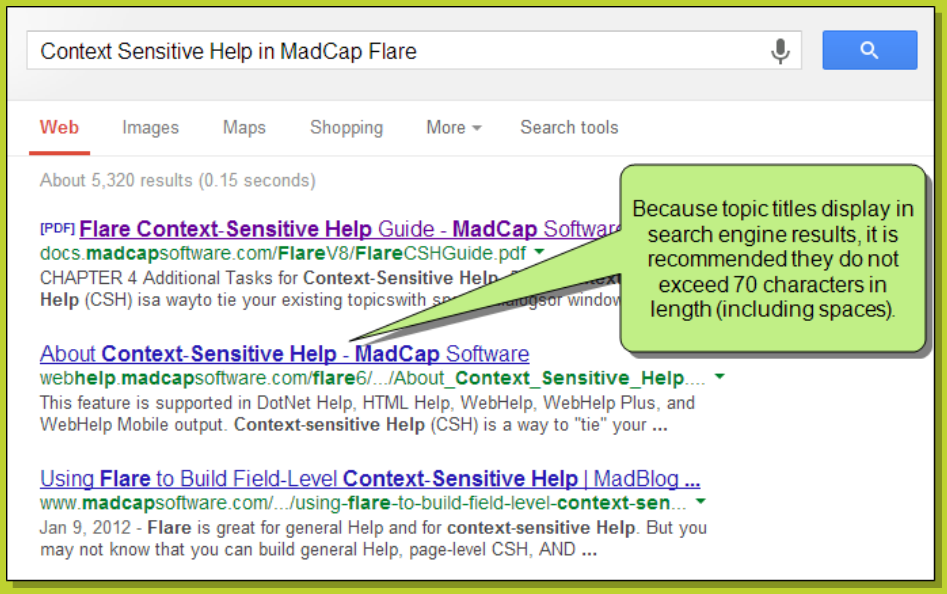
Below is an example of how the title appears in the Flare Text Editor:



» **Limit Title Length to 70 Characters** Because topic titles display in search engine results, experts recommend limiting page titles to a maximum of 70 characters including spaces. This increases the odds of end users clicking the link.

E X A M P L E

Because titles display on search engine results pages, titles should be limited to a maximum of 70 characters (including spaces).

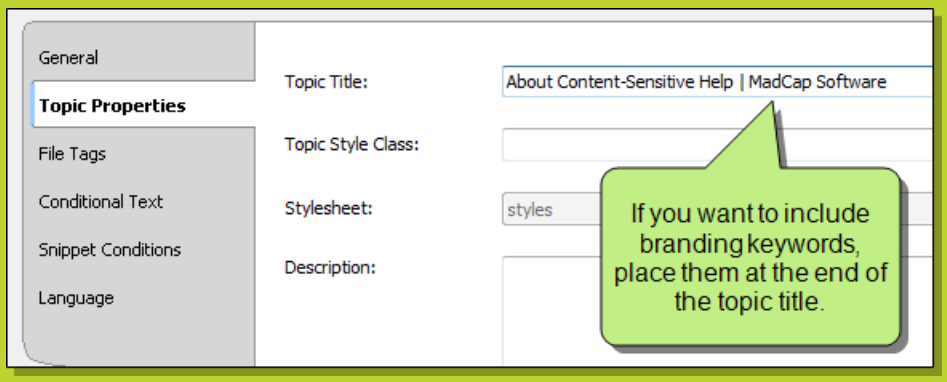


» **Place Important Keywords at the Front of the Title Tag** For best results, order the keywords in a title from most important to least important. For example, if you anticipate that your end users use query terms such as "Online Help Writing," it may be preferable to ensure the terms Online and Help are at the front of the title tag. For example, "Writing Online Help" or "Online Help Writing"

» **Place Keywords at the End of a Title** If you want to include your company branding or project name in a title, it is recommended that you place those keywords at the end of the title.

E X A M P L E

If you want to include branding keywords, place them at the end of the topic title.



HEADING TAGS

Heading tags are important page elements. Below are some best practices for optimizing your heading tags:

» **Include Important Keywords in the <h1> Tag** Because the text in the <h1> tags are used for search categorization, they should always contain important search keywords.

» **Limit <h1> Tags to One Per Page** You should always apply the <h1> tag to the most important heading text in a document. As a general rule, it is best to include only one <h1> tag per page.

» **Keep <h1> Tags Unique** Because search engines score unique pages higher, it is best that the content of an <h1> tag is unique from other <h1> tags in a project.

FILE NAMES

When the Flare search engine looks at the file names in your project, it considers the following factors when listing search results:

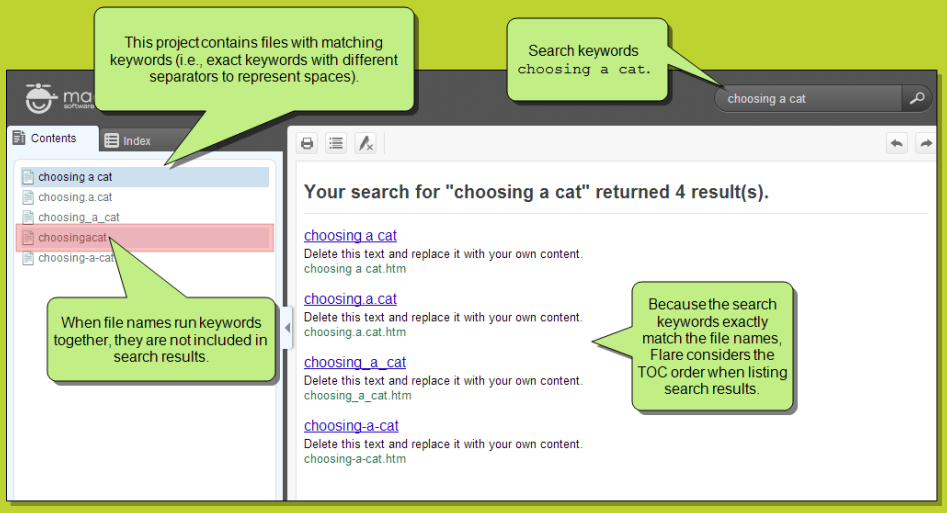
» **Keyword Matches in File Names** File names with exact keyword matches are favored. For example, if you are searching for a topic named "choosing a cat," topics containing the keywords "choosing a cat" will be ranked higher than file names containing the words "choose a cat" or "choosing cats."

» **TOC Order** If there are several file names containing exact keyword matches, the search results will rank topics in TOC order. Preference is not given to any type of character separator (e.g., dash, period, or underscore) that might be used to represent a space between keywords in file names.

E X A M P L E

Let's say you have a project with only five topic files. The file name for each topic uses a different separator to represent the space between keywords (e.g., choosing a cat.htm, choosing.a.cat.htm, choosing_a_cat.htm, and choosing-a-cat.htm. In addition, one of the file names runs the keywords together (e.g., choosingacat.htm).

If you were to search for "choosing a cat," note how the search results will list only the exact matches (i.e., the file name that runs keywords together is not detected as a match). For example, "choosingacat.htm" is not listed in the results. In addition, note that the order search results are listed reflects the TOC order, regardless of the separator used in the file name.



» **Do Not Run Keywords Together in File Names** For best results with keyword recognition, it is recommended that you do not run keywords together in file names (e.g., choosingacat.htm). When keywords run together, there is a greater risk of the keywords not being recognized, as well as not being parsed properly by search engines.

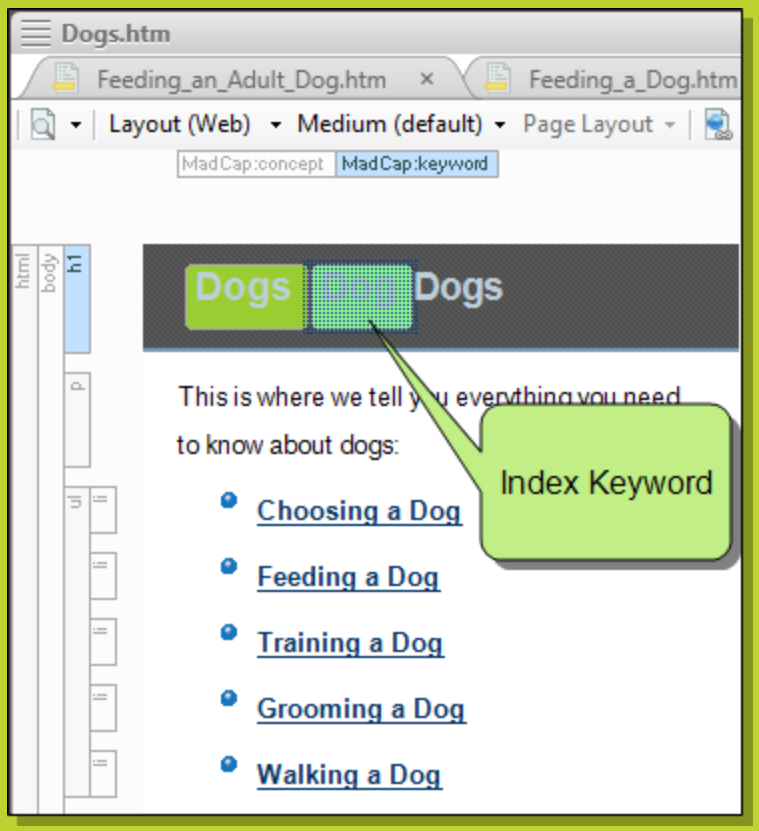
- **Shorter File Names are Better** Because file names are part of a URL, studies show that the general rule of thumb for page URLs is that shorter URLs are better. For example, a file named "choose-a-cat.htm" would be a more compelling link for an end user to click than a file named, "how-to-go-about-choosing-a-cat-or-a-kitten.htm."
- **Use Hyphens to Represent Spaces Between Words in a File Name** While it is a common practice to use underscores in file names (e.g., Choosing_a_Cat.htm), many search engine providers and SEO experts no longer recommend it because the underscore is considered by some indexes to be its own word character. While it provides visible separation between words, one point to consider is that some search engines might take regular expressions such as "Choosing_a_Cat" and interpret it as "ChoosingaCat." Because of this, some SEO experts recommend that you use hyphens to represent a space between keywords. Whichever separator you decide to use, it is recommended that you do not use periods (.) or blank spaces to separate words in file names. Periods are used by some computer systems to indicate different file extension types. Blank spaces can cause issues for Web servers, particularly those running UNIX or Linux.
- **Pick a File Naming Convention and Be Consistent** Because some major search engine providers run indexing systems on case-sensitive servers (e.g., Apache, Unix, and Linux servers), whether a file name is written in lowercase or uppercase can make a difference to whether or not the file is indexed. For example, a page named "choosing-a-cat.htm" may be interpreted differently from "Choosing_A_Cat.htm." It can also lead to search engines creating duplicate page entries, which can result in error codes when users click links, as well as penalties for content ranking. While it is difficult to predict how each and every search engines will handle a file name, it is good to pick your file naming convention wisely and then use it consistently.

INDEX KEYWORDS

The Flare search engine considers the index keywords that you insert into your topics when ranking search results. Some search engines may also recognize the index keywords that you include. Because the Flare search engine looks at index keywords when ranking search results, make sure that you insert important keywords into your topics.

E X A M P L E

Here is an example of an index keyword in the XML Editor.



BODY TEXT

The Flare search engine considers keywords occurring in the body text when ranking search results. While the search algorithm is different, major search engine algorithms also consider keywords in the body text.

BEST PRACTICES FOR BODY TEXT

Following are some best practices when it comes to body text.

- **Include Keywords in Close Proximity to the Top of a Topic** For best results, carefully craft your paragraphs to include your most important keywords close to the top of a topic.
- **Consider the Density of Your Keywords** As a general rule, it is best to consider the number of times you use a keyword in relation to the rest of the content on a page. A general rule of thumb is if you have a topic of less than 500 words, use the keyword in 1-3% of the overall content. For topics over 500 words, use the keyword in 3-5% of the overall topic.
- **Use Important Keywords in Heading Tags** You should always include the most important keywords in the heading tags, as most search engines give headings more weight.
- **Apply Emphasis to Keywords** Some, but not all, search engines give preference to keywords where bold or italics are applied. The Flare search engine weighs text with emphasis slightly higher than regular text.
- **Include Hidden/Invisible Text** You can optionally include hidden/invisible text as described below.

HIDDEN/INVISIBLE TEXT

You can modify your project stylesheet if you want to include hidden/invisible text. This makes the text invisible to the users viewing the topic, but it will be visible to the indexing programs used by some search engines.

For the Flare search engine, it is acceptable to use invisible/hidden text to influence search results.

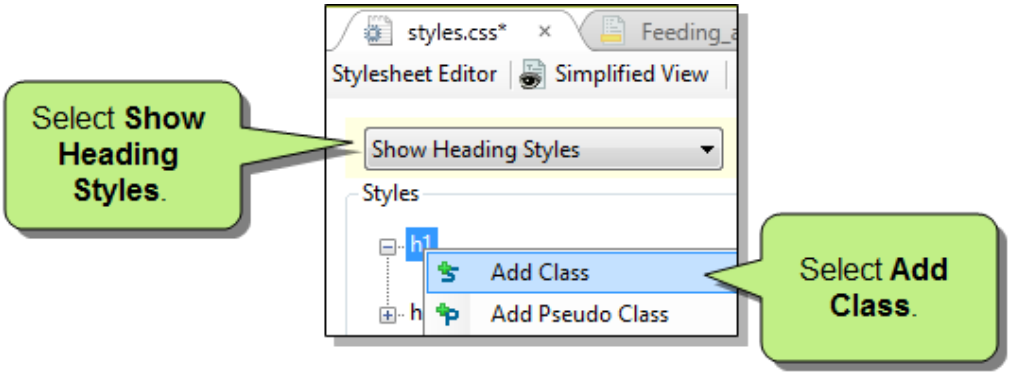
You might use hidden/invisible text on additional headings to give the topic more weight with search engines.

Important: Be careful about using invisible/hidden text for the purpose of keyword stuffing. For example, you should not include large blocks of hidden text in a topic because it can lead to major search engine providers temporarily or permanently blocking your content from their site. For that reason, it is recommended that you always research the current content standards for your desired search engines.

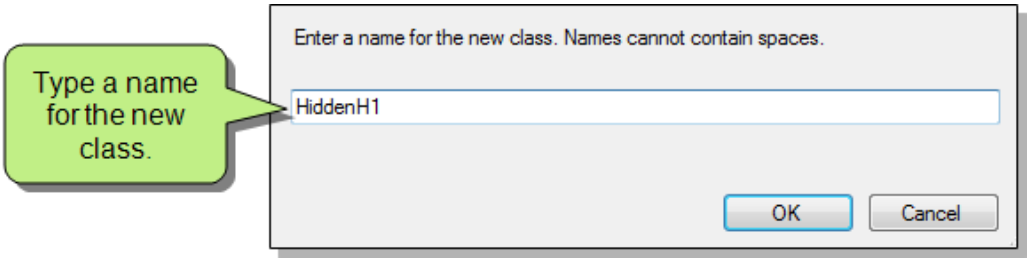
HOW TO CREATE A HIDDEN TEXT STYLE

You can create a hidden/invisible text style for any style in your project.

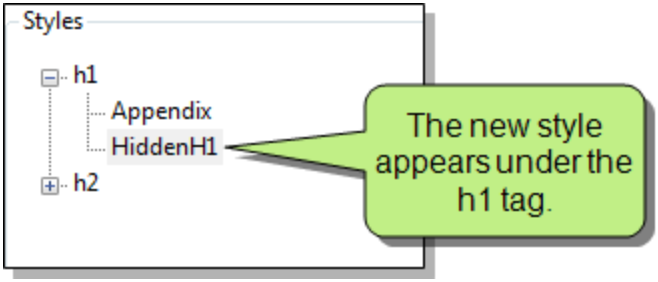
1. In the Content Explorer, open the project stylesheet.
2. In the list box on the left, choose **Show Heading Styles** from the list. For this example, we will show you how to create a hidden style class for your h1 tags.
3. Right-click the **h1** and select **Add Class** from the context menu.



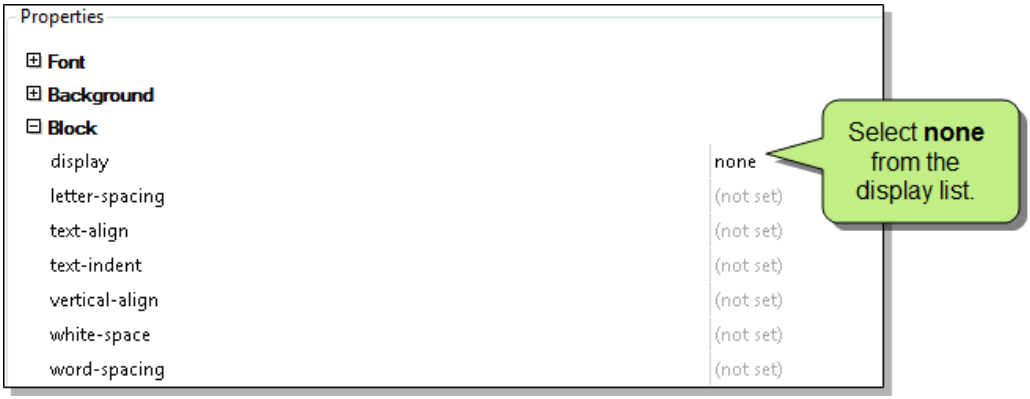
4. In the New Style dialog, type a name for your style. In this example, we will name it `HiddenH1`.



The new class appears in the stylesheet under the h1 tag.



5. In the **Properties** area, expand the **Block** properties.
6. Next to the **display** field, select **none** from the drop-down list. Selecting none here will let you see the element in the XML Editor and Text Editor. It will be visible to web crawlers and spiders in the code, but completely hidden from your end users in the target output.

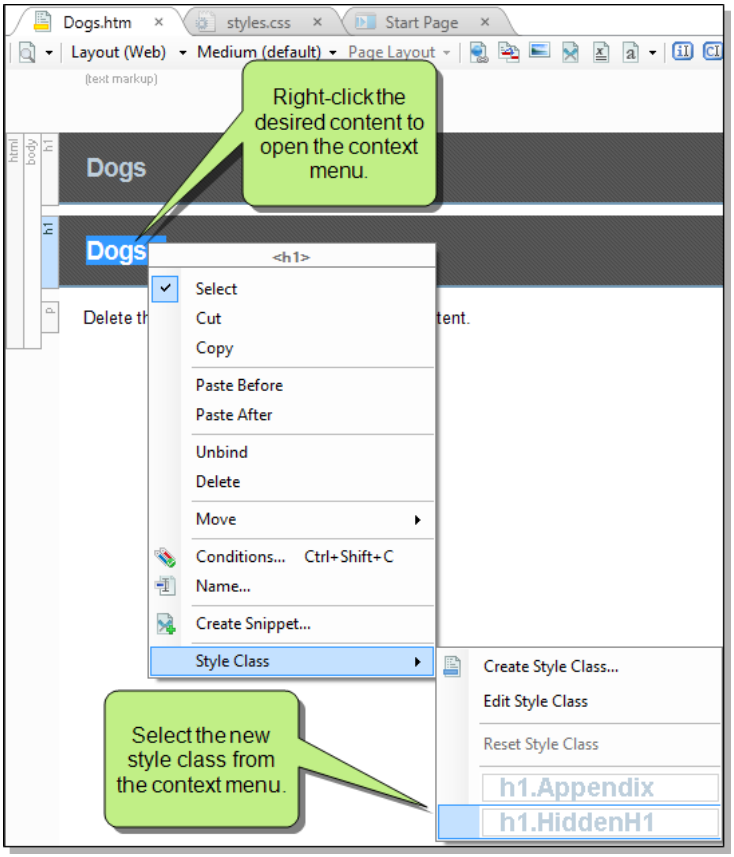


7. Save your changes.

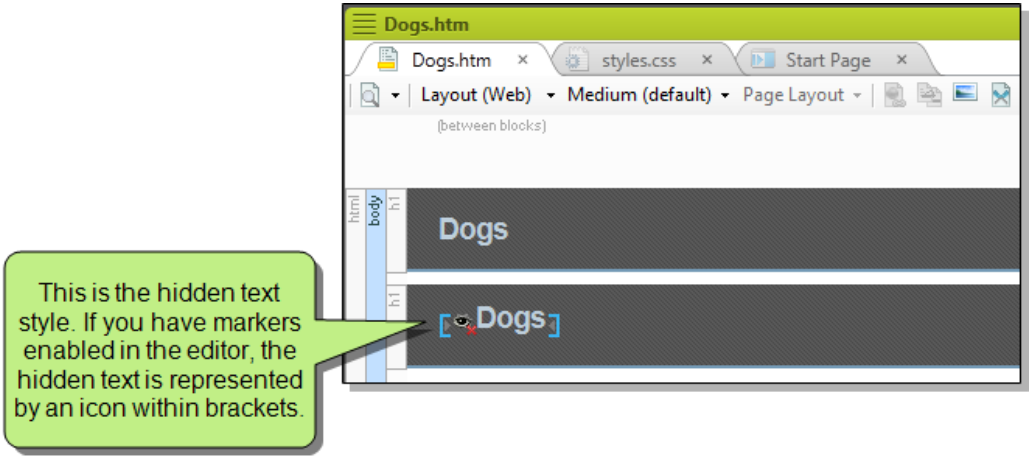
HOW TO APPLY A HIDDEN/INVISIBLE TEXT STYLE

After you create a hidden/invisible text style, you can apply it to content, such as additional headings. In this example, we show you how to apply the hidden style you just created to the first-level heading.

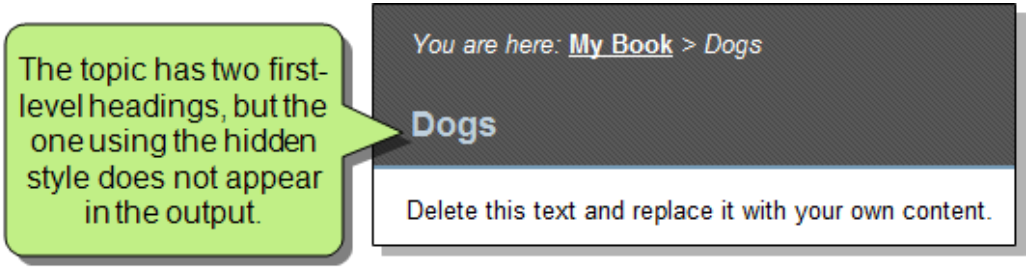
1. Open the desired topic.
2. Add the text that you want to be hidden/invisible. In this example, we will add a duplicate <h1> heading in a topic.
3. Right-click on the heading text and from the context menu, choose **Style Class>h1HiddenH1**.



The illustration below shows you how the hidden text style appears in the XML Editor.



4. Preview the new style in your output.



META DESCRIPTIONS

You can use a text editor to add a meta description (summary or abstract) manually to a topic. However, an easier method is to use the topic Properties dialog in Flare to add them. Meta descriptions are supported for HTML5, WebHelp, and WebHelp Plus targets. See "Meta Descriptions for Topics" on page 195.

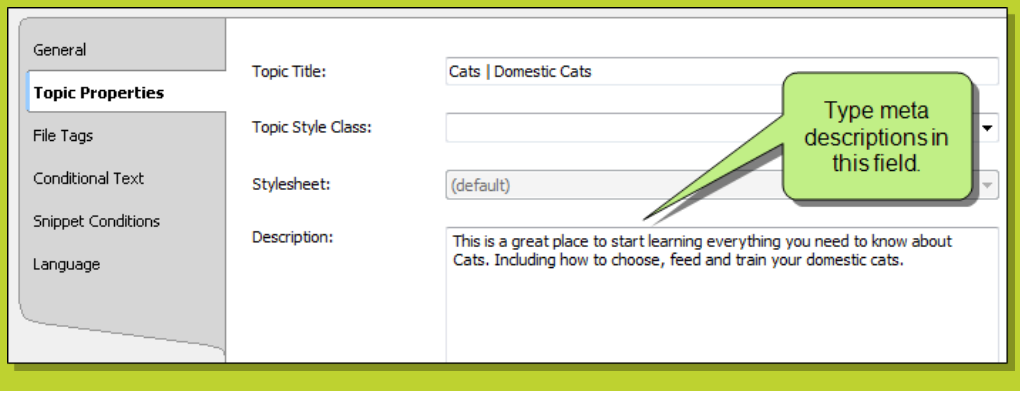
A meta description is typically not an important consideration for ranking results. However, many (but not all) search engines display meta descriptions as page summaries in search results.

In Flare, meta descriptions are considered when ranking search results. In addition, meta descriptions are used to display topic summaries on the search results page of the output. This is also true for many, but not all, search engine providers.

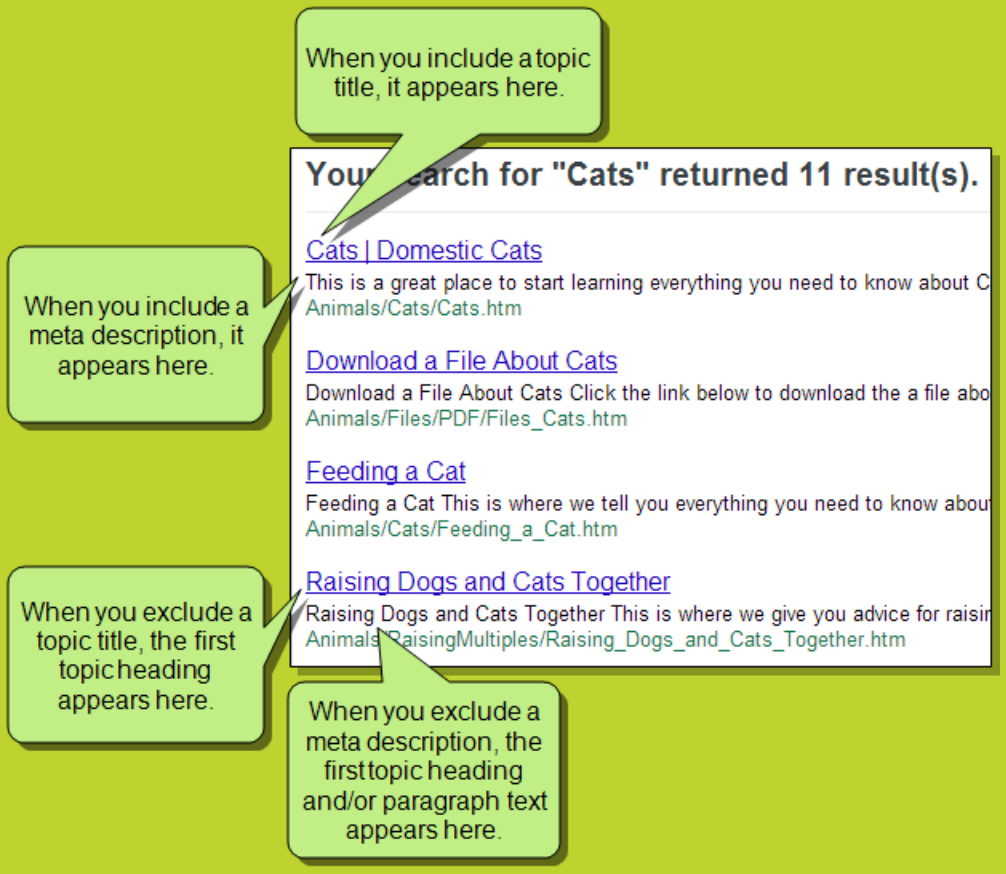
If you include a meta description in a topic in an output type using the Flare search engine, the description will always be displayed as the page summary in the search results.

E X A M P L E

Below is an example of a meta description that has been added using the topic's Properties dialog.



If you decide to include a meta description for your topic, the text you write will appear in the summary field of the Flare search results. The same is true for some, but not all, major search engine providers.



GUIDELINES FOR WRITING META DESCRIPTIONS

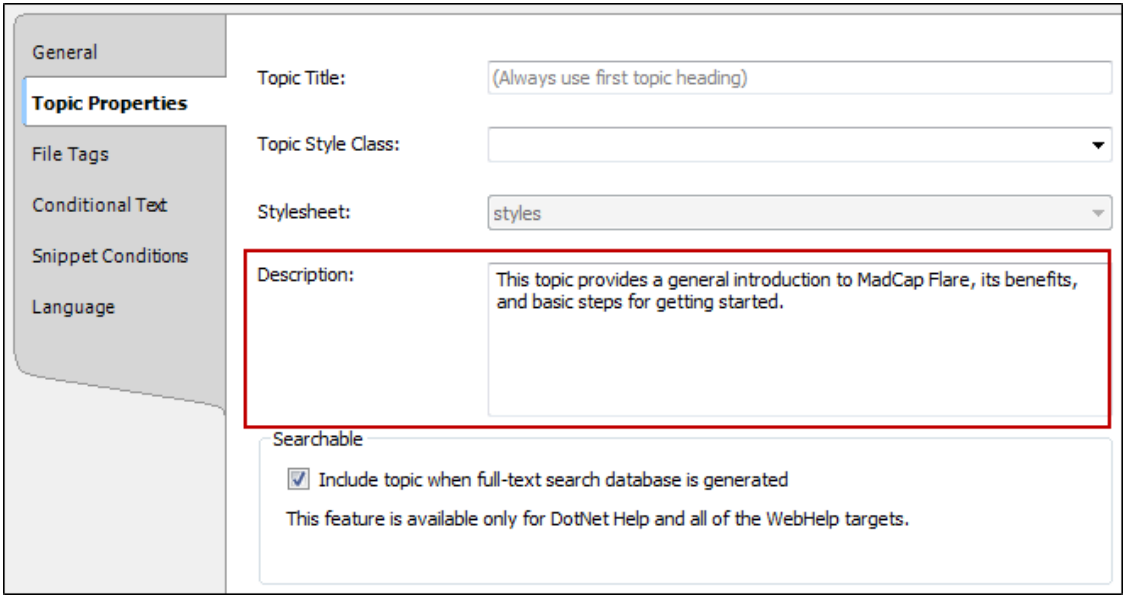
While not always used for ranking, most major search engine providers identify content with meta descriptions as sign of higher-quality content. Also, because end users read meta descriptions and make decisions as to whether or not to visit a page, it is generally a good practice to write meta descriptions that satisfy these minimum guidelines:

- **Create Readable and Well-Written Descriptions** It is beneficial to add a high-quality meta description to your topics. Just after the title on a search results page, a well-written meta description can influence a person's decision to click to view a page. This, in turn, typically improves the quality and quantity of page visits from Internet search traffic.
- **Provide Searcher with an Accurate Description of Page Content** Think of a meta description as part page summary and part advertisement. You want your descriptions to contain descriptive keywords, and since it will also be displayed in search results, you want it to be readable, concise, accurate, and to the point. A description should always provide a summary of the content on a page. To avoid creating confusion, disappointment, or frustration for end users, never load a meta description with repetitive keywords, inaccuracies, or promises that they will find information that isn't actually in the body of the page.
- **Contains Between 68-155 Characters** Depending on which SEO experts you consult and where you anticipate the page summary being displayed, you will find a wide variety of recommendations about meta description length. The short answer is the different search engine providers impose different limits. However, the Google limit is widely reported as being 155 characters, so as a general guideline we recommend writing descriptions between 68-155 characters in length. If you want to check the length of your descriptions, there are a wide variety of tools that let you cut and paste text into their counter. Simply search online for "letter count" or "word count."
- **Avoid Keyword Stuffing** Although it can be tempting to repeat descriptive terms in a meta description, there is little reason to include the same words and phrases multiple times. For example, there is no need to stuff a meta description with keywords (i.e., "Toolbar, tool bar, toolbars, tool bars"). First, this renders the description useless to anyone trying to read the summary. Also, most major search engine providers will flag keywords in meta descriptions as spam which can trigger ranking penalties and result in your page (or your entire site) being disregarded by their search engine.

Meta Descriptions for Topics

This feature is supported in HTML5, WebHelp, and WebHelp Plus output.

You can add a meta description to a topic in the Properties dialog. Meta descriptions are brief summaries of web pages and are displayed in search engine results pages (SERPs). Therefore, they are useful for search engine optimization in HTML5, WebHelp, and WebHelp Plus outputs.



This description is stored as metadata in the <head> tag of the topic file. The markup looks like this:

```
<meta name="description" content="This topic provides a general introduction to MadCap Flare,
its benefits, and basic steps for getting started." />
```

In addition, topic meta descriptions are used in the search results for HTML5 output. If you do not provide a meta description, the first text found in the topic is used in the search results abstract. Also, the meta description itself is searchable.

For more information and tips for using meta descriptions, see "Optimizing Your Content" on page 179.

HOW TO ADD A META DESCRIPTION FOR A TOPIC

1. Make sure the Content Explorer is open.
2. Locate and click on the topic file.
3. In the local toolbar, click . The Properties dialog for the file opens.
4. Click the **Topic Properties** tab.
5. In the **Description** field, enter the meta text.

   Tip: It is recommended that you keep meta descriptions to fewer than 155 characters.

6. Click **OK**.

Optimizing Your Site

You can take actions to optimize the site where your output is published. This includes generating a sitemap, including a robots.txt file, enabling non-XHTML files in search, and showing navigation links.

GENERATING SITEMAPS

You can generate a sitemap when compiling your output. This helps with search engine optimization (SEO), making it easier for search indexing services (i.e., spiders, crawlers, or bots) to find your output. Therefore, the entire output is indexed and search engine results are improved.

HOW TO GENERATE A SITEMAP

1. Open a target.
2. On the **Advanced** tab of the Target Editor, select **Generate Sitemap**.
3. In the **Web URL** field enter the path where the output is ultimately published. For example, our own output is published here: http://webhelp.madcapsoftware.com/flare10/.

> **Note:** Be sure to include the full path—including “http://”—when entering the web URL.

4. Click to save your work.

INCLUDING A ROBOTS.TXT FILE

A robots.txt file is typically implemented by a webmaster or website owners and is used to advise search engine robots and spiders about the site content that can and cannot be crawled. The robots.txt protocol is a simple text file that you can create in a text editor.

There are several reasons why you may want to consider creating a robots.txt file to use with your published output:

- **Block Access to Content** If you do not want the robot or spider to crawl certain content, you may want to publish those content files in a password-protected directory and include a robots.txt file. It is recommended that you work with your website or web server administrator to ensure your requirements are met.
- **Block Access to Specific Files and/or Folders** If you have specific content that want to block from search engines, you can advise cooperating robots and spiders to exclude that content from their index. Keep in mind that most major search engines cooperate with these instructions. However, some search engines do not.
- **Block Your Site from Specific Search Engines** If you would like to block a specific search engine from crawling your site, you can advise its robot or spider to exclude your site from its index. To be successful, the robots.txt file must explicitly define the robot to block by name and the spider must be programmed to cooperate with your instructions.

HOW TO INCLUDE A ROBOTS.TXT FILE

1. Open a text editor.
2. Create a new file and name it "robots.txt."
3. Include the desired instructions.

> **Tip:** To learn what to include in a robots.txt file, see **http://www.robotstxt.org/**. You should discuss specific requirements with your web server administrator and/or webmaster.

4. Place the file at the root of the website hosting your published content.

> **E X A M P L E**
>
> Let's say you plan to publish your Help content to a site named:
>
> https://www.help.example.com
>
> In this scenario, you should place the robots.txt file at the root of the site:
>
> https://www.help.example.com/robots.txt

5. Publish your content and ensure the robots.txt file is still in place.
6. Test your robots.txt using a validation tool. Some major search engines provide their own testing tools (e.g., Google) .

> **Note:** Most major search engines (e.g., Google, Bing, and Yahoo) are known to cooperate with the instructions in a robot.txt file. However, many search engines also have the ability to discover information using other methods. For example, let's say you have blocked a file named "form_1.html" in robots.txt. However, another website has created a link on their site to your "form_1.html" page. In this scenario, the URL for that linked page may be included in an engine's search results.

> **Note:** It is also generally understood that there are existing search engines, including malicious ones, that do cooperate with the robots.txt protocol. Be sure to work closely with a web developer or your web host to ensure you get the best results possible with your robots.txt file.

ENABLING NON-XHTML FILES IN SEARCH

Because search engines have added non-HTML formats to their search indexes, it is helpful to enable non-XHTML search in your output. This allows the Flare search engine to return matches for non-HTML content in your project (e.g., PDF, DOC, and XLS files). You can enable non-XHTML search in the HTML5 and WebHelp Plus server-based outputs. See "Including Non-XHTML Files in Search" on page 127 and "Including Non-XHTML Files in HTML5 Search" on page 102.

SHOWING NAVIGATION LINKS

You can add a navigation link to the top or bottom of topics in HTML5, WebHelp, WebHelp AIR, or WebHelp Plus outputs. This navigation link will not display unless the output topic is opened as a standalone (outside of the main navigation framework of the output). By clicking the link, a user can view the standalone topic in the main navigation framework.

APPENDIX

PDF Guides

The following PDF guides are available for download from the online Help.

Accessibility Guide
Analyzer Guide
Autonumbers Guide
Condition Tags Guide
Context-sensitive Help Guide
DotNet Help Guide
Eclipse Help Guide
Getting Started Guide
Global Project Linking Guide
HTML Help Guide
HTML5 Guide
Images Guide
Importing Guide
Index Guide
Key Features Guide
Language Support Guide
Movies Guide
Navigation Links Guide
Print-based Output Guide
Project Creation Guide
Pulse Guide
QR Codes Guide
Reports Guide
Reviews & Contributions Guide
Search Guide
SharePoint Guide
Shortcuts Guide
Skins Guide

Snippets Guide

Source Control Guide

Styles Guide

Tables Guide

Tables of Contents Guide

Targets Guide

Templates Guide

Topics Guide

Touring the Workspace Guide

Transition From FrameMaker Guide

Variables Guide

WebHelp Outputs Guide

What's New Guide