madcap
software

MADCAP FLARE DESKTOP 2025

Search

THIS PDF WAS CREATED USING MADCAP FLARE.

CONTENTS

CHAPTER 5

CHAPTER 6

CHAPTER 7

CHAPTER 8

CHAPTER 9

CHAPTER 10

CHAPTER 11

CHAPTER 12

APPENDIX

Introduction

Supported In:

You can use the search feature in online outputs. Search works differently with each output type. There are also special features that you can use to enhance search, such as micro content, synonyms, partial-word search, filters, reports, and excluding topics from search.

General Information

- "Client or Server Output" on page 10
- "Searching the Outputs" on page 11
- "End User Search Features" on page 38
- "Content Developer Search Options" on page 40

Required Activities

- "Including Search Bars" on page 44
- (HTML5 Only) "Setting Up a Search Engine" on page 50
  - "MadCap Search" on page 57
  - "Elasticsearch" on page 63
  - "Google Search" on page 131

Optional Activities

- "Setting Search Results Options" on page 137

- "Generating Sitemaps" on page 170

- "Optimizing Search" on page 172

- "Search Filter Sets" on page 211

- "Search Highlighting" on page 230 and "Customizing the Highlight Color for Search Hits" on page 233

- "Server-Based Search HTML5" on page 241

- "Creating Synonyms" on page 264

- "Including or Excluding Topics in Search" on page 271

General Information for Search

There are various pieces of general information you should know if you plan to use this feature.

This chapter discusses the following:

▍Client or Server Output

The search features and capabilities that are available in your published Flare output depend 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.

Search and Client-Based Output

With the web-based 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 Microsoft HTML Help, the Microsoft Compiled HTML (CHM) Help file format also offers a built-in search engine.

Search and Server-Based Output

There are multiple search options to choose from for online output, including server-based search options. For example, the server-based HTML5 output type can be enabled in Flare Desktop, 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.

However, you do not need to use HTML5 server-based output to have server-based search. We recommend that you use Elasticsearch with regular HTML5 output to produce server-based search. Elasticsearch includes features such as search auto-complete with suggestions.

❙ Searching the Outputs

Depending on the output type, the user interface for your published output offers different search features and functionality.

When compiling online output, the build process generates a search database with the 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.

> 🗒 **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 (for more information, see help.eclipse.org). The Flare search engine does not handle Eclipse Help search operations.

Searching an HTML5 System

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

Type the search query.

Narrow the scope of the search to categories defined by a search filter set.

Click **Search**.

Lists search results in ranked order.

Results also show the topic title, a text excerpt (or meta description), and a link to the topic.

Your search for "dogs" returned 16 result(s).

Dogs
Dogs This is where we tell you everything you need to know about dogs:
Animals/Dogs/Dogs.htm

Raising Dogs and Cats Together
Raising Dogs and Cats Together This is where we give you advice for raising dogs and cats together.
Animals/RaisingMultiples/Raising_Dogs_and_Cats_Together.htm

Raising Dogs and Kittens Together
Raising Dogs and Kittens Together This is where we give you advice for raising dogs and kittens together.
Animals/RaisingMultiples/Raising_Dogs_and_Kittens_Together.htm

Caring for Your Dogs Eyes
Caring for Your Dogs Eyes To your dog's vision sharp (and a twinkle in his or her eyes), follow these steps:
Animals/Dogs/Caring_for_Your_Dogs_Eyes.htm

Feeding a Dog
Feeding a Dog This is where we tell you everything you need to know about feeding dogs:
Animals/Dogs/Feeding_a_Dog.htm

file:///C:/Users/snelson/Documents/My Projects/Pets/Output/snelson/Example_HTML5/Default.htm

Contents — Welcome, Cats, Dogs, Hamsters, Parrots, Raising Multiple Pets, PDF Files

Click this button to remove all the search highlighting.

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 27.	Change the look of the field and button.
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 220 and "Associating a Search Filter Set With a Target" on page 224. Customize the order of the search filters in the output. See "Customizing Search Filter Ordering" on page 222. Change the appearance of the drop-down in the Skin Editor.

Feature	Description	Content Developer Options
Search Results	Lists search results in ranked order. Matching keywords are bolded in search results.	Change the appearance of your search results. Set the number of search results that display on each page. See "Optimizing a Site" on page 198. Adjust the weight the search engine places on internal links to a topic when ranking search results. See "Setting Search Result Importance" on page 150. If you are using Pulse, you have the option to display community results in search.
Search Highlighting	Highlights matching keywords in topics. Tripane output shows highlights words in color by default. In Side and Top Navigation outputs, search results are transparent, but you can customize this, adding colors. 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 230.

Feature	Description	Content Developer Options
Remove Highlighting Button	Removes search highlighting from topics.	Include this button in the toolbar.
Search Result Pagination Options	Change the number of search results that appear on the page.	Include and format pagination options.
Search Non-HTML Files (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.	Include non-HTML files in search results when publishing server-based output. See "Including Non-XHTML Files in HTML5 Search" on page 258.

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 27.

> 📝 **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 225.

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 233.

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

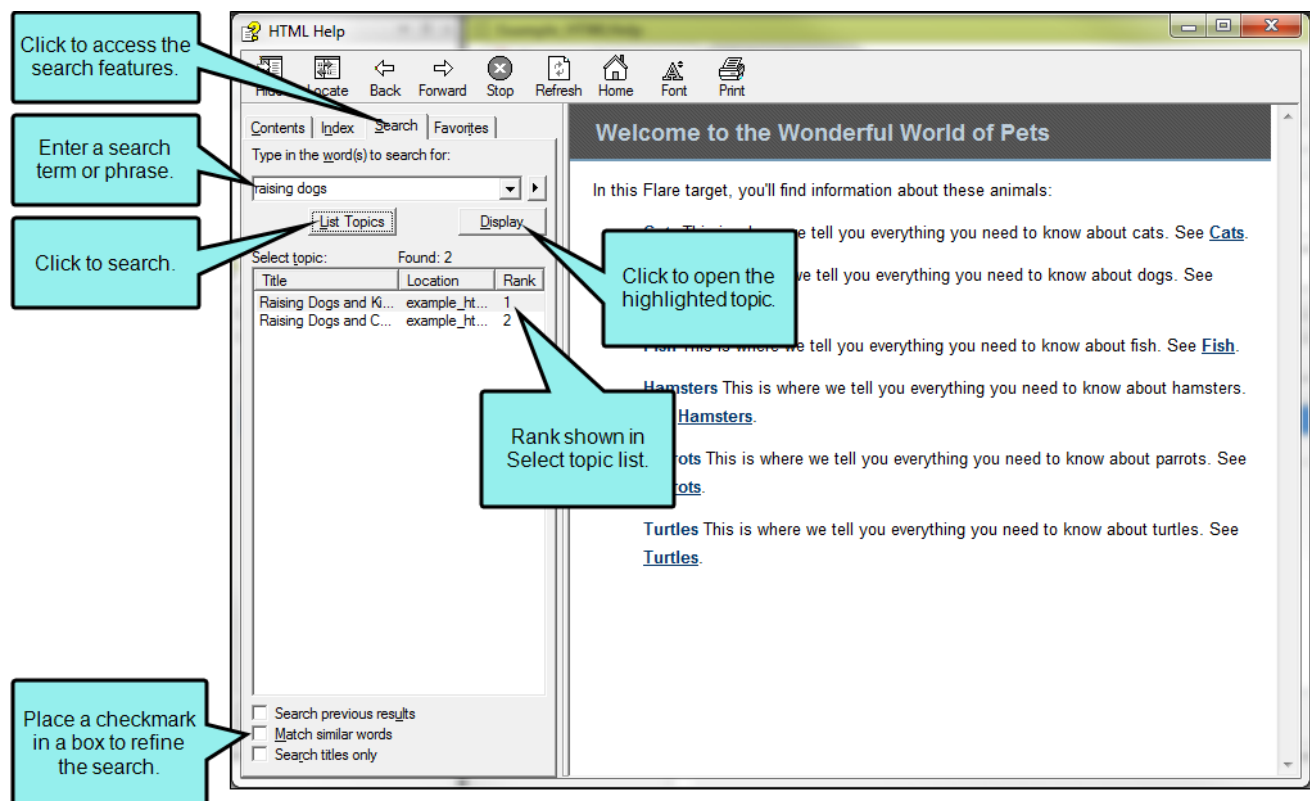# Searching a Microsoft HTML Help System

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 "Including Search Bars" on page 44.
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 27.	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 27.
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 **MiscOptions**, place a check mark in the**Show Advanced Search** box.

Feature	Description	Content Developer Options…
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 172.
Display Button	Opens the highlighted topic. End users can alternatively double-click a topic to open it.	Cannot be turned on and off.
Search Highlighting	Highlights matching keywords in topics.	Cannot modify search highlight color.

How to Search

1. Open the Microsoft HTML Help system.

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 27.

> **NOTE** The search query can include boolean operators or the asterisk (*) wildcard character. See "Search Methods and Syntax" on page 27.

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:

   - Highlight a topic in the list. Then click **Display**.

   - 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 230.

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 Desktop 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 7 may need to switch off the computer's User Account Control (UAC) settings before beginning. For instructions, visit this link:
>
> ```
> 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 Desktop installation's \bin directory. Typically, the path is as follows (where [#]= the Flare Desktop version number):

   - Windows 7 or 8 (64-bit versions)

     - If you are using Flare Desktop 12 or later

       ```
       C:\Program Files\MadCap Software\MadCap Flare [#]\
       Flare.app\Resources\Bin
       ```

     - If you are using Flare Desktop 11 or earlier

       ```
       C:\Program Files\MadCap Software\MadCap Flare V[#]\
       Flare.app\Resources\Bin
       ```

   - Windows 7 or 8 (32-bit versions)

     ```
     C:\Program Files (x86)\MadCap Software\MadCap Flare V[#]
     \Flare.app\Resources\Bin
     ```
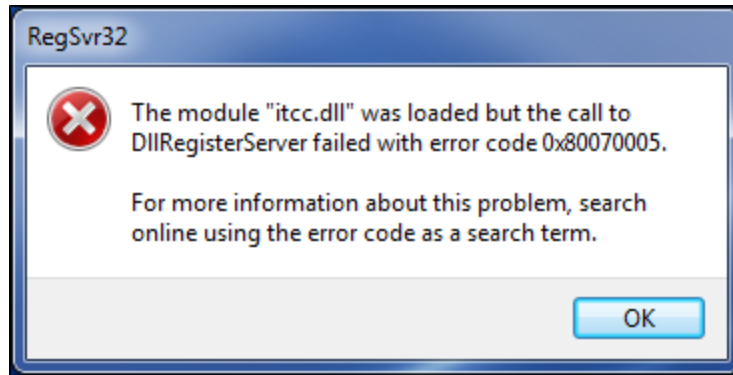
   > **NOTE** The path that you use depends on your specific system configuration. For users running the 64-bit version of Windows, you will see two folders named Program Files on your C: drive. Typically, the folder named "\Program Files (x86)" stores non-native 32-bit applications, and the "\Program Files" folder stores native 64-bit applications, such as Flare Desktop. If you installed Flare Desktop 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, a message appears telling you so.

> 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.
>
> RegSvr32
>
> The module "itcc.dll" was loaded but the call to DllRegisterServer failed with error code 0x80070005.
>
> For more information about this problem, search online using the error code as a search term.
>
> OK
>
> 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.
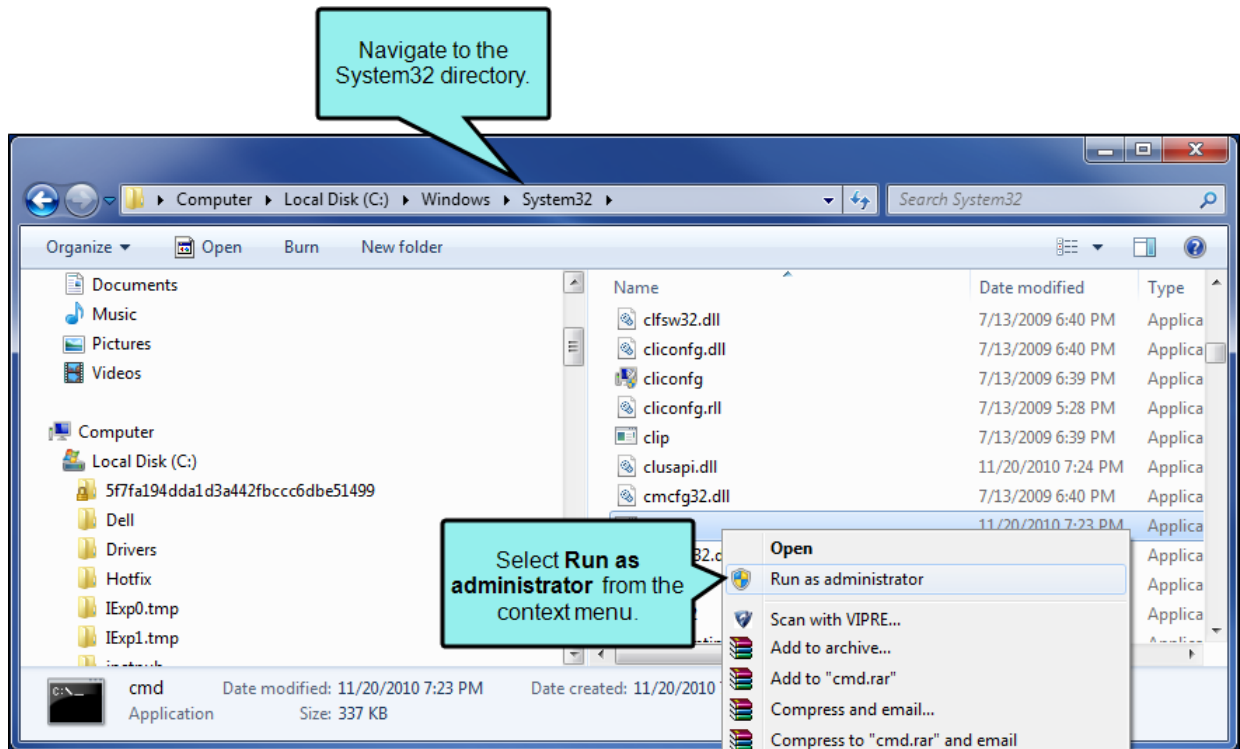
3. If the User Account Control message appears, click **Yes**. This lets you use the command
   prompt to make changes on the system.

> **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:

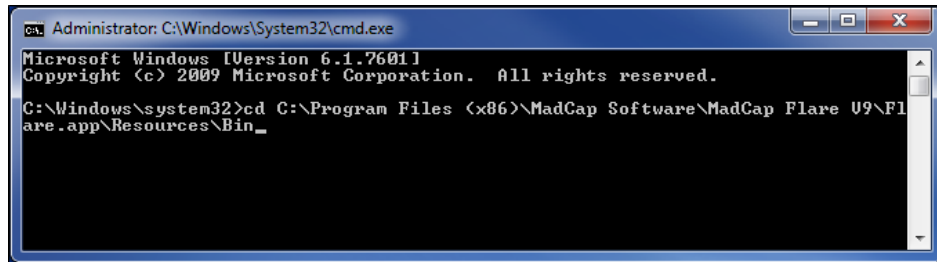> ⭐ **EXAMPLE** Use this information to enter the following path, depending on your version of Flare Desktop.
>
> ### IF YOU ARE USING FLARE DESKTOP 12 OR LATER
>
> ```
> C:\Program Files\MadCap Software\MadCap Flare [#]\
> Flare.app\Resources\Bin
> ```
>
> Below is an example:
>
> ```
> C:\Program Files\MadCap Software\MadCap Flare 21\
> Flare.app\Resources\Bin
> ```
>
>
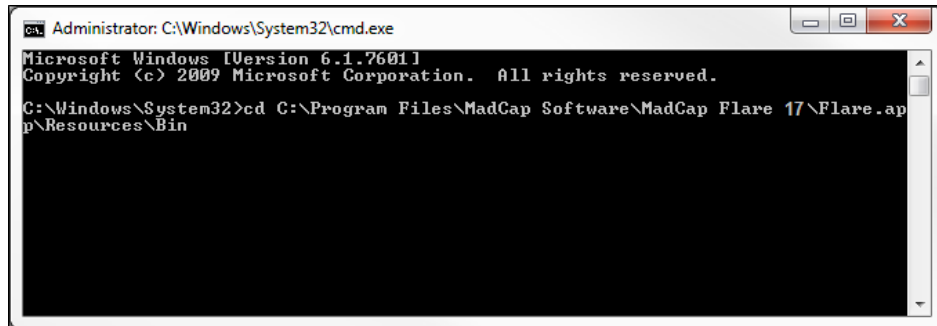
> ⭐ **IF YOU ARE USING FLARE DESKTOP 11 OR EARLIER**
>
> ```
> C:\Program Files (x86)\MadCap Software\MadCap Flare V[#]\
> Flare.app\Resources\Bin
> ```
>
> Where [#] appears above, you must enter the correct Flare Desktop version number when typing the system path (e.g., V8, V9, V10.). Below is an example:
>
> ```
> C:\Program Files (x86)\MadCap Software\MadCap Flare V9\
> Flare.app\Resources\Bin
> ```
>
> ```
> Administrator: C:\Windows\System32\cmd.exe
>
> Microsoft Windows [Version 6.1.7601]
> Copyright (c) 2009 Microsoft Corporation.  All rights reserved.
>
> C:\Windows\system32>cd C:\Program Files (x86)\MadCap Software\MadCap Flare V9\Fl
> are.app\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, a message tells you so.

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.

Search Methods and Syntax

Depending on the output type you are searching, end users can perform a variety of simple text and phrase searches. Some output types also support the use of boolean operators, the asterisk (*) wildcard character, and other syntax.

Full-Text Search

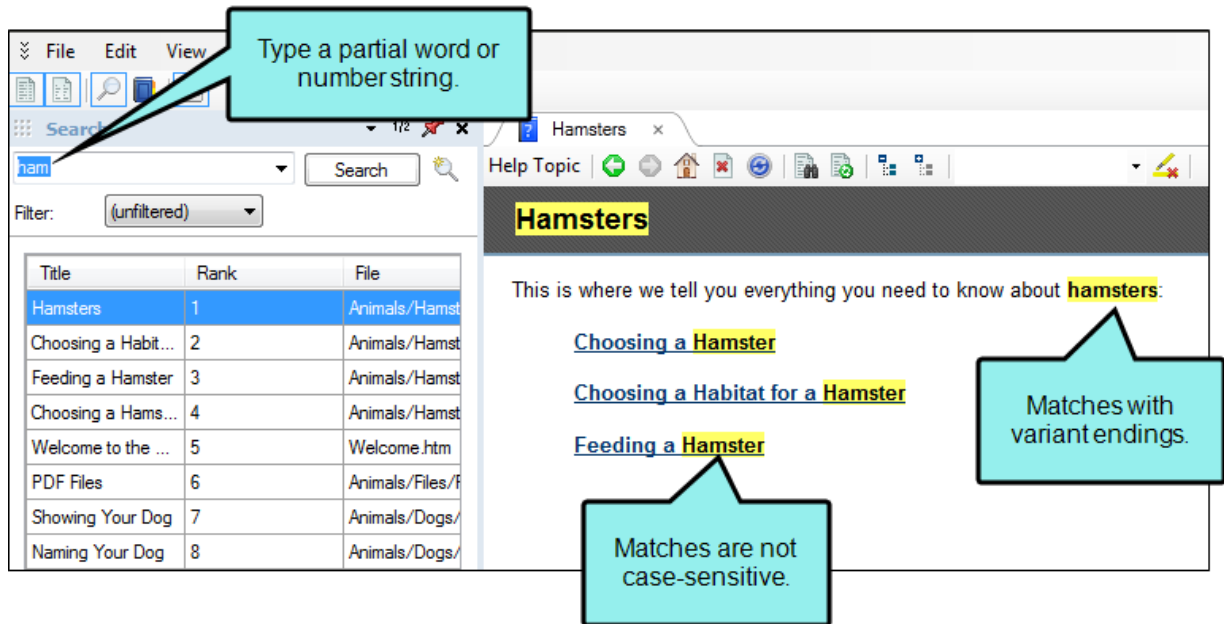All online output types support full-text search.

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 Desktop 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 Desktop, 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 230.

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."

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 143.

> ▭ **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 230.

Boolean Operators

The 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

- **Eclipse Help** Boolean search is supported by the search engine that you configure in the Eclipse platform. See the Eclipse documentation at help.eclipse.org.

- **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 predefined drop-down list. See "Searching a Microsoft HTML Help System" on page 17.

- **HTML5** Boolean search is provided by Flare Desktop 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
  ```

  See the following for information about Windows Search:

  ```
  http://msdn.microsoft.com/en-us/library/windows/desktop/ff628790(v=vs.85).aspx
  ```

  See also "Enabling HTML5 Server-Based Output" on page 242.

- **WebHelp and WebHelp Plus** Boolean search is provided by Flare Desktop 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
  ```

  See the following for information about Windows Search:

  ```
  http://msdn.microsoft.com/en-us/library/windows/desktop/ff628790(v=vs.85).aspx
  ```

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	Usage	HTML Help	HTML5[1]	WebHelp
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.	✔	✔	✔
	When separating terms with a blank space, the AND is always inferred. This is only available in HTML5 help.	✘	✔	✘
	Instead of the word AND, type the plus symbol (+).	✔	✔	✔
	Instead of the word AND, type the ampersand symbol (&).	✔	✔	✔

Operators	Usage	HTML Help	HTML5[1]	WebHelp
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. This is not available in HTML5 help.	✔	✖	✔
	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	Usage	HTML Help	HTML5[1]	WebHelp
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.	✓[2]	✗	✓
	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.	✗	✓[3]	✓
()	Use parentheses to combine boolean phrases and search terms. Type parentheses ( ) around the combined terms.	✗	✓	✓

[1]In HTML5, this is supported only with MadCap Search set as the search engine.

[2]This only works if you search for one term but not another (e.g., MadCap NOT Flare).

[3]The carat symbol (^) can be used interchangeably with an exclamation point (!) and NOT.

Asterisk (*) Wildcard Search

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

Requirements and Dependencies

- **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:

  help.eclipse.org

- **WebHelp** For asterisk (*) wildcard search capabilities to be supported, you must enable the partial-word search feature. See "Enabling Partial-Word Search" on page 154.

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.

Placement	Usage	HTML Help	WebHelp
Before a Term	Place the asterisk (*) in front of a term to represent unknown characters.	✔[1]	✔
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.	✔	✔

[1]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`.

Partial-Word Search

The HTML5, WebHelp, 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 154.

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

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 154.

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 230.

☆ **EXAMPLE** Search for `cond`.

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

Search for `cond`.

The string "cond" is found in "Conditioning."

The Search pane shows a ranked list of topics containing the partial word "cond."

The string "cond" is found in "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.

▎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.

	HTML5 (Client)	HTML5 (Server)	HTML Help
Glossary Search (Find Matching Terms)	✔	✔	✔
Index Search (Find Matching Terms)	✔	✔	✔
Predictive Search **See** "Setting Up a Search Engine" on page 50.	✔	✔	✘
Search Favorites (Save Queries to Favorites List)	✘	✘	✘
Search Query (Asterisk (*) Wildcard Character)	✘	✘	✔
Search Query (Boolean Operators) **See** "Search Methods and Syntax" on page 27.	✔	✘	✔[1]
Search Query (Full-text Search—not case sensitive) **See** "Search Methods and Syntax" on page 27.	✔	✔	✔

	HTML5 (Client)	HTML5 (Server)	HTML Help
Search Query (Enclose Terms in Quotes)	✔	✔	✔
See "Search Methods and Syntax" on page 27.			
Search Results (Narrow Search Scope Using Search Filter Sets)	✔[2]	✔	✘
See "Search Filter Set Example" on page 225.			
Search Results (Results Listed in Ranked Order and Show Rank Number)	✔[3]	✔[3]	✔[3]
See "Optimizing Search" on page 172.			
Search Results (Search Hits Highlighted in Topics)	✔	✔	✔
See "Search Highlighting" on page 230.			
Search Results (Search Hits Bolded)	✔	✘	✘

[1]Select the operator from the built-in list.

[2]Search filters are not supported in Elasticsearch.

[3]Results are listed in order. Rank number is not visible.

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.

	HTML5 (Client)	HTML5 (Server)	HTML Help
Enable "Including Search Bars" on page 44	✓[1]	✓[1]	✓[2]
Content Optimization "Setting the Search Abstract Character Limit" on page 140	✓[3]	✗	✗
Content Optimization "Setting Search Result Importance" on page 150	✓[3]	✗	✗
Content Optimization "Including Glossary Terms in Search Results" on page 157	✓[3]	✓	✗
Content Optimization "Setting the Number of Search Results Per Page" on page 138	✓[3]	✓[3]	✗
"Elasticsearch" on page 63	✓	✓	✗
"Google Search" on page 131	✓[4]	✗	✗

	HTML5 (Client)	HTML5 (Server)	HTML Help
Micro Content Search Integration "Setting Micro Content Containers" on page 156	✓[3]	✓[3]	✗
Search Highlighting "Customizing the Highlight Color for Search Hits" on page 233	✓	✓	✓
Search Optimization "Enabling Partial-Word Search" on page 154	✓	✓	✗
Search Optimization "Including Stop Words in Search" on page 143	✓	✓	✓[5]
Search Optimization "Excluding Index Entries From Search" on page 162	✓	✗	✓[6]
Search Optimization "Excluding Non-Words From Search" on page 161	✓	✓	✓[7]
Search Optimization "Setting the N-Gram Size for Search" on page 168	✓	✓	✗

	HTML5 (Client)	HTML5 (Server)	HTML Help
Search Performance "Chunking Large Search Database Files" on page 164	✓	✓	✕
Search Performance "Pre-Merging Search Database Files" on page 163	✓	✓	✕
Search Results "Customizing Search Filter Ordering" on page 222	✓	✓	✕
Search Toolbar Web Toolbars in WebHelp Outputs	✕	✕	✕

	HTML5 (Client)	HTML5 (Server)	HTML Help
Styles	✓[4]	✓[8]	✗
Styles for Generated Pages			

[1]HTML5 skin.

[2]Standard skin.

[3]This is supported if you are using Elasticsearch or MadCap Search, but not Google Search.

[4]This is supported only in HTML5 Side Navigation, Top Navigation, and skinless outputs. It is not supported in HTML5 Tripane output.

[5]Stop words are always enabled.

[6]Index entries are always excluded.

[7]Non-words are always excluded.

[8]SQL Server Compact is required.

Including Search Bars

The first step in making search accessible in your online documentation is to include a search bar.

HTML5 output is designed to show a search bar at the top of all topics via the skin. You just need to make sure this option is enabled, which is the default setting. Therefore, you might not need to do anything.

However, you might want to insert a search bar elsewhere (e.g., in the middle of your Home page). In this case, you would need to use a Search Bar proxy. You might also need to hide the search bar from some topics so that you do not have two search bars on a page.

This chapter discusses the following:

| How to Enable the Search Bar in an HTML5 Skin

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.

▌How to Insert a Custom Search Bar

1. Open a template page or topic, depending on whether you want the search bar to be show on many pages or only one page.

2. Place your cursor where you want the search bar to be shown in the output.

3. Select **Insert > Proxy > Insert Search Bar Proxy**. The Search Bar Proxy dialog opens.

4. If you have added a Search Bar skin component to your project and want to use it to control the look of the search bar, you can select it from the **Skin File** field.

   If you do not select a Search Bar skin component in this field, Flare Desktop uses the first one it finds in your project (if one exists). Otherwise, Flare Desktop provides a default design.

   > **NOTE** The Search Bar proxy and skin component are not supported in HTML5 Tripane output.

5. Click **OK**. The proxy is added.

6. Click ⊞ to save your work.

❙ How to Hide the Search Bar From All Topics

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, select **none**.

6. Click 🖫 to save your work.

▌ How to Hide the Search Bar From a Single Topic

1. Assuming you are already using a primary stylesheet for all topics, make sure the option to **Allow local stylesheets** is selected.

2. Create a new stylesheet to be used for the topic where you want to hide the search bar.

3. Open the new stylesheet in the Internal Text Editor (i.e., in the Content Explorer, right-click it and select **Open with > Internal Text Editor**). Then, copy and paste the following into it.

   ```
   .nav-search
   {
       display: none;
   }
   ```

4. Click 🖫 to save your work.

5. Associate the topic with the new stylesheet.

▌How to Enable Search in a Skin for Other Output Types

HTML Help, WebHelp, and WebHelp Plus are not as commonly used as HTML5. However, if you are using one of these outputs, you can enable search as follows.

1. From the Project Organizer, open the Standard 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**

5. **Search** box.

6. Click to save your work.

Setting Up a Search Engine

Supported In:

For HTML5 targets, you can choose the type of search engine you want people to use—MadCap Search, Google Search, or Elasticsearch (for Side Navigation, Top Navigation, or skinless output). There are additional steps that you can follow and features you can select, depending on the search engine you choose. For MadCap Search and Elasticsearch, you can include micro content in the output, which can especially enhance your search results.

This chapter discusses the following:

Comparison of Search Engine Options

There are benefits to any of the search methods offered by Flare Desktop. Some users might prefer the search results returned by Google. However, others might prefer the results returned by MadCap. Or some users might want all of the configurable options provided by Elasticsearch.

> ⊘ **TIP** To determine the type of search that is best for you, we recommend that you generate different outputs using each method. Then perform several different searches and see which results you like best.

	MadCap Search	Elasticsearch	Google Search
Less Time and Effort to Set Up	✔ Setting up MadCap Search in a Flare project takes only a few seconds.	Setting up Elasticsearch is done within the Target Editor and Destination Editor in Flare Desktop. Web servers also need to be configured to support Flare Desktop, along with the Elasticsearch service.	Setting up a Google custom search engine (CSE) and performing other necessary tasks requires a combination of steps in both Google and Flare Desktop. This can take a bit of time to complete. However, it is usually just a one-time setup.
Public vs. Local Output Flexibility	✔ Output can be searched whether it is available publicly or locally.	Output must be published on a server in order to use the full capability of Elasticsearch.	Output must be available publicly so that you can use Google. Output cannot be behind a firewall.

	MadCap Search	Elasticsearch	Google Search
Multiple Outputs	Searches will include results for only the Flare output that is open.	✔You can manage multiple HTML5 targets that use Elasticsearch through the Content Services Portal.	✔You can add multiple folders/sites to be included in your Google custom search engine (CSE). Each of these sites can be a separately published Flare output. When users search from one of the published Flare outputs, results will display for all of the outputs.
Other File Types	In order to include file types such as PDF in your search results, you need to generate and publish server-based output.	✔Most file types are included in the search results.	✔If you have added other types of files (e.g., PDF) to the site(s) associated with your CSE, they may be included in search results.
Search Tailored to Flare Projects	✔MadCap Search rankings are specifically tailored for Flare users. They take into account not only H1-H6 headings, but also index keywords, glossary terms, etc. See "Ranking Search Results" on page 205.	Elasticsearch does not provide any direct mapping of search criteria to the structure of a Flare project.	Google does not recognize the unique characteristics of a Flare project (e.g., index keywords, glossaries). Therefore, those elements will have no effect on how Google ranks pages in the results.

	MadCap Search	Elasticsearch	Google Search
Micro Content in Results	✓MadCap Search lets you include micro content in your search results, which can especially improve the experience for users.	✓Elasticsearch lets you include micro content in your search results, which can especially improve the experience for users.	Google does not include micro content (created in Flare Desktop) in your search results.
Glossary Definitions in Results	✓MadCap Search will fetch your project's glossary terms and feature them at the top of search results.	Elasticsearch does not provide an option to include glossary terms in your search results.	Google will not fetch your project's glossary terms and feature them at the top of search results.
Results for Incorrectly Typed Searches	Incorrectly typed search terms will not return results.	✓The partial-word search and fuzzy match settings allow for numerous searches to be returned when these settings are enabled.	✓If an end user incorrectly enters a search term (e.g., types "Tble" instead of "Table"), Google will often guess the correct term and show results anyway.

	MadCap Search	Elasticsearch	Google Search
Better Search and Indexing Speed	✔Search results might be faster because the output is immediately indexed once it is generated. You do not need to spend any extra time indexing your pages or waiting for search results to appear.	✔The administrator portal allows for the search indexes to be managed closely. This will assist in keeping search result times optimal.	Search results might lag at times, depending on the size of the output and whether Google is finished with the indexing (i.e., making your output available for searches). Google will index your pages automatically over time, but it can take awhile, sometimes weeks.
Mobile Devices	Search results are "chunked" and then collapsed so that they can be displayed when a search is performed. This is usually okay on PCs, but if you try to perform a search on a mobile device, the results might be slow or even crash because the device cannot handle the number of search results.	✔Search results always come from a server, so you do not need to be concerned about the ability of the mobile device to handle the information.	✔Search results always come from a server, so you do not need to be concerned about the ability of the mobile device to handle the information.

	MadCap Search	Elasticsearch	Google Search
No Advertisements	✔No advertisements are included in search results.	✔No advertisements are included in search results.	Users might see advertisements in search results.
Customize Auto-Complete Results	There are no options available for auto-complete results.	✔You can enable multiple options to include a mix of personal and global searches on your output. There is also an option to include project content information such as topic titles and the file path in your project.	While Google Search does provide auto-complete results, it does not provide the ability to customize these results.
Customize Predictive Search	MadCap Search does not offer any predictive methods in obtaining search results.	✔There are multiple options that allow you to obtain predictive results when searching, especially when using auto-complete options.	Google Search provides a measure of predictive results, although it is not customizable within Flare Desktop.

NOTE Google Search is not supported for HTML5 Tripane output.

NOTE For MadCap Search, the look of the search bar and results can be customized through these skins and components: Top Navigation skin, Side Navigation skin, Search Bar skin component, and Search Results skin component. However, with Google Search, any changes in these skins are not supported. Instead, the look is controlled via Google.

NOTE Keep in mind that the exact steps in Google may change over time as the user interface is adjusted.

▍MadCap Search

Supported In:

HTML 5

MadCap Search is Flare Desktop's built-in search engine. When an HTML5 target is created, it is set by default to use this search engine. MadCap Search considers heading styles, index keywords, glossary terms, and more when ranking regular search results, and it considers phrases and alternate phrases when ranking micro content. You can customize the search engine by setting options such as search result importance, glossary terms in the results, number of search results per page, and abstract character limit.

How to Set Up a MadCap Search Engine

1. Open an HTML5 target.

2. Select the **Search** tab.

3. From the **Search Engine** field, select **MadCap Search**.

4. You can complete various options to optimize the search, then click 🖫 to save your work.

Search Results	
Results per page	You can change the number of search results that appear on each page. This makes it easier to navigate between pages of search results and improves loading times, especially for users who access output from a mobile device. Setting a reasonable number of results per page also makes it easier for search indexing services (i.e., spiders, crawlers, or bots) to locate pages in output, improving search results. See "Setting the Number of Search Results Per Page" on page 138.

Abstract character limit	In HTML5 output, you can set a character limit for automatically generated abstracts that appear in your search results. This allows your users to see a brief summary of each topic in the search results, while keeping the search results page easy to scan. You can set the character limit as long or as short as you like. When creating an automatic abstract, Flare Desktop scans all text elements in the topic, including headings and paragraphs, and includes them in the abstract until the character limit is met. See "Setting the Search Abstract Character Limit" on page 140.
Partial word searching	This allows part of a word to be searched in the target database. For example, the string "sear" could return results for "search." The Minimum word size field can be set from 3-10.

> **NOTE** Enabling this setting could increase the build time and the size of the search index for your target.

Advanced Search Options	
Include Importance (recommended)	In HTML5 output, the Flare search engine uses a combination of factors to rank search results. The search engine considers the number of links to a topic (Importance) and the number of times a search term appears in a topic. This gives you the most accurate results. You can turn off Importance and search using only the number of search term hits in each topic. This is not recommended unless you have one topic that is linked too many times that it would skew your search results. See "Setting Search Result Importance" on page 150.
Include glossary results	For HTML5 output, search results display glossary terms if they are used as the search text. This option to display glossary terms in search results is enabled by default. However, it can be turned off in the HTML5 Target Editor. See "Including Glossary Terms in Search Results" on page 157.

Exclude non-words from search	If you have a project that contains a lot of content that is not composed of regular letters and numbers (e.g., angled brackets), you can set your target to avoid these "non-words" when users perform a search in your Help system. This will improve the search performance that your users experience. See "Excluding Non-Words From Search" on page 161.
Exclude index entries from search	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. See "Excluding Index Entries From Search" on page 162.
Pre-merge search database file	If you have multiple projects whose outputs are set to be merged when you build the parent project, you can pre-merge search database files. If you select to pre-merge the search database file, you disable runtime merging, which means that you cannot compile and publish a "sub-project" later. You must generate and publish all linked Help systems at the same time. Selecting this option may slow down the generation of the output, but it will significantly increase the speed with which the output loads for the end user.
Chunk large search database file	You can control the size of "chunks" used when generating the search database files for a target. After you choose this option, select the number of bytes for each chunk. The chunk size affects the speed that a Help system loads for a user. Depending on the internet connection, different results will be seen. The smaller the chunk size, the greater the number of chunks that will be sent. A large number of chunks may result in a slower speed, especially if you have many merged "sub-projects" and the index is being merged. Chunking may slow down the generation of your output somewhat, but it increases the speed that the output loads for end users. For best results, you should test the different chunk sizes. Click the drop-down next to the **Maximum chunk size** field to set the maximum size of your search database file.

N-gram size   You can adjust the n-grams, which are character chunks used to separate words in Chinese, Japanese, and Korean projects. Chinese, Japanese, and Korean languages do not have spaces as word boundaries, so n-grams are used to separate the words. Smaller n-gram values produce smaller search database file sizes. They also lead to more search results, which may be less accurate. On the other hand, larger n-gram values produce larger search database file sizes. They also lead to fewer search results, which may be more accurate. The default size in this field is optimal for most situations.

Featured Snippets

Filter	Select to control which pieces of micro content to include for the featured snippets area.

- **Do not include in search results** No micro content is included in the featured snippets area.

- **All micro content files** Every phrase from all of your micro content files may be included.

- **Specific micro content files** In the drop-down(s), choose one or more micro content files. Every phrase from those files may be included.

- **Micro content with meta tags** In the additional drop-down(s), choose specific meta tag names and corresponding values. Micro content phrases that match may be included.

Limit number of results	Control the maximum number of micro content responses that are allowed to display in the featured snippets area. If you leave it set at 1, Flare Desktop displays only the best match from your micro content file (s); if you enter 3, Flare Desktop displays up to the best three matches (if that many exist).

Knowledge Panel	
Filter	Select to control which pieces of micro content to include the Knowledge Panel.

Do not include in search results No micro content is included in the Knowledge Panel area.

All micro content files Every phrase from all of your micro content files may be included.

Specific micro content files In the drop-down(s), choose one or more micro content files. Every phrase from those files may be included.

Micro content with meta tags In the additional drop-down(s), choose specific meta tag names and corresponding values. Micro content phrases that match may be included.

Limit number of results	Control the maximum number of micro content responses that are allowed to display in the Knowledge Panel. If you leave it set at 1, Flare Desktop displays only the best match from your micro content file(s); if you enter 3, Flare Desktop displays up to the best three matches (if that many exist).

Sitemap	
Generate sitemap	For web-based targets, 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. See "Generating Sitemaps" on page 170.
Web URL	This is the URL used for your published output.

❙ Elasticsearch

Supported In:

Elasticsearch is a powerful search engine that provides numerous unique, configurable options, including "fuzzy matching" (i.e., matching similar words), predictive search, and auto-completion.

Elasticsearch is enabled by two web services, one used by Flare Desktop and the other used by Elasticsearch. The Elasticsearch web service runs a portal that lets you manage the targets, topics, and indexes employed by the Elasticsearch engine in your server-based HTML5 target.
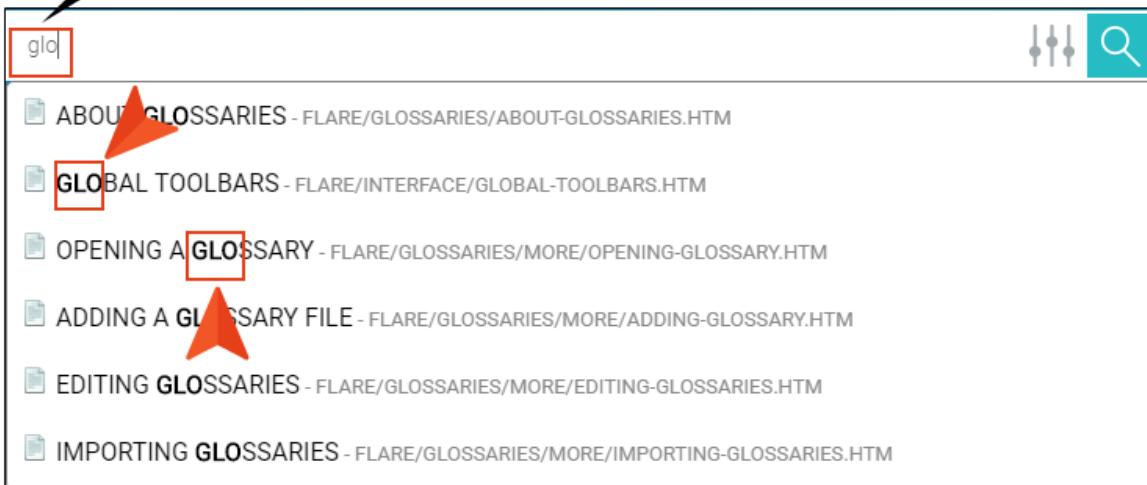
Process

1. "Installing Elasticsearch on a Remote Server" on page 70

2. "Enabling Elasticsearch in the Target Editor" on page 102

3. "Creating Destination Files for Elasticsearch" on page 110

4. "Associating Elasticsearch Destinations With a Target" on page 112

5. Generating and Testing Output—"MadCap Process Manager" on page 113

6. Managing Size of Search Indexes—"Content Services Portal" on page 114

7. (Optional/Periodic) "Upgrading Elasticsearch and Content Services on a Remote Server" on page 122

⭐ **EXAMPLE** Bob wants to use Elasticsearch with his HTML5 output.

First, he sends his network administrator the steps for setting up an Elasticsearch remote server.

After the network administrator finishes setting up the server, she sends Bob the URL for it. In this case, let's say the URL is:

```
https://ourelasticsearchservices.fictionsoft.com
```

Bob opens his HTML5 target, selects the **Search** tab, and chooses **Elasticsearch** as the search engine type.
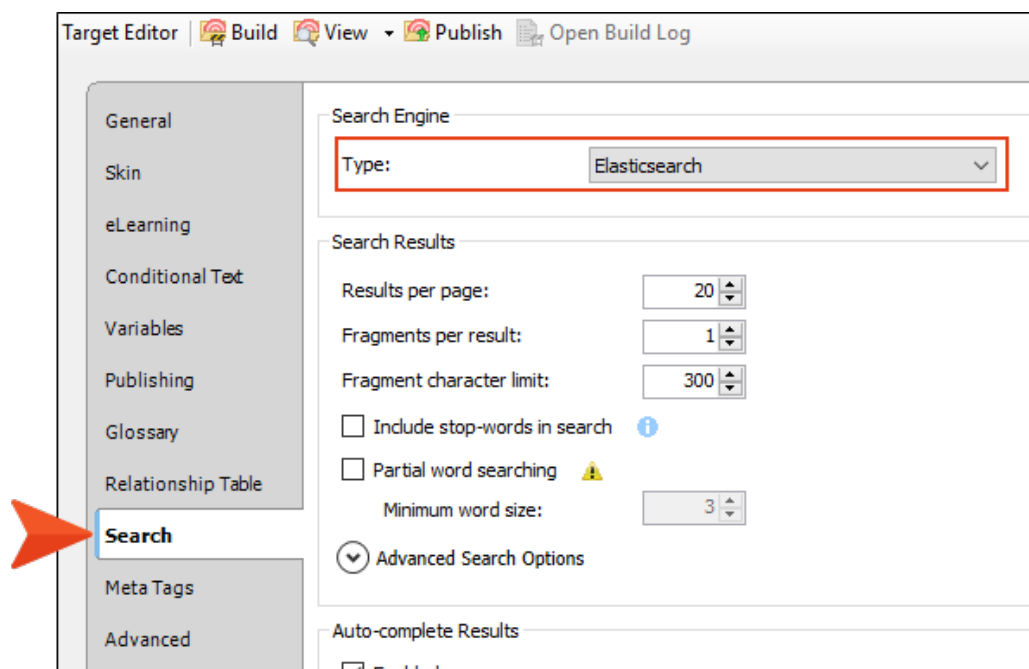
He also decides which Elasticsearch options on that tab he wants to use and sets them accordingly.

Next, Bob creates a primary publishing destination. This is the destination where he will send his output.
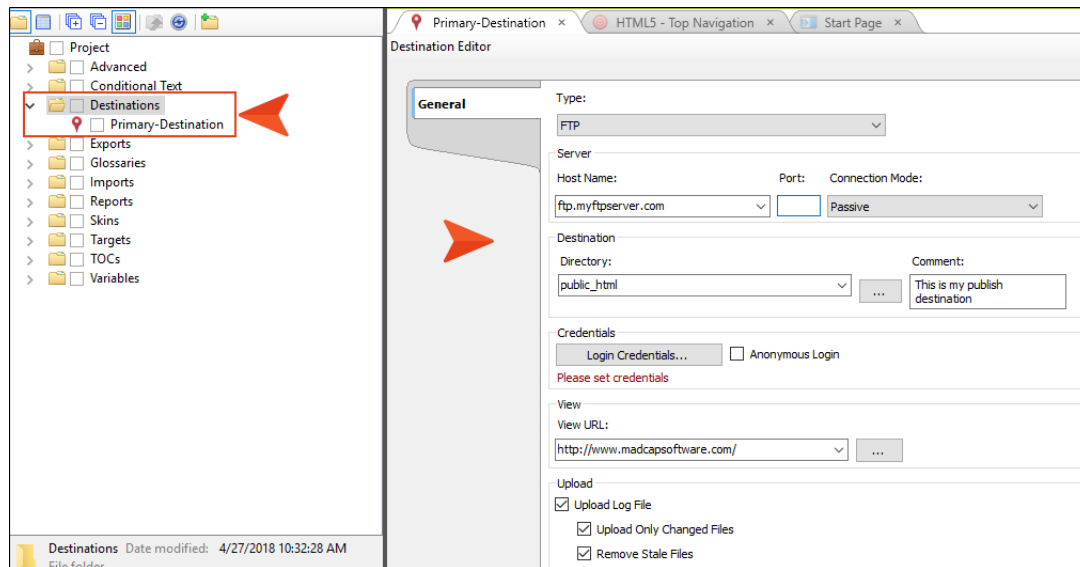
Let's say Bob needs to upload his output to this location:

```
help.fictionsoft.com/myoutput/
```

☆ One option is that Bob could use file transfer protocol (FTP) to copy his output directly up to the server where his output will be hosted. But suppose Bob prefers to use a third-party tool (say, FileZilla) to transfer his output files to the server. In that case, Bob chooses **File System** as the type, and for the directory he selects a folder that he created in his Documents folder.
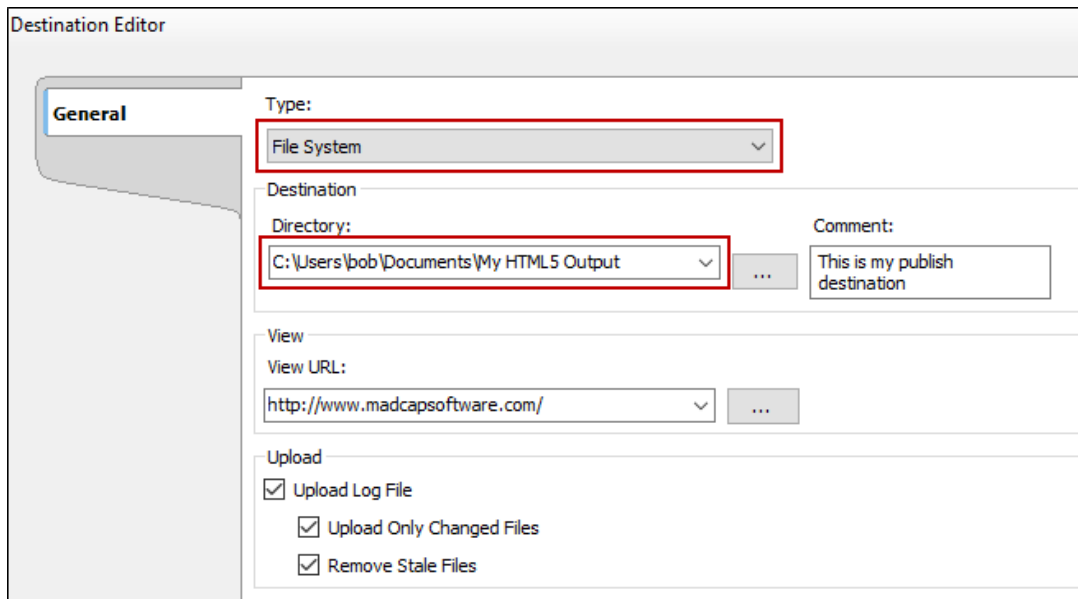
Now Bob creates an Elasticsearch destination file. In this file, he chooses **Elasticsearch** as the type, and he enters the URL that his network administrator gave him (https://ourelasticsearchservices.fictionsoft.com).
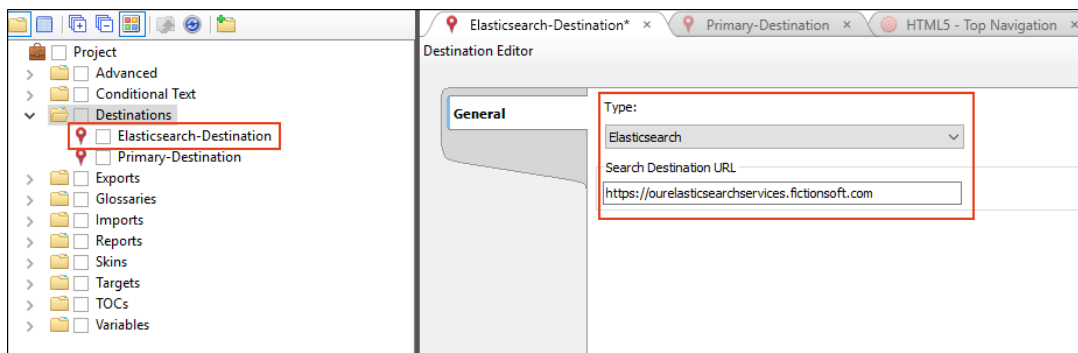
☆ Next, Bob returns to his target and opens the **Publishing** tab. In this tab, he places a check mark next to his primary destination. Then in the **Elasticsearch Destination** cell, he chooses the other destination file.
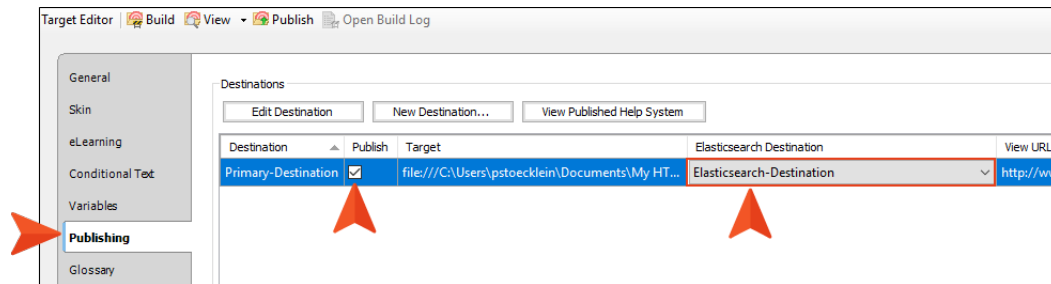
After saving all his changes, Bob builds the target. When that is done, he clicks the **Publish** button in the Target Editor, which copies the output files to the local folder he set up in his Documents directory.

Finally, Bob uses his third-party tool to transfer the output files from that Documents folder up to their final destination (help.fictionsoft.com/myoutput/). When users access that output, the search function will be using Elasticsearch features. (If Bob decided to use FTP or SFTP, the output would transfer directly to the server, and using the third-party tool would not be necessary.)

NOTE Synonyms are not supported in Elasticsearch.

NOTE Elasticsearch is not supported for outputs built on MadCap Flare Online. However, you can publish directly from Flare Desktop to Flare Online via a destination and Elasticsearch will be supported.

NOTE Search filters are not supported in Elasticsearch.

> **NOTE** Multilingual Elasticsearch publishing requires all targets to use the same GUID. This is set on the Search tab of the Target Editor. If the GUIDs in the targets are different, you might have empty targets on the portal or experience a publishing failing with error 400. If necessary, open targets in the Internal Text Editor to modify the GUID.

> **NOTE** If you are viewing your generated Elasticsearch output on Microsoft Edge, you will not be able to search. In order to use Edge for your Elasticsearch output, you will need disable loopback in your Edge browser. A search on the internet can provide steps for doing this.

Installing Elasticsearch on a Remote Server

Information for Network Administrators

Before you can publish HTML5 output to use Elasticsearch, you must have a remote server configured to run the Elasticsearch service as well as the Content Services web application. The Elasticsearch service is required to perform searches from the indexed search data. The Content Services Portal is provided as a central location to manage the search data published from Flare Desktop.

NOTE Please be aware that setting up a remote server for Elasticsearch can be a lengthy process. The procedure typically requires administrator permissions. If you are unfamiliar with how to install a web server, it is highly recommended to contact your Network Administrator for assistance.

Prerequisites for Elasticsearch

The following prerequisites for Elasticsearch are only necessary if you do not already have the programs on your computer. Go through each section to confirm you have all the programs and correct options set, and then follow the given procedures if anything is missing.

NOTE When setting up a computer as a remote server, you can use a Windows Server operating system (e.g., Windows Server 2016), or a regular Windows operating system (e.g., Windows 10). Which system you use depends on your needs. A Windows Server is often used in business settings.

Prerequisite	Description
Operating System With Internet Connection	Make sure your operating system is updated with the latest service packs, critical patches, and security updates from Microsoft.
.NET Framework 4.6 or newer	This is the software development framework for building and running applications on Windows. The minimum required .NET Framework version required is 4.6. It also works with newer versions of .NET Framework.
ASP .NET	ASP.NET is part of .NET Framework (it does not require a separate install from .NET). ASP.NET is the web application framework for building dynamic web pages.This feature gets "turned on" in Windows.
IIS Web Server	Microsoft Internet Information Services (IIS) is a web service role that is enabled in the operating system to give the system its web server capabilities. IIS must be installed on the computer that will act as your Elasticsearch web server. The minimum version required is IIS 6. Newer versions work as well.
.NET 6.0.13 Windows Hosting Bundle	Microsoft .NET Core is used to create server applications that run on Windows, Linux, and Mac.
Java SE Development Kit	You can install a paid Oracle (JDK) Java SE Development Kit, or a free Open JDK Java 1.8

NOTE For details about supported operating systems and hardware requirements for Microsoft programs, refer to Microsoft documentation for downloads. See the following:

```
https://www.microsoft.com/en-us/download/windows.aspx
```

NOTE The following procedures use Windows 10. Be advised that some user interfaces might vary slightly depending on the operating system you are using.

How to Determine if Programs are on the Computer

1. Open the Control Panel.

2. Select **Programs and Features**.

3. Compare the listed applications with the required programs (e.g., Microsoft .NET Core 6.0.13 Windows Server Hosting). If programs for a remote server are missing, you may have to add them.

How to Install .NET Framework

It is necessary to install .NET Framework to run certain applications on Windows that were created with it. However, many versions of Windows already include .NET Framework.

> 📝 **NOTE** It is important to install .NET Framework before installing the IIS web server.

1. In a browser, navigate to:

   `https://dotnet.microsoft.com/download/dotnet-framework`

2. Locate the .NET Framework version, and click the link to download the runtime installer. You can choose to install version 4.6 or newer.

3. In Microsoft's configuration dialog, follow the installation wizard.

> 📝 **NOTE** If you are installing on a Windows Server operating system, you can use the Server Manager to enable .NET Framework features. See "How to Set Roles and Features With the Server Manager on Windows Server" on page 76.

Installing Internet Information Services

The Microsoft Internet Information Services (IIS) gives the system its web server capabilities. If the server that will act as your Elasticsearch web server does not yet have IIS, find the download on the Microsoft website and install it.

NOTE Since newer versions of Windows come with IIS, check to see if IIS is already on your computer. It might be installed, but you just have to enable it via the Control Panel (**Turn Windows features on or off**). If you want a newer version, then you might have to download and install it.

NOTE If working with a Windows Server operating system, the Server Manager program is available to you to manage and configure web server roles and features (see "How to Set Roles and Features With the Server Manager on Windows Server" on the next page). If you are working with a regular Windows operating system, use the Windows Feature dialog to manage and configure web server roles and features for .NET and IIS (see "How to Set Roles and Features With Windows Desktop" on page 78).

How to Set Roles and Features With the Server Manager on Windows Server

To enable roles and features on a Windows Server, you can do so via the Server Manager.

1. From the Windows Server operating system, open the Server Manager.

2. From the **Manage** menu, select **Add roles and features**. Click **Next**.

3. In the Add Roles and Features wizard, select **Role based or feature based installation**. Click **Next**.

4. Choose **Select a server from the server pool**. Click **Next**.

5. Scroll down in the **Server Roles** list and select **Web Server (IIS)**. Click **Next**.

6. In the **Features** list, expand and select **.NET Framework 4.x Advanced Services**, and then select **ASP .NET 4.x**.

7. In the **Role Services** list, select the following under Web Server (IIS):

   - Web Server
     - Common HTTP Features
       - Static Content
       - Default Document
       - Directory Browsing
       - HTTP Errors
     - Security
       - Request Filtering
       - Basic Authentication
       - Windows Authentication
     - Application Development
       - .NET Extensibility 4.x
       - ISAPI Extensions
       - ISAPI Filters
       - ASP .NET 4.x

- Health and Diagnostics
    - HTTP Logging
- Performance
    - Static Content Compression
- Tools Management
    - IIS Management Console
    - IIS 6 Management Capability
        - IIS Metabase and IIS 6 Configuration Compatibility

8. Click **Next** through to the screen with the **Install** button enabled, then click **Install**.

How to Set Roles and Features With Windows Desktop

To enable roles and features on a regular Windows desktop to set it up as a remote server, you can do so via the Windows Feature, Control Panel app.

1. In the Windows Search bar, type `turn on windows.`

2. Click the resulting item, **Turn Windows features on or off**. The Windows Features dialog opens.

3. Expand **.NET Framework 4.x Advanced Services** (the version number may vary depending on the original installation and updates).

4. Select the **ASP.NET 4.x** check box.
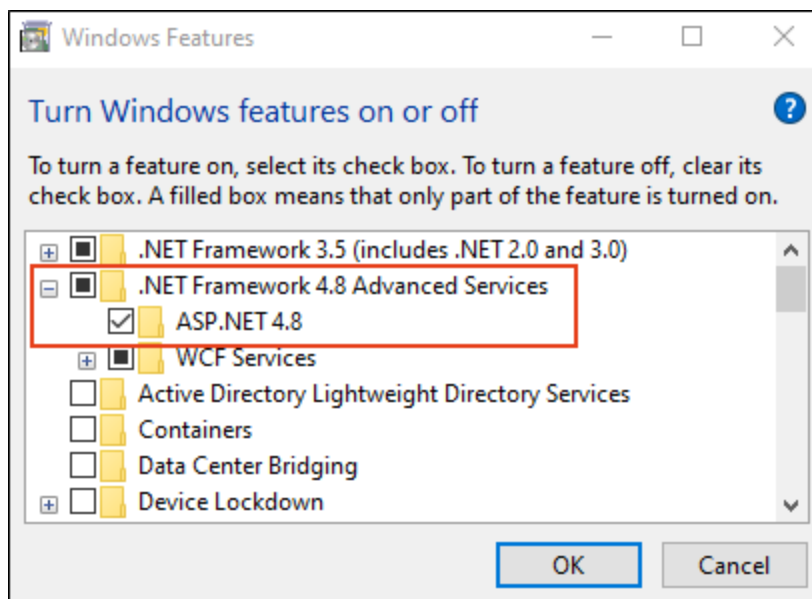
5. Expand **Internet Information Services**.

6. Expand **Web Management Tools**, and select **IIS Management Console**.

7. Expand the **IIS 6 Management Compatibility** folder, and select **IIS Metabase and IIS 6 configuration compatibility** (the version number may vary depending on original installation and updates).
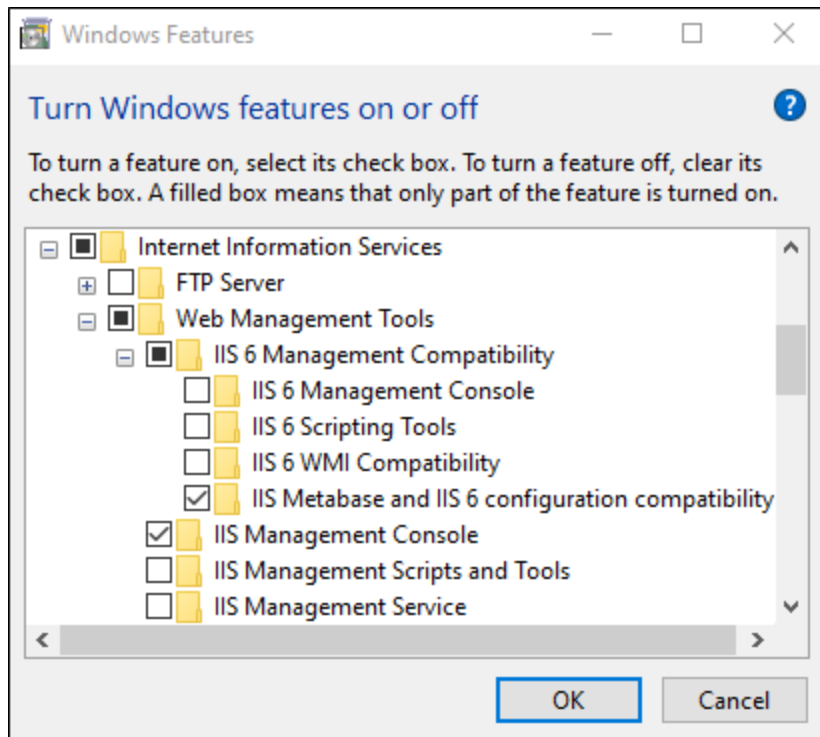
8. Expand **World Wide Web Services**, and expand the **Application Development Features** folder.

9. Select items **.NET Extensibility 4.x**, **ASP.NET 4.x**, **ISAPI Extensions**, and **ISAPI Filters**.
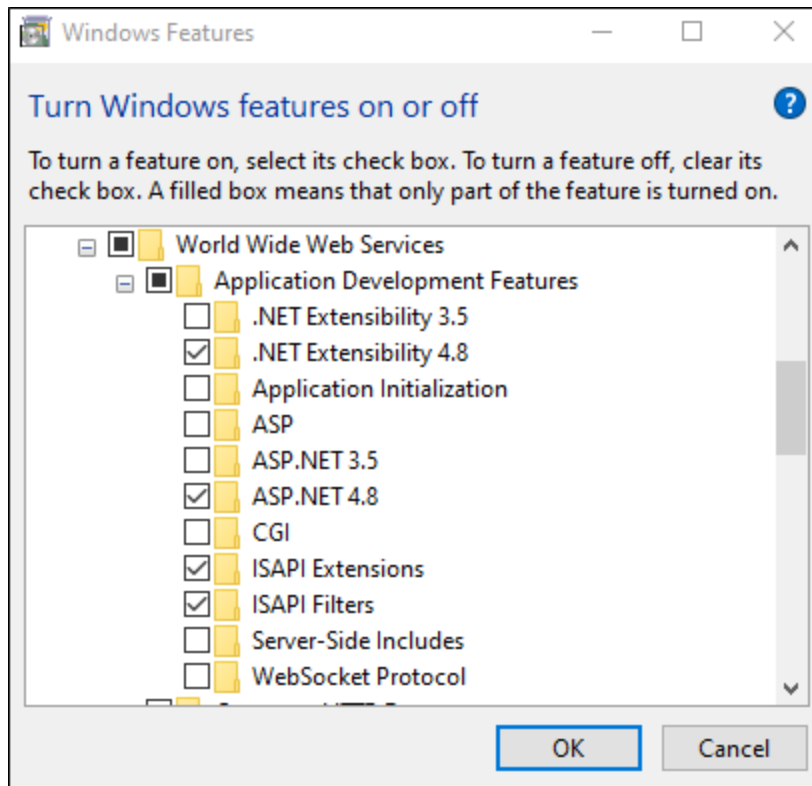
10. Expand the **Common HTTP Features** folder.

11. Select items **Default Document**, **Directory Browsing**, **HTTP Errors**, and **Static Content**.
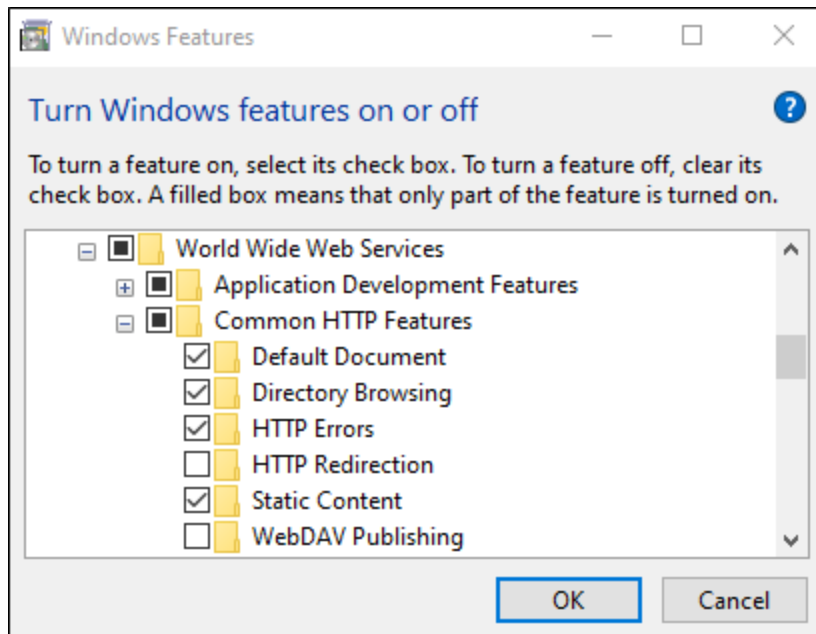
12. Expand the **Health and Diagnostics** folder, and select **HTTP Logging**.
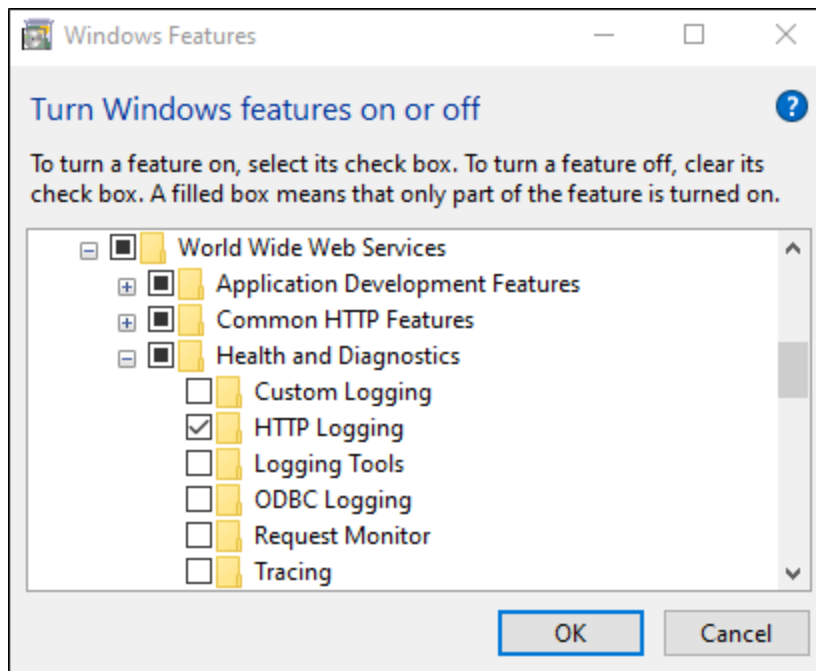
13. Expand the **Performance Features** folder, and select **Static Content Compression**.
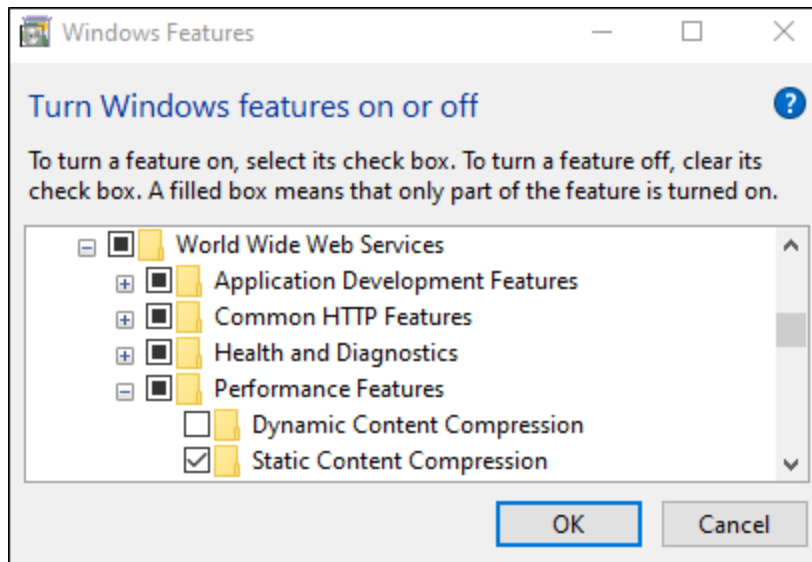
14. Expand the **Security** folder.

15. Select items **Basic Authentication**, **Request Filtering**, and **Windows Authentication**.
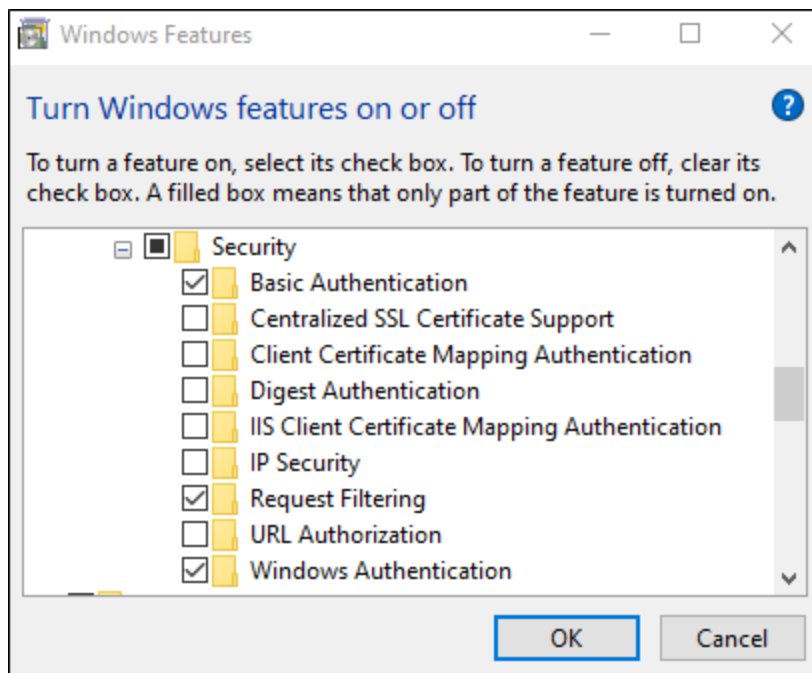
16. Click **OK**. The installation begins.

17. At the Windows completion message, click **Close**.

Optional—How to Verify IIS Installation

Verifying the installation of IIS is not necessary to do, but it might provide peace of mind that it got installed correctly.

1. From the Windows Search bar, type `IIS`.

2. Click the resulting item, **Internet Information Services (IIS) Manager** app. The IIS Manager opens, and should look similar to the image below. When you install IIS for the first time, a "Default Web Site" is automatically created.
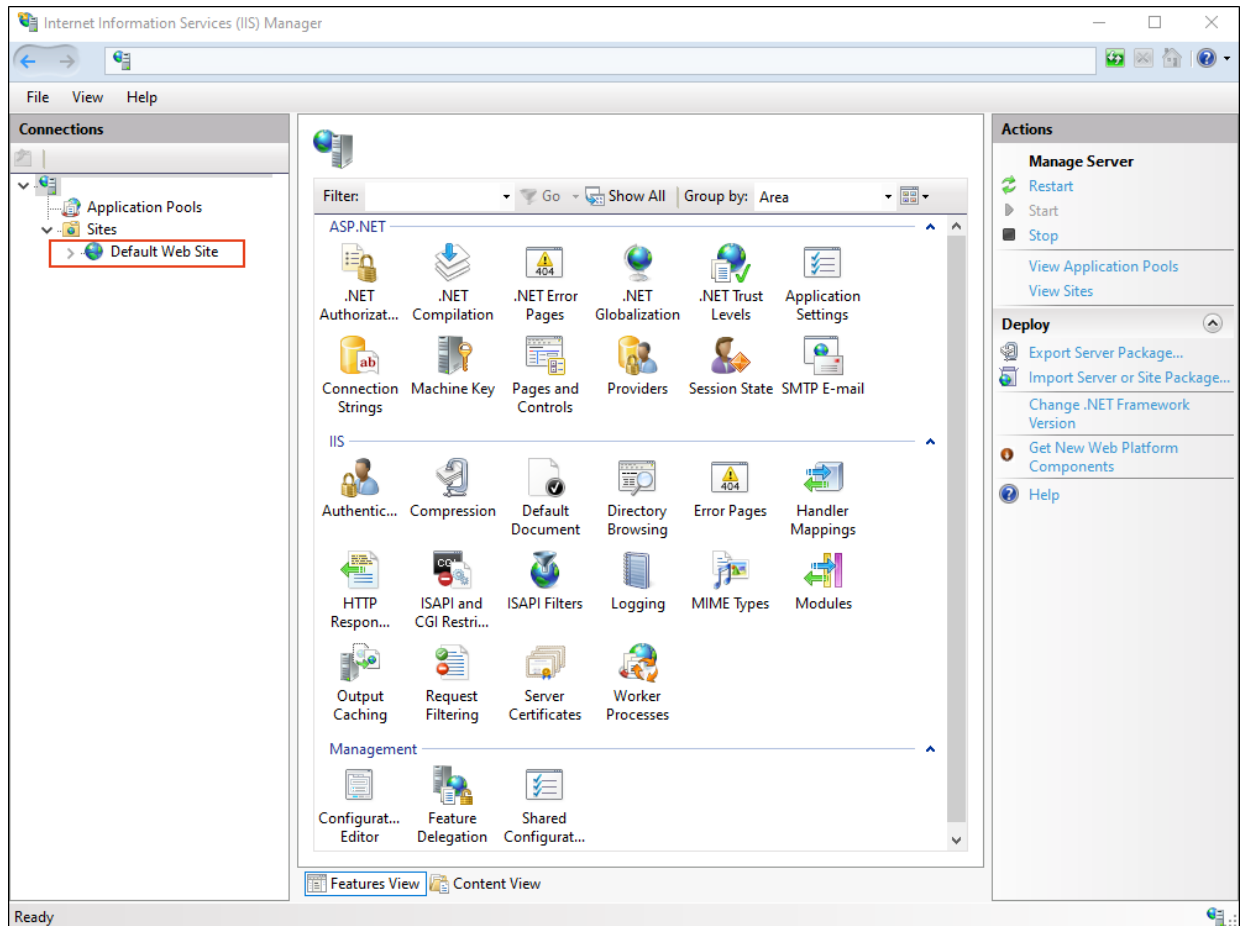
3. Open a web browser, and in the URL field type `localhost`. The default IIS web page displays.
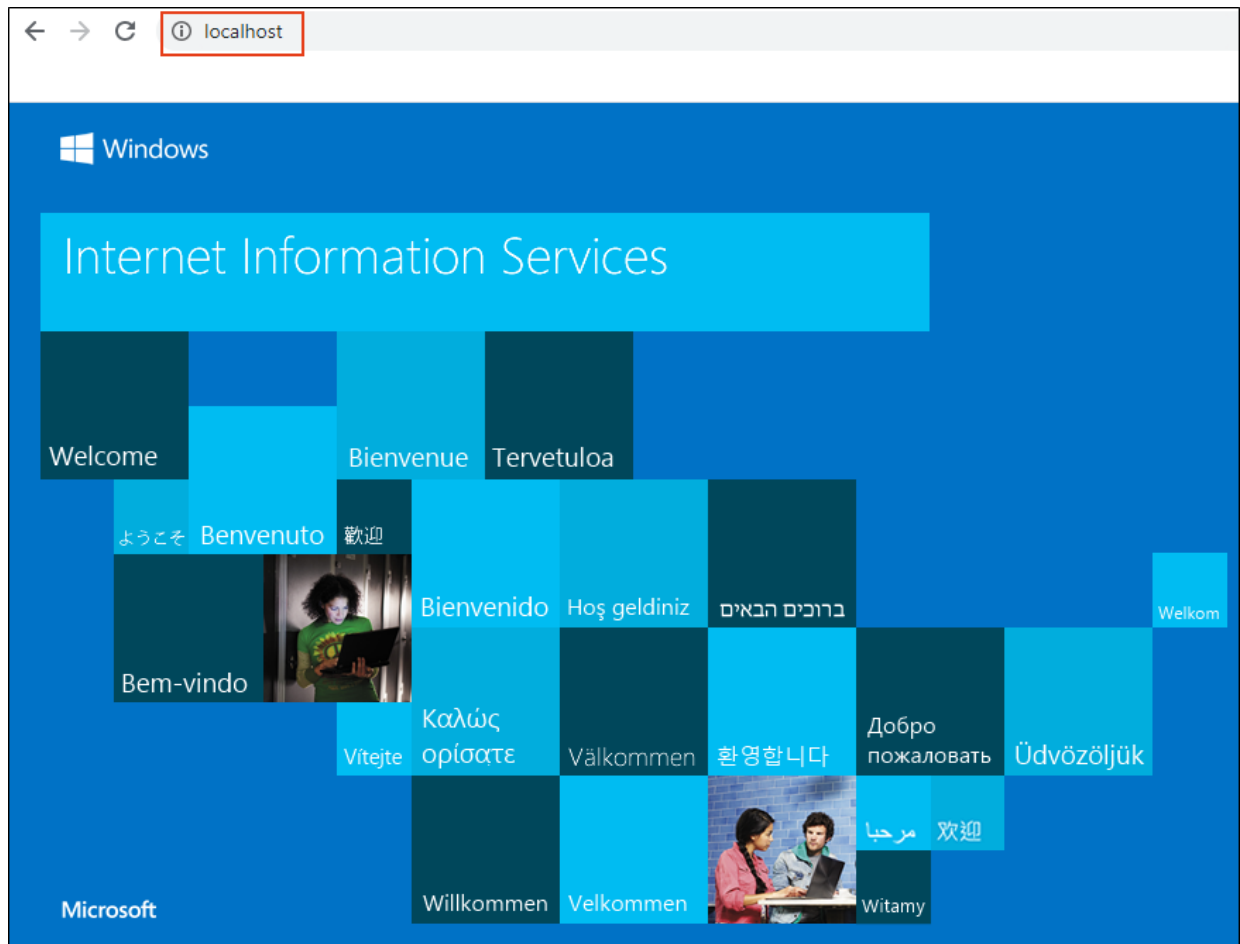
What's Next?

"Configuring the Web Server" on the next page.

Configuring the Web Server

At this point, .NET Framework and IIS are installed for the Elasticsearch engine. A couple more programs are needed for the server, and a new system environment variable. Go through each section to confirm you have all the programs and correct options set, and then follow the given procedures if anything is missing.

How to Install .NET Core

The Microsoft .NET Core 6.0.13 Windows Hosting Bundle is needed for apps to run behind the IIS. This Windows Hosting Bundle should be installed after IIS is installed.

1. Install the Microsoft .NET Core 6.0.13 Windows Hosting Bundle from the following link.

   ```
   https://dotnet.microsoft.com/download/dotnet-core
   ```


2. In Microsoft's configuration dialog, follow the installation wizard.

3. Reboot (server or computer).

How to Download Java JDK

> 📝 **NOTE** Oracle charges license fees to use their Java Development Kit (JDK). Therefore, we also provide support for a free alternative to Oracle's JDK. This alternative—Open JDK—can be used to support Elasticsearch on both local and remote servers made through the Content Services Portal.

1. In a browser, navigate to:

   ```
   https://www.madcapsoftware.com/downloads/java.aspx
   ```

2. Choose one of the following Java JDK links to download.

   - Click **Oracle (JDK) Java SE Development Kit** (this option may have costs associated with it).

       i. From the Java SE Development Kit 8 Download web page, scroll down to the **Java SE Development Kit 8u261** section. S

          The latest version available is subject to change.

       ii. Determine the appropriate Windows option for your machine (e.g., Windows x64, or Windows x86).

       iii. Select the corresponding download file (e.g., for Windows x64, the link is jdk-8u261-windows-x64.exe).

       iv. Click the executable file to install.

- Click **Open JDK Java 1.8** (this option is free).

  i. From the ojdkbuild web page, scroll down to the **Downloads for Windows x86_64** section. See the following:

     ```
     https://github.com/ojdkbuild/ojdkbuild
     ```

  ii. From the bulleted list items, locate the latest version for the MSI installer (e.g., java-1.8.0-openjdk-1.8.0.265-1.b01.ojdkbuild.windows.x86_64.msi). The latest version available is subject to change (build numbers in path for given example might not match).

  iii. Click the **MSI** executable file to install.

How to Edit Environment Variables

After Java JDK has been installed, a new environment variable is needed.

1. From the Windows Search bar, type `Environment Variables`.

2. Click the resulting item from the Control Panel, **Edit the system environment variables**. The System Properties dialog opens.

3. Click the **Environment Variables** button.
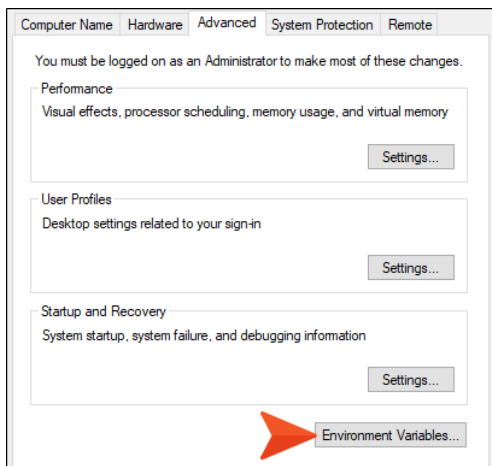
4. In the Environment Variables dialog, in the **System variables** section, click **New**.

5. In the New System Variable dialog, in the **Variable name** field, type `JAVA_HOME`.

6. Use the **Browse Directory** or **Browse File** to navigate to the folder where Java JDK was installed. Once selected, the **Variable value** field populates with that path (e.g., C:\Program Files\ojdkbuild\java-1.8.0-openjdk-1.8.0.252-2). Then click **OK**.
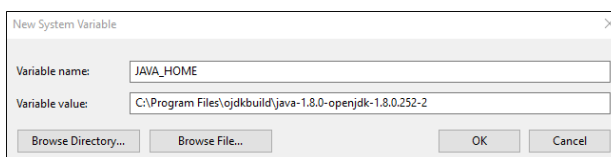
7. In the Environment Variables dialog, click **OK**.

8. In the System Properties dialog, click **OK**.

9. Reboot after adding the environment variable.

Optional—How to Verify the Java JDK Installation

1. From the Windows Search bar, type `cmd`, and press **ENTER** to open a command prompt.

2. At the command prompt, type `javac` and press **ENTER**. If you see javac options display below the command prompt, then Java JDK is working properly.

```
C:\Users\Administrator>javac
Usage: javac <options> <source files>
where possible options include:
  -g                         Generate all debugging info
  -g:none                    Generate no debugging info
  -g:<lines,vars,source>     Generate only some debugging info
  -nowarn                    Generate no warnings
  -verbose                   Output messages about what the compiler is doing
  -deprecation               Output source locations where deprecated APIs are u
sed
  -classpath <path>          Specify where to find user class files and annotati
on processors
  -cp <path>                 Specify where to find user class files and annotati
on processors
  -sourcepath <path>         Specify where to find input source files
  -bootclasspath <path>      Override location of bootstrap class files
  -extdirs <dirs>            Override location of installed extensions
  -endorseddirs <dirs>       Override location of endorsed standards path
  -proc:<none,only>          Control whether annotation processing and/or compil
ation is done.
  -processor <class1>[,<class2>,<class3>...] Names of the annotation processors
to run; bypasses default discovery process
  -processorpath <path>      Specify where to find annotation processors
  -parameters                Generate metadata for reflection on method paramete
rs
  -d <directory>             Specify where to place generated class files
  -s <directory>             Specify where to place generated source files
  -h <directory>             Specify where to place generated native header file
s
  -implicit:<none,class>     Specify whether or not to generate class files for
implicitly referenced files
  -encoding <encoding>       Specify character encoding used by source files
  -source <release>          Provide source compatibility with specified release

  -target <release>          Generate class files for specific VM version
  -profile <profile>         Check that API used is available in the specified p
rofile
  -version                   Version information
  -help                      Print a synopsis of standard options
  -Akey[=value]              Options to pass to annotation processors
  -X                         Print a synopsis of nonstandard options
  -J<flag>                   Pass <flag> directly to the runtime system
  -Werror                    Terminate compilation if warnings occur
  @<filename>                Read options and filenames from file

C:\Users\Administrator>_
```

3. Close the command prompt.

What's Next?

"Gathering Required Files for the Remote Server" on the next page.

Gathering Required Files for the Remote Server

With the IIS Web Server configured, it is necessary to gather the required files from Flare Desktop and copy them to the remote server.

How to Copy Files to the Remote Server

1. From the computer where Flare Desktop is installed, use Windows File Explorer to navigate to the **Elasticsearch** folder (e.g., C:\Program Files\MadCap Software\MadCap Flare 21\Flare.app\Resources\Elasticsearch).

2. Copy the **Elasticsearch** folder to the remote server computer (e.g., C:\Elasticsearch). (If you copy files to this location, you may receive a message requiring administrative permission for this action. Click **Continue**.)

   > 🗒 **NOTE** The Elasticsearch folder can be copied anywhere on the computer. It is also better to keep the Elasticsearch folder outside of the web server for security purposes.

3. Navigate to the **Web.ContentServices** folder from the location where you have Flare Desktop installed (e.g., C:\Program Files\MadCap Software\MadCap Flare 21\Flare.app\Resources\WebHelp2\ContentServices\Web.ContentServices).

4. Copy the **Web.ContentServices** folder to the web server folder of the remote server (e.g., C:\inetpub\wwwroot). (If you copy files to this location, you may receive a message requiring administrative permission. Click **Continue**.)
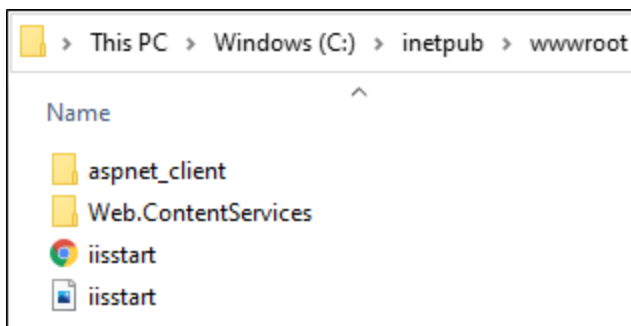
What's Next?

"Setting Up the Elasticsearch Server and Content Portal" on the next page.

Setting Up the Elasticsearch Server and Content Portal

Work through each section below to complete the remaining items needed for the Elasticsearch service.

How to Install the Elasticsearch Service

Install Elasticsearch on the remote server to provide the engine for the Elasticsearch service.

1. From Windows File Explorer, right-click the **Elasticsearch** folder on the remote server, and select **Properties**.

2. In the Elasticsearch Properties dialog, select the **Security** tab.

3. In the **Groups or user names** section, select the **Everyone** account. If this account is not listed, do the following.

   a. Create this account by clicking **Edit**. (You need to be signed is as an administrator.)

   b. In the Permissions for Elasticsearch dialog, click **Add**. The Select Users, Computers, Service Accounts, or Groups dialog opens.

   c. In the **Enter the object names to select** section, type `Everyone`. Click **OK**.

4. In the Permissions for Elasticsearch dialog, choose the permissions for **Everyone**. Under the **Allow** category, select **Read** and **Write**.

5. Click **OK**.

6. Navigate to **Elasticsearch\config** directory, and open the **elasticsearch.yml** file in a text editor (e.g., right-click, and select **Edit with Notepad++**).

7. Under the **Network** section, find the string "http.port: 9200" and remove the # character from it.

> 📝 **NOTE** Elasticsearch uses port 9200 by default. You will notice in the Elasticsearch.yml file that the http port is 9200, and in the appsettings.json file the port is 9602 (in a later step). These numbers must match. You can choose to edit one of the files with either number. Just make sure they show the same number after the edits. If you change the port number in the YML file, you can specify the port number where it reads: http.port: 9200.

```
# -------------------------------------- Network ---------------------
#
# Set the bind address to a specific IP (IPv4 or IPv6):
#
#network.host: 192.168.0.1
#
# Set a custom port for HTTP:
#
#http.port: 9200
#
# For more information, consult the network module documentation.
#
```

Remove this symbol to
enable this port number.

8. Save the YML file.

9. In the Windows Search bar, type `cmd`.

10. In the command prompt, navigate to the location of the copied Elasticsearch\bin directory
    (e.g., cd C:\Elasticsearch\bin).

11. Type `elasticsearch-service.bat install` and press **ENTER**.

12. Type `elasticsearch-service.bat start` and press **ENTER**. Elasticsearch is now
    running as the remote web server.

How to Set Up the Content Services Portal

The Content Services Portal is necessary in order to manage the search data for the Elasticsearch-enabled HTML5 output.

1. From Windows File Explorer, right-click the **Web.ContentServices** folder on the remote server, and select **Properties**.

2. In the Web.ContentServices Properties dialog, select the **Security** tab.

3. In the **Groups or user names** section, select the **Everyone** account. If this account is not listed, do the following.

    a. Create this account by clicking **Edit**. (You need to be signed is as an administrator.)

    b. In the Permissions for Web.ContentServices dialog, click **Add**. The Select Users, Computers, Service Accounts, or Groups dialog opens.

    c. In the **Enter the object names to select** section, type `Everyone`. Click **OK**.

4. In the Permissions for Web.ContentServices dialog, choose the permissions for **Everyone**. Under the **Allow** category, select **Read** and **Write**.

5. Click **OK**.

6. In the **Web.ContentServices** folder on the remote server, create a folder titled "logs."

7. In the **Web.ContentServices** folder on the remote server, open the **appsettings.json** file in a text editor (e.g., right-click, and select **Edit with Notepad++**).

   a. Under the **ConnectionStrings** section, update the path to be used for the DefaultConnection. The default string line should read as shown in the following image.

```json
{
    "ApplicationInsights": {
        "InstrumentationKey": ""
    },
    "Logging": {
        "IncludeScopes": true,
        "LogLevel": {
            "Default": "Information",
            "System": "Information",
            "Microsoft": "Information"
        }
    },
    "ConnectionStrings": {
        "DefaultConnection": "Data Source=\"C:\\inetpub\\wwwroot\\Web.ContentServices\\Indices.db\"",
        "ElasticsearchUrl": "http://localhost:9602",
        "LegacyElasticsearchUrl": ""
    },
    "ContentServicesStartUpConfigSettings": {
        "DataRootDir": "%LocalAppData%\\MadCap Software\\ContentServices\\Web.ContentServices"
    }
}
```

> 🗒 **NOTE** The Indices.db file is actually not created until the Content Services application is started in IIS and users start searching on the Elasticsearch output. In this step, you are simply specifying the location of where you want this file to reside on your remote server.

> 🗒 **NOTE** Elasticsearch uses port 9200 by default. You will notice in the Elasticsearch.yml file that the http port is 9200 (in a previous step), and in the appsettings.json file the port is 9602. These numbers must match. You can choose to edit one of the files with either number. Just make sure they show the same number. If you change the port number in the JSON file, you can specify the port number where it reads: http://localhost: 9602.

b. Under **ContentServicesStartupConfigSettings**, update the path to be used for the **DataRootDir**. The default string line should read as shown in the following image.

```json
{
    "ApplicationInsights": {
        "InstrumentationKey": ""
    },
    "Logging": {
        "IncludeScopes": true,
        "LogLevel": {
            "Default": "Information",
            "System": "Information",
            "Microsoft": "Information"
        }
    },
    "ConnectionStrings": {
        "DefaultConnection": "Data Source=\"C:\\inetpub\\wwwroot\\Web.ContentServices\\Indices.db\"",
        "ElasticsearchUrl": "http://localhost:9602",
        "LegacyElasticsearchUrl": ""
    },
    "ContentServicesStartUpConfigSettings": {
        "DataRootDir": "C:\\inetpub\\wwwroot\\Web.ContentServices"
    }
}
```

c. Save the JSON file.

> **NOTE** Ensure that the paths you provide for DefaultConnection and DataRootDir in the appsettings.json file have read/write permissions for the user account logging into the web server.

> **WARNING** If you decide to place the Web.ContentServices folder in a different location from the C:\inetpub\wwwroot location, make sure the configuration settings in the appsettings.json file match the location on your remote server where you placed the Web.ContentServices folder.
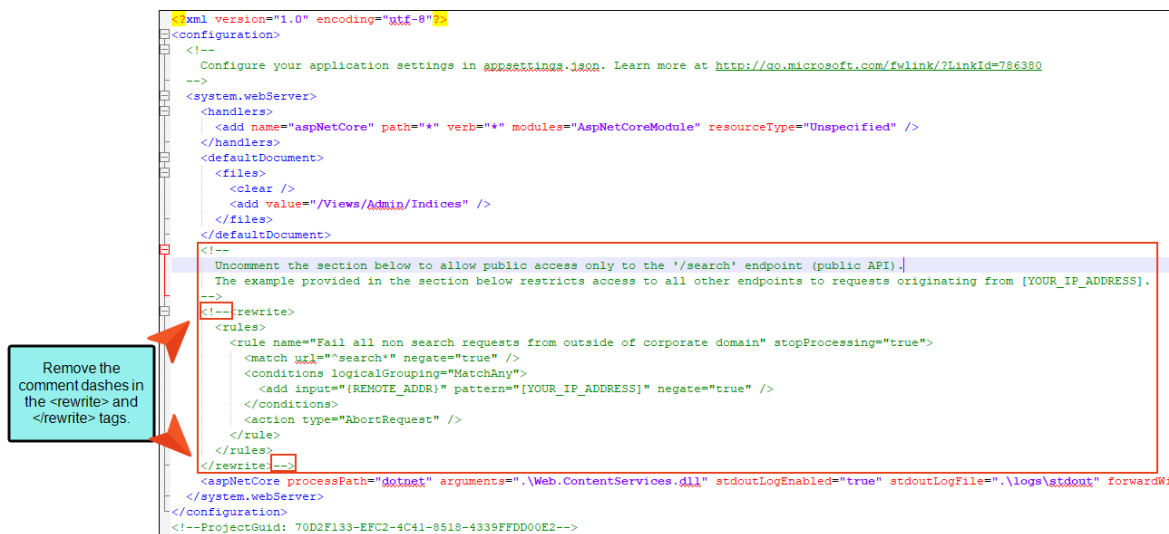
Optional—How to Restrict Access to Content Services

To restrict access to the Content Services Portal, configure the Content Services web application. This is done by installing the URL Rewrite Module, which will enable IP address security restrictions to work in your web.config.file. This is an optional procedure.

1. In a browser, navigate to:

   ```
   https://www.iis.net/downloads/microsoft/url-rewrite
   ```

2. From the URL Rewrite web page, scroll down to the **Download URL Rewrite Module 2.1** section.

   a. Determine the appropriate download option for your machine (e.g., x64 installer), and select it.

   b. Click the executable file to install.

3. In the **Web.ContentServices** folder on the remote server, open the **web.config** file in a text editor (e.g., right-click, and select **Edit with Notepad++**).

4. Remove the comment characters from the **<rewrite>** and **</rewrite>** tags in this file.

5. Modify **YOUR_IP_ADDRESS** with your desired IP address pattern. You can enter a range of IP addresses in this field, or a singular IP address. This will block other addresses that do not match your IP address pattern from gaining administrator access to your Content Services Portal.

```xml
<!--
  Uncomment the section below to allow public access only to the '/search' endpoint (public API).
  The example provided in the section below restricts access to all other endpoints to requests originating from [YOUR_IP_ADDRESS].
-->
<!--<rewrite>
  <rules>
    <rule name="Fail all non search requests from outside of corporate domain" stopProcessing="true">
      <match url="^search*" negate="true" />
      <conditions logicalGrouping="MatchAny">
        <add input="{REMOTE_ADDR}" pattern="YOUR_IP_ADDRESS" negate="true" />
      </conditions>
      <action type="AbortRequest" />
    </rule>
  </rules>
</rewrite>-->
```

> **NOTE** You can enter a single IP address of the remote server to limit portal access to users only on that computer. However, you might need to provide access for more than just the remote server computer. For example, enter a range of IP addresses to provide access for authors to publish to the server.

How to Configure the Content Services Web Application

1. From the Windows Search bar, type IIS.

2. Click the resulting item, **Internet Information Services (IIS) Manager** app to open IIS Manager.

3. Right-click **Application Pools**, and select **Add Application Pool**. The Application Pool dialog opens.

4. In the **Name** field, type a name (e.g., MyAppPool). Keep the other default settings, and click **OK**. For information about application pools, refer to Microsoft documentation:

   ```
   https://docs.microsoft.com/en-
   us/iis/configuration/system.applicationhost/applicationpools/
   ```
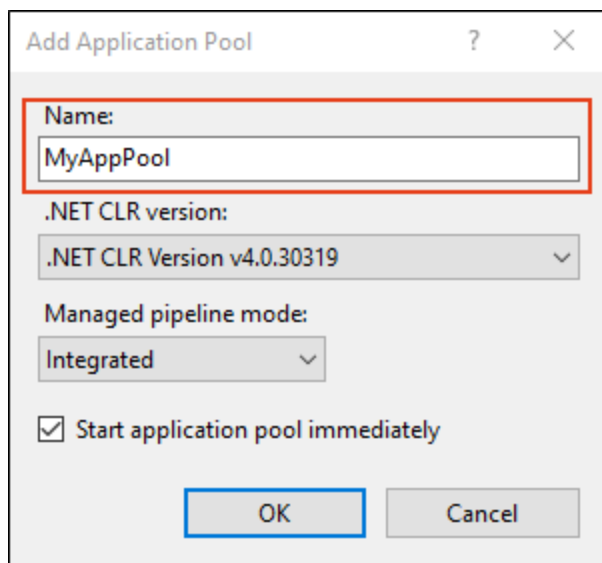

5. In the IIS Manager, navigate to **Sites > Default Web Site**.

6. Right-click **Default Web Site**, and select **Add Application**.

7. Enter the name of the **Alias** for your Elasticsearch website (e.g., MyPortal).

8. Click the **Select** button, and choose your Application pool.

> 📝 **NOTE** You can use the default Application pool or create a new one for this service.

9. Next to the **Physical path** field, click the **ellipsis** button.

10. Select the **C:\inetpub\wwwroot\Web.ContentServices** directory. Or, if you placed the Web.ContentServices directory in another location on your server, select that location instead.
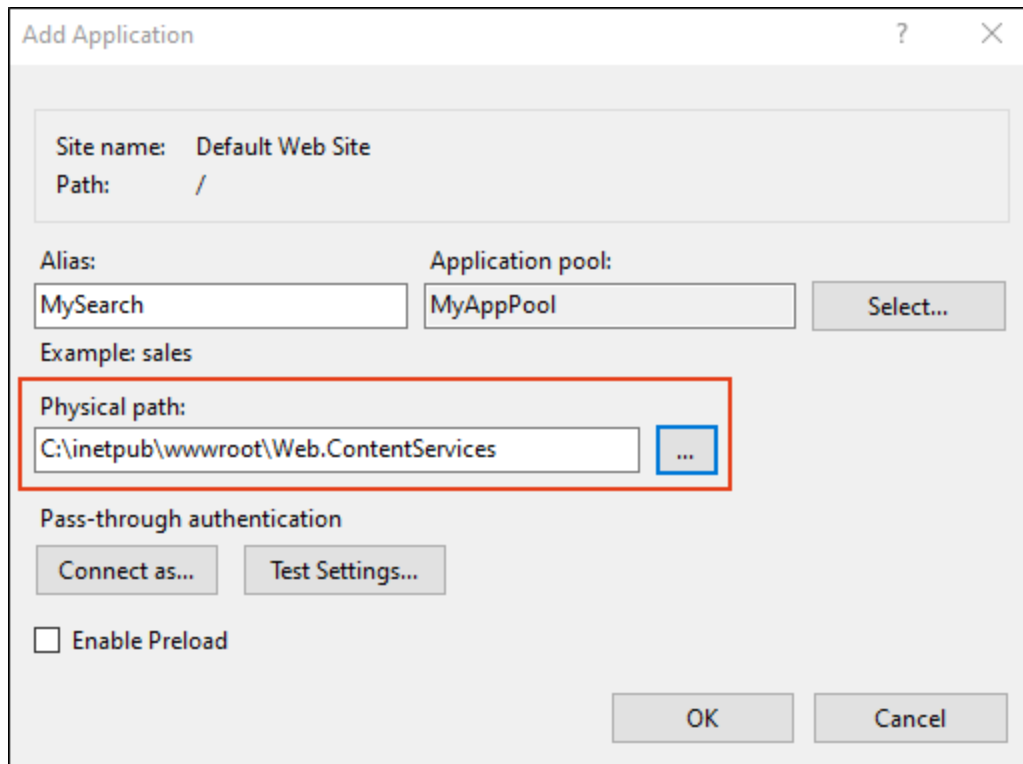
11. Click **OK**. Your Content Services application is now displayed under Default Web Site in IIS.
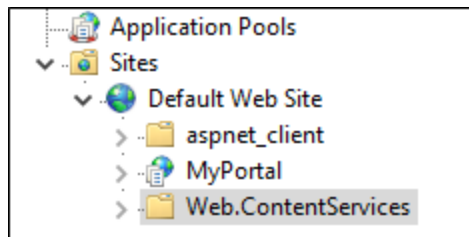
12. Click **Start** (or **Restart** if it is already running) on your Default Web Site. The Content Services application is now running.
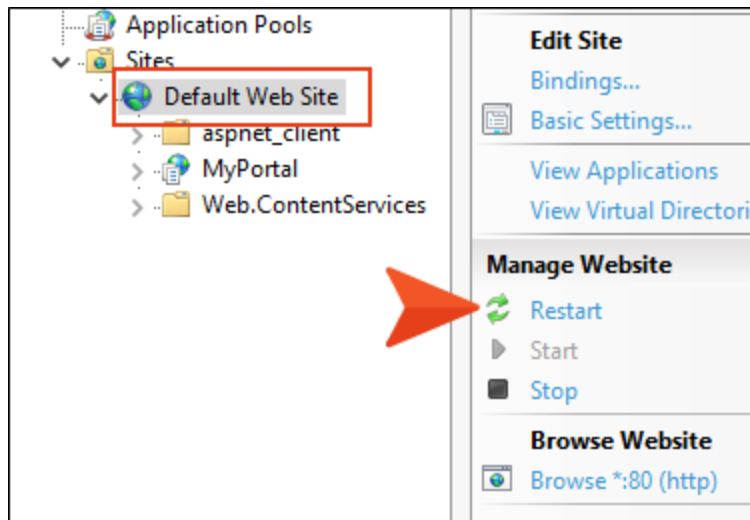
Optional—How to Verify Content Service Portal Installation

Verifying the installation of Content Services Portal is not necessary to do, but it might provide peace of mind that is running properly.

1. From the Windows Search bar, type `IIS`.

2. Click the resulting item, **Internet Information Services (IIS) Manager** app. The IIS Manager opens and should show the website configured from earlier steps.

3. Right-click the portal (e.g. MyPortal) and select **Manage Website > Browse**. If the following page displays, the portal was configured successfully.
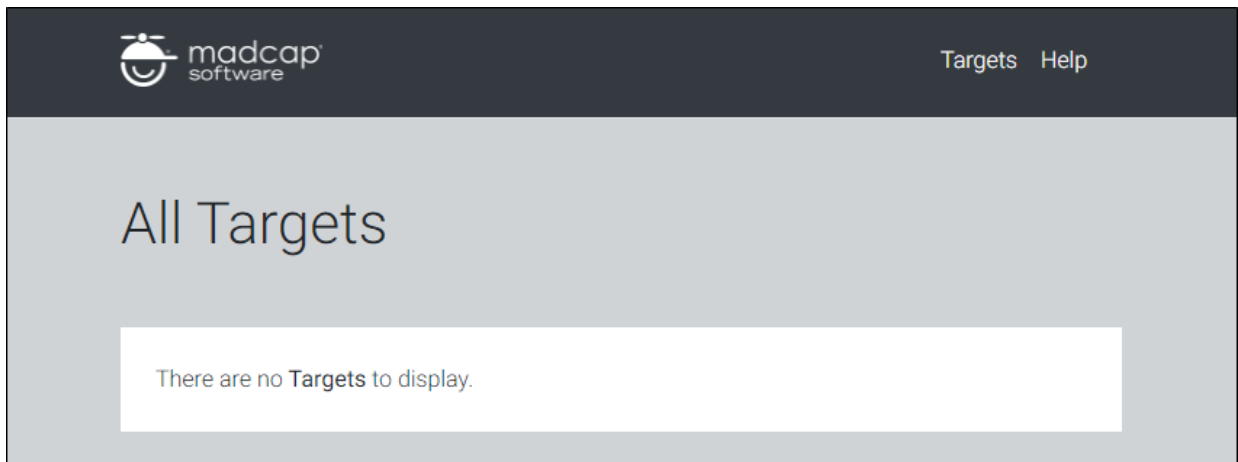
The URL for the portal displays as http://localhost/MyPortal where "MyPortal" is the name of the website picked in an earlier step. In order for another computer to have access to this server, replace "localhost" with the name of the remote server. For example, the URL to use from another computer to access this portal is http://[name of server]/[MyPortal].

4. Ensure the computer with Flare Desktop (used to publish to the server) has access to the remote server. Open a browser on that local computer and browse to http://[name of server]/[MyPortal]. It should display the same portal page as in the last step. This URL is the also the one to use for the Elasticsearch destination file in the Flare project.

What's Next?
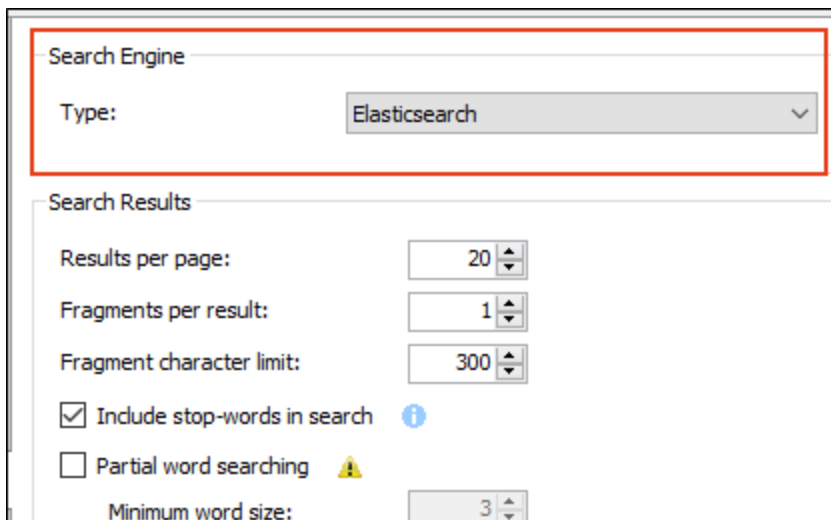
The next steps in the process involve integrating Elasticsearch with Flare Desktop. Once those are complete, you'll be able take advantage of the full capabilities of Elasticsearch as your search engine. See "Enabling Elasticsearch in the Target Editor" on the next page.

Enabling Elasticsearch in the Target Editor

Follow these steps to configure Elasticsearch for your server-based HTML5 target.

How to Enable Elasticsearch

1. Open the target and click the **Search** tab.

2. Click the drop-down in the **Type** field and select **Elasticsearch**.

3. Configure the following options you need to enable Elasticsearch for your output.

Search Results	
Results per page	You can change the number of search results that appear on each page. This makes it easier to navigate between pages of search results and improves loading times, especially for users who access output from a mobile device. Setting a reasonable number of results per page also makes it easier for search indexing services (i.e., spiders, crawlers, or bots) to locate pages in output, improving search results. You can set between 1-100 search results per page.
Fragments per result	This sets the number of fragments that contain the text of the searched item shown in the preview text. The fragment level can be set anywhere from 0-5. This applies to both search results and Autocompletion Types. For example, if you type in the word "Search" in the search bar, the search result extract might display like this: ■ "**Search** can be conducted from multiple locations. There are three types of **search**es that can be selected in the Target Editor. Use the **search** bar to locate the feature you want to use." ■ In this case, the Fragments Per Limit level is set to 3.
Fragment character limit	This sets the character limit of the fragment phrase used in the search.

Include stop-words in search	Flare Desktop 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. If you want the search engine to search for queries with these words, you can include the stop words list in search.
Partial word searching	This allows part of a word to be searched in the target database. For example, the string "sear" could return results for "search." The Minimum word size field can be set from 3-10.

> **NOTE** Enabling this setting could increase the build time and the size of the search index for your target.

Advanced Search Options	
Include Importance (recommended)	In HTML5 output, the Flare search engine uses a combination of factors to rank search results. The search engine considers the number of links to a topic (Importance) and the number of times a search term appears in a topic. This gives you the most accurate results. You can turn off Importance and search using only the number of search term hits in each topic. This is not recommended unless you have one topic that is linked too many times that it would skew your search results.

| Include fuzzy matches | Fuzziness is when two words are spelled similarly and could be considered the same word. |

- Substitution: ta**b**s could be construed as ta**g**s

- Insertion: **tab** could be construed as **tab**le

- Deletion: se**r**ver could be construed as sever

- Transposition: fi**le** could be construed as fl**ie**s

- Multiple edits: im**e**g > im**age**. The first edit substitutes e for i. The second edit inserts e at the end of the string to find the word image.

By enabling this setting, this allows the following fuzzy matches:

- Zero edits for strings of one or two characters (i.e., to, by, on)

- One edit for strings of three to five characters (i.e., rnu could be construed as run, hleps could be construed as helps)

- Two edits for strings greater than five characters (i.e., sievrly could be construed as severely)

> 📝 **NOTE** Sometimes a search string is stemmed when displaying the search results. Stemming is when a word is reduced to its root. For example, say you enter a search criteria for "important." If this word is stemmed, then Elasticsearch may return fuzzy matches for "importing." This occurs because the initial search criteria has been stemmed to the root "import."

Featured Snippets

Filter	Select to control which pieces of micro content to include in the featured snippets area.
	- **Do not include in search results** No micro content is included in the featured snippets area.
	- **All micro content files** Every phrase from all of your micro content files may be included.
	- **Specific micro content files** In the drop-down(s), choose one or more micro content files. Every phrase from those files may be included.
	- **Micro content with meta tags** In the additional drop-down(s), choose specific meta tag names and corresponding values. Micro content phrases that match may be included.
Limit number of results	Control the maximum number of micro content responses that are allowed to display in the featured snippets area. If you leave it set at 1, Flare Desktop displays only the best match from your micro content file(s); if you enter 3, Flare Desktop displays up to the best three matches (if that many exist).

Knowledge Panel	
Filter	Select to control which pieces of micro content to include in the Knowledge Panel. ■ **Do not include in search results** No micro content is included in the Knowledge Panel area. ■ **All micro content files** Every phrase from all of your micro content files may be included. ■ **Specific micro content files** In the drop-down(s), choose one or more micro content files. Every phrase from those files may be included. ■ **Micro content with meta tags** In the additional drop-down(s), choose specific meta tag names and corresponding values. Micro content phrases that match may be included.
Limit number of results	Control the maximum number of micro content responses that are allowed to display in the Knowledge Panel. If you leave it set at 1, Flare Desktop displays only the best match from your micro content file(s); if you enter 3, Flare Desktop displays up to the best three matches (if that many exist).

Auto-complete Results	
Enabled	This option enables the other options in this area. If this box is not checked, all of the other options in this area are disabled.
Number of results	This field sets the limit of personal searches that display in the drop-down while entering the search string. This can be set from a value of 1-25.

Include project content	This displays the topic title, the path of where the topic resides in your project, and the file name based on the search criteria. These results are displayed with a topic icon.
Include search history	This includes a mix of personal and global searches in the output.
Global search threshold	This threshold determines the minimum number of times a term must be searched from unique IP addresses before it becomes a global search term. This threshold can be set from a value of 0-10000. ■ Assuming that this field is set to a value of 50, if the term "autocompletion" is searched from 49 unique IP addresses on your HTML5 output, "autocompletion" does not become a global search term until that term is searched from a 50th unique IP address.
Sitemap	
Generate sitemap	This box should be checked to generate the sitemap required for Elasticsearch on your output.
Web URL	This is the URL used for your published output.

Administrator Tools	
Target GUID	This provides the key used to identify and link a target to the corresponding Elasticsearch index.

> **NOTE** Multilingual Elasticsearch publishing requires all targets to use the same GUID. If the GUIDs in the targets are different, you might have empty targets on the portal or experience a publishing failing with error 400. If necessary, open targets in the Internal Text Editor to modify the GUID.

Generate GUID	This generates the key to be used by the target for the Elasticsearch index.
Launch Content Services	This opens the target in the content services portal. You can manage your targets, and search indexes in the portal.

4. Click 🖫 to save your work.

> **TIP** If you are producing different versions of your online output and using Elasticsearch, you probably want to create a target with a different name for each version. Then, generate a unique GUID for each of those targets.
>
> The reason for this is that a search database/index is created for each output. If those outputs share the same GUID, all the outputs will share the same search results, which would could cause problems, because some outputs might have content that is not actually available in other outputs.
>
> Also, the paths to the topics linked in search results are also stored in the index. If you change the path of a topic between the versions, the search result paths will also be wrong.

Creating Destination Files for Elasticsearch

Elasticsearch is tied to your target—and therefore your output—through the use of publishing destinations. You must create both a primary destination and an Elasticsearch destination. With the primary destination, you tell Flare Desktop where to send your output files. With the Elasticsearch destination, you specify where your search indexing data should be stored (i.e., the server location that is set up by your network administrator).
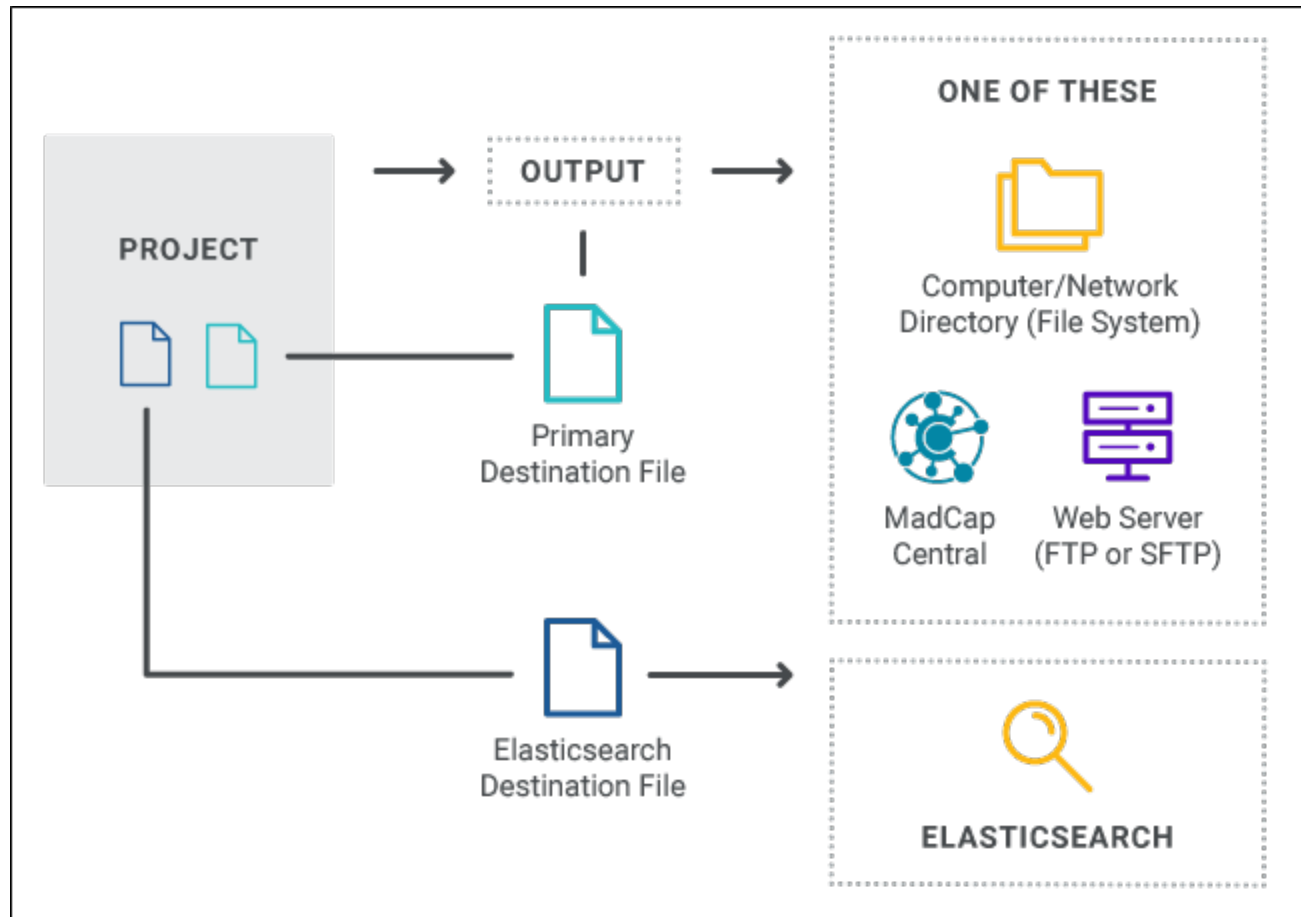
How to Create a Primary Destination File

1. In the Project Organizer, right-click the **Destinations** folder and select **Add Destination**.

2. Give the file a name and click **Add**.

3. Complete the fields in the Destination Editor, depending on how you want to transfer a copy of your output files to their destination (e.g., FTP, SFTP). For more about the available options, see the Help system.

4. Click ⊞ to save your work.

> ▱ **NOTE** You have the option in the Destination Editor to choose "File System" as the method for transferring files. In this case, you would be storing the copy of your output files to a local folder instead of transferring them remotely. You might choose to do this if you prefer to use a third-party tool to then move those files up to the server hosting your output.
>
> If you choose to publish your files locally in this way, you must have Java Development Kit (JDK) version 8 installed. See the following:
>
> ```
> https://www.madcapsoftware.com/downloads/java.aspx
> ```

How to Create an Elasticsearch Destination File

1. In the Project Organizer, right-click the **Destinations** folder and select **Add Destination**.

2. Give the file a name and click **Add**.

3. In the Destination Editor, click the drop-down arrow for the **Type** field and select **Elasticsearch**.

4. Enter the **Search Destination URL**. This is the location provided by your network administrator where the search index files will be uploaded for your output.

5. Click ⊞ to save your work.

Associating Elasticsearch Destinations With a Target

Now that the Elasticsearch destinations have been created, you need to associate them with your HTML5 target.

How to Associate Elasticsearch Destinations with a Target

1. From the Project Organizer, open the target that you want to associate with the destinations.

2. Click the **Publishing** tab.

3. Click the check box in the **Publish** column next to the primary destination file that you created.

4. Click the drop-down arrow in the **Elasticsearch Destination** column and choose the Elasticsearch destination file that you created.

   > **NOTE** Elasticsearch destinations will not display in the list of destinations on the Publishing tab in your Target Editor. This is because you will select one from the Elasticsearch Destination field on the Publishing tab of the Target Editor.

5. Click ⊞ to save your work.

MadCap Process Manager

The Process Manager is a background process that manages the Elasticsearch service and the Flare web service. This process can be found in the system tray. It is initiated when the Content Services Portal is launched. See "Content Services Portal" on the next page.

The MadCap Process Manager continues to run even after Flare Desktop is closed. This process allows any Elasticsearch output to continue running.

If you need to troubleshoot your Elasticsearch output, you will need to stop the Elasticsearch process from running through the MadCap Process Manager. In order to do that, find the MadCap Process Manager icon in your system tray. Then, select **Elasticsearch Service** > **End Process**.
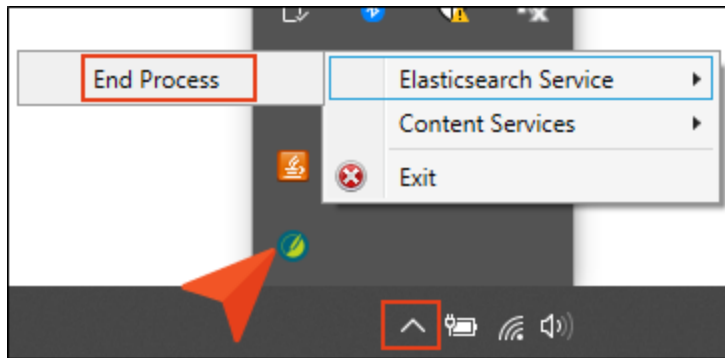
Once you are done using the Content Services Portal or any output configured with Elasticsearch, you can end the MadCap Process Manager by ending the task. Select the MadCap Process Manager icon in your system tray. Then, select **Content Services** > **End Process**.
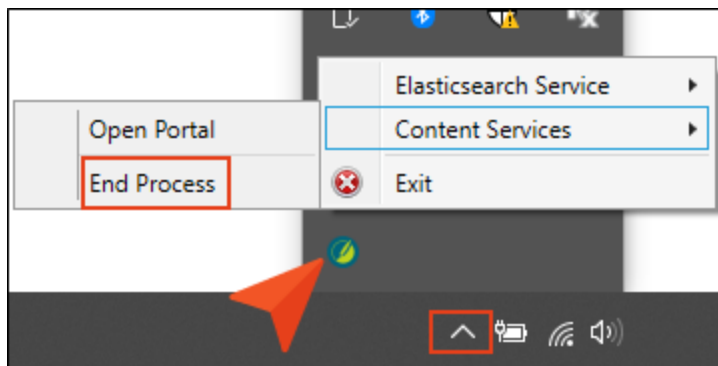
Content Services Portal

The Content Services Portal is used to manage search indexes on your Elasticsearch output. You can review and manage search indexes by topic, micro content, user searches, and global searches.

How to Access the Production Content Services Portal

Installation and configuration of the Content Services Portal results in a URL for the portal. To access Content Services on the production server, you can enter the URL into a web browser. For example, the URL to use from another computer to access this portal is http://[name of server]/ [MyPortal]. See "Optional—How to Verify Content Service Portal Installation" on page 101.
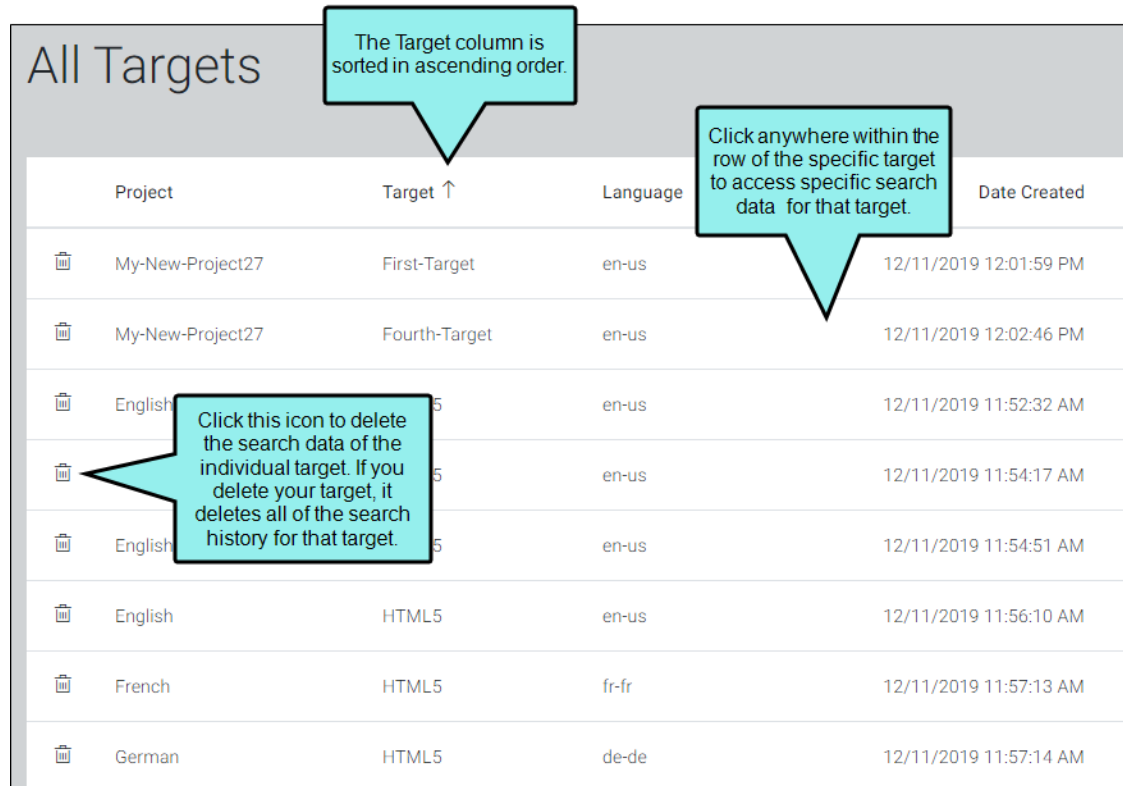
How to Access the Local Content Services Portal

The following steps describe how to open the local version of Content Services. You might want to do this to test the portal locally.

1. Open a project.

2. Open an HTML5 target that has been built using Elasticsearch as the search engine.

3. Click the **Search** tab.

4. After all of the settings have been configured for Elasticsearch, click the **Launch Content Services** button.

Managing Search Indexes

The All Targets window displays all HTML5 targets using Elasticsearch. You can access search data by an individual target. Each of the columns on this window can be sorted in ascending or descending order by clicking on the column name.

When you click an individual target, the Summary window is displayed for it. This window shows the total number of searches done, number of files that can be searched, and users that have searched on the individual target. The bottom half of this window displays the settings you configured for your Elasticsearch output.

My-New-Project27 / My-Flare-Target / **Summary**

The icon on the left lets you delete the search indexes for this target. The icon on the right gives a warning that the search data for this target will be deleted from the portal.

Summary

This path displays the name of your project, followed by the specific target, then the page name (Summary) you are currently viewing.

| 1680 | Micro Content 84 | User Searches 21 | Global Searches 21 |

You can click on the individual box graphics for Topics, Micro Content, User Searches, and Global Searches to drill down into and obtain more granular information for the specific index.

Info

Target GUID: 1eaa3f9f-0680-456d-8aa6-e219152e190c_en-us

Target Path: Flare-Top-Nav-Server-2019.fltar

Language: en-us

Date Created: 12/11/2019 12:02:46 PM

Date Modified: 12/11/2019 12:13:27 PM

This bottom section displays all of the search settingsfor this specific target that you configured in the Target Editor.

Settings

Search Results

Fragment per result: 1

Fragment character limit: 300

Include stop-words in search: Disabled

Partial word search: Disabled

Advanced

Include importance: Enabled

Please note that if you do not enable the Auto-complete Results setting in the Target Editor, this section will not display for this target on the Summary page in the portal.

Auto-complete Results

Number of results: 6

Include project content: True

Include search history: True

Global threshold: 10

If you click the red Topics button in the top left corner, the Topics window displays the total number of files searched on this target. You can enter a string in the search field to filter the list of files displayed.

When you click the purple box in the portal, the Micro Content window displays all of the phrases and the corresponding content that responds to each phrase. Each box in this window contains the phrase, the date the micro content was created, and its corresponding response.

Clicking the blue button displays the number of user searches for the specific target. This window displays the search criteria from each individual search, the date of the search, along with the IP address of the user who conducted the search. Each of the columns can be sorted in ascending or descending order by clicking on the column name. You have the option to delete individual search criteria, or delete all of the individual user searches for your target.

The Global Searches window is displayed when you click the green button labeled Global Searches anywhere in the portal. The Global Searches window shows each search criteria, the last time that criteria was searched, along with the number of times that particular search string has been searched for your Elasticsearch output. The number displayed in the Search Count field increments higher when a specific string is searched by different IP addresses. So if the same IP address has searched a certain search string multiple times, the search count number does not increment higher for that particular IP address. Each of these columns can be sorted in ascending or descending order by clicking on the column name.
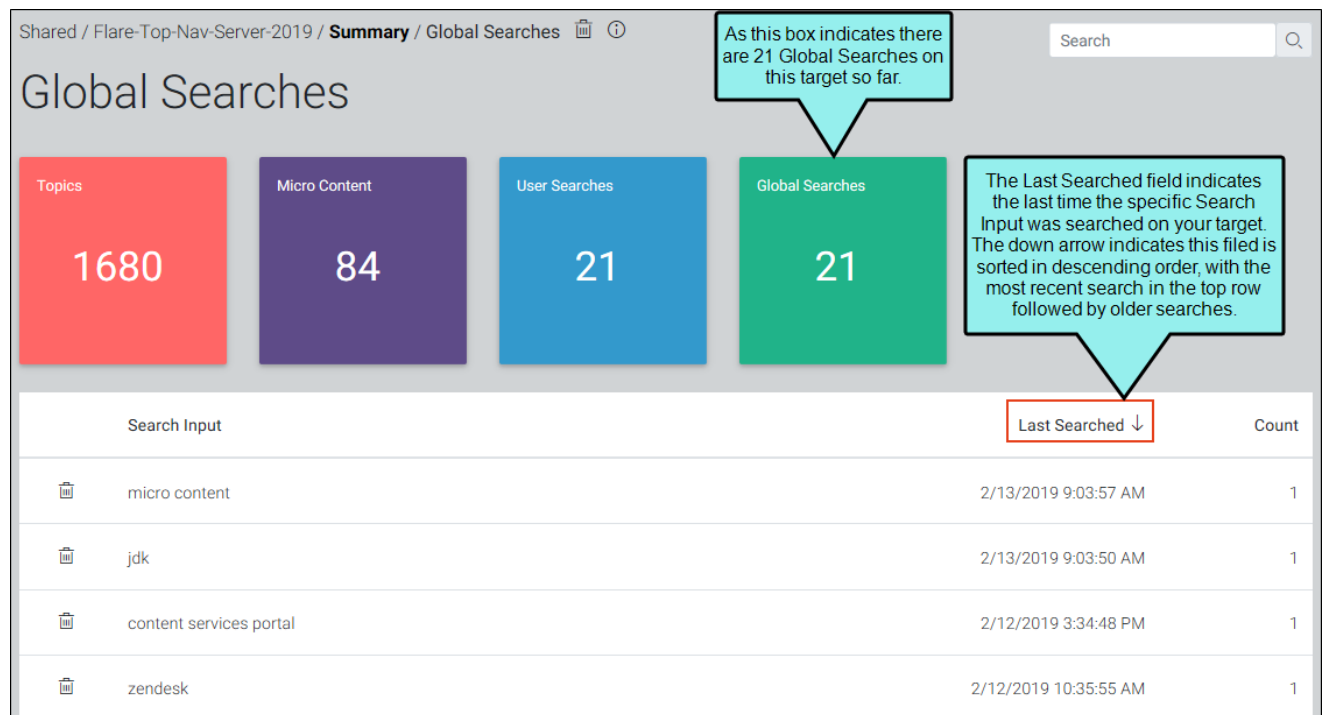
Importing Data From an Upgrade

If you are upgrading Elasticsearch from 5.6 to 7.10.2, you will see a large Import Data button in the portal after you open a target.
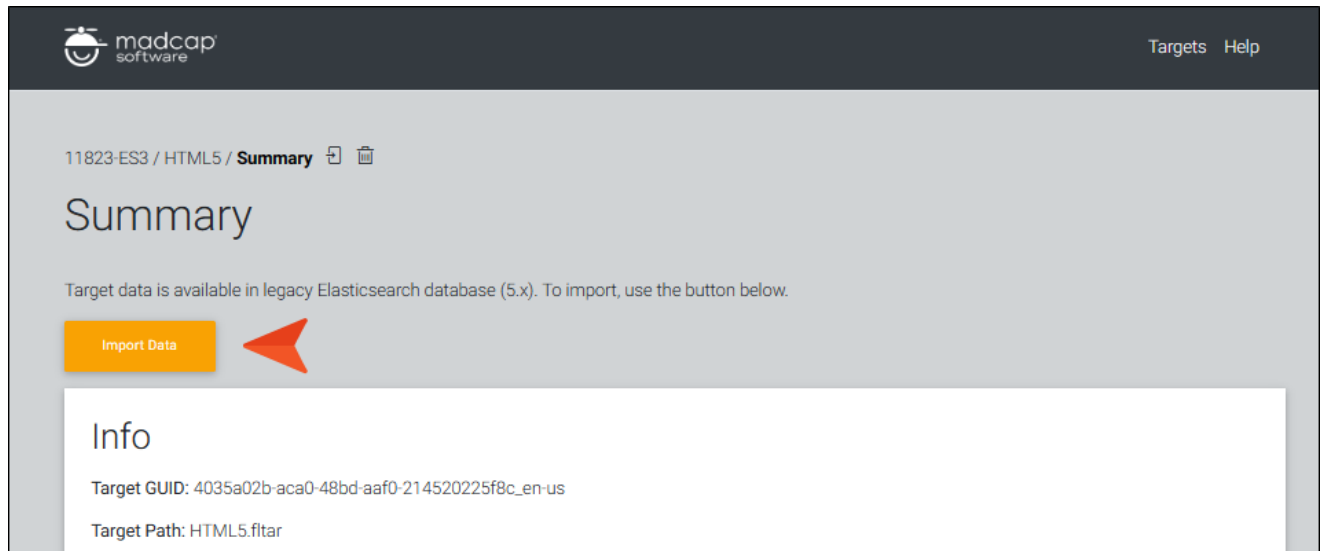
> NOTE If you have do not yet have data for Elasticsearch 7.10.2, you should see the large Import Data button. This button will go away after your first import. There is also a smaller import button at the top of the portal.
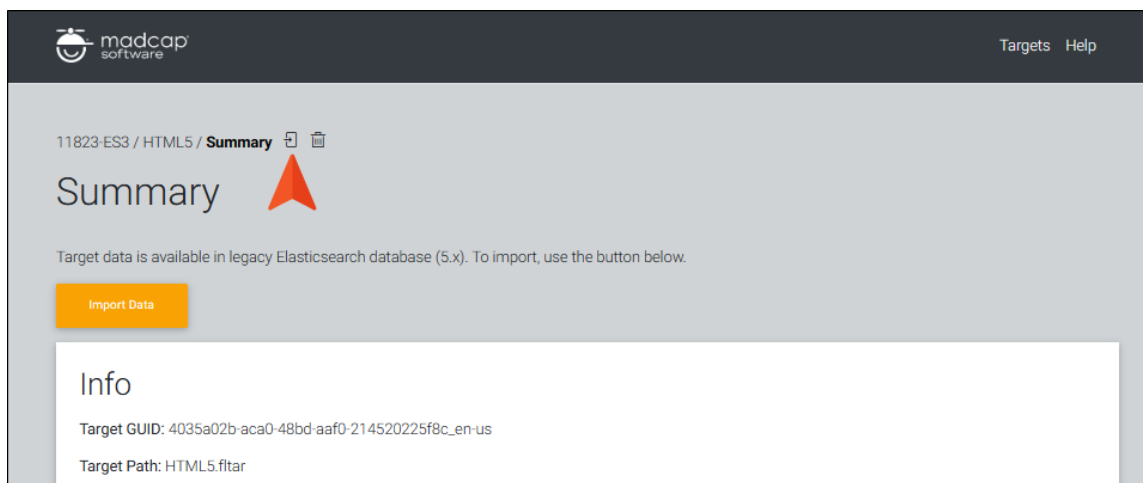
Upgrading Elasticsearch and Content Services on a Remote Server

<div style="background:#d32f2f;color:#fff;text-align:center;padding:1em;">Information for Network Administrators</div>

Periodically, you might need to upgrade Elasticsearch or Content Services, or both.

How to Upgrade Elasticsearch From 5.6 to 7.10.2

1. Navigate to the **Elasticsearch** folder at the location where you have Flare Desktop installed (e.g., C:\Program Files\MadCap Software\MadCap Flare 21\Flare.app\Resources\Elasticsearch).

2. Copy this **Elasticsearch** folder from your local machine to the remote server and rename it **Elasticsearch7.x**.

   > ⊙ **IMPORTANT** This folder can be copied anywhere on the remote server, but the rest of these steps are written assuming you have copied it to the root C:\ drive. It also assumes your existing Elasticsearch folder for 5.6 that you previously copied during the initial Elasticsearch installation is located on the root C:\ drive as well.

3. On the remote server, launch the command prompt (CMD) as an admin and run the following commands:

   - ```
     cd c:\Elasticsearch\bin
     ```
   - ```
     elasticsearch-service.bat stop
     ```
   - ```
     elasticsearch-service.bat remove
     ```

   > 🗒 **NOTE** The three commands above are used to remove the Elasticsearch 5.6 service.

   - ```
     cd c:\Elasticsearch7.x\bin
     ```
   - ```
     elasticsearch-service.bat install
     ```

> 🗒 **NOTE** The two commands above are used to add the Elasticsearch 7.10.2 service.

4. Using Windows Explorer, do the following:

   a. Navigate to **c:\Elasticsearch\config\elasticsearch.yml** (the file that has been used for Elasticsearch 5.6).

   b. Open the **elasticsearch.yml** file in a text editor.

   c. Under the **Network** section, find the string "http.port: 9200" and change the port to something other than 9200 (e.g., 9205).
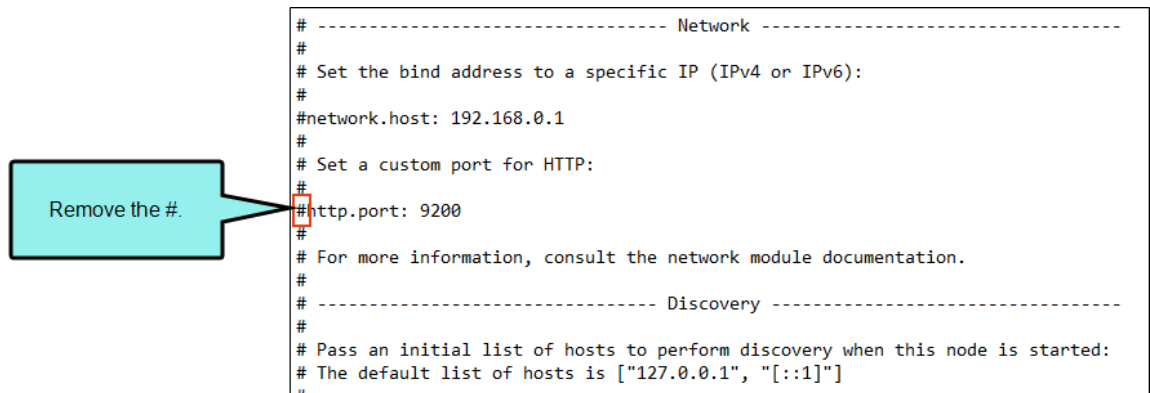
```
# on the system and that the owner of the process is allowed to use this
# limit.
#
# Elasticsearch performs poorly when the system is swapping the memory.
#
# --------------------------------- Network ----------------------------------
#
# Set the bind address to a specific IP (IPv4 or IPv6):
#
#network.host: 192.168.0.1
#
# Set a custom port for HTTP:
#
http.port: 9205  ◀◀
#
# For more information, consult the network module documentation.
#
# --------------------------------- Discovery --------------------------------
#
# Pass an initial list of hosts to perform discovery when new node is started:
```

   d. Save your changes in this file.

5. Using Windows Explorer, do the following:

   a. Navigate to **c:\Elasticsearch7.x\config\elasticsearch.yml** (the file that will be used for Elasticsearch 7.10.2).

   > 🗒 **NOTE** You might also need to open the properties for this file and remove the Read-Only check mark.
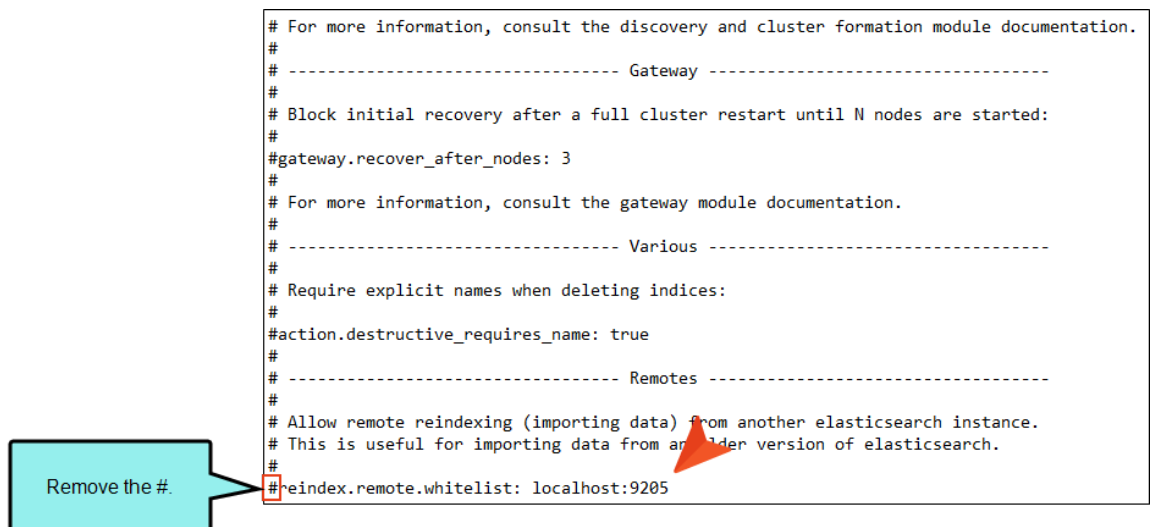
   b. Open the **elasticsearch.yml** file in a text editor.

c. Under the **Network** section, find the string "http.port: 9200" and remove the # character from it. Leave the port number at 9200.

```
# ---------------------------------- Network ----------------------------------
#
# Set the bind address to a specific IP (IPv4 or IPv6):
#
#network.host: 192.168.0.1
#
# Set a custom port for HTTP:
#
#http.port: 9200
#
# For more information, consult the network module documentation.
#
# ---------------------------------- Discovery ----------------------------------
#
# Pass an initial list of hosts to perform discovery when this node is started:
# The default list of hosts is ["127.0.0.1", "[::1]"]
#
```

Remove the #.

d. On the last line of the file (i.e., the whitelist), remove the # at the beginning of the line. Also, change the number to match the configured port for the Elasticsearch 5.6 file (e.g., 9205).

```
# For more information, consult the discovery and cluster formation module documentation.
#
# ---------------------------------- Gateway ----------------------------------
#
# Block initial recovery after a full cluster restart until N nodes are started:
#
#gateway.recover_after_nodes: 3
#
# For more information, consult the gateway module documentation.
#
# ---------------------------------- Various ----------------------------------
#
# Require explicit names when deleting indices:
#
#action.destructive_requires_name: true
#
# ---------------------------------- Remotes ----------------------------------
#
# Allow remote reindexing (importing data) from another elasticsearch instance.
# This is useful for importing data from an older version of elasticsearch.
#
#reindex.remote.whitelist: localhost:9205
```

Remove the #.

e. Save your changes in this file.

6. In the command prompt, run the following commands:

- `elasticsearch-service.bat start`

- `cd c:\Elasticsearch\bin`

- `elasticsearch`

> **NOTE** This will run the Elasticsearch 5.6 service in a console and won't be part of Windows Services. Do not close the command prompt, which would stop the Elasticsearch 5.6 Service.

7. Continue with the next set of steps to upgrade Content Services.

How to Upgrade Content Services From .NET Core 3.1 to 6.0.13

If you have upgraded Elasticsearch, you also need to upgrade Content Services. There might be other times when you need to upgrade Content Services only.

1. On the remote server, open the Internet Information Services (IIS) Manager, and stop the service.

2. Download and install the Microsoft .NET 6.0.13 Windows Hosting Bundle from the following link.

   ```
   https://dotnet.microsoft.com/download/dotnet-core
   ```


3. On the local machine, navigate to the **Web.ContentServices** folder at the location where you have Flare Desktop installed (e.g., C:\Program Files\MadCap Software\MadCap Flare 21\Flare.app\Resources\WebHelp2\ContentServices\Web.ContentServices).

4. Copy and paste this Web.ContentServices folder to the remote server. It can be pasted anywhere on the remote server. This is just a temporary folder that you will use in the steps below; you can delete this folder later.

5. Upgrade the Content Services portal. The older files referenced in the following sub steps have to do with those you copied to C:/inetpub/wwwroot, as described in Installing Elasticsearch on a Remote Server. So navigate to **C:/intepub/wwwroot**.

    a. *Keep* the following folders in the older **Web.ContentServices** folder (located under C:/inetpub/wwwroot):

        ▪ Logs

        ▪ Targets

        ▪ Uploads

        Remove the other folders.

    b. *Keep* the following files in this **Web.ContentServices** folder:

        ▪ appsettings.json

        ▪ Indices.db

        ▪ web.config

        Remove the other files.

    c. Copy all of the new folders and files (except appsettings.json and web.config)from the temporary Web.ContentServices folder to the old Web.ContentServices folder.

6. Open the **appsettings.json** file. Add a comma at the end of the **ElasticsearchURL** line. Then paste the following under that line (assuming the port number you entered previously is 9205):

```
"LegacyElasticsearchUrl": "http://localhost:9205"
```

```
{
  "ApplicationInsights": {
    "InstrumentationKey": ""
  },
  "Logging": {
    "IncludeScopes": true,
    "LogLevel": {
      "Default": "Information",
      "System": "Information",
      "Microsoft": "Information"
    }
  },
  "ConnectionStrings": {
    "DefaultConnection": "Data_Source=\"C:\\inetpub\\wwwroot\\Web.ContentServices\\Indices.db\"",
    "ElasticsearchUrl": "http://localhost:9200",
    "LegacyElasticsearchUrl": "http://localhost:9205"
  },
  "ContentServicesStartUpConfigSettings": {
    "DataRootDir": "C:\\inetpub\\wwwroot\\Web.ContentServices\\"
  }
}
```

7. Save your changes in this file.

8. Open the IIS Manager and start the service.

Import Data From Elasticsearch 5.6 to 7.10.2

1. Launch Content Services (i.e., the URL to your server where Elasticsearch is installed).

2. Open a target from the grid.

3. Click **Import Data**.
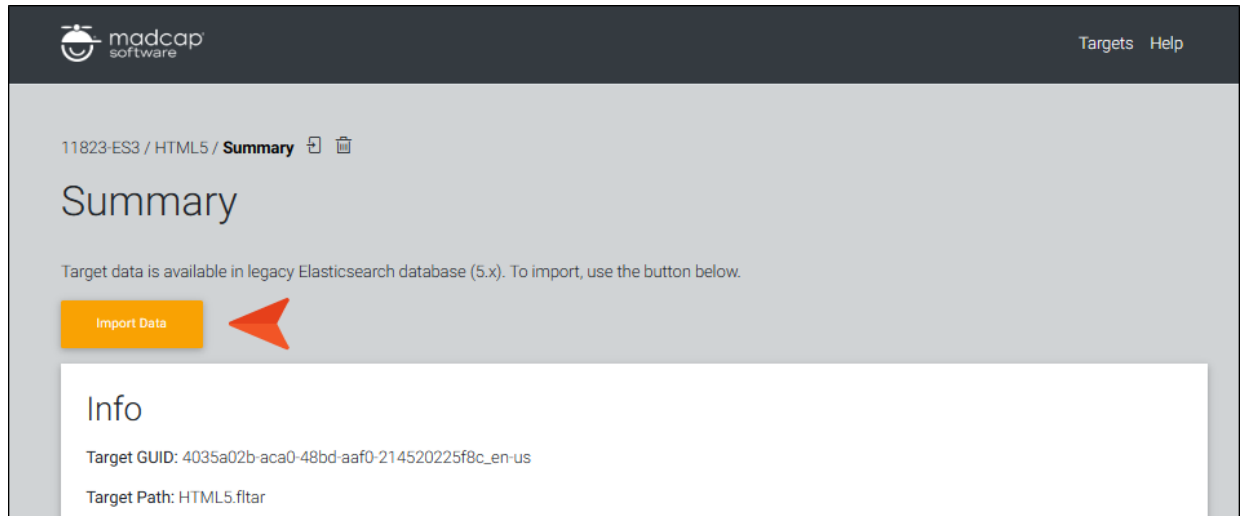
NOTE If you have do not yet have data for Elasticsearch 7.10.2, you should see the large Import Data button. This button will go away after your first import. There is also a smaller import button at the top of the portal.
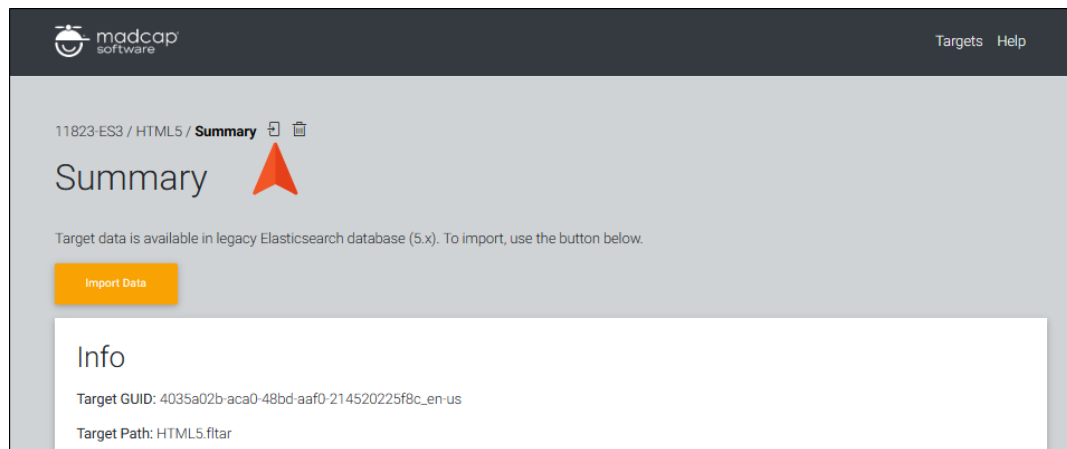
4. In the popup, click **Import Data** again.

You should see the tiles populated with numbers, representing your imported data.

❙ Google Search

Supported In:

Google Search can be used in your HTML5 Top Navigation or Side Navigation output. It provides many configurable options.

- Verify the URL

- Add a sitemap

- Submit the site for indexing

- Exclude the TOC from indexing

- Customize how the results display

- Review indexing status

> ⊘ **IMPORTANT** If you implement Google Search, your Flare output will be available publicly and listed in Google searches. To make your published output private, please refer to Google's documentation.

How to Set Up a Google Search Engine
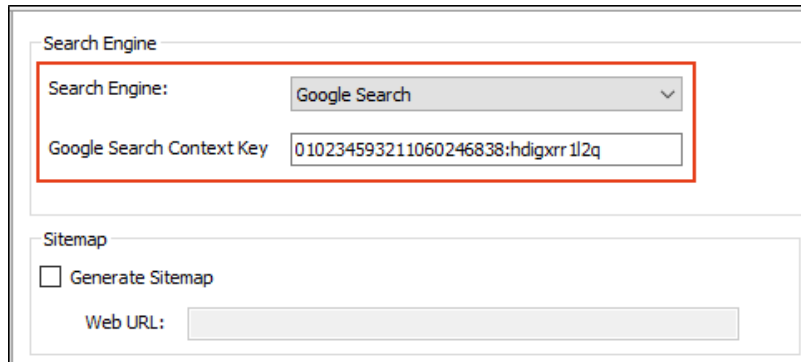
1. Open an HTML5 target.

2. Select the **Search** tab.

3. From the **Search Engine** field, select **Google Search**.

4. There are several additional steps you can complete in your Google account to optimize your search. Not all of these extra steps are required for integrating search with Flare Desktop, but they are recommended. Also, the exact steps that you follow may be somewhat different if you are using a free Google account as opposed to a paid account.

   GOOGLE ACCOUNT—CREATE SEARCH ENGINE

   a. Go to cse.google.com and log in with your Google (i.e., gmail) password.

   b. Click **Add** to create a custom search engine.

   c. In the **Sites to search** field, enter the URL for the site where your output will be published. A name for the search engine is automatically added toward the bottom of the page, based on your URL. You can edit the name to something more simple if you want.

   d. Click **Create**.

   e. On the next page, click **Get code** to retrieve your search engine ID.

   f. Copy the search engine ID shown.

   g. Continue with the following Flare steps to enter the Google search key and generate a sitemap.

FLARE PROJECT—ENTER GOOGLE SEARCH KEY AND GENERATE SITEMAP

a. Return to the HTML5 target (Search tab) in the Flare project.

b. In the **Google Search Context Key** field, paste the ID that you copied from cse.google.com.

c. To assist with indexing, we also recommend that you create a sitemap. So Click **Generate Sitemap** and enter the same URL that you provided on your Google account page (make sure you include http:.// before the path; also, make sure you end the path with a closing /).

d. Click 🖫 to save your work.

e. Generate the target and upload the output files to your URL.

f. Continue with the following steps to verify your URL.

GOOGLE ACCOUNT—VERIFY URL

a. In your browser, open a new tab and go to
   https://www.google.com/webmasters/tools/.

b. If you do not yet have a site, click the **Add property** drop-down, then select the **Add property** option.

   If you already have a site, click the drop-down next to the site name, then select the **Add property** option.

c. Enter the URL for your site, and click **Continue**.

   A page opens with steps for verifying your site.

d. Complete the steps on the page.

e. After you have successfully verified the site, continue with the following steps to add your sitemap.

GOOGLE ACCOUNT—ADD SITEMAP

a. After verifying the URL, click **Go to Property**.

b. Click **Sitemaps**.

c. Enter `Sitemap.xml`.

d. Click **Submit**.

e. Continue with the following steps to submit the site for indexing.

GOOGLE ACCOUNT—SUBMIT SITE FOR INDEXING

a. In the Google Search Console, click **URL inspection**.

b. In the text field, enter a page in your output that contains many links. For example, in the Top Navigation project template in Flare Desktop, the "Home.htm" topic is the landing page and contains links to multiple topics, so in that case you would enter Content/Home.htm in the field.

c. Click **Request indexing**.

d. After the status finishes processing, close the message.

e. Continue with the following steps to exclude your TOC from indexing.

GOOGLE ACCOUNT—EXCLUDE TOC FROM INDEXING

By default, Google will index each word it finds on your pages, but there may be some words that you do not want to be indexed. This likely includes your TOC. After all, the words in the TOC will be repeated on most, if not all, of your pages. So it wouldn't be useful for those words to be included in searches.

a. Go back to the first browser tab for your Google account and click the **Advanced** tab.

b. Click **CSE context** to expand that section.

c. Click **Download (XML)**. The cse.xml file is added to the Downloads folder on your computer.

d. Edit the downloaded context file cse.xml to add the following attribute: `enable_nocontent_tag="true"`. (If you already see this attribute in the file, you do not need to add it.)

To add the attribute, you can open the file in a text editor such as Notepad++. Then near the top of the file, change:

```
<CustomSearchEngine id= "[id]" creator="[id]">
```

to

```
<CustomSearchEngine id= "[id]" creator= "[id]" enable_nocontent_tag="true">
```

There may be other attributes that are already in the tag as well. Save your changes when finished.

☆ **EXAMPLE** Here is an example of an edited cse.xml file:

```
<?xml version="1.0" encoding="UTF-8" ?>
<CustomSearchEngine id="hdigxrr1l2q" creator="010234593211060246838" language="en" encoding=
"UTF-8" enable_suggest="true" enable_nocontent_tag="true">
   <Title>Project3</Title>
   <Context>
     <BackgroundLabels>
       <Label name="_cse_hdigxrr1l2q" mode="FILTER" />
       <Label name="_cse_exclude_hdigxrr1l2q" mode="ELIMINATE" />
     </BackgroundLabels>
   </Context>
   <LookAndFeel nonprofit="false" element_layout="8" theme="7" text_font="Arial, sans-serif"
   url_length="full" element_branding="show" enable_cse_thumbnail="true" promotion_url_length=
   "full">
```

e. On your Google account page, go back to the CSE context section of the Advanced tab, and click **Upload XML file**.

f. Choose the cse.xml file that you edited.

g. In the popup, click **OK** to upload the file.

h. Continue with the following steps to customize the appearance of search results.

GOOGLE ACCOUNT—CUSTOMIZE APPEARANCE OF SEARCH RESULTS

By default, search results are overlayed on top of your output. You can change this look if you want.

a. Click **Look and feel**.

b. On the **Layout** tab, select an option.

> **NOTE** In your Flare output, the results layout that you select may not look precisely the way that Google presents them in the layout thumbnails. It is recommended that you try different layouts and test the output to see which one best meets your needs.

> **TIP** To make the search results appear the way that they normally do in Top Navigation output, select **Results Only**.

c. Click **Save**.

GOOGLE ACCOUNT—REVIEW INDEXING STATUS

From your account, you can see the progress of your indexed pages.

a. Go back to the browser tab showing your Google Search Console.

b. Click **Sitemaps**.

It might be awhile before you see actual results, so return to this page periodically.

5. Click 🖫 to save your work.

Setting Search Results Options

For online targets, you have a variety of options that you can enable or disable to define how search results are treated, depending on the output type.

This chapter discusses the following:
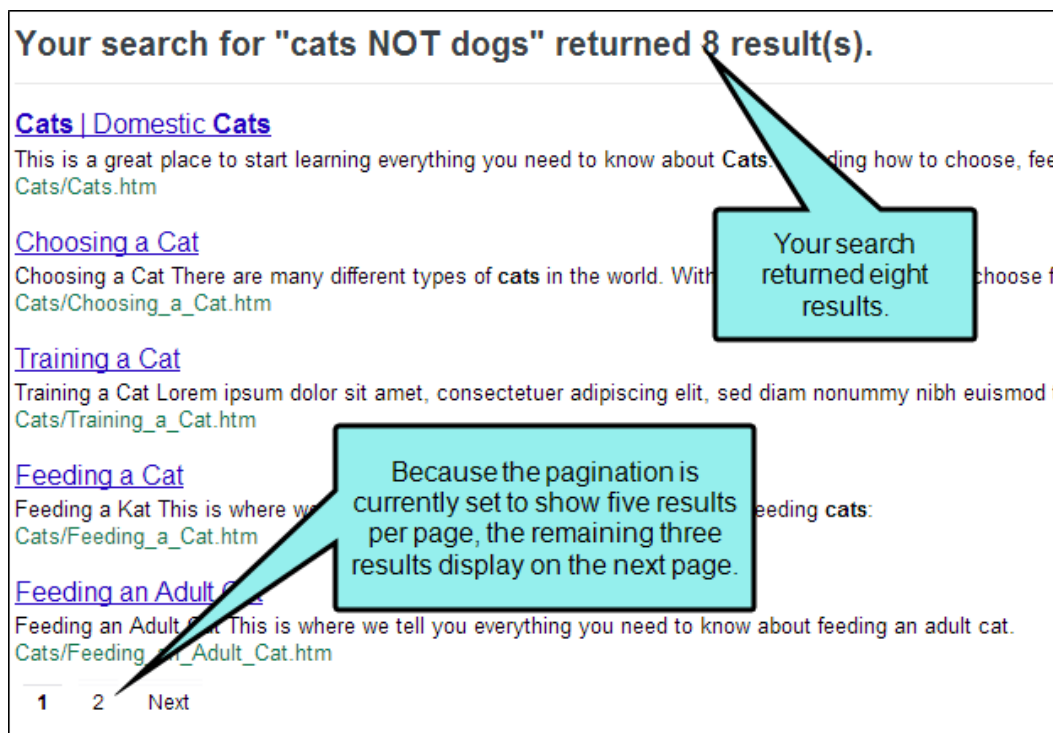
▍Setting the Number of Search Results Per Page

Supported In:

HTML

You can change the number of search results that appear on each page. This makes it easier to navigate between pages of search results and improves loading times, especially for users who access output from a mobile device. Setting a reasonable number of results per page also makes it easier for search indexing services (i.e., spiders, crawlers, or bots) to locate pages in output, improving search results. In order to use this feature, you must be using MadCap Search. This feature is not supported for Google Search (see "Setting Up a Search Engine" on page 50).

How to Change the Number of Search Results per Page

1. Open an HTML5 target.

2. Select the **Search** tab.

3. From the **Search Engine** section, make sure either **MadCap Search** or **Elasticsearch** is selected.

4. In the **Results Per Page** field, use the arrows to set the number of results you want to display on each page. By default, the number of results per page is 20 for MadCapSearch and 100 for Elasticsearch.

5. Click ⊞ to save your work.

Setting the Search Abstract Character Limit

Supported In:

In HTML5 output, you can set a character limit for automatically generated abstracts that appear in your search results. This allows your users to see a brief summary of each topic in the search results, while keeping the search results page easy to scan. You can set the character limit as long or as short as you like. When creating an automatic abstract, Flare Desktop scans all text elements in the topic, including headings and paragraphs, and includes them in the abstract until the character limit is met.

How to Change the Abstract Character Limit in Search Results

If you want change the abstract character limit, do the following.

1. Open an HTML5 target.

2. Select the **Search** tab.

3. Select **MadCap Search** in the **Search Engine** field.

4. In the **Abstract Character Limit** field, enter the number of characters you want to allow in the topic's abstract. By default, the number of results per page is 300.

5. Click ⊟ to save your work.

NOTE In order to use this field, you must be using MadCap Search. Elasticsearch uses a similar field called Fragment character limit. This feature is not supported for Google Search (see "Google Search" on page 131).

NOTE Setting the abstract character limit to 0 will remove the abstract completely.

NOTE If a word is too long and would push the abstract past its character limit, it is not included in the abstract. Flare Desktop will not leave incomplete words at the end of the abstract.

NOTE If you need to provide a longer or shorter search abstract, or if you do not like the default text that appears in the abstract, you can manually enter a meta description for the topic in the topic's Properties dialog.

▎Including Stop Words in Search

Supported In:

Flare Desktop 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. If you want the search engine to search for queries with these words, you can include the stop words list in search.

List of Stop Words—English

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.

NOTE "If" and "will" are also recognized as stop words when using Elasticsearch as your search engine.

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 target.

2. In the Target Editor, click the **Search** tab.

3. In the **Search Results** 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 Desktop, the stop words list is hard-coded. However, you can create your own stop words list on your local computer using language skins.

> 📝 **NOTE** Stop words are not customizable in HTML5 outputs.

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. Do one of the following, depending on the part of the user interface you are using:

   - **Ribbon** Select **Project > New > Advanced > Add Language Skin**.

   - **Right-Click** In the Project Organizer, right-click on the **Advanced** folder and from the context menu select **Add Language Skin**.

   The Add File dialog opens.

3. In the **File Type** field at the top, make sure **Language Skin** is selected.

4. (Optional) If you want to place the file into a subfolder previously created in the Content Explorer or Project Organizer, in the **Folder** field click ▦ and select the subfolder. Otherwise, keep the default location.

5. From the **Language** drop-down, select the language you want to use for the language skin.

6. In the **File Name** field, type a new name for the language skin.

7. (Optional) If you want to apply condition tags to the file, expand the **Attributes** section at the bottom of the dialog. Next to the **Condition Tags** field, click ▦ and select the conditions you want to apply. Click **OK**.

8. (Optional) If you want to apply file tags, expand the **Attributes** section at the bottom of the dialog. Next to the **File Tags** field, click ▦ and select the file tags you want to apply. Click **OK**.

9. Click **Add**. The language skin is added to the Advanced folder in the Project Organizer. The Language Skin Editor opens to the right, with the new language skin shown. Depending on the language you selected when creating the language skin, the skin may include default translations for some UI text strings.

   This creates a copy of the project language skin file and places it in your Project's Advanced folder (e.g., C:\Users\[username]\Documents\My Projects\[project name]\Project\Advanced). The language skin file name uses the *.fllng file name extension (e.g., af.fllng, en.fllng, es.fllng).

10. Close the Language Skin Editor.

How to Modify the Stop Words List

1. Open the Project Organizer.

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

3. Right-click the language skin file, then select **Open with > Internal Text Editor**.

4. 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.

5. Enclose each stop word in the <Word></Word> tag.
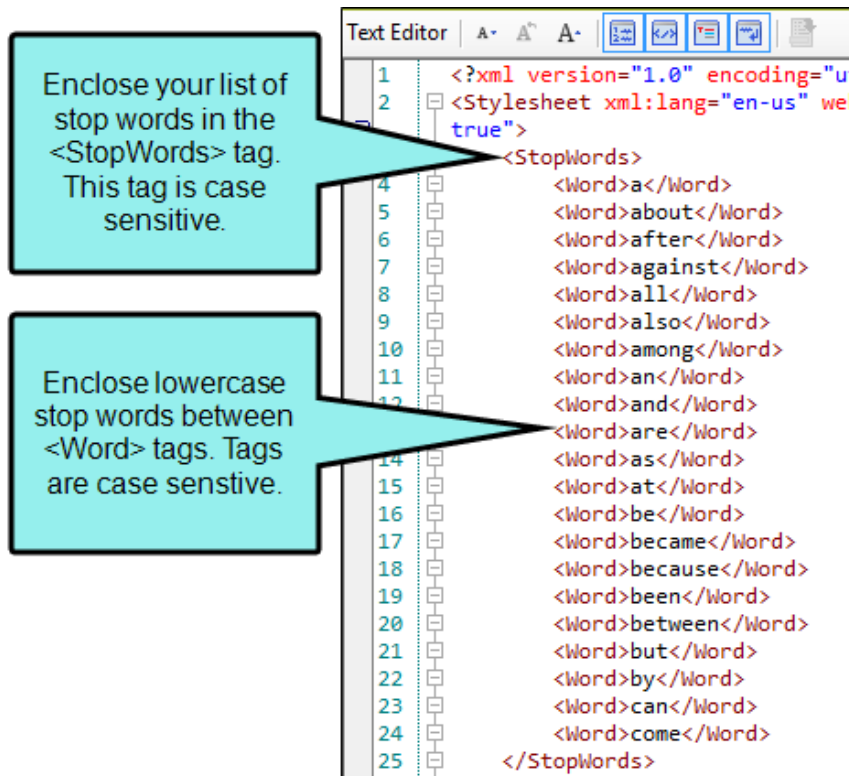
6. Click 🖫 to save your work.

> 📝 **NOTE** You can also modify the stop words list using a text editor on your computer, such as Notepad.

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.

❚ Setting Search Result Importance

Supported In:

In HTML5 output, the Flare search engine uses a combination of factors to rank search results. The search engine considers the number of links to a topic (Importance) and the number of times a search term appears in a topic. This gives you the most accurate results. You can turn off Importance and search using only the number of search term hits in each topic. This is not recommended unless you have one topic that is linked too many times that it would skew your search results. You must be using Elasticsearch or MadCap Search to use this feature. It is not supported for Google Search.

How to Include or Exclude Importance in Search Results

1. Open an HTML5 target.

2. Select the **Search** tab.

3. From the **Search Engine** section, make sure **MadCap Search** or **Elasticsearch** is selected.

4. Expand the **Advanced Search Options** section.

5. Select **Include Importance**.

6. Click 🖫 to save your work.

☆ **EXAMPLE** Here is an example of a search with Importance turned on.

☆ Here is an example of a search in the same content with Importance turned off.

☆ Notice how the search results are different. This is because in the first example, with Importance turned on, the search engine considers the number of links to that topic when ranking the search results. In the second example, the results are ranked only using the location of the search term in the topic (e.g., in a heading, in an index keyword, in the body text).

If you want your users to be able to find a topic that you refer to—and link to—often in your content, you should turn on the Importance setting so the topic appears higher in the search rankings.

▢ **NOTE** Links that occur in a template page are not considered when calculating Importance. For example, suppose you have a link in the template page footer that appears on every page in your output. Because you can access the page it links to from every other page, it should be the most important page in the output, but it is excluded from Importance rankings so it does not skew results.

❙ Enabling Partial-Word Search

Supported In:

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.

How to Enable Partial-Word Search

1. In the Project Organizer, open the target.

2. Select the **Search** tab.

3. In the **Search Results** section, place a check mark in the **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, the maximum value is 10.

   > **NOTE** The higher the minimum word size that you enter, the smaller the search database.

5. Click 💾 to save your work.

☆ **EXAMPLE** In the **Search** field, you enter `cond`.

Search finds matches in "conditioning" and "second."
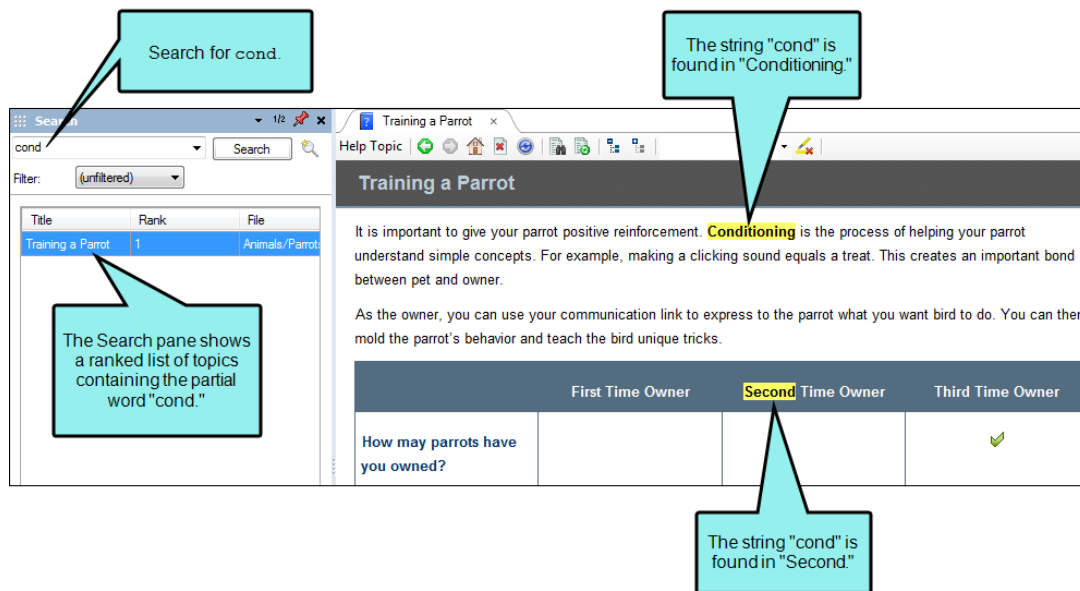
ⓘ **IMPORTANT** Enabling partial-word search in client-based outputs increases the size of the search database included with your target output. It also increases the amount of time it takes to build and publish the output.

📝 **NOTE** 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.

📝 **NOTE** Partial-word search is not supported in server-based output.

❙ Setting Micro Content Containers
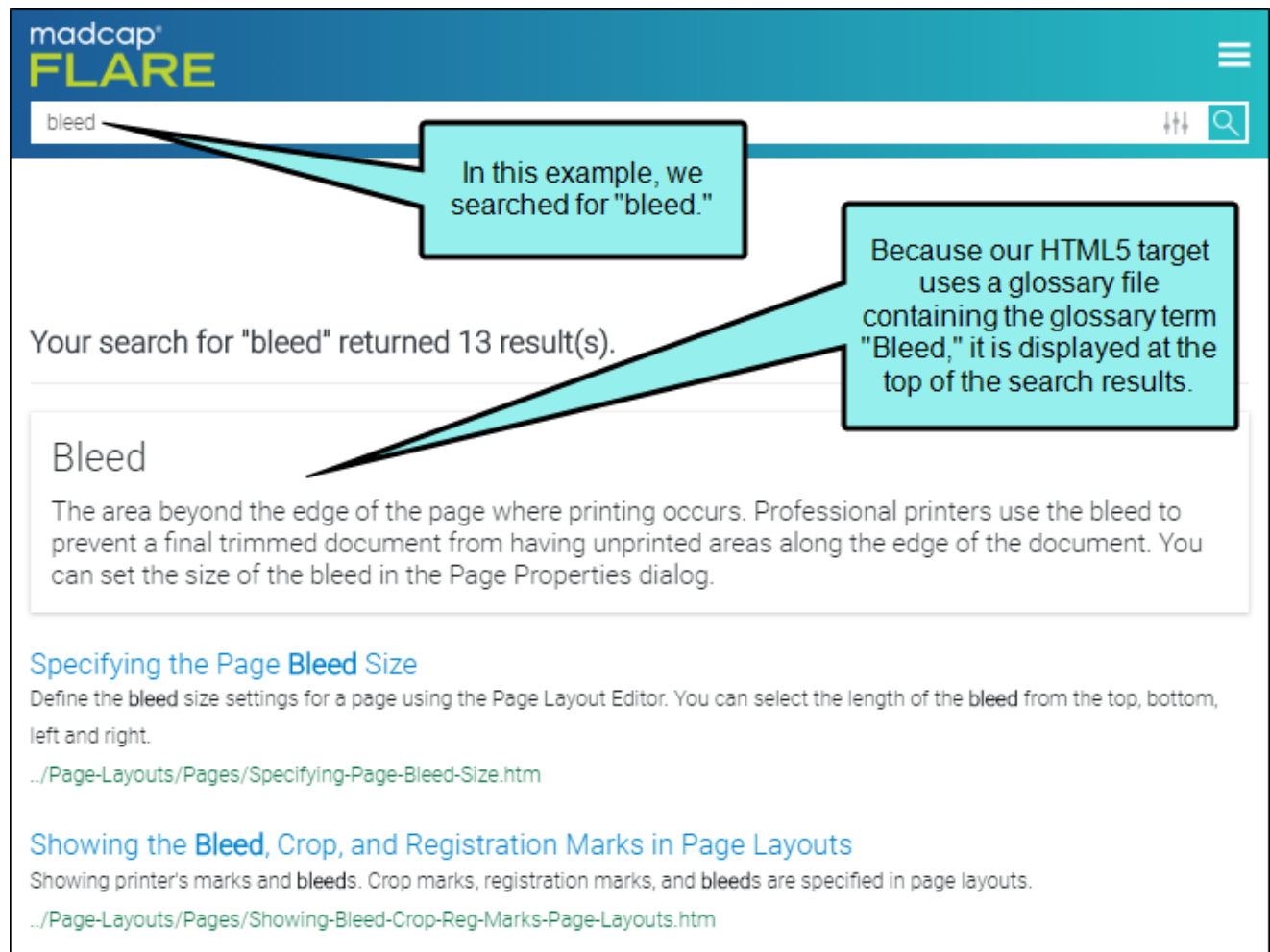
Flare Desktop provides various container types that you can use to add micro content to your HTML5 output. Some of these can be used in search results, some in topic output, and some in both. See the Help system for more information.

I Including Glossary Terms in Search Results

Supported In:

For HTML5 output, search results display glossary terms if they are used as the search text. In order to use this feature, you must be using MadCap Search. This feature is not supported for Google Search (see "Setting Up a Search Engine" on page 50).

How to Include Glossary Terms in Search Results

1. Open an HTML5 target.

2. In the Target Editor, select the **Search** tab.

3. In the **Search Engine** field, make sure **MadCap Search** is selected.

4. Expand **Advanced Search Options**.

5. Select **Include glossary results**.

6. Click 🖫 to save your work.

> 🗐 **NOTE** In order for a glossary term to display in the search results, the end user's search text must match the glossary term exactly, with no additional words (although it is not case-sensitive). For example, in the example above, only the word "table" was included in the search; therefore, the glossary term "Table" was displayed. But if we had searched for "table topic," no glossary term would have been displayed in the search results.

NOTE If you open a Side Navigation, Top Navigation, Tripane, or Search Results skin, you will notice Search Glossary styles that let you control the look of this new feature (e.g., change the font color to make it stand out from the other search results). The Search Glossary Result style is used to control the entire area displaying the glossary search result. The Search Glossary Term and Search Glossary Definition styles are used to control the look of only the term and definition, respectively.
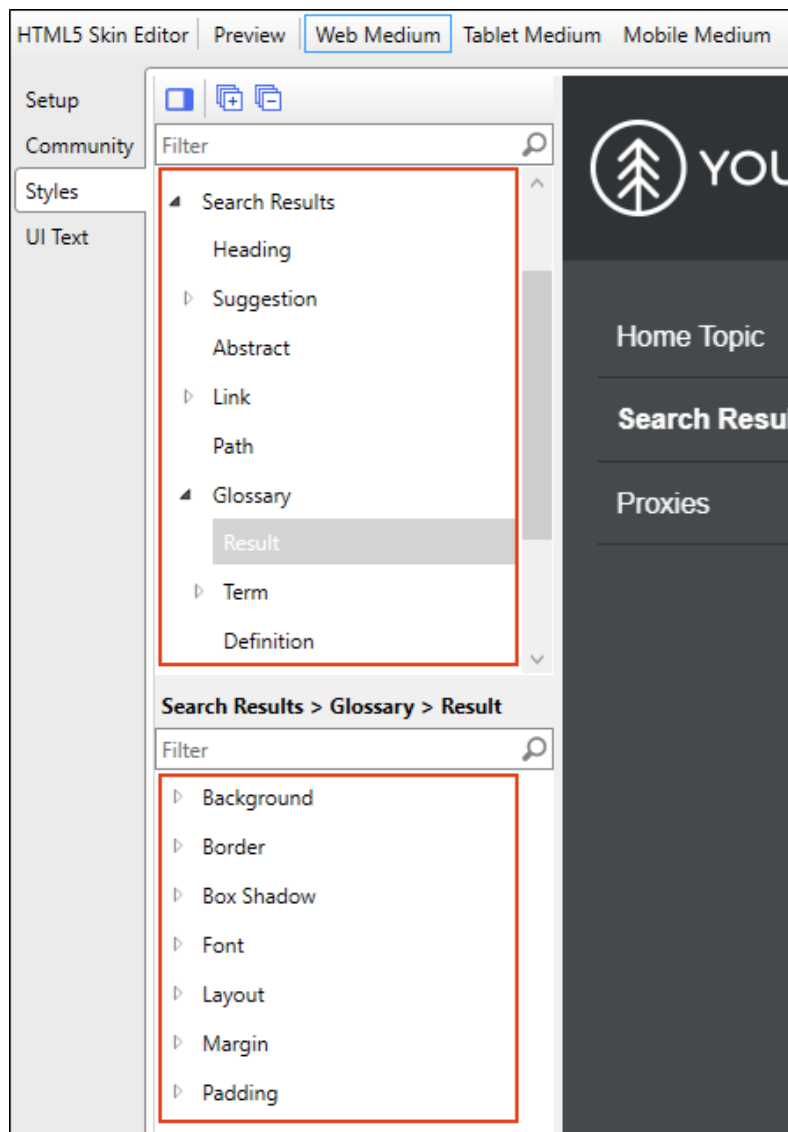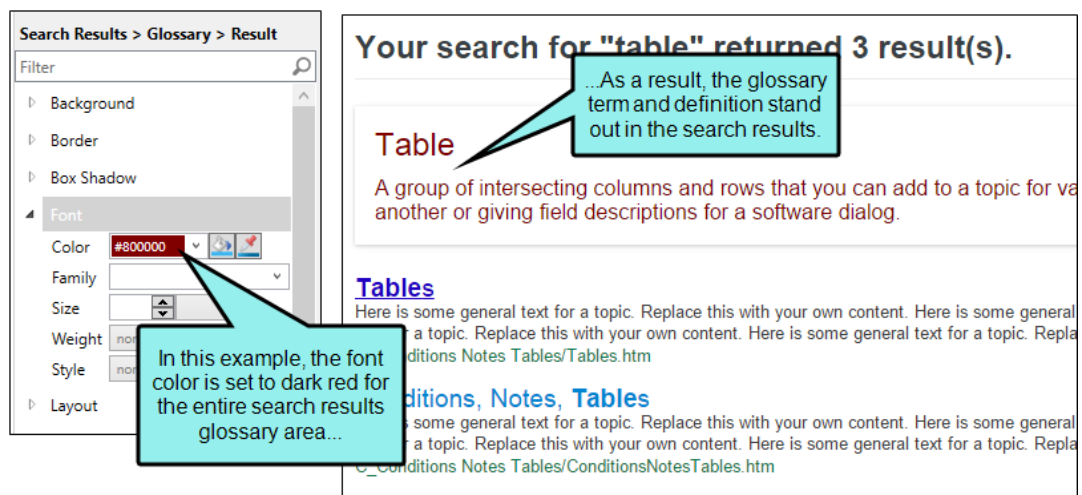
❙ Excluding Non-Words From Search

Supported In:

Flare Desktop 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 **Search** tab.

3. In the **Search Results** section, click the drop-down arrow next to **Advanced Search Options**.

4. Place a check mark in the **Exclude non-words from search** box. To include non-words in search, clear the check mark.

5. Click 🖫 to save your work.

> 🗒 **NOTE** This option is not available for HTML5 targets using Elasticsearch or Google Search.

▎Excluding Index Entries From Search

Supported In:

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 **Search** tab.

3. In the **Search Results** section, click the drop-down arrow next to **Advanced Search Options**.

4. Click **Exclude index entries from search**.

5. Click ⊟ to save your work.

> 🗒 **NOTE** This option is not available for HTML5 targets using Elasticsearch or Google Search.

❚ Pre-Merging Search Database Files

Supported In:

If you have multiple projects and plan to merge their outputs when building the parent 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 **Search** tab.

3. Expand the **Advanced Search Options** section.

4. Place a check mark in the **Pre-merge search database file** box.

5. Click ⊟ to save your work.

▌Chunking Large Search Database Files

Supported In:

When Flare Desktop builds your output files, it also automatically generates a search index. The search database is split into a series of chunk files with JS file name extensions. 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., SearchPhrase_Chunk0.js, SearchPhrase_Chunk1.js, SearchPhrase_Chunk2.js). 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 Desktop 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
```

- **There are Three Kinds of Chunk Files** Search chunks come in three varieties: SearchPhrase chunks, SearchStem chunks, and SearchTopic chunks. Each chunk type holds a different kind of data. By separating search chunks into different files that contain phrases, stems, and topics, Flare's search engine can locate data faster.

- **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 154.

- **New Chunk Files are Generated With Every Build** When you update your content and build new output files, Flare Desktop 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 **Search** tab.

3. Expand the **Advanced Search Options** section.

4. Place a check mark in the **Chunk Large Search Database Files** box. Then select a value in the **Maximum Chunk Size** box.
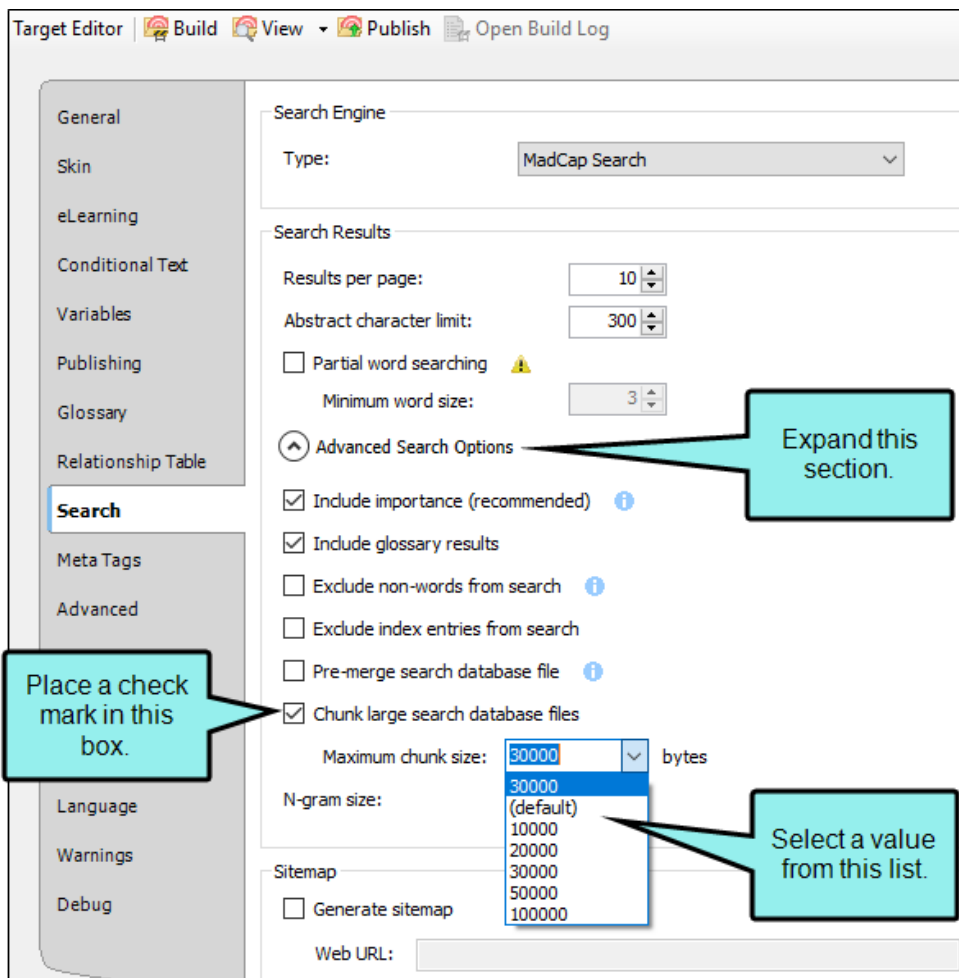
> NOTE The smallest maximum file size for a chunk file is 10,000 bytes. The largest maximum file size is 100,000 bytes. The default setting for the maximum chunk file size is set to 30,000 bytes.

5. Click 🖫 to save your work.

▮ Setting the N-Gram Size for Search

Supported In:

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 **Search** tab.

3. Expand the **Advanced Search Options** section.

4. In the **N-gram size** box, select a value between 1- 5.

> ⊘ **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.

5. Click 💾 to save your work.

Generating Sitemaps

Supported In:

For web-based targets, 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 web-based target.

2. On the **Search** tab of the Target Editor, select **Generate Sitemap**.

3. In the **Web URL** field enter the path where the output is ultimately published.

   ⭐ **EXAMPLE** https://help.madcapsoftware.com/flare2025/

   🗒 **NOTE** Be sure to include the full path—including "https://"—when entering the web URL.

4. Click ▣ to save your work.

🗒 **NOTE** If you are generating HTML5 output, you can also set up your search engine—MadCap Search, Google Search, or Elasticsearch (for Top Navigation, Side Navigation, or skinless outputs). See "Setting Up a Search Engine" on page 50.

CHAPTER 7

Optimizing Search

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

This chapter discusses the following:

❚ Meta Descriptions for Topics

Supported In:

Description meta tags contain brief summaries of web pages and are recognized by all major search engines. These tags might not factor into the search rankings by all search engines, but they are still useful for search engine optimization in web-based outputs, because they can help with the click-through rate in HTML5 output. We recommend that you create a meta tag set file, which adds an empty description meta tag by default. This is faster than adding it separately to each topic. This meta tag then becomes available at lower file levels (including topics), and you can then provide the value in the topic properties.

How to Add a Description Meta Tag Value for a Topic

1. (Recommended) In the Project Organizer, expand the **Advanced** folder and add a new meta tag set.

2. In the Content Explorer, right-click the topic file and select **Properties**.

3. Select the **Meta Tags** tab.

4. If you are using a meta tag set (recommended), expand it.
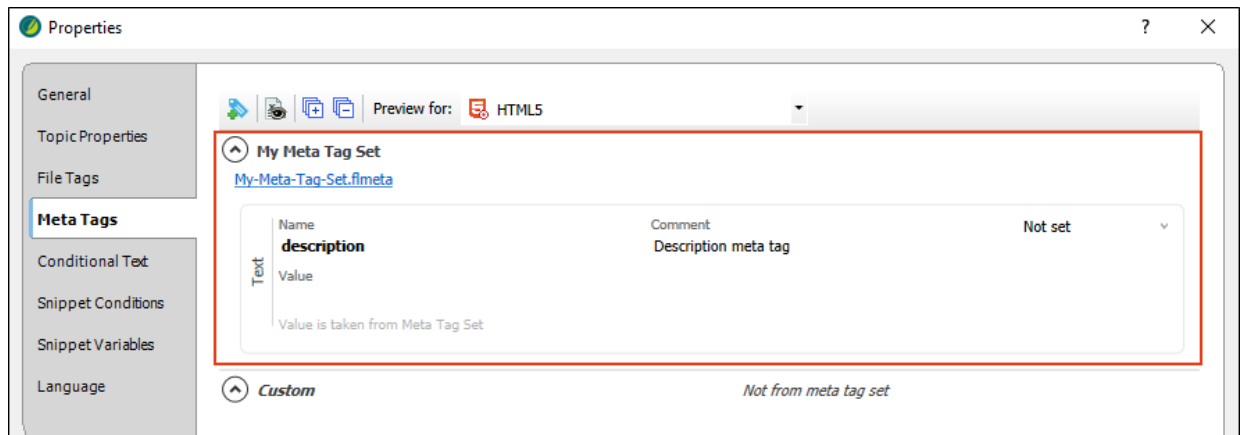
If you are not using a meta tag set, click to add a new text meta tag, which is added under the Custom section. Then, enter `description` as the name.
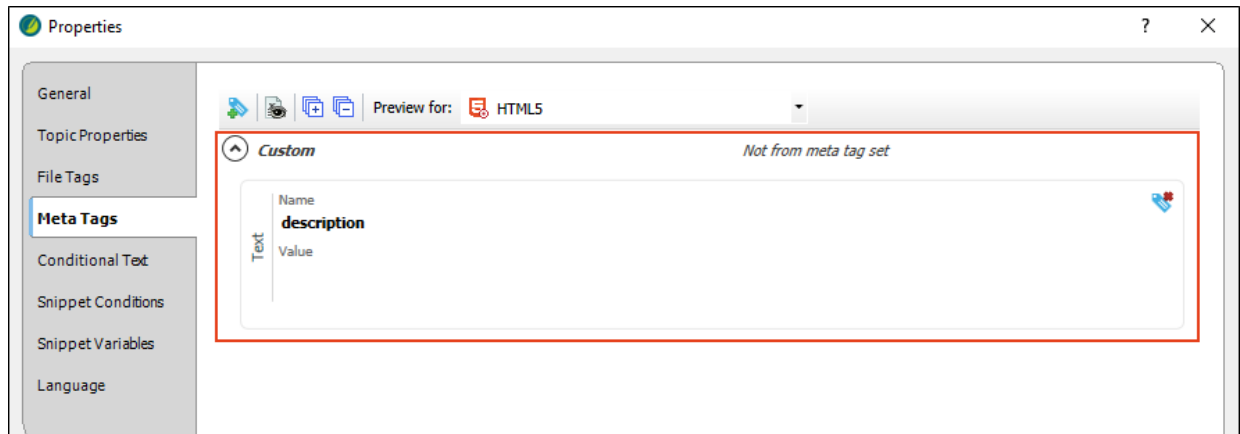
5. In the **Value** field, enter a description for the topic.

> ⊘ **TIP** When adding a value for a description meta tag, it is a good idea to ensure the following:
>
> - It should not be too long (fewer than 155 characters if possible) or too short.
>
> - It should accurately reflect the contents of the page.
>
> - It should contain relevant keywords, although you should never "stack" keywords by simply repeating them.
>
> - It should be unique (i.e., not the same description as you have in lots of other topics).

6. Click **OK**.

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." />
```

> 🗒 **NOTE** If you do not provide a meta description, Flare Desktop will use the abstract character limit to create an abstract from the text in your topic.

⭐ **EXAMPLE** A documentation team wants to enhance the overall experience for users to find available information in their Help system. They establish in-house guidelines for how these meta tags should be constructed, and create brief descriptions of each web page. The team sets out to increase content discoverability (which in turn should build user trust, and increase brand awareness). They work to optimize text in search results for HTML5 output—with the goal of increasing clicks and traffic.

LEVEL

They create a meta tag set, which automatically includes a description meta tag. They leave the value empty, and add text at the topic level in the Properties dialog.

1. In the Project Organizer, right-click the **Advanced** folder and select **Add Meta Tag Set**.

2. Complete the **File Name** field and click **Add**.

3. When you want to provide the actual description text for a topic, open the Content Explorer, right-click the topic, and select **Properties**.

4. In the **Value** field, enter a description for the topic.

5. Click **OK**.

   This is an example of a description meta tag value shown in search results output.

☆ FINDABILITY

- **SEO** Description meta tags help to increase discoverability on the web. It is better to add this tag for topics rather than leaving it blank or relying on a search engine to auto-generate a description.

- **Content Management** In Flare Desktop, you might rely on the Used Meta Tags analysis report or the File List window pane to view a list of files that show the description tags used and their definitions.

Optimizing 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. You can also determine whether or not the search engine considers how many internal links there are to a topic when considering that topic's search result ranking.

Topic Titles

For Flare Desktop and for search engine providers, the topic title is one of the most important considerations taken into account when ranking search results. Topic titles are important because in addition to including important keywords, 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 Desktop, 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 heading as the title or you can manually enter a topic title.

☆ **EXAMPLE** 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.

General	Topic Title:	(Always use first topic heading)	If you leave this field blank, the first heading in the topic will be used as the topic title.
Topic Properties	Topic Style Class:		
File Tags	Stylesheet:		
Conditional Text		☐ Disable project and target stylesheets	
Snippet Conditions	Template Page:	(default)	
Snippet Variables	Description:		
Language			

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.

General	Topic Title:	Feeding a Cat	When you type a title in the **Topic Title** box, it appears on the page inside a <title> tag within the <head> tag.
Topic Properties	Topic Style Class:		
File Tags	Stylesheet:		
Conditional Text		☐ Disable project and target stylesheets	
Snippet Conditions	Template Page:	(default)	
Snippet Variables	Description:		
Language			

- **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.

☆ **EXAMPLE** 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 Title field, type the title:
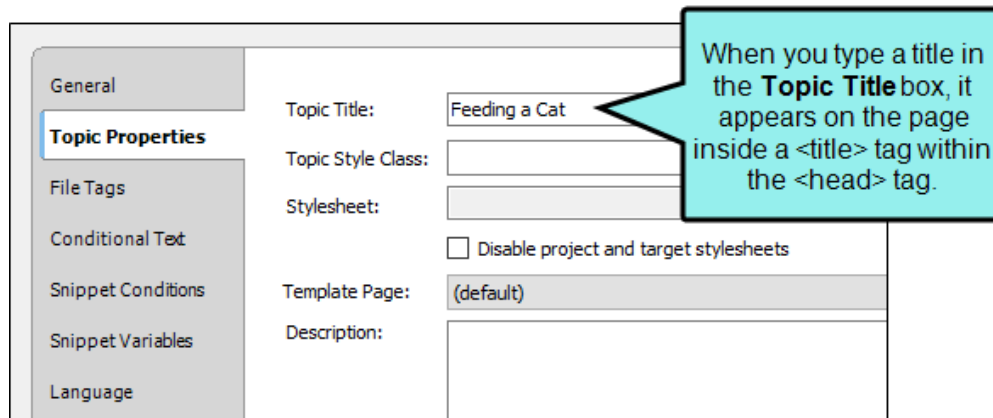
Below is an example of how the title appears in the Flare Desktop Text Editor:
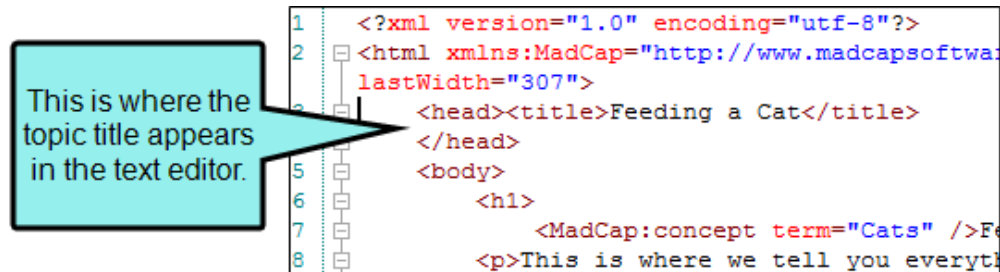
- **Limit Title Length to 70 Characters** Because topic titles display in search engine results, experts recommend limiting page titles to a maximum of 70 characters, including spaces. This increases the odds of end users clicking the link.

> ☆ **EXAMPLE** Because titles display on search engine results pages, titles should be limited to a maximum of 70 characters (including spaces).
>
>
>
> Context Sensitive Help in MadCap Flare
>
> **Your search for "Context Sensitive Help in MadCap Flare" returned 67 result(s).**
>
> Because topic titles display in search engine results, it is recommended they do not exceed 70 characters in length (including spaces).
>
> Testing **Context-sensitive Help**
> Test your **context sensitive Help** project to verify that the correct Help topic... project or from your application.
> CSH/Testing_Context_Sensitive_Help.htm
>
> About **Context-sensitive Help**
> Planning for **Context Sensitive Help** in **MadCap Flare**. Learn who is involved, how to plan the CSH, and what tasks need to be done.
> CSH/About_Context_Sensitive_Help.htm
>
> Integrating **Flare** and Pulse
> Learn how to integrate a Pulse system with a **Flare** community. This adds the Pulse social layer and community features to your published **Flare** output.
> Pulse/Install/Integrating_Flare_and_Pulse.htm
>
> Searching a Microsoft HTML **Help** System
> Describes the end user search experience for the Microsoft HTML **Help** output type. Gives content developers information about how to set up search in HTML **Help**.
> Search/Searching_Outputs/Searching_HTML_Help.htm

- **Place Important Keywords at the Front of the Title Tag** For best results, order 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.

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

General

Topic Properties

File Tags

Conditional Text

Snippet Conditions

Snippet Variables

Language

Topic Title: About Context-sensitive Help | MadCap Software

Topic Style Class:

Stylesheet:

☐ Disable proj

Master Page: (default)

Description:

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.

Index Keywords

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

☆ **EXAMPLE** Here is an example of an index keyword in the XML Editor.
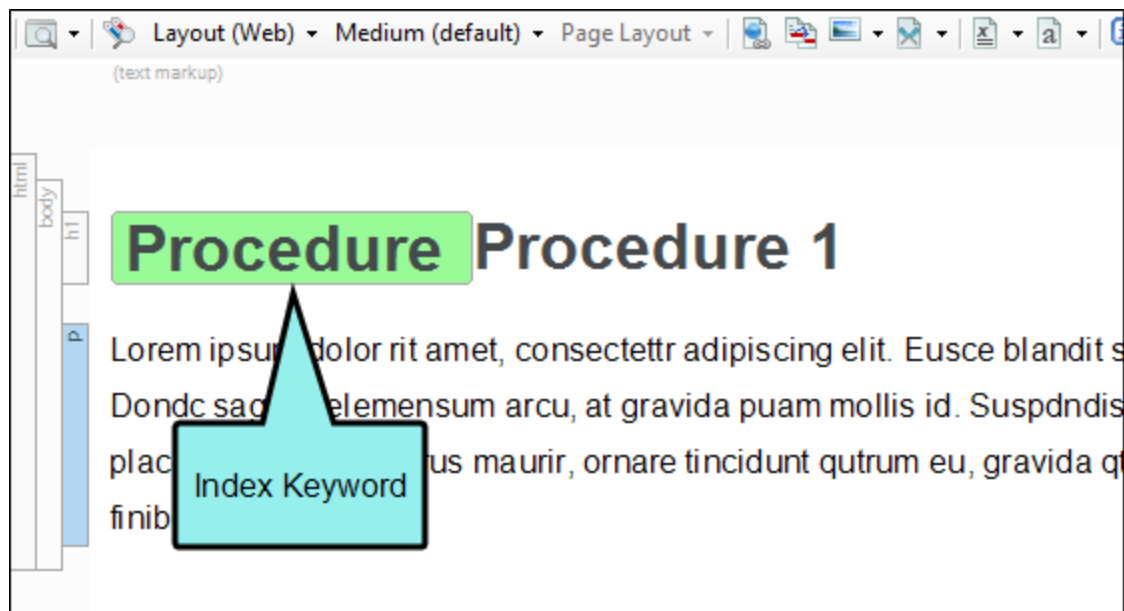
Body Text

The Flare search engine considers keywords 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 the Topic Abstract** For best results, carefully craft your paragraphs to include your most important keywords in the first paragraph of the topic. Flare's search engine places a high preference on keywords found in this paragraph, which acts as the topic abstract.

  > **NOTE** If you use a meta description, the information in the meta description appears in the search result instead of the topic abstract. See "Meta Descriptions for Topics" on page 173.

- **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 inline tags (i.e, formatting applied with span tags) slightly higher than regular text.

- **Consider the Frequency of Your Keywords** Consider the number of times you use a keyword on a page. Flare's search engine places gives preference to topics that use a keyword often.

- **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

1. From the Content Explorer, open the stylesheet that you want to modify.

2. In the local toolbar, make sure the first button displays [View: Advanced]. If the button displays [View: Simplified] instead, then click it.

3. In the drop-down field on the left, choose **Heading Styles** from the list. For this example, we will show you how to create a hidden style class for your h1 tags.

4. Right-click the **h1** and select **Add Selector** from the context menu.
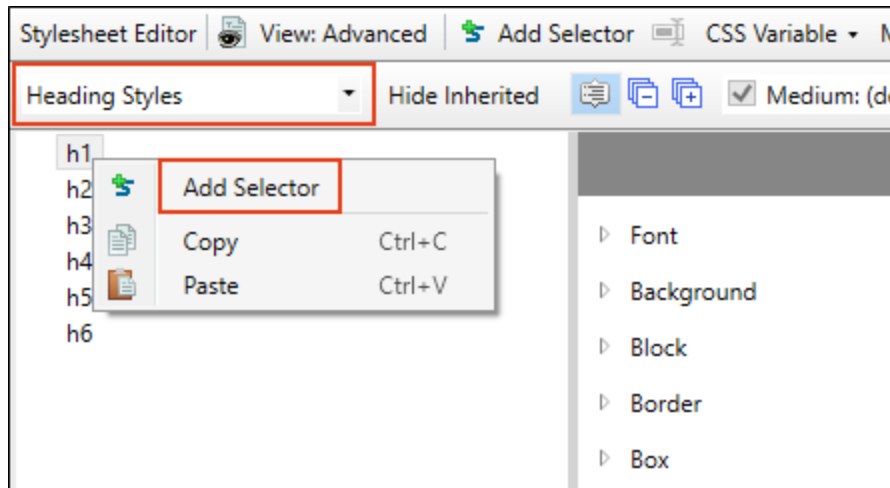
The New Selector dialog opens.

5. In the **Class Name** field, type a name for your style. In this example, we will name it
    `HiddenH1.`
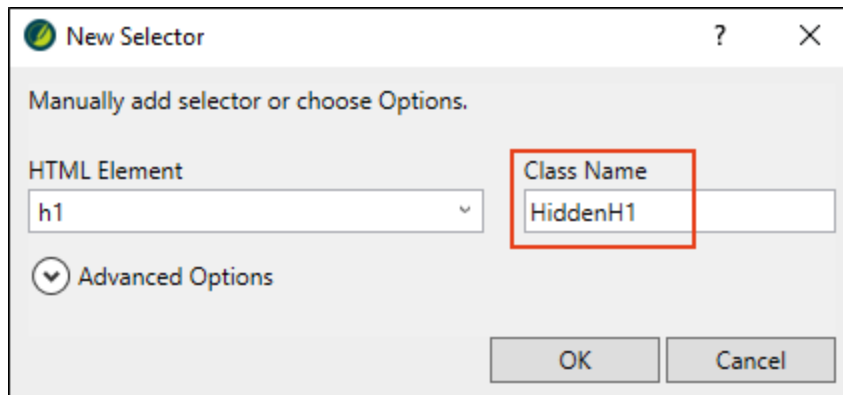
The new class appears in the stylesheet under the h1 tag.
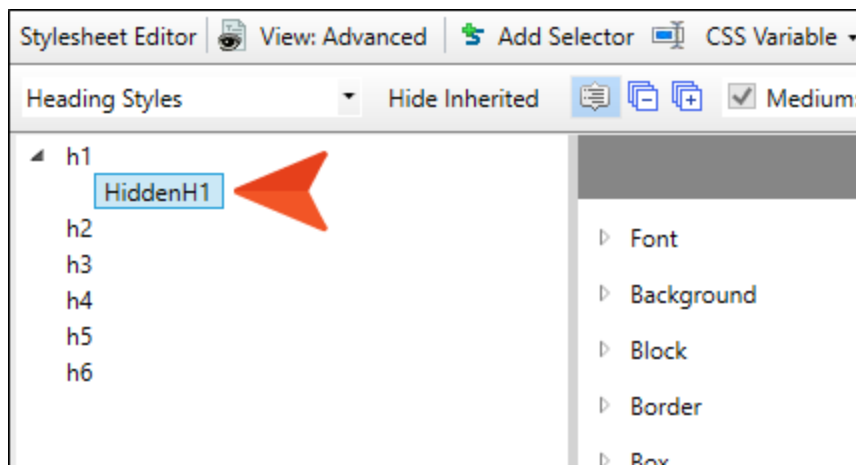
6. In the **Properties** area, expand the **Block** properties.

7. Next to the **display** field, click ⬛ and 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.
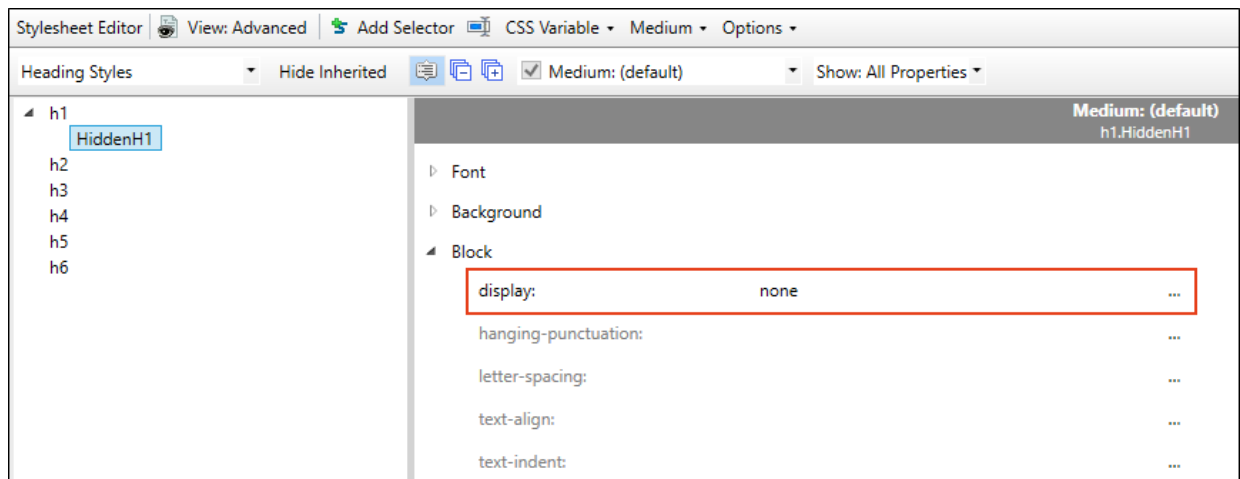
8. Save your changes.

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 the structure bar to the left of the heading text and from the context menu, choose **Style Class > h1HiddenH1**.
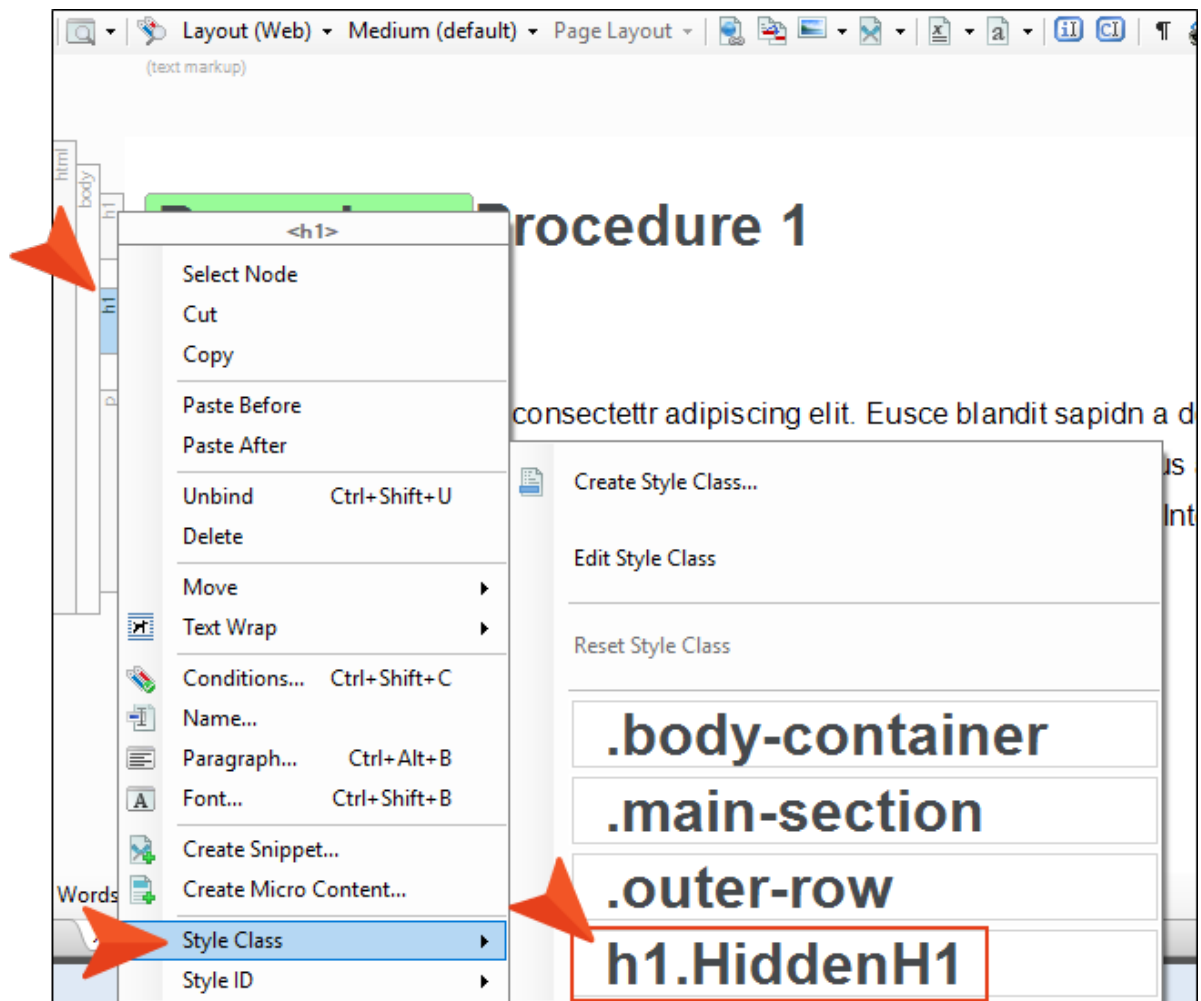
The illustration below shows you how the hidden text style appears in the XML Editor.

This is the hidden text style. If you have markers enabled in the editor, the hidden text is represented by an icon within brackets.
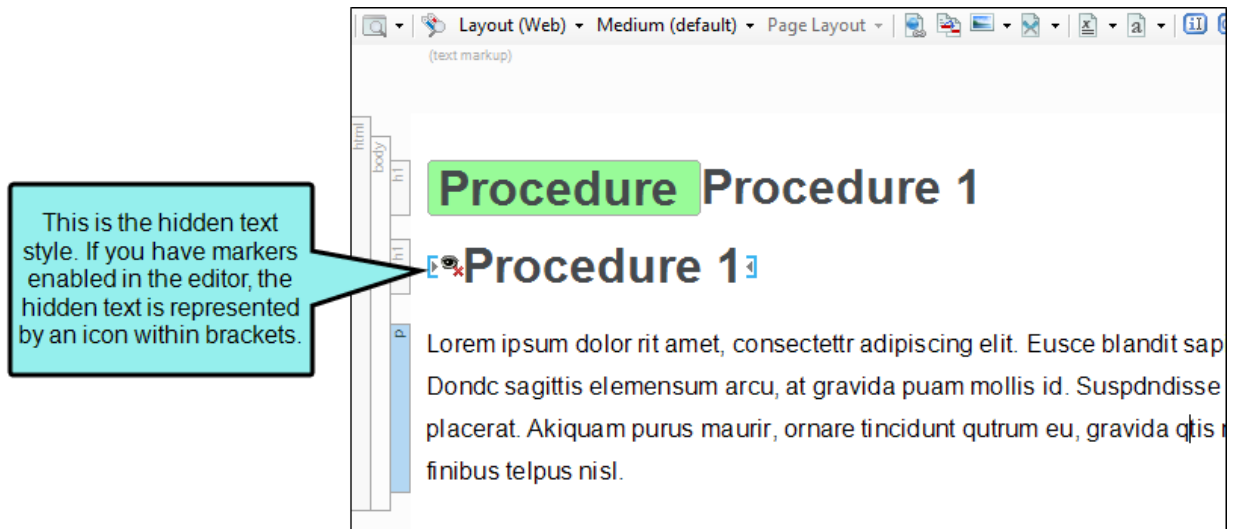
4. View the new style in your output.

In Flare Desktop, the topic has two first-level headings, but the one using the hidden style does not appear in the output.
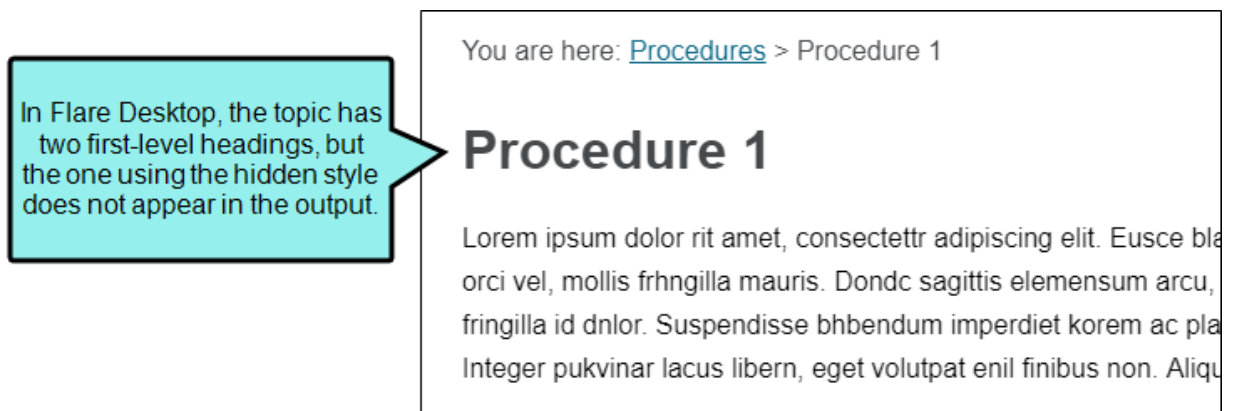
Meta Descriptions

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's Properties dialog in Flare Desktop to add them. Meta descriptions are supported for HTML5, WebHelp, and WebHelp Plus targets. See "Meta Descriptions for Topics" on page 173.

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 Desktop, meta descriptions are weighted heavily 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, rather than of the first paragraph of the topic.

☆ **EXAMPLE** 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.
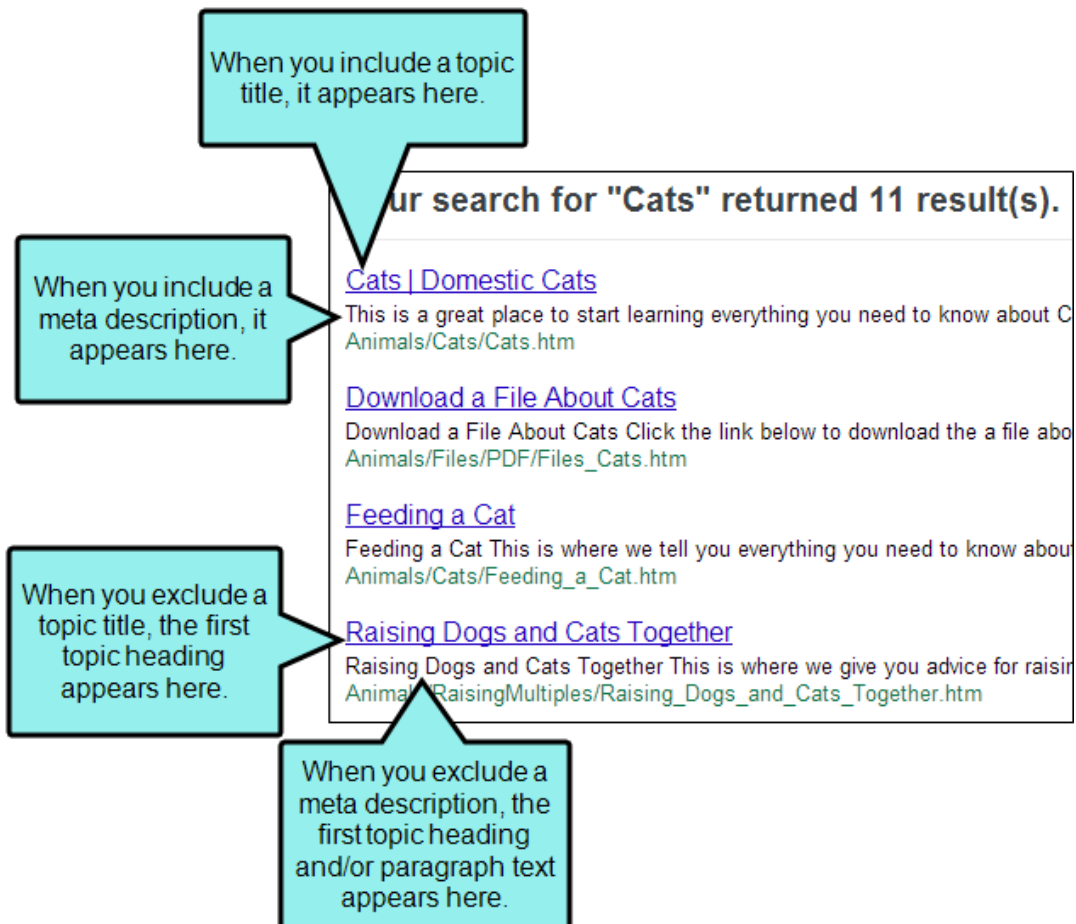
Guidelines for Writing Meta Descriptions

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.

- **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.

File Names

Flare Desktop considers file names in rankings if you do not have a <title> tag in the document. When the Flare search engine looks at the file names in your project, it considers the following when listing results:

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

- **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** 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.

- **Be Aware of Case** 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 as to whether 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 engine will handle a file name, it is good to pick your file naming convention wisely and then use it consistently.

☆ **EXAMPLE** 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.
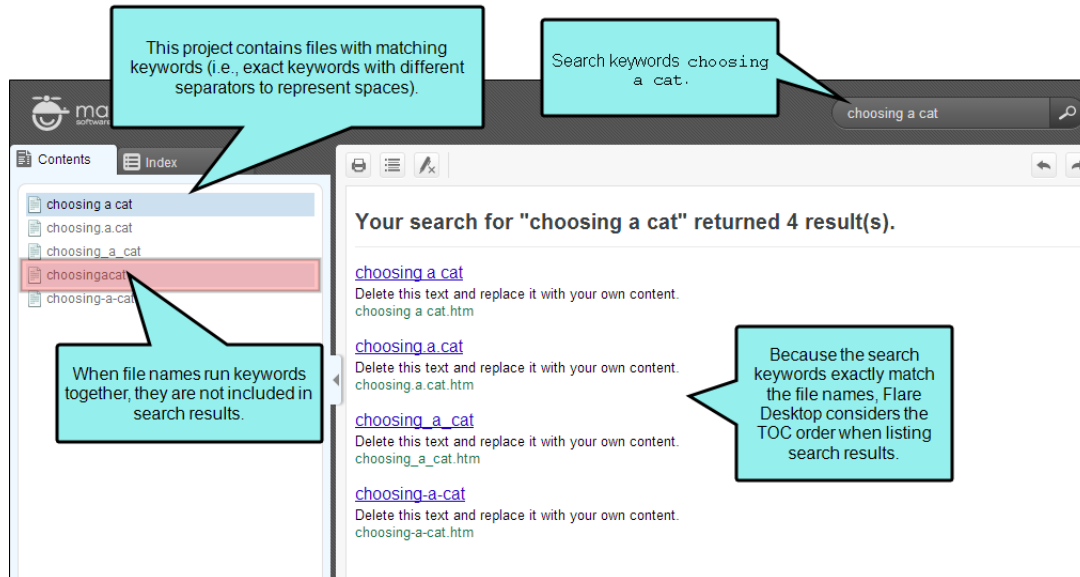
Search Result Importance—HTML5 Output

In HTML5 output, the Flare search engine uses a combination of factors to rank search results. The search engine considers the number of links to a topic (Importance) and the number of times a search term appears in a topic. This gives you the most accurate results. You can turn off Importance and search using only the number of search term hits in each topic. This is not recommended unless you have one topic that is linked too many times that it would skew your search results.

When optimizing your content for HTML5 output, consider if you are going to use Importance in your searches and tailor your content appropriately. For example, if you plan to use Importance, you should make sure you link to important topics throughout your output. However, if you do not plan on using Importance in your searches, you should focus on adding keywords throughout your topic.

See "Setting Search Result Importance" on page 150.

❙ Optimizing a 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, showing links, changing search pagination, and adding search abstracts.

Generating Sitemaps

For web-based targets, 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 web-based target.

2. On the **Search** tab of the Target Editor, select **Generate Sitemap**.

3. In the **Web URL** field enter the path where the output is ultimately published.

   ☆ **EXAMPLE** https://help.madcapsoftware.com/flare2025/

   📝 **NOTE** Be sure to include the full path—including "https://"—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 website developer or website owners. It is used to advise search engine robots and spiders about what site content 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 website developer.

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

   > ☆ **EXAMPLE** 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 not 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 HTML5 Search" on page 258.

Showing Links

You can add a link to the top or bottom of topics in HTML5, WebHelp, or WebHelp Plus outputs. This 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.

Changing the Number of Search Results Per Page

You can change the number of search results that appear on each page in HTML5 outputs. This makes it easier for users to navigate between pages of search results and improves search result loading times, especially for users who access your output from a mobile device. In order to use this feature, you must be using Elasticsearch or MadCap Search. This is feature is not suppoted for Google Search. See "Setting Up a Search Engine" on page 50.

Changing the Abstract Character Limit in Search Results

In HTML5 output, you can set a character limit for automatically generated abstracts that appear in your search results. This allows your users to see a brief summary of each topic in the search results, while keeping the search results page easy to scan. You can set the character limit as long or as short as you like. When creating an automatic abstract, Flare Desktop scans all text elements in the topic, including headings and paragraphs, and includes them in the abstract until the character limit is met. This feature is only supported for MadCap Search. See "Setting the Search Abstract Character Limit" on page 140.

You can also add a manual search abstract using meta descriptions in the topic's Properties dialog. See "Meta Descriptions for Topics" on page 173.

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—HTML5, WebHelp

Flare's search engine uses content signals and content weighting to determine search rankings.

> **NOTE** In HTML5 outputs, the Flare search engine uses one additional concept to rank search results: Importance.
>
> A topic's importance is determined by the number links to a topic in the output. A topic that is linked from ten other topics is more important than a topic that is only linked from one other topic. See "Setting Search Result Importance" on page 150.

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 terms occur in the topic title?
- Do the search terms occur in a heading tag, and at what level (e.g., H1, H2, H3)?
- Do the search terms occur in the abstract text or meta description?
- Do the search terms occur in an index marker in the topic?
- Do the search terms occur in a glossary term?
- Do the search terms occur in the topic's body?
- How many times do the search terms occur in each location (e.g., topic title, hyperlinks, body text)?

These items are used to determine the topic's search ranking against other topics.

Content Weighting

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

Micro Content Search Results

If you create micro content, Flare Desktop considers only the text in the phrases and alternate phrases for the micro content search results. The content in the response associated with each phrase is not weighed. So the response that is paired with the phrase most closely matching the search query (or having the most weight) is used. If you want to help boost a particular micro content phrase/response so that it displays when a certain search term is used, you can add more keywords to the phrase or alternative phrases for that response.

Regular Search Results

1. 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. If you do this, the first topic heading will be used as the topic title by default.

   Topics with a keyword in the <title> tag appear first in search results, and always are ranked higher than topics where a keyword appears elsewhere in the topic, regardless of how many times the keyword appears. This helps you find the most expected topics when searching.

   > **NOTE** If you do not have a <title> tag in your topic, Flare Desktop uses the first heading in the topic as the title tag for the file. If there are no headings in the topic, the file name acts as the title tag. This text is given the same search ranking as a <title> tag.

2. H1 Tags

3. H2 Tags

4. H3 Tags

5. H4 Tags, Index Keywords in Topics

> 📝 **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 162.

6. H5 Tags, Glossary Terms

7. H6 Tags, Keywords in Body Text

8. Keyword Frequency

The search engine looks at how many times the search term appears in each topic. Topics with frequent keywords are ranked higher than topics with fewer keywords.

> 📝 **NOTE** While topics with more frequent keywords are ranked higher, they will never outrank a keyword with a higher base weighting.

⭐ **EXAMPLE** You have two topics that are almost identical. However, the search term appears in a Heading 2 three times in the first topic and only two times in the second topic. Because the search engine accounts for frequency, the first topic will appear higher in the search results than the second topic.

☆ **EXAMPLE** You have two topics. In the first, your search term appears many times, all in Heading 4s. In the second it appears once, in a Heading 3. The second topic will appear higher in the search results because even though the search engine accounts for frequency, search terms that appear in a Heading 3 still take priority over search terms that appear in a Heading 4, regardless of how many total times they appear in the topic.

📝 **NOTE** Some search engines might also consider the text in a "description" meta tag that you add for a topic (e.g., <meta name="description" content="Here is my description of this topic." />). However, some search engines do not include this text in search rankings.

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 "Enabling HTML5 Server-Based Output" on page 242.

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: help.eclipse.org.

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 add to topics that have some kind of relationship with each other. They are also used for inserting concept links into topics.

> 📝 **NOTE** Search filters are not supported in Elasticsearch.

This chapter discusses the following:

❙ Adding Search Filter Set Files to Projects

Supported In:

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.

How to Add a Search Filter Set

1. Do one of the following, depending on the part of the user interface you are using:

   - **Ribbon** Select **Project > New > Advanced > 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, choose to create the new file based on a template or an existing file.

   - **New From Template** Choose either a factory template file or one of your own custom 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 Desktop, expand the **Factory Templates** folder and click on a template file. If you want to use your own custom template file, expand the appropriate folder and click on a file. For more information about templates, see the Help system.

   - **New From Existing** 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 ▭, 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 previously created in the Content Explorer or 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. (Optional) If you want to apply condition tags to the file, expand the **Attributes** section at the bottom of the dialog. Next to the **Condition Tags** field, click ⬚ and select the conditions you want to apply. Click **OK**.

7. (Optional) If you want to apply file tags, expand the **Attributes** section at the bottom of the dialog. Next to the **File Tags** field, click ⬚ and select the file tags you want to apply. Click **OK**.

8. 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.

What's Next?

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.

▌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 **Project > New > Advanced > 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. (Optional) If you want to apply condition tags to the file, expand the **Attributes** section at the bottom of the dialog. Next to the **Condition Tags** field, click ▦ and select the conditions you want to apply. Click **OK**.

7. (Optional) If you want to apply file tags, expand the **Attributes** section at the bottom of the dialog. Next to the **File Tags** field, click ▦ and select the file tags you want to apply. Click **OK**.

8. 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 From the Quick Launch Bar

The Quick Launch bar lets you search for any Flare Desktop file or command. It is located in the upper-right corner of the interface. You can press **CTRL+Q** on your keyboard to move focus to the Quick Launch bar so you can begin typing.
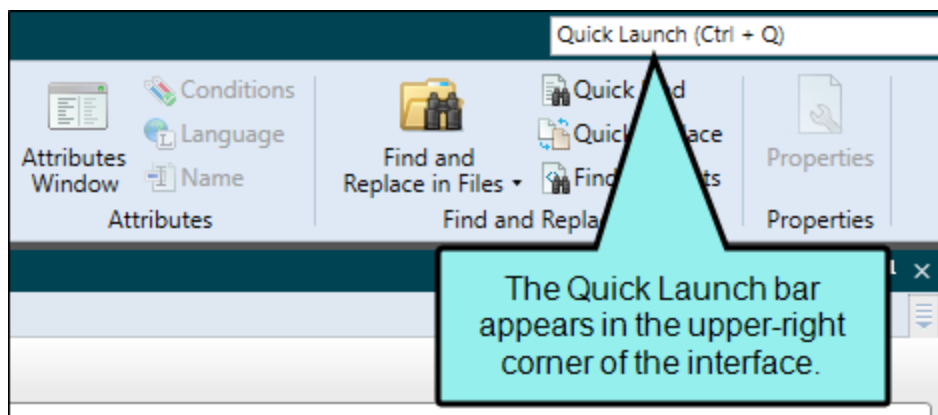
1. In the Quick Launch bar, type a few letters of the name of the file you want to open. Any available results appear in a drop-down list.

2. From the list, click the name of the file.

How to Open a Search Filter Set From the Project Organizer

1. Open the Project Organizer.

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.

❙ Inserting Concepts

You can open a topic and use the top area of the Concept window pane to insert concepts into that file.

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 a Concept Using the Drag-and-Drop Method

1. Open the content file.

2. Do one of the following, depending on the part of the user interface you are using:

   - **Ribbon** 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 a Concept Using the Concept Window Pane Method

1. Open the content file.

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 **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 a Concept Using the Concept Entry Mode Method

1. Open the content file.

2. In the local toolbar of the XML Editor click ⬚.

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.

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

What's Noteworthy?

> 🗒 **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. Open the Project Organizer.

2. Double-click the **Advanced** folder. Any search filter sets that you have added are listed. See "Adding Search Filter Set Files to Projects" on page 212.

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 Desktop 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.

    > 🗒 **NOTE** If you do not associate a concept with the search filter, the search filter will not appear in your output.

8. Click **OK**.

9. Click to save your work.

NOTE When merging projects in WebHelp and HTML 5 output, only the parent project's concepts and search filter sets retained after the merge. You will not be able to find the child project's topics even if the concept links are identical. A workaround is to create an external resources folder that all the projects share and put the search filter set in that folder. .

▌Customizing Search Filter Ordering

Supported In:

By default, search filters display alphabetically. However, you can customize the ordering of the search filter set so they display in the order that is most useful for your audience.
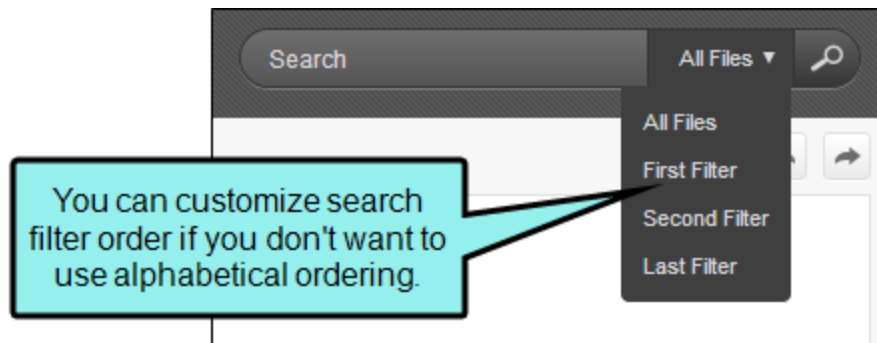
How to Customize Search Filter Ordering

1. Open the Project Organizer.

2. Double-click the **Advanced** folder. Any search filter sets that you have added are listed.

3. Double-click the search filter set you want to customize. The Search Filter Set Editor opens to the right. The **Order** column represents the order displayed in the output.

4. In the **Filter Name** column, select the filter you want to move.

5. To customize the order of the filters, do one of the following:

   - Click ⬆ or ⬇ in the local toolbar.

   - Select **Move Up** or **Move Down** from the context menu.

6. (Optional) To reset the search filters to alphabetical order, click 🔁.

7. Click 💾 to save your work.

> 🗒 **NOTE** You can create search filters for merged projects in WebHelp and HTML 5 output. However, when you merge projects, ordered search filter sets are separated by project in the output. To control the order of the search filters from all of your merged projects, you can create an external resources folder that all the projects share and put the search filter set in that folder.

▌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.

❙ 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 **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**.
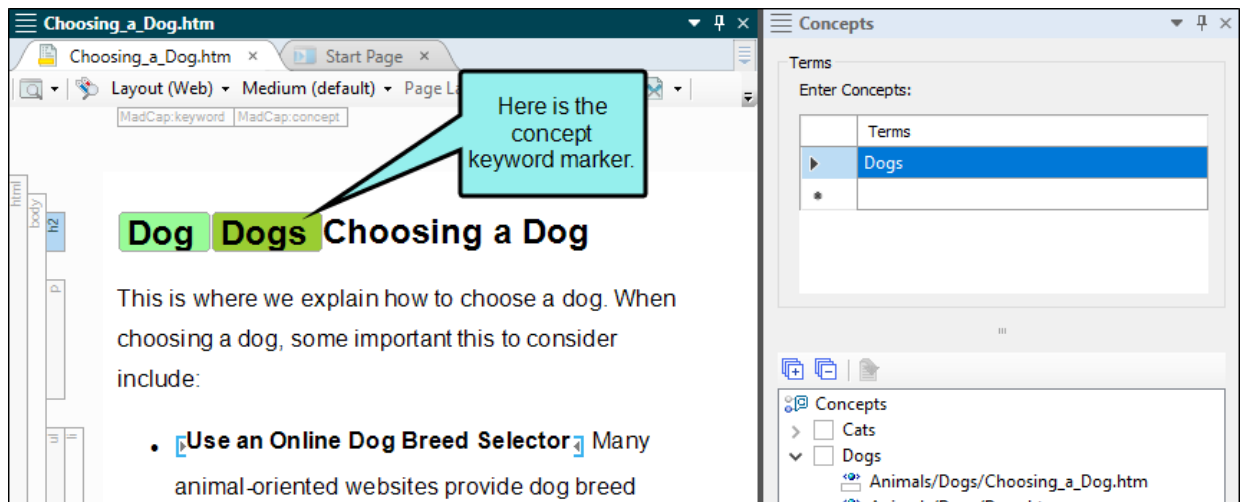
Step 2—Copy and Paste the Concept Marker Into All Relevant Topics

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 **Project > New > Advanced > 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—Customize Search Filter Ordering

If you have created multiple search filters, you can rearrange them to best suit the needs of your audience (in web outputs). By default, they are alphabetical, but you want to move the "dog" filter to the top of the list.

1. Open the Project Organizer.

2. Double-click the **Advanced** folder. Any search filter sets that you have added are listed.

3. Double-click the search filter set you want to customize. The Search Filter Set Editor opens to the right. The **Order** column represents the displayed order in the output.

4. In the **Filter Name** column, select the "dog" filter.

5. To customize the order of the filters, do one of the following:

   - Click ⬆ or ⬇ in the local toolbar.

   - Select **Move Up** or **Move Down** from the context menu.

6. (Optional) To reset the search filters to alphabetical order, click ⟳.

7. Click 🖫 to save your work.

Step 5—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.

What's Noteworthy?

> **NOTE** Search filters are not supported in Elasticsearch.

Search Highlighting

Supported In:

When users initiate a search query, the search hits (i.e., the matching keywords and phrases) may be 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.

This chapter discusses the following:

Search Highlighting in Online Outputs

Online output types use a highlight color when revealing search hits. HTML5 Tripane output shows highlights words in color by default. In Side and Top Navigation outputs, search results are transparent, but you can customize this, adding colors. See "Customizing the Highlight Color for Search Hits" on page 233.

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

Turning Off Search Highlighting in Flare's Output

If you search in a Help system and open a topic from the search results, terms are automatically highlighted in the topic. To turn off the highlighting, click in the upper-right of the topic.

▮ Customizing the Highlight Color for Search Hits

Supported In:

When users perform searches in your online output, the keywords that are found may be highlighted in the topics. The background for each term found in a topic can be highlighted in a different color. In Flare Desktop 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.

For most types of output, you can customize the highlight color using span styles (e.g., span.SearchHighlight1, span.SearchHighlight2) in a regular stylesheet. For HTML5 Tripane output, this is done in the Skin Editor instead.

☆ **EXAMPLE** 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 Desktop (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 Desktop (since you did not change it).

How to Customize Search Highlight Colors

1. From the Content Explorer, open the stylesheet that you want to modify.

2. Complete one of the following sets of steps, depending on whether you want to use the Simplified view or Advanced view in the Stylesheet Editor.
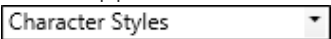
   - **Simplified** The Simplified view displays styles in a grid view and is often best for brand new users.

     This view provides an easy way to apply properties to styles, with format options available from a toolbar and dialogs (similar to the way one would use an interface such as Microsoft Word). In some cases, only the most common property options are available in the Simplified view (e.g., font, letter/word spacing, paragraph alignment/indentation, autonumbering format, borders, background). One advantage of the Simplified view is that you can apply a property to multiple styles at the same time. You can also click a check box to hide the properties in the editor, allowing you to see only the styles.

   - **Advanced** The Advanced view displays styles in a tree structure, and despite the name, is user friendly for authors of all levels.

     For the properties, you can toggle between a grouped display and an alphabetical display. The Advanced view of the Stylesheet Editor lets you edit more settings than are available in the Simplified view. In addition, the Advanced view lets you see and apply settings to multiple mediums and media queries at the same time.
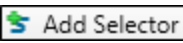
IF USING SIMPLIFIED VIEW

   a. In the local toolbar, make sure the first button displays ![View: Simplified] (which means that the Simplified view is currently shown in the editor). If the button displays ![View: Advanced] instead, then click it.

   b. In the upper-left corner of the editor, click in the drop-down field and select ![Character Styles].

   c. (Optional) If you have an older stylesheet that does not yet contain the appropriate span classes you need for search highlighting, you can create them. You can do this for a main "SearchHighlight" class, as well as 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.

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. From the grid in the bottom portion of the Stylesheet Editor, select the **span** tag.

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

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

iv. Click **OK**.

d. Select the style class that you want to modify. If you select the main **SearchHighlight** class, the same color will be used for all search terms found. Otherwise, you can select a numbered SearchHighlight class (e.g., SearchHighlight1, SearchHighlight2) to set individual colors for different terms found.

e. In the local toolbar of the editor, click . The Properties dialog opens.
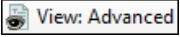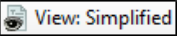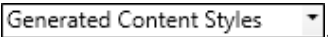
f. Use the Properties dialog to change values for the style's properties.

> ☆ **EXAMPLE** You want to change the background color for the class
> span.SearchHighlight1. After you select that class on the left you can select the
> **Font** tab in the Properties dialog. Then click the down arrow in the **Background**
> field and choose the color you want.

g. In the Properties dialog, click **OK**.

IF USING ADVANCED VIEW

a. In the local toolbar, make sure the first button displays [View: Advanced]. If the button
displays [View: Simplified] instead, then click it.

b. In the upper-left corner of the editor, click in the drop-down field and select
[Generated Content Styles ▾].

c. (Optional) If you have an older stylesheet that does not yet contain the appropriate
span classes you need for search highlighting, you can create them. You can do this for
a main "SearchHighlight" class, as well as 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.

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 IMPORT CREATE THESE CLASSES MANUALLY

i. On the left side of the editor, select the **span** tag.

ii. In the local toolbar, click 🔧 Add Selector . The New Selector dialog opens.

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

iv. Click **OK**.

d. Select the style class that you want to modify. If you select the main **SearchHighlight** class, the same color will be used for all search terms found. Otherwise, you can select a numbered SearchHighlight class (e.g., SearchHighlight1, SearchHighlight2) to set individual colors for different terms found.

e. From the **Show** drop-down list on the upper-right side of the editor, select Show: All Properties ▾.

f. (Optional) You can use the toggle button in the local toolbar to show properties below in a group view 🖼 or an alphabetical view 🖼.

g. Locate the property you want to change. Not only can you change the background color, but you can change any other property for the class as well.

h. The area to the right of the property is used for selecting and entering values. If you know how to enter the information correctly, you can click in the value field and type it directly. Otherwise, click the ellipsis button 🔲 to the right of the property. Depending on the type of property, the appropriate controls and options display, allowing you to choose or enter values (e.g., select from a drop-down list, click a button, complete fields in a dialog or popup). If you completed values in a popup, click **OK** at the bottom of the box.

⭐ **EXAMPLE** You want to change the background color for the class span.SearchHighlight1. After you select that class on the left you can open the **Background** property group on the right side of the editor. Then to the right of **background-color**, click ⊡, then choose the color you want.

3. Click 💾 to save your work.

How to Customize Search Highlight Colors— HTML5 Tripane Only

Use the following steps if you are creating HTML5 Tripane output. If you are creating HTML5 Side Navigation, Top Navigation, or skinless output, use the steps above for doing this in a stylesheet.

1. In the Project Organizer, open the **Skins** folder.

2. Open the desired HTML5 Tripane 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 main **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.

6. Click ![save icon] to save your work.

What's Noteworthy?

> ![note icon] **NOTE** Search highlighting for Eclipse Help is provided by the Eclipse platform. Highlight colors for search cannot be modified in Flare Desktop.

Server-Based Search HTML5

For HTML5, there are additional tasks that you can perform when producing server-based output.

This chapter discusses the following:

❙ 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.

If you want to take advantage of the advanced server-side features of HTML5 (i.e., automatic runtime project merging, server-side search, searching of non-XHTML files), you must enable HTML5 server-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

1. Under **Internet Information Services** expand **World Wide Web Services**.

2. Expand **Application Development Features**.

3. Click the check box next to **ASP.NET 4.5** to add a check mark.

4. 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

1. Under **Internet Information Services** expand **World Wide Web Services**.

2. Expand **Application Development Features**.

3. Click the check box next to **ASP.NET** to add a check mark.

4. Click **OK**.

5. Click **Start**.

6. In the search field enter `run`.

7. Click **Run**. The Run dialog opens.

8. 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
   ```

9. 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

1. In the Add Roles Wizard click **Next**.

2. Expand **.NET Framework 4.5 Features** and click **ASP.NET 4.5**.

3. Click **Next**.

4. At the Web Server Role (IIS) tab, click **Next** again.

5. Expand **Management Tools > IIS 6 Management Compatibility** and click **IIS 6 Metabase Compatibility**.

6. On the Confirm Installation Selections page of the wizard, click **Install**.

7. 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.

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 Desktop, 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. 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 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.

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

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, and Windows 8

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 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 Server 2003. This procedure is not necessary for the other operating systems.

Windows Server 2003—How to Start Microsoft Indexing Service

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.

Windows Server 2008—How to Start Microsoft Windows Search

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).

How to Enable HTML5 Server-Based Search

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).

How to Test 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.

What's Noteworthy?

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

> **NOTE** Flare's HTML5 Side and Top Navigation skins do not support runtime project merging.

▐ Including Non-XHTML Files in HTML5 Search

Supported In:

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 HTML5 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, server-side search, searching of non-XHTML files), you must enable HTML5 server-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 Help system.

2. **Generate HTML5 Server-Based Output** In Flare Desktop, generate a target using the HTML5 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.

> **NOTE** 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. 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.

Synonyms

Supported In:

If users enter search phrases in your online output and those phrases are not returning results, 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.

You can determine what search phrases are being used in your output by using MadCap Flare Online Analytics.

> ☆ **EXAMPLE** You view search keyword results from end 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.

> ▢ **NOTE** Synonyms are not supported in Elasticsearch.

> 🗒 **NOTE** Depending on the browser being used, the cache may need to be cleared in order to see the synonym results.

> 🗒 **NOTE** If you create micro content, synonyms can help display the best search results. The search engine looks at the micro content phrases and alternate phrases that you have added to a file, but it also considers any relevant synonyms.

This chapter discusses the following:

▌Adding Synonym Files

Supported In:

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 **Project > New > Advanced > 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, choose to create the new file based on a template or an existing file.

   - **New From Template** Choose either a factory template file or one of your own custom 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 Desktop, expand the **Factory Templates** folder and click on a template file. If you want to use your own custom template file, expand the appropriate folder and click on a file. For more information about templates, see the Help system.

   - **New From Existing** 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 ▦, 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 previously created in the Content Explorer or 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. (Optional) If you want to apply condition tags to the file, expand the **Attributes** section at the bottom of the dialog. Next to the **Condition Tags** field, click ▣ and select the conditions you want to apply. Click **OK**.

7. (Optional) If you want to apply file tags, expand the **Attributes** section at the bottom of the dialog. Next to the **File Tags** field, click ▣ and select the file tags you want to apply. Click **OK**.

8. Click **Add**. The synonym file is added to the Advanced folder in the Project Organizer. The Synonyms Editor opens to the right.

> **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

Following are steps for creating synonyms.

How to Create Synonyms

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

   TO 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**.

2. **TO OPEN A SYNONYM FILE**

   a. Open the Project Organizer.

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

   c. Double-click the synonym file.

3. 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.

☆ **EXAMPLE** 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).

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=athletics=games). Press **ENTER** when you are finished.

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

☆ **EXAMPLE** 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.

☆ **EXAMPLE** You use Flare Online Analytics 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 Desktop 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 Desktop to accept other variations of the search term that have the same stem.

> ☆ **EXAMPLE** 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."

4. Click 🖫 to save your work.

▎Exporting Synonyms

> ⊘ **IMPORTANT** Feedback is deprecated in Flare Desktop, which means that it is slated to be removed in a future version.

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. Open the Project Organizer.

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 From the Quick Launch Bar

The Quick Launch bar lets you search for any Flare Desktop file or command. It is located in the upper-right corner of the interface. You can press **CTRL+Q** on your keyboard to move focus to the Quick Launch bar so you can begin typing.
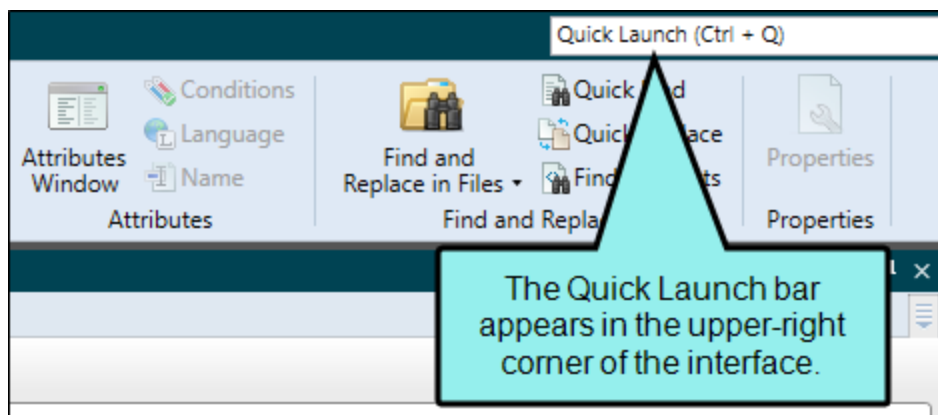
1. In the Quick Launch bar, type a few letters of the name of the file you want to open. Any available results appear in a drop-down list.

2. From the list, click the name of the file.

How to Open a Synonym File From the Project Organizer

1. Open the Project Organizer.

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

3. Double-click the synonym file. The Synonyms Editor opens to the right.

Including or Excluding Topics in Search

Supported In:

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

How to Include or Exclude Topics in Search

1. Open the Content Explorer.

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.

PDFs

The following PDFs are available for download from the Help system.

Tutorials

Autonumbers Tutorial

Back-to-Top Button Tutorial

Context-Sensitive Help Tutorial

Custom Toolbar Tutorial

eLearning Tutorial—Basic

eLearning Tutorial—Advanced

Getting Started Tutorial

Image Tooltips Tutorial

Lists Tutorial

Meta Tags Tutorial

Micro Content Tutorial—Basic

Micro Content Tutorial—Advanced

Responsive Output Tutorial

Single-Sourcing Tutorial

Snippet Conditions Tutorial

Styles Tutorials

Tables Tutorial

Word Import Tutorial

Cheat Sheets

Context-Sensitive Help Cheat Sheet

Folders and Files Cheat Sheet

Learning & Development Cheat Sheet

Lists Cheat Sheet

Micro Content Cheat Sheet

Print-Based Output Cheat Sheet

Search Cheat Sheet

Shortcuts Cheat Sheet

Structure Bars Cheat Sheet

Styles Cheat Sheet

User Guides

Accessibility Guide

Analysis and Reports Guide

Architecture Guide

Autonumbers Guide

Branding Guide

Condition Tags Guide

Context-Sensitive Help Guide

Eclipse Help Guide

eLearning Guide

Getting Started Guide

Global Project Linking Guide

HTML5 Guide

Images Guide

Import Guide

Indexing Guide

Key Features Guide

Lists Guide

MadCap Flare Online Integration Guide

Meta Tags Guide

Micro Content Guide

Navigation Links Guide

Plug-In API Guide

Print-Based Output Guide

Project Creation Guide

QR Codes Guide

Reviews & Contributions With Contributor Guide

Scripting Guide

Search Guide

SharePoint Guide

Skins Guide

Snippets Guide

Source Control Guide: Git

Source Control Guide: Perforce Helix Core

Source Control Guide: Subversion

Source Control Guide: Team Foundation Server

Styles Guide

Tables Guide

Tables of Contents Guide

Targets Guide

Template Pages Guide

Templates Guide

Topics Guide

Touring the Workspace Guide

Transition From FrameMaker Guide

Translation and Localization Guide

Variables Guide

Videos Guide

What's New Guide