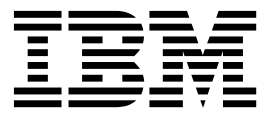


IBM StoredIQ Administrator  
Version 7.6.0.5

*Administration Guide*





IBM StoredIQ Administrator  
Version 7.6.0.5

*Administration Guide*



**Note**

Before using this information and the product it supports, read the information in Notices.

This edition applies to Version 7.6.0.5 of product number 5724M86 and to all subsequent releases and modifications until otherwise indicated in new editions.

© **Copyright IBM Corporation 2001, 2015.**

US Government Users Restricted Rights – Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

# Table of contents

|  |            |  |           |
|--|------------|--|-----------|
| <b>Tables</b> . . . . .  | <b>v</b>   | Obtaining a new password . . . . .                                     | 35        |
| <b>About this publication</b> . . . . .                                | <b>vii</b> | <b>Chapter 6. Action management</b> . . . . .                          | <b>37</b> |
| IBM StoredIQ Platform product library . . . . .                        | vii        | Searching for a specific action . . . . .                              | 38        |
| Contacting IBM StoredIQ customer support . . . . .                     | vii        | Creating an action . . . . .   | 38        |
| Contacting IBM . . . . .   | vii        | Deleting an action . . . . .   | 42        |
| How to send your comments . . . . .                                    | viii       | Cloning an action . . . . .  | 42        |
|  |            | Editing an action . . . . .  | 43        |
| <b>Chapter 1. Overview of IBM StoredIQ Administrator</b> . . . . .     | <b>1</b>   | <b>Chapter 7. Target sets</b> . . . . .                                | <b>45</b> |
|  |            | Searching for a specific target set . . . . .                          | 45        |
| <b>Chapter 2. Data Servers and Volumes</b> ..                          | <b>3</b>   | Creating a target set . . . . .  | 46        |
| Searching for a specific data server . . . . .                         | 5          | Editing a target set . . . . .   | 46        |
| Adding a primary volume. . . . .                                       | 5          | Cloning a target set. . . . .  | 46        |
| Box volumes: configuration note . . . . .                              | 15         | Deleting a target set . . . . .  | 47        |
| Configuring data-server access for Box volumes                         | 16         |  |           |
| IBM Content Manager attributes . . . . .                               | 17         | <b>Chapter 8. Reports</b> . . . . .                                    | <b>49</b> |
| Adding a retention volume . . . . .                                    | 19         | Searching for a specific report . . . . .                              | 49        |
| Adding a discovery export volume . . . . .                             | 20         | Creating a report . . . . .  | 50        |
| Viewing details of a data server . . . . .                             | 20         |  |           |
| Viewing details of multiple volumes . . . . .                          | 21         | <b>Chapter 9. Auto-classification models</b> <b>51</b>                 |           |
| Rebooting a data server . . . . .                                      | 21         | Applying the auto-classification feature . . . . .                     | 52        |
| Restarting services . . . . .  | 21         | Data server sizing-configuration guidelines. . . . .                   | 53        |
| Removing a volume . . . . .  | 22         | Downloading the classification export utility . . . . .                | 53        |
|  |            | Building an auto-classification model. . . . .                         | 53        |
| <b>Chapter 3. Harvests</b> . . . . .                                   | <b>23</b>  | Preparing an IBM Content Classification model for import . . . . .     | 54        |
| Harvesting a volume . . . . .  | 23         | Importing an auto-classification model . . . . .                       | 54        |
| Searching for a specific harvest. . . . .                              | 23         | Selecting a classification model . . . . .                             | 55        |
| Stopping a harvest . . . . .   | 24         | Searching for a specific classification model. . . . .                 | 56        |
| Editing a harvest . . . . .  | 24         | Editing a model . . . . .  | 56        |
| Deleting a harvest . . . . .   | 24         | Deleting a model . . . . .   | 57        |
|  |            | Retraining a classification model . . . . .                            | 57        |
| <b>Chapter 4. System infosets</b> . . . . .                            | <b>25</b>  | <b>Chapter 10. Concept management</b> . . . . .                        | <b>59</b> |
| Searching for a specific system infoset . . . . .                      | 25         | Adding a member to a concept. . . . .                                  | 59        |
| Creating a system infoset. . . . .                                     | 26         | Searching for a concept . . . . .                                      | 60        |
| Editing a system infoset . . . . .                                     | 26         | Editing a member of a concept . . . . .                                | 60        |
| Viewing infosets that use a system infoset . . . . .                   | 27         | Deleting a member of a concept . . . . .                               | 60        |
| Viewing access members . . . . .                                       | 27         |  |           |
| Deleting a system infoset. . . . .                                     | 27         | <b>Chapter 11. Mule scripts</b> . . . . .                              | <b>61</b> |
|  |            | Creating a Mule script. . . . .  | 61        |
| <b>Chapter 5. User management</b> . . . . .                            | <b>29</b>  | Searching for a specific Mule script . . . . .                         | 61        |
| Viewing your user profile . . . . .                                    | 29         | Viewing details of Mule scripts. . . . .                               | 62        |
| Searching for a specific user . . . . .                                | 29         | Editing a Mule script . . . . .  | 62        |
| Creating a user . . . . .  | 30         | Deleting a Mule script. . . . .  | 62        |
| Connecting to the LDAP server. . . . .                                 | 30         | Importing the IBM StoredIQ application stack SSL certificate . . . . . | 63        |
| Synchronizing the LDAP server and application stack database . . . . . | 31         |  |           |
| Importing a user. . . . .  | 32         | <b>Appendix A. IBM StoredIQ Mule script</b> <b>65</b>                  |           |
| Editing an imported user. . . . .                                      | 32         | Setting up Mule Anypoint Studio with IBM StoredIQ . . . . .            | 65        |
| Editing a user . . . . .   | 32         | Importing the IBM StoredIQ application stack SSL certificate . . . . . | 66        |
| Viewing details of a user . . . . .                                    | 33         |  |           |
| Deleting a user . . . . .  | 33         |  |           |
| Changing user passwords . . . . .                                      | 34         |  |           |
| Resetting the user password. . . . .                                   | 34         |  |           |

|  |    |
|--|----|
| Mule script management . . . . .                           | 67 |
| IBM StoredIQ Connector operations . . . . .                | 67 |
| Creating the IBM StoredIQ Mule script . . . . .            | 67 |
| Deploying the Mule script . . . . .                        | 69 |
| Configuring Mule script timeout lengths . . . . .          | 70 |
| Mule domain project . . . . .                              | 71 |
| Importing a domain project in Anypoint Studio . . . . .    | 71 |
| Associating a Mule project with a domain project . . . . . | 71 |

|                      |    |
|----------------------|----|
| Trademarks . . . . . | 86 |
|----------------------|----|

|                        |           |
|------------------------|-----------|
| <b>Index . . . . .</b> | <b>89</b> |
|------------------------|-----------|

|  |           |
|--|-----------|
| <b>Appendix B. IBM StoredIQ Connector operations . . . . .</b> | <b>73</b> |
|--|-----------|

|                          |           |
|--------------------------|-----------|
| <b>Notices . . . . .</b> | <b>83</b> |
|--------------------------|-----------|

|  |    |
|--|----|
| Privacy policy considerations . . . . .                | 85 |
| Terms and conditions for product documentation.. . . . | 85 |

---

## Tables

|  |    |  |    |
|--|----|--|----|
| 1. Data Dashboard fields and descriptions . . .  | 3  | 14. SharePoint volumes: Add Volume dialog box options for primary volumes. . . . . | 14 |
| 2. All Data Servers tab column names and descriptions . . . . .                          | 3  | 15. Retained Box metadata attributes when copying to Box volumes . . . . .         | 15 |
| 3. System Status and System Activity panes field names and descriptions . . . . .        | 3  | 16. CSV mapping file fields: example . . . . .                                     | 16 |
| 4. All Volumes tab column names and descriptions . . . . .                               | 4  | 17. Retention volume options . . . . .   | 19 |
| 5. Box volumes: Add Volume dialog box options for primary volumes . . . . .              | 5  | 18. Discovery export volume options . . . . .                                      | 20 |
| 6. CIFS volumes: Add Volume dialog box options for primary volumes . . . . .             | 6  | 19. List of Harvests fields and descriptions                                       | 23 |
| 7. CMIS volumes: Add Volume dialog box options for primary volumes . . . . .             | 7  | 20. Infoset management column names and descriptions . . . . .                     | 25 |
| 8. Exchange volumes: Add Volume dialog box options for primary volumes . . . . .         | 7  | 21. List of Users column names and descriptions                                    | 29 |
| 9. FileNet volumes: Add Volume dialog box options for primary volumes . . . . .          | 9  | 22. Actions column names and descriptions  | 37 |
| 10. IBM Content Manager volumes: Add Volume dialog box options for primary volumes . . . | 10 | 23. Target set management columns and descriptions . . . . .                       | 45 |
| 11. Livelink volumes: Add Volume dialog box options for primary volumes . . . . .        | 11 | 24. List of Reports options and descriptions                                       | 49 |
| 12. NewsGator volumes: Add Volume dialog box options for primary volumes . . . . .       | 12 | 25. Classification model column names and descriptions . . . . .                   | 55 |
| 13. NFS volumes: Add Volume dialog box options for primary volumes . . . . .             | 13 | 26. Row names and descriptions of the <model name> Details panel . . . . .         | 56 |
|  |    | 27. Concept columns and descriptions . . . . .                                     | 59 |
|  |    | 28. Mule script columns and descriptions. . . . .                                  | 61 |
|  |    | 29. IBM StoredIQ Connector operations . . . . .                                    | 73 |





---

## About this publication

The IBM® *StoredIQ Administrator Administration Guide* describes how to manage the IBM StoredIQ Administrator application to configure shares, create system infosets, manage users, target sets, and actions, and create reports.

---

## IBM StoredIQ Platform product library

The following documents are available in the IBM StoredIQ Platform product library.

- *IBM StoredIQ Platform Deployment and Configuration Guide*, SC27-6386
- *IBM StoredIQ Platform Overview Guide*, GC27-6398
- *IBM StoredIQ Platform Data Server Administration Guide*, SC27-5692
- *IBM StoredIQ Administrator Administration Guide*, SC27-5688
- *IBM StoredIQ Data Workbench User Guide*, SC27-5691
- *IBM StoredIQ eDiscovery User Guide*, SC27-5693
- *IBM StoredIQ Policy Manager User Guide*, SC27-5694
- *IBM StoredIQ Data Script User Guide*, SC27-5690

---

## Contacting IBM StoredIQ customer support

For IBM StoredIQ technical support or to learn about available service options, contact IBM StoredIQ customer support at this phone number:

### Support and assistance

- 1-866-227-2068

To e-mail IBM StoredIQ customer support, use this email address:

- [storediqsupport@us.ibm.com](mailto:storediqsupport@us.ibm.com)

For information about how to contact IBM, see the Contact IBM web site at <http://www.ibm.com/contact/us/>

### IBM Knowledge Center

The IBM StoredIQ publications can be found from IBM Knowledge Center.

### PDF publications

The IBM Publication Center site offers customized search functions to help you find all the IBM publications you need.

## Contacting IBM

For general inquiries, call 800-IBM-4YOU (800-426-4968). To contact IBM customer service in the United States or Canada, call 1-800-IBM-SERV (1-800-426-7378).

For more information about how to contact IBM, including TTY service, see the Contact IBM website at <http://www.ibm.com/contact/us/>.

---

## How to send your comments

Your feedback is important in helping to provide the most accurate and highest quality information.

Send your comments by using the online reader comment form at [https://www14.software.ibm.com/webapp/iwm/web/signup.do?lang=en\\_US&source=swg-rcf](https://www14.software.ibm.com/webapp/iwm/web/signup.do?lang=en_US&source=swg-rcf).

---

## Chapter 1. Overview of IBM StoredIQ Administrator

IBM StoredIQ Administrator provides at-a-glance understanding of the different issues that can crop up in the IBM StoredIQ Platform environment. These views are unique to the IBM StoredIQ Administrator application, providing an overview of how the system is running. These views also allow access to various pieces of information that are shared across applications or allow for the management of resources in a centralized manner.

The Administrator is the person responsible for managing the IBM StoredIQ Platform installation at a customer site. This individual has strong understanding of data sources, harvests, indexes, data servers, jobs, infosets, reports, concepts, actions, and Mule scripts. This list provides an overview as to how IBM StoredIQ Administrator works.

### Managing Data Servers

Using IBM StoredIQ Administrator, the Administrator can identify what data servers are deployed, their location, what data is being managed, and the status of each data server in the system. Volume management is a central component of IBM StoredIQ Platform. With IBM StoredIQ Administrator, the Administrator can see:

- What volumes are currently under management
- Which data server is responsible for that volume
- The state of the volume after indexing
- The amount and size of information that is contained by each volume.

Administrators can also add volumes to data servers through this interface.

### Administering Harvests

Administrators can initiate the incremental or full harvest of a single volume through the IBM StoredIQ Administrator user interface without having to log into IBM StoredIQ Platform Data Server.

### Creating System Infosets

System infosets that use only specific indexed volumes can be created and managed within IBM StoredIQ Administrator. Although infosets are a core component of IBM StoredIQ Data Workbench, system infosets are created as a shortcut for users in IBM StoredIQ Administrator.

### Managing Users

The user management area allows administrators to create users and manage users' access to the various IBM StoredIQ Platform applications.

### Configuring and Managing Actions

An action is any process upon the data that is represented by the indexes. Actions are run by data servers on indexed data objects. Any errors or warnings that are generated as a result of an action are recorded as exceptions in IBM StoredIQ Data Workbench.

**Note:** Actions can be created within IBM StoredIQ Administrator and then made available to other IBM StoredIQ Platform applications such as IBM StoredIQ Data Workbench.

**Managing Target Sets**

Provides an interface that allows the user to set the wanted targets for specific actions that require a destination volume for their actions.

**Creating Reports**

Helps you to create reports and upload report packages, helping you to produce reports about your environment.

**Using Auto-classification Models**

Deploys natural language processing-based document classification to help you identify relevant documents in cases when relevance is difficult to characterize with traditional methods, such as queries and set operations.

**Managing Concepts**

Helps you to relate business concepts to indexed data.

**Managing Mule Scripts**

Helps you to create Mule scripts and upload script packages. These Mule scripts are used by IBM StoredIQ Policy Manager to create policies using the Automation Workflow.

---

## Chapter 2. Data Servers and Volumes

The Data Servers and Volumes page of IBM StoredIQ Administrator contains the Data Dashboard, where you see all data currently under management, **All Data Servers** tab and the **All Volumes** tab. When a data server is selected, the System Status and System Activity panes provide detailed information about the selected data server.

### Data Dashboard

The description of the Data Dashboard fields is listed in the following table.

*Table 1. Data Dashboard fields and descriptions*

| Data Dashboard         | Description   |
|------------------------|---|
| Total Data Objects     | This field lists the total number of data objects under management. |
| Total Data Size        | This field lists the total size of data objects under management.   |
| Number of Data Servers | This field lists the total number of data servers under management. |
| Number of Volumes      | This field lists the total number of volumes under management.      |

### All Data Servers

All Data Servers tab lists detailed information about a data server.

*Table 2. All Data Servers tab column names and descriptions*

| All Data Servers Column Name | Description   |
|------------------------------|---|
| Data server name             | Lists the name of the data server.  |
| Status                       | Lists the data server's status, namely <b>Healthy</b> , <b>Vulnerable</b> , <b>Critical</b> , <b>Unavailable</b> , <b>Under maintenance</b> , <b>Rebooting</b> , or <b>Restarting</b> . |
| IP address                   | Lists the IP address of the data server.  |
| Data objects                 | Lists the number of data objects that are found on the data server.   |
| Total data object size       | Lists the size of the data objects that are found on the data server.   |

The **System Status** and **System Activity** panes provide performance information on a selected data server. These panels only appear once a data server is selected and **View Details** is clicked. The ability to check the status of all deployed data servers is critical to understanding the system's performance metrics.

*Table 3. System Status and System Activity panes field names and descriptions*

| System Status Field Name | Description   |
|--------------------------|---|
| Status                   | Lists the data server's status, namely <b>Healthy</b> , <b>Vulnerable</b> , <b>Critical</b> , <b>Unavailable</b> , <b>Under maintenance</b> , <b>Rebooting</b> , or <b>Restarting</b> . |

Table 3. System Status and System Activity panes field names and descriptions (continued)

| System Status Field Name   | Description   |
|----------------------------|---|
| Status message             | Describes the data server's status. Status messages include: <ul style="list-style-type: none"> <li>• System and services running.</li> <li>• System is running but some services are still coming up.</li> <li>• Some query processes are not running.</li> <li>• There was a problem with the RAID controller.</li> <li>• Some services are in error.</li> <li>• Cannot connect to system and error.</li> </ul> |
| IP address                 | Lists the IP address of the data server.  |
| Software version           | Lists the installed software version.   |
| DB version                 | Lists the installed database version.   |
| System time                | Lists the system's time, date, and utilized time zone.  |
|                            |   |
| System Activity Field Name | Description   |
| Free RAM memory            | Denotes the amount of available memory (RAM) for the selected data server.  |
| Free swap memory           | Denotes the amount of available swap memory for the selected data server.   |
| Load average               | Lists the average process load for the selected data server.  |
| Available space            | Lists the available space on the selected data server.  |
| Active DB connections      | Lists the number of database connections currently open for the selected data server.   |
| System uptime              | Lists the total duration of time for which the data server ran.   |

## All Volumes

The tab provides the detailed information about the volumes.

Table 4. All Volumes tab column names and descriptions

| Volumes Column Name    | Description   |
|------------------------|---|
| Volume name            | Lists the name of the volume.   |
| Data server            | Lists the name of the parent data server.   |
| Type                   | Lists the volume's type, namely <b>Primary</b> , <b>Retention</b> , or <b>Discovery Export</b> . <b>Primary</b> indicates a primary volume. <b>Retention</b> indicates a retention volume. <b>Discovery Export</b> indicates a discovery export volume. |
| Source type            | Lists the source or connection type for the volume.   |
| Server name            | Lists the name of the server where the volume is found.   |
| Data objects           | Lists the number of data objects that are found on the volume.  |
| Total data object size | Lists the size of the data objects in the volume.   |
| Last harvested         | Denotes the last time that the volume was harvested.  |

Select the volume and click **View Details**, a bottom panel opens with the number of data objects, total data object size, harvest status, last harvest date and time, and the harvest type.

---

## Searching for a specific data server

When you have multiple data servers available from which to choose, you can search for a specific data server instead of using the slider to move through available options.

### Procedure

1. In the **Enter key term(s)...** text box, enter the name of the data server for which you want to search, and then click **Search**. You can enter either the full data server name or a portion of it. To remove the search term, click the **X** to the left of the **Enter key terms....** text box. Actions that match the entered search term are returned.
2. Select a data server from the returned list of servers.
3. View the data server's details by clicking **View Details**.

---

## Adding a primary volume

A primary volume serves as a primary data source in IBM StoredIQ Platform. You must have at least one primary volume within your configuration.

### Procedure

1. Select **Data Servers & Volumes > All Data Servers**, select a data server, and then click **Add Volume**. The Add Volume dialog box appears.
2. In the Add Volume dialog box, complete these fields.

*Table 5. Box volumes: Add Volume dialog box options for primary volumes.* For Box volume prerequisites and configuration information, see “Box volumes: configuration note” on page 15.

| Box: Add Volume dialog box options | Action  | Notes |
|------------------------------------|---|-------|
| <b>Volume type</b>                 | In the <b>Volume type</b> list, select <b>Primary</b> .   |       |
| <b>Source type</b>                 | Select the server's source type.  |       |
| <b>Server</b>                      | In the <b>Server</b> text box, enter the fully qualified domain name of the server from which the volume is available for mounting. For Box volumes, the server name <code>api.box.com</code> is automatically entered. |       |
| <b>Authenticate with Box</b>       | Before a Box volume can be added, the user must be authenticated. Click the <b>Authenticate with Box</b> link, sign into the Box account, and select <b>Grant access</b> .  |       |
| <b>Assign to Data Server</b>       | In the <b>Assign to Data Server</b> list, select the data server.   |       |
| <b>Volume Name</b>                 | In the <b>Volume Name</b> text box, enter the common, user-defined name of this volume.   |       |
| <b>Include Users</b>               | Select this option to scope the volume. Regular expressions are supported.  |       |

Table 5. Box volumes: Add Volume dialog box options for primary volumes (continued). For Box volume prerequisites and configuration information, see “Box volumes: configuration note” on page 15.

| Box: Add Volume dialog box options | Action  | Notes                                      |
|------------------------------------|---|--|
| Indexing Options                   | Select the check box for the indexing options that you want to include: <ul style="list-style-type: none"> <li>• <b>Include metadata for contained objects</b></li> <li>• <b>Include content tagging and full-text index</b></li> </ul> | These options are not selected by default. |

Table 6. CIFS volumes: Add Volume dialog box options for primary volumes

| CIFS: Add Volume dialog box options | Action  | Notes                                      |
|-------------------------------------|---|--|
| Volume type                         | In the <b>Volume type</b> list, select <b>Primary</b> .   |  |
| Source type                         | Select the server's source type.  |  |
| Server                              | In the <b>Server</b> text box, enter the fully qualified domain name of the server from which the volume is available for mounting.   |  |
| Username                            | In the <b>Username</b> text box, enter the user name that is used to connect to and mount the volume.   |  |
| Password                            | In the <b>Password</b> text box, enter the password that is used to connect to and mount the volume.  |  |
| Assign to Data Server               | In the <b>Assign to Data Server</b> list, select the data server.   |  |
| Volume Name                         | In the <b>Volume Name</b> text box, enter the common name of this volume.   |  |
| Share                               | In the <b>Share</b> text box, enter the share name or this volume.  |  |
| Initial Directory                   | In the <b>Initial Directory</b> text box, enter the name of the initial directory from which the harvest must begin.  |  |
| Indexing Options                    | Select the check box for the indexing options that you want to include: <ul style="list-style-type: none"> <li>• <b>Include metadata for contained objects</b></li> <li>• <b>Include content tagging and full-text index</b></li> </ul> | These options are not selected by default. |



Table 7. CMIS volumes: Add Volume dialog box options for primary volumes

| CMIS: Add Volume dialog box options | Action  | Notes                                      |
|-------------------------------------|---|--|
| Volume type                         | In the <b>Volume type</b> list, select <b>Primary</b> .   |  |
| Source type                         | Select the server's source type.  |  |
| Server                              | In the <b>Server</b> text box, enter the fully qualified domain name of the server from which the volume is available for mounting.   |  |
| Port                                | In the <b>Port</b> text box, enter the port number.   |  |
| Username                            | In the <b>Username</b> text box, enter the user name that is used to connect to and mount the volume.   |  |
| Password                            | In the <b>Password</b> text box, enter the password that is used to connect to and mount the volume.  |  |
| Assign to Data Server               | In the <b>Assign to Data Server</b> list, select the data server.   |  |
| Volume Name                         | In the <b>Volume Name</b> text box, enter the common name of this volume.   |  |
| Use SSL                             | Select the <b>Use SSL</b> check box.  |  |
| Service                             | In the <b>Service</b> text box, enter the service name.   |  |
| Repository                          | In the <b>Repository</b> text box, enter the name of the repository.  |  |
| Indexing Options                    | Select the check box for the indexing options that you want to include: <ul style="list-style-type: none"> <li>• <b>Include metadata for contained objects</b></li> <li>• <b>Include content tagging and full-text index</b></li> </ul> | These options are not selected by default. |

Table 8. Exchange volumes: Add Volume dialog box options for primary volumes

| Exchange: Add Volume dialog box options | Action  | Notes |
|---|---|-------|
| Volume type                             | In the <b>Volume type</b> list, select <b>Primary</b> . |       |
| Source type                             | Select the server's source type.                        |       |

Table 8. Exchange volumes: Add Volume dialog box options for primary volumes (continued)

| Exchange: Add Volume dialog box options | Action  | Notes   |
|---|---|---|
| <b>Server</b>                           | In the <b>Server</b> text box, enter the fully qualified domain name of the server from which the volume is available for mounting.                                       | If <b>Exchange Online</b> is selected as the <b>Source Type</b> , the server name is automatically entered. |
| <b>Username</b>                         | In the <b>Username</b> text box, enter the user name that is used to connect to and mount the volume.   |   |
| <b>Password</b>                         | In the <b>Password</b> text box, enter the password that is used to connect to and mount the volume.  |   |
| <b>Assign to Data Server</b>            | In the <b>Assign to Data Server</b> list, select the data server.   |   |
| <b>Volume Name</b>                      | In the <b>Volume Name</b> text box, enter the common name of this volume.   |   |
| <b>Server Version</b>                   | In the <b>Server Version</b> list, select the version of Microsoft Exchange, choosing from <b>2000/2003</b> , <b>2007</b> , <b>2010/2013</b> and <b>Exchange Online</b> . |   |
| <b>Mailbox Server</b>                   | In the <b>Mailbox Server</b> text box, enter the name(s) of the mailbox server(s), separated by commas.   | If <b>Exchange Online</b> is selected as the <b>Server Version</b> , this option is not available.          |
| <b>Active Directory Server</b>          | In the <b>Active Directory Server</b> text box, enter the name of the Active Directory server.  | If <b>Exchange Online</b> is selected as the <b>Server Version</b> , this option is not available.          |
| <b>Use SSL</b>                          | To use secure socket layer, select the <b>Use SSL</b> check box.  | If <b>Exchange Online</b> is selected as the <b>Server Version</b> , this option is not available.          |
| <b>Initial Directory</b>                | In the <b>Initial Directory</b> text box, enter the name of the initial directory from which the harvest must begin.  |   |
| <b>Virtual Root</b>                     | In the <b>Virtual Root</b> text box, the name defaults to the correct endpoint for the selected Exchange version.   |   |

Table 8. Exchange volumes: Add Volume dialog box options for primary volumes (continued)

| Exchange: Add Volume dialog box options | Action  | Notes                                      |
|---|---|--|
| <b>Indexing Options</b>                 | Select the check box for the indexing options that you want to include: <ul style="list-style-type: none"> <li>• <b>Include metadata for contained objects</b></li> <li>• <b>Include content tagging and full-text index</b></li> </ul> | These options are not selected by default. |

Table 9. FileNet volumes: Add Volume dialog box options for primary volumes

| FileNet: Add Volume dialog box options | Action  | Notes |
|--|---|-------|
| <b>Volume type</b>                     | In the <b>Volume type</b> list, select <b>Primary</b> .   |       |
| <b>Source type</b>                     | Select the server's source type.  |       |
| <b>Server</b>                          | In the <b>Server</b> text box, enter the fully qualified domain name of the server from which the volume is available for mounting. |       |
| <b>Port</b>                            | In the <b>Port</b> text box, enter the port number.   |       |
| <b>Username</b>                        | In the <b>Username</b> text box, enter the user name that is used to connect to and mount the volume.                               |       |
| <b>Password</b>                        | In the <b>Password</b> text box, enter the password that is used to connect to and mount the volume.                                |       |
| <b>Assign to Data Server</b>           | In the <b>Assign to Data Server</b> list, select the data server.   |       |
| <b>Volume Name</b>                     | In the <b>Volume Name</b> text box, enter the common name of this volume.   |       |
| <b>Object Store</b>                    | In the <b>Object Store</b> text box, enter the object store.  |       |
| <b>Connection Type</b>                 | In the <b>Connection Type</b> list, select either <b>HTTP</b> or <b>HTTPS</b> .   |       |
| <b>Path</b>                            | In the <b>Path</b> text box, enter the appropriate directory path.  |       |
| <b>Stanza</b>                          | In the <b>Stanza</b> text box, enter the appropriate stanza.  |       |
| <b>Scope</b>                           | In the <b>Scope</b> text box, enter the appropriate SQL where clause.   |       |

Table 9. FileNet volumes: Add Volume dialog box options for primary volumes (continued)

| FileNet: Add Volume dialog box options | Action  | Notes                                      |
|--|---|--|
| <b>Indexing Options</b>                | Select the check box for the indexing options that you want to include: <ul style="list-style-type: none"> <li>• <b>Include metadata for contained objects</b></li> <li>• <b>Include content tagging and full-text index</b></li> </ul> | These options are not selected by default. |

Table 10. IBM Content Manager volumes: Add Volume dialog box options for primary volumes

| IBM Content Manager: Add Volume dialog box options | Action   | Notes |
|--|--|-------|
| <b>Volume type</b>                                 | In the <b>Volume type</b> list, select <b>Primary</b> .  |       |
| <b>Source type</b>                                 | Select the server's source type.   |       |
| <b>Server</b>                                      | In the <b>Server</b> text box, enter the fully qualified host name of the library server database.   |       |
| <b>Port</b>  | In the <b>Port</b> text box, enter the port used to access the library server database.  |       |
| <b>Username</b>                                    | In the <b>Username</b> text box, enter the user name that is used to connect to and mount the volume.  |       |
| <b>Password</b>                                    | In the <b>Password</b> text box, enter the password that is used to connect to and mount the volume.   |       |
| <b>Connection String</b>                           | In the <b>Connection String</b> text box, enter additional connection-string parameters. This is an optional step.   |       |
| <b>Assign to Data Server</b>                       | In the <b>Assign to Data Server</b> list, select the data server.  |       |
| <b>Volume Name</b>                                 | In the <b>Volume Name</b> text box, enter the common name of this volume.  |       |
| <b>Repository</b>                                  | In the <b>Repository</b> text box, enter the name of the library server database.  |       |
| <b>Server Type</b>                                 | In the <b>Server Type</b> list, select the type of server associated with the volume. Options include <b>DB2</b> and <b>Oracle</b> . By default, <b>DB2</b> is selected. |       |

Table 10. IBM Content Manager volumes: Add Volume dialog box options for primary volumes (continued)

| IBM Content Manager: Add Volume dialog box options | Action  | Notes   |
|--|---|---|
| <b>Schema</b>                                      | In the <b>Schema</b> text box, enter the schema for this library server database.   |   |
| <b>Remote Database</b>                             | In the <b>Remote Database</b> text box, enter the name of the remote database.  |   |
| <b>Harvest Item Types</b>                          | In the <b>Harvest Item Types</b> text box, enter the name of the item types to be harvested, separated by commas.   |   |
| <b>Copy to Item Type</b>                           | The <b>Copy to Item Type</b> text box can be changed to either <code>SiqDocument</code> or to be an empty field. If this field is left empty, the volume cannot be used for copy-to actions.  | In this release, the attribute lengths are increased for some. For more information, see "IBM Content Manager attributes" on page 17. |
| <b>Indexing Options</b>                            | Select the check box for the indexing options that you want to include: <ul style="list-style-type: none"> <li>• <b>Include metadata for contained objects</b></li> <li>• <b>Include content tagging and full-text index</b></li> </ul> | These options are not selected by default.  |

Table 11. Livelink volumes: Add Volume dialog box options for primary volumes

| Livelink: Add Volume dialog box options | Action  | Notes |
|---|---|-------|
| <b>Volume type</b>                      | In the <b>Volume type</b> list, select <b>Primary</b> .   |       |
| <b>Source type</b>                      | Select the server's source type.  |       |
| <b>Server</b>                           | In the <b>Server</b> text box, enter the fully qualified domain name of the server from which the volume is available for mounting. |       |
| <b>Port</b>                             | In the <b>Port</b> text box, enter the port number.   |       |
| <b>Username</b>                         | In the <b>Username</b> text box, enter the user name that is used to connect to and mount the volume.                               |       |
| <b>Password</b>                         | In the <b>Password</b> text box, enter the password that is used to connect to and mount the volume.                                |       |

Table 11. Livelink volumes: Add Volume dialog box options for primary volumes (continued)

| Livelink: Add Volume dialog box options | Action  | Notes                                      |
|---|---|--|
| Assign to Data Server                   | In the <b>Assign to Data Server</b> list, select the data server.   |  |
| Volume Name                             | In the <b>Volume Name</b> text box, enter the common name of this volume.   |  |
| Database                                | In the <b>Database</b> text box, enter the database name.   |  |
| Search slice                            | In the <b>Search slice</b> text box, enter the search slice.  |  |
| Initial Directory                       | In the <b>Initial Directory</b> text box, enter the search slice and name of the initial directory from which the harvest must begin.   |  |
| Indexing Options                        | Select the check box for the indexing options that you want to include: <ul style="list-style-type: none"> <li>• <b>Include metadata for contained objects</b></li> <li>• <b>Include content tagging and full-text index</b></li> </ul> | These options are not selected by default. |

Table 12. NewsGator volumes: Add Volume dialog box options for primary volumes

| NewsGator: Add Volume dialog box options | Action  | Notes |
|--|---|-------|
| Volume type                              | In the <b>Volume type</b> list, select <b>Primary</b> .   |       |
| Source type                              | Select the server's source type.  |       |
| Server                                   | In the <b>Server</b> text box, enter the fully qualified domain name of the server from which the volume is available for mounting. |       |
| Username                                 | In the <b>Username</b> text box, enter the user name that is used to connect to and mount the volume.                               |       |
| Password                                 | In the <b>Password</b> text box, enter the password that is used to connect to and mount the volume.                                |       |
| Assign to Data Server                    | In the <b>Assign to Data Server</b> list, select the data server.   |       |
| Volume Name                              | In the <b>Volume Name</b> text box, enter the common name of this volume.   |       |

Table 12. NewsGator volumes: Add Volume dialog box options for primary volumes (continued)

| NewsGator: Add Volume dialog box options | Action  | Notes                                      |
|--|---|--|
| <b>Initial Directory</b>                 | In the <b>Initial Directory</b> text box, enter the name of the initial directory from which the harvest must begin.  |  |
| <b>Indexing Options</b>                  | Select the check box for the indexing options that you want to include: <ul style="list-style-type: none"> <li>• <b>Include metadata for contained objects</b></li> <li>• <b>Include content tagging and full-text index</b></li> </ul> | These options are not selected by default. |

Table 13. NFS volumes: Add Volume dialog box options for primary volumes

| NFS: Add Volume dialog box options | Action  | Notes                                      |
|------------------------------------|---|--|
| <b>Volume type</b>                 | In the <b>Volume type</b> list, select <b>Primary</b> .   |  |
| <b>Source type</b>                 | Select the server's source type.  |  |
| <b>Server</b>                      | In the <b>Server</b> text box, enter the fully qualified domain name of the server from which the volume is available for mounting.   |  |
| <b>Assign to Data Server</b>       | In the <b>Assign to Data Server</b> list, select the data server.   |  |
| <b>Volume Name</b>                 | In the <b>Volume Name</b> text box, enter the common name of this volume.   |  |
| <b>Export</b>                      | In the <b>Export</b> text box, enter the export name for this volume.   |  |
| <b>Initial Directory</b>           | In the <b>Initial Directory</b> text box, enter the name of the initial directory from which the harvest must begin.  |  |
| <b>Indexing Options</b>            | Select the check box for the indexing options that you want to include: <ul style="list-style-type: none"> <li>• <b>Include metadata for contained objects</b></li> <li>• <b>Include content tagging and full-text index</b></li> </ul> | These options are not selected by default. |

Table 14. SharePoint volumes: Add Volume dialog box options for primary volumes

| SharePoint: Add Volume dialog box options | Action  | Notes   |
|---|---|---|
| <b>Volume type</b>                        | In the <b>Volume type</b> list, select <b>Primary</b> .   |   |
| <b>Source type</b>                        | Select the server's source type.  |   |
| <b>Server</b>                             | In the <b>Server</b> text box, enter the fully qualified domain name of the server from which the volume is available for mounting.   |   |
| <b>Username</b>                           | In the <b>Username</b> text box, enter the user name that is used to connect to and mount the volume.   |   |
| <b>Password</b>                           | In the <b>Password</b> text box, enter the password that is used to connect to and mount the volume.  |   |
| <b>Assign to Data Server</b>              | In the <b>Assign to Data Server</b> list, select the data server.   |   |
| <b>Volume Name</b>                        | In the <b>Volume Name</b> text box, enter the common name of this volume.   |   |
| <b>Site URL</b>                           | In the <b>Site URL</b> text box, enter the site URL of the SharePoint server.   |   |
| <b>Initial Directory</b>                  | In the <b>Initial Directory</b> text box, enter the name of the initial directory from which the harvest must begin.  | To recurse subsites and include versioning, SharePoint volumes must be added in the IBM StoredIQ Data Server user interface. SharePoint volumes added on the application stack can be edited on the IBM StoredIQ Data Server user interface to include those options. |
| <b>Indexing Options</b>                   | Select the check box for the indexing options that you want to include: <ul style="list-style-type: none"> <li>• <b>Include metadata for contained objects</b></li> <li>• <b>Include content tagging and full-text index</b></li> </ul> | These options are not selected by default.  |

3. Click **Save** to save your configurations and add the volume.
4. Click the **All Volumes** tab. Notice that the added volume appears therein, listed as a primary volume. To harvest this newly added volume, select that volume and then click **Harvest**.



## Box volumes: configuration note

Box volumes can be added only from IBM StoredIQ Administrator and have several configuration prerequisites that must be met.

In Box volumes, the concepts of ownership and access are different than in a typical computer file system. When data objects are copied to Box, they do not retain their original owner. Instead, ownership changes to the user performing the copy of those objects. Additionally, the folder hierarchy of the source volume can be reproduced, but it is rooted in the home folder of the user. And finally, when configuring a copy action with Box as the target set, it is a best practice to either designate a destination directory or select **Recreate Directory Structure**.

Table 15. Retained Box metadata attributes when copying to Box volumes

| File metadata attribute | Description                   | Notes  |
|-------------------------|-------------------------------|--|
| File name               | Same as source                |  |
| Description             | Same as source                |  |
| Owner                   | Box administrator's user name | IBM StoredIQ does not support setting the owner attribute for Box. When copying any files, the owner name is set to that of the Box administrator's account that was used to add a Box volume. |
| Size                    | Same as source                |  |
| Created                 | Same as source                |  |
| Modified                | Same as source                |  |

**Note:** Box volumes can be added only from IBM StoredIQ Administrator, not from IBM StoredIQ Data Server. IBM StoredIQ supports copy-to Box using CIFS, NFS and SharePoint as the source volumes. Additionally, Box Notes cannot be viewed through the Data Object Viewer in IBM StoredIQ Data Workbench.

These prerequisites must be met when adding a Box volume:

- Every application stack requires a dedicated Client ID. Each Client ID has its own Redirect URI that points to the IBM StoredIQ application stack. To create the application, log into your Developer's Box account, click **My Apps**, and then click **Create Application** to get `client_id`, `client_secret`, and `redirect_uri`
- In the Box application, set `redirect_uri` to `https://x.x.x.x/proxy/enamel/1.0/oauthtokengenerator/box`, where `x.x.x.x` is the hostname/IP address of the application stack. This is how the user accesses the application stack through a browser.
- In the Box application, select these **Scopes** options:
  - **Read and write all files and folders**
  - **Manage an enterprise**
  - **Manage an enterprise's managed users**
  - **Manage an enterprise's groups**
  - **Manage an enterprise's properties**
  - **Manage an enterprise's retention policies**
- Before adding Box volumes, the Client ID, Client Secret, and Redirect URI must be stored in an application stack `oauth.conf` file. This file can be found in the

application stack directory in this location: `/etc/siq/oauth.conf`. After modifying the `oauth.conf` file, restart the uwsgi service by logging into the application stack using Putty and running this command: `/siq/bin/monit restart uwsgi`

- Each Client ID must have the **As-User** capability enabled to allow harvests and data discovery.

**Note:** Customers should contact their Box support representative to enable this permission. They will also need their Client ID.

- The application stack must be configured for SSL access, and it must have access to the Box authentication endpoint on `api.box.com`. If the application stack has been deployed without SSL enabled, run `/siq/bin/certcfg` and follow the instructions on the Certificate Configuration screen. Consult the *IBM StoredIQ Deployment and Configuration Guide* for more information about SSL configuration.
- The **Application Settings** for the Box Enterprise Account must not disable unpublished applications from accessing the account. Leave the **Unpublished Applications** check box clear when configuring **Application Settings**.

## Configuring data-server access for Box volumes

A data server managing a Box volume must have access to `api.box.com`. In order to copy custom attributes to Box, you must create a CSV mapping file for the source-volume attributes.

### About this task

IBM StoredIQ supports file system metadata as well as SharePoint attributes. What follows is an example of the CSV mapping file fields:

Table 16. CSV mapping file fields: example

| Source volume | Attribute name                | Attribute example           |
|---------------|-------------------------------|-----------------------------|
| SharePoint    | Created (SharePoint)          | created_sharepoint          |
| SharePoint    | Modified (SharePoint)         | modified_sharepoint         |
| SharePoint    | Approval status (SharePoint)  | approval_status_sharepoint  |
| SharePoint    | Author (SharePoint)           | author_sharepoint           |
| SharePoint    | Content type (SharePoint)     | content_type_sharepoint     |
| SharePoint    | Editor (SharePoint)           | editor_sharepoint           |
| SharePoint    | Publishing level (SharePoint) | publishing_level_sharepoint |
| SharePoint    | Unique ID (SharePoint)        | unique_id_sharepoint        |
| SharePoint    | Version (SharePoint)          | version_sharepoint          |
| SharePoint    | Title (SharePoint)            | title_sharepoint            |
| SharePoint    | Modified by (SharePoint)      | modified_by_sharepoint      |
| SharePoint    | Category (SharePoint)         | category_sharepoint         |
| SharePoint    | Checked out to (SharePoint)   | checked_out_to_sharepoint   |

Table 16. CSV mapping file fields: example (continued)

| Source volume   | Attribute name                | Attribute example           |
|-----------------|-------------------------------|-----------------------------|
| SharePoint      | Virus status (SharePoint)     | virus_status_sharepoint     |
| SharePoint      | Description (SharePoint)      | description_sharepoint      |
| SharePoint      | Keywords (SharePoint)         | keywords_sharepoint         |
| SharePoint      | Check in comment (SharePoint) | check_in_comment_sharepoint |
| System metadata | Owner                         | source_owner                |
| System metadata | Group                         | source_group                |
| System metadata | Object name                   | source_object_name          |
| System metadata | System path                   | source_system_path          |
| System metadata | Container path                | source_container_path       |
| System metadata | Accessed date                 | source_accessed_date        |
| System metadata | Modified date                 | source_modified_date        |
| System metadata | Created date                  | source_created_date         |

## Procedure

1. Copy the mapping .CSV file to each data server.
2. Change the adminknob configuration on each data server by running this command: `psql -d dfdata -U dfuser`
  - a. `Select * from adminknobs where name like box_attribute_mapping_file`
  - b. Update adminknobs using the following SQL: `Update adminknobs set value='/path/to/your/mapping/file' where name = 'box_attribute_mapping_file';`
3. Restart services on the data servers.

**Note:** When a file is copied to Box, the Owner attribute is the Box Administrator's user name. SharePoint, CIFS, and NFS are supported source volumes for the copy-to Box action.

## IBM Content Manager attributes

In the `SiqDocument` item type, various attributes are increased when copying to IBM Content Manager.

In the `SiqDocument` item type, the length of the following attributes are increased from 128 to 256 bytes when copying to IBM Content Manager:

- `SiqServer`
- `SiqShare`

- SiqInitialDirectory
- SiqFileName
- SiqContainerPath
- SiqOwner

This change will be handled automatically if you do not already have an SiqDocument item type in your IBM Content Manager server. However, if this item type exists, it must be recreated with the new attribute lengths for this change to take effect.

**Note:** If you have a working CopyTo IBM Content Manager action running without issues or if you know that your attribute lengths are not greater than 128 in length, then you can defer this action as you have not encountered the attribute length issue.

**Note:** Note that the attribute length is in bytes. The number of actual characters this length will hold varies based on the database code page that is used. For example, if ASCII is used, then the number of characters is equal to the number of bytes. If UTF-8 is used, the number of bytes per character varies depending on the characters. Without this change, you will see errors if the source attributes for a copy to IBM Content Manager exceed 128 bytes. If you see these errors, you will need to perform the actions listed below.

To extend the length of these attributes, perform the following actions:

- If the SiqDocument item type does not exist in the IBM Content Manager server, create a new IBM Content Manager volume with a CopyTo option to select SiqDocument. It will create the item type and its attributes with the correct lengths.
- If SiqDocument item type already exists in the IBM Content Manager server and you need to fix the attribute length problem, then the administrator should delete/drop the SiqDocument item type and recreate or update the IBM Content Manager volume used for copy. This will automatically create the item types and attributes desired.

**Note: Take a back up of the database before dropping and recreating SiqDocument item type. When you drop the item type, you will permanently lose all the items (documents) stored in it. If the source documents are still available, you can run copy again to copy the data back into this item type. If there are no items in the item type, then this is not an issue.**

To drop the SiqDocument item type:

1. Delete all the items in the SiqDocument. Note that this is a permanent delete and you will lose all of the data.
2. Delete the SiqDocument item type.
3. Delete all the attributes belonging to the SiqDocument

If the item type already exists and contains data you need to keep, and you need to extend these attributes, this is possible through direct database manipulation. However, this process is not supported and issues deriving from this would not be covered by IBM support. If this is desired, services should be employed to make these database changes.

## Adding a retention volume

A retention volume stores data objects that are placed under retention, meaning that the object is retained for a specified period.

### Procedure

1. Click **Data Servers & Volumes > All Data Servers**, and then click **Add Volume**. The Add Volume dialog box appears.
2. In the Add Volume dialog box, complete these fields:

Table 17. Retention volume options

| Add Volume dialog box option | Action  | Notes                                      | Source type   |
|------------------------------|---|--|---|
| <b>Volume Type</b>           | In the <b>Volume Type</b> list, select <b>Retention</b> .   |  | <ul style="list-style-type: none"> <li>• CIFS</li> <li>• NFS</li> </ul> |
| <b>Source Type</b>           | In the <b>Source Type</b> list, select the source or connection type.   |  | <ul style="list-style-type: none"> <li>• CIFS</li> <li>• NFS</li> </ul> |
| <b>Server</b>                | In the <b>Server</b> text box, enter the fully qualified domain name of the server from which the volume is available for mounting.   |  | <ul style="list-style-type: none"> <li>• CIFS</li> <li>• NFS</li> </ul> |
| <b>Username</b>              | In the <b>Username</b> text box, enter the user name that is used to connect to and mount the volume.   |  | <ul style="list-style-type: none"> <li>• CIFS</li> </ul>                |
| <b>Password</b>              | In the <b>Password</b> text box, enter the password that is used to connect to and mount the volume.  |  | <ul style="list-style-type: none"> <li>• CIFS</li> </ul>                |
| <b>Assign to Data Server</b> | In the <b>Assign to Data Server</b> list, select a data server.   |  | <ul style="list-style-type: none"> <li>• CIFS</li> <li>• NFS</li> </ul> |
| <b>Volume Name</b>           | In the <b>Volume Name</b> text box, enter the common name of this volume.   |  | <ul style="list-style-type: none"> <li>• CIFS</li> <li>• NFS</li> </ul> |
| <b>Share</b>                 | In the <b>Share</b> text box, enter the share name for this volume.   |  | <ul style="list-style-type: none"> <li>• CIFS</li> </ul>                |
| <b>Export</b>                | In the <b>Export</b> text box, enter the export name for this volume.   |  | <ul style="list-style-type: none"> <li>• NFS</li> </ul>                 |
| <b>Indexing Options</b>      | Select the check box for the indexing options that you want to include: <ul style="list-style-type: none"> <li>• <b>Include metadata for contained objects</b></li> <li>• <b>Include content tagging and full-text index</b></li> </ul> | These options are not selected by default. | <ul style="list-style-type: none"> <li>• CIFS</li> <li>• NFS</li> </ul> |

3. Click **Save** to save your configurations and add the volume. Retention volumes do not have any data to harvest until a copy to retention runs.
4. Click the **All Volumes** tab. The added volume appears, listed as a retention volume.

---

## Adding a discovery export volume

A discovery export volume contains data that is produced from a discovery export action. That data is kept so that it can be exported as a load file and uploaded into a legal review tool.

### Procedure

1. Click **Data Servers & Volumes > All Data Servers**, and then click **Add Volume**. The Add Volume dialog box appears.
2. In the Add Volume dialog box, complete these fields:

Table 18. Discovery export volume options

| Add Volume dialog box option | Action  | Notes | Source type  |
|------------------------------|---|-------|--|
| Volume Type                  | In the <b>Volume Type</b> list, select <b>Discovery Export</b> .  |       | <ul style="list-style-type: none"><li>• CIFS</li><li>• NFS</li></ul> |
| Source Type                  | In the <b>Source Type</b> list, select the source or connection type.   |       | <ul style="list-style-type: none"><li>• CIFS</li><li>• NFS</li></ul> |
| Server                       | In the <b>Server</b> text box, enter the fully qualified domain name of the server from which the volume is available for mounting. |       | <ul style="list-style-type: none"><li>• CIFS</li><li>• NFS</li></ul> |
| Username                     | In the <b>Username</b> text box, enter the user name that is used to connect to and mount the volume.                               |       | <ul style="list-style-type: none"><li>• CIFS</li></ul>               |
| Password                     | In the <b>Password</b> text box, enter the password that is used to connect to and mount the volume.                                |       | <ul style="list-style-type: none"><li>• CIFS</li></ul>               |
| Assign to Data Server        | In the <b>Assign to Data Server</b> list, select the data server.   |       | <ul style="list-style-type: none"><li>• CIFS</li><li>• NFS</li></ul> |
| Volume Name                  | In the <b>Volume Name</b> text box, enter the name of this volume.  |       | <ul style="list-style-type: none"><li>• CIFS</li><li>• NFS</li></ul> |
| Share                        | In the <b>Share</b> text box, enter the share name for this volume.   |       | <ul style="list-style-type: none"><li>• CIFS</li></ul>               |
| Export                       | In the <b>Export</b> text box, enter the export name for this volume.   |       | <ul style="list-style-type: none"><li>• NFS</li></ul>                |

3. Click **Save** to save your configurations and add the volume.
4. Click the **All Volumes** tab. The added volume appears, listed as a discovery export volume.

---

## Viewing details of a data server

Detailed information for any data server or volume can be viewed.

### Procedure

1. Click **Data Servers & Volumes > All Data Servers**, and then click **View Details**. The <data server name> Details page appears, showing the **All Data Servers** and **All Volumes** tabs.

2. Select the **All Data Servers** tab, select the item for which you want to view its details, and then click **View Details**.

**Note:** To view details for multiple items, press **Ctrl** and select those items, and then click **View Details**.

A summary of the data server's details appears along with the **System Status** and **System Activity** panes. The ability to check the status of all deployed data servers is critical to understanding the system's performance metrics.

#### **System Status**

This pane shows the data server's status, a status message, its IP address, software version, database version, and the system's time.

#### **System Activity**

This pane shows the data server's free RAM memory, its free swap memory, the load average, the available space, the number of active database connections and the uptime.

When viewing a data server's details, you can use the **Reboot Data Server** and **Restart Services** buttons.

---

## **Viewing details of multiple volumes**

Detailed, combined information for multiple volumes can be viewed.

### **Procedure**

1. Click **Data Servers & Volumes > All Volumes**, and then press and hold the **CTRL** key or **SHIFT** key to select the volumes for which you would like to view combined detailed information. The Combined Volume Details page appears, showing the combined details of the selected volumes, including the number of data objects, the size of the total number of data objects, the number of data servers, and the number of volumes.
2. Add or remove volumes from the Combined Volume Details view using the **CTRL** key. The volume is added or removed, and the Combined Volume Details view is updated automatically.

---

## **Rebooting a data server**

Data servers can be rebooted when viewing that data server's details.

### **Procedure**

1. Click **Data Servers & Volumes > All Data Servers**, and then click **View Details**. The <data server name> Details page appears, showing the **All Data Servers** and **All Volumes** tabs.
2. Select the **All Data Servers** tab, select the data server to reboot, and then click **View Details**.
3. Click **Reboot Data Server**. The Confirm Data Server Reboot window appears, verifying that you would like to reboot the selected data server.
4. Click **Reboot Data Server**, and the data server reboots. When the data server is rebooting, its status is changed to **Maintenance Mode**, and the status message is **Rebooting-system**. All other details appear as **N/A** until the reboot completes, at which point the data server's details are once again depicted.

---

## **Restarting services**

Services on a data server can be restarted when viewing that data server's details.

## Procedure

1. Click **Data Servers & Volumes > All Data Servers**, and then click **View Details**. The <data server name> Details page appears, showing the **All Data Servers** and **All Volumes** tabs.
2. Select the **All Data Servers** tab, select the data server to restart, and then click **View Details**.
3. Click **Restart Services**. The Confirm Data Server Reboot window appears, verifying that you would like to restart services on the selected data server.
4. Click **Restart Services**, and services restart. When the services are restarting, its status is changed to **Restarting**, and the status message is one of the following:
  - System and services running.
  - System is running but some services are still coming up.
  - Some query processes are not running.
  - There was a problem with the RAID controller.
  - Some services are in error.
  - Cannot connect to system and error.

All other details appear as N/A until the services restart, at which point the data server's details are once again depicted.

---

## Removing a volume

Volumes can be deleted from the list of available data sources. Note that volume deletion can cause data loss in existing infosets or indices that reference the deleted volumes.

## Procedure

1. Select **Data Servers & Volumes > All Volumes**, and then select the volume you want to delete.
2. Click **Remove Volume**. The volume is deleted, removing it from the list of available volumes.



---

## Chapter 3. Harvests

The Harvests page of IBM StoredIQ Administrator displays the complete list of harvests, where you see all harvests currently under management

In the **Scheduled Harvests** list, select from **Scheduled Harvests**, **Current Harvests**, and **Completed Harvests**. Depending on the option selected, only those harvests in that category are shown in the List of Harvests table.

The description of the different harvest fields is listed in the following table.

*Table 19. List of Harvests fields and descriptions*

| List of Harvests  | Description   |
|-------------------|---|
| <b>Name</b>       | Lists the name of the harvest instance.                               |
| <b>Type</b>       | Lists the type of harvest, either <b>Full</b> or <b>Incremental</b> . |
| <b>Start time</b> | Lists the date and time at which the harvest was initiated.           |
| <b>Owner</b>      | Lists the owner of the harvest.                                       |

---

### Harvesting a volume

By clicking **Harvest**, an Administrator can initiate a full or incremental harvest of a primary volume without having to utilize IBM StoredIQ Platform Data Server.

#### Procedure

1. Click **Data Servers & Volumes > All Data Servers > Volume**, select the volume to harvest, and then click **Harvest**. The Harvest Volume dialog box appears.
2. In the **Harvest Name** text box, enter a unique name for this harvest.
3. In the **Schedule Harvest** area, select either of the following options.
  - Select **Immediate** to harvest the volume immediately.
  - Click **Schedule** to schedule a date and time for the harvest to occur. Enter the date (YYYY-MM-DD) and time in the text boxes.
4. In the **Harvest Options** area, select **Incremental** or **Full**.
  - An **Incremental** harvest only harvests any changes on the selected volume since its last harvest.
  - A **Full** harvest performs a full harvest of the selected volume, regardless of when it was last harvested.
5. Click **Save**, and the volume is harvested.

---

### Searching for a specific harvest

When you have multiple harvests available to choose, you can search for a specific harvest instead of using the slider to move through available options.

#### Procedure

1. In the **Scheduled Harvests** lists, select either **Scheduled Harvests**, **Current Harvests**, or **Completed Harvests**. Depending on the option that is selected, only harvests in the selected category are shown in the table.

2. In the **Enter key term(s)...** text box, enter the name of the harvest for which you want to search, and then click **Search**. You can enter either the full harvest name or a portion of it. To remove the search term, click the **X** to the left of the **Enter key term(s)....** text box. Harvests that match the entered search term are returned.
3. Select a harvest from the returned list of harvests.

---

## Stopping a harvest

Harvests that have not yet completed can be stopped.

### Procedure

1. In the **Scheduled Harvests** list, select **Current Harvests**. The list of harvests that are currently running opens.
2. Select the harvest that you want to stop and click **Stop Harvest**. The **Confirm Stopping Harvest** window appears.
3. Click **Stop Harvest** to confirm that the harvest will be stopped and not completed.

---

## Editing a harvest

Existing harvests can be modified as needed.

### Procedure

1. In the List of Harvests page, select the harvest that you want to edit, and then click **Edit Harvest**. The Edit Harvest dialog box appears.

**Note:** Only scheduled harvests can be edited.

2. In the Edit Harvest dialog box, edit the harvest as needed.
3. Click **Save** to save your changes.

---

## Deleting a harvest

Scheduled harvests can be deleted from the List of Harvests page.

### Procedure

1. In the List of Harvests page, select the scheduled harvest that you want to delete, and then click **Delete Harvest**. The Delete Harvest window appears.
2. Click **Delete** to delete the selected harvest. The harvest is deleted from the list of scheduled harvests.

---

## Chapter 4. System infosets

System infosets can be created in IBM StoredIQ Data Workbench to allow users to have a different starting point than the All Data Objects infoset.

System infosets are the basis for user-created infosets. System infosets allow administrators to select which indexed volumes the infoset can draw upon, creating a shortcut for IBM StoredIQ Data Workbench users. Actions cannot be run on system infosets, but only on user-created infosets. Therefore, you must first create the system infoset here in IBM StoredIQ Administrator and then create a user infoset that can be acted upon in IBM StoredIQ Data Workbench.

Infosets can be public or private. The administrator determines users' access to system infosets at the time of creation. The All Data Objects and All System-Level Objects infosets, which are generated by the application, are set to admin by default and can be viewed only by an administrator.

**Note:** System infosets must not be used to manage volumes or indexes. Additionally, system infosets must be created judiciously. If there are several system infosets through which a user must cull, the shortcut aspect is removed.

*Table 20. Infoset management column names and descriptions*

| Infoset Management Column Name | Description  |
|--------------------------------|--|
| Name                           | Lists the name of the system infoset. This name must be unique against all infosets.   |
| Total objects                  | Lists the total number of data objects that are contained within the system infoset.   |
| Infoset size                   | Lists size of the system infoset.  |
| In use by                      | Indicates the infosets in which this system infoset is used. If the system infoset is in use, a link is shown, indicating the number of infosets by which the system infoset is being used. Click the link to see which infosets use this system infoset.  |
| Access                         | Indicates whether the system infoset is public or private. If the system infoset is public, it can be viewed by any user. If the system infoset is private, it can be viewed by only those users granted permission by the administrator. If users are granted permission, the number of users is listed with a hyperlink to the Access Members modal, which lists the name and role of users who have access. |
| Description                    | This column lists the optional description of the system infoset.  |

---

### Searching for a specific system infoset

When you have multiple system infosets available to choose, you can search for a specific system infoset instead of using the slider to move through available options.

#### Procedure

1. In the **Enter key term(s)...** text box, enter the name of the system infoset for which you want to search, and then click **Search**. You can enter either the full

system infoset name or a portion of it. To remove the search term, click the **X** to the left of the **Enter key term(s)...** text box. System infosets that match the entered search term are returned.

2. Select a system infoset from the returned list of system infosets.

---

## Creating a system infoset

System infosets can be created with selected volumes, creating a shortcut for IBM StoredIQ Data Workbench users.

### Procedure

1. Click **System Infosets**, and then click **Create Infoset**. The Add System Infoset dialog box appears.
2. In the Add System Infoset dialog box, complete these fields.
  - a. In the **Infoset Name** text box, enter the name of this system infoset.
  - b. In the **Description of Infoset** text box, enter a brief description of this system infoset. This infoset might need to be used by several people, so an accurate description can be helpful to others.
  - c. In the Access area, click either **Public** or **Private**. The All Data Objects and All System-Level Objects infosets, which are generated by the application, can be viewed only by an administrator. System infosets that are created by an administrator default to public. Public system infosets are visible and available to all users, including users that will be added at a future time. For public system infosets, the user list is disabled.
  - d. For private system infosets, the list of available users becomes active. Select the users for whom this private infoset can be seen. If no users are selected for a private system infoset, then only administrators can see that system infoset because they have administrative rights to every infoset.

**Note:** Access cannot be edited. It must be determined at the time of infoset creation.

- e. Add volumes to this infoset. In the **Available Volumes** area, select the volumes that you want to add to this system infoset, and then click **Add**. To remove volumes from the infoset, select the volume in **Selected Volumes** and then click **Remove**.
3. Click **Save** to save the system infoset. It now appears on the List of Infosets page.

---

## Editing a system infoset

Existing user-created system infosets can be modified as needed.

### Procedure

1. In the List of Infosets page, select the system infoset that you want to edit, and then click **Edit Infoset**. The Edit System Infoset dialog box appears.
2. In the Edit System Infoset dialog box, edit the infoset as needed.

**Note:** Access cannot be edited. It must be determined at the time of infoset creation.

3. Click **Save** to save your changes.

---

## Viewing infosets that use a system infoset

Click the link to view which infosets use the selected system infoset.

### Procedure

1. Select the system infoset for which you would like what other infosets use the system infoset.
2. In the **In use by** column, click the link. The System infoset modal for the system infoset appears, listing the infosets that use it.
3. Click **Close**.

---

## Viewing access members

### Procedure

1. Select the system infoset for which you would like to access its members, and then click the link in the Access column. The Access Members window appears, listing both the user names and roles of all members of the system infoset.

**Note:** The columns can be sorted to show members in ascending or descending order.

2. Click **Close**.

---

## Deleting a system infoset

System infosets can be deleted from the List of Infosets page if they are not in use by other infosets. When a system infoset is in use by a direct ancestor of other infosets, **Delete** is unavailable for use so that the system infoset cannot be deleted.

### Procedure

1. In the List of Infosets page, select the system infoset that you want to delete, and then click **Delete Infoset**.

**Note:** The All Data Objects and All System-Level Objects system infosets cannot be deleted.  
The Delete Infoset window appears.

2. Click **Delete** to delete the selected system infoset. The system infoset is deleted from the list of available system infosets.



---

## Chapter 5. User management

From the **User Management** page, users can be defined and provided with login information so that they can use the application stack.

This table lists and describes all of the fields that are seen within the List of Users page. When a user is selected, that user can be viewed, edited, or deleted.

*Table 21. List of Users column names and descriptions*

| List of Users column name | Description   |
|---------------------------|---|
| User name                 | The user name that is assigned to the user  |
| First name                | The user's first or given name  |
| Last name                 | The user's last or surname  |
| Email address             | The user's email address. System notifications are sent to this email address.  |
| Role                      | The user's role. Options include <b>Admin</b> , <b>Data User</b> , <b>Discovery User</b> , <b>Policy User</b> , or <b>SDK User</b> .  |
| Status                    | The user's status. Options include <b>Active</b> or <b>Inactive</b> . <ul style="list-style-type: none"><li>• <b>Active</b> users can log in and use the product. <b>Active</b> is the default status for a user.</li><li>• <b>Inactive</b> users cannot log in to the product suite because their account is rendered inactive by the Administrator. When inactive users attempt to log in, they are notified that their login is invalid and that they must contact an Administrator.</li></ul> |
| Last login                | The date and time of the most recent user login. If the user is not logged in to the system, <b>N/A</b> is shown.   |

---

### Viewing your user profile

When you are viewing your user profile, you can see various aspects, including your assigned roles.

#### Procedure

1. Within the interface, click the down arrow to the right of your user name, and then select **View Profile**. The View Profile window appears, showing various pieces of data, including your name, role, and email address.
2. To change your password, click **Change Password**.
3. Click **Close** to close the View Profile window.

---

### Searching for a specific user

When you have multiple users available to choose, you can search for a specific user instead of using the slider to move through available options.

## Procedure

1. In the **Enter key term(s)...** text box, enter the user name of the user for which you want to search, and then click **Search**. To remove the search term, click the **X** to the right of the **Enter key term(s)...** text box. Users that match the entered search term are returned.
2. Select a user name from the returned list of user names.

---

## Creating a user

Within IBM StoredIQ Platform, a user authenticates to and interacts with the product suite. When a user is created, this user can log in and use the system.

### Procedure

1. Click **Users**, and then click **Create User**. The Add User - Details dialog box appears.
2. In the Add User - Details dialog box, complete these fields.
  - a. In the **User name** text box, enter the user name of the individual. It is generally a short, unique name, not the person's full name.
  - b. In the **First name** text box, enter the first or common name of the user.
  - c. In the **Last name** text box, enter the last or surname of the user.
  - d. In the **Email address** text box, enter the user's email address.

**Note:** Because **User name** and **Email address** are unique fields, users can log in to the system by entering either their email address or their user name.

- e. In the **Password** text box, enter the password for this user.

**Note:** Passwords must be at least 8 characters in length and contain at least one of each of these characters: an uppercase letter, a lowercase letter, a number, and a special character.

- f. In the **Re-enter password** text box, enter the user's password again.
- g. In the **Role** list, select the user's role. Options include **Admin**, **Data User**, **Discovery User**, **Policy User**, or **SDK User**. A user can be assigned multiple roles by selecting the check boxes in the role list.

**Note:** The default option during user creation is **Data User**.

- h. In the **Status** list, select the user's status. Options include **Active** or **Inactive**.

**Note:** The default option during user creation is **Active**.

- i. Click **Save**, and the user is created.

The newly created user appears within the User Management page.

---

## Connecting to the LDAP server

Before users can be imported and authenticated from an LDAP or LDAP-supported authentication system, you must connect to the LDAP server.

### Procedure

1. Exit IBM StoredIQ Administrator.
2. Verify that your IBM StoredIQ application stack is upgraded to version 7.6.0.5.
3. In an SSH tool, enter `/siq/bin/ldapcfg`. The Console window appears.



4. In the Console window, enter these configuration details.
  - a. Press the space bar to select **Allow External LDAP User**. This enables LDAP.
  - b. In the **LDAP URL** text box, enter the IP address of your server.
    - For the LDAP URL, enter  
ldap://ldap-server-hostname  
ldap://<ip-address>
    - For SSL mode, enter  
ldaps://ldap-server-hostname  
ldaps://<ip-address>
  - c. In the **LDAP User** text box, enter the LDAP user. For example, enter  
cn=user,dc=example,dc=com
  - d. In the **LDAP Password** text box, enter the LDAP user's password.
  - e. In the **Base DN** text box, enter the base DN. For example, enter  
dc=example,dc=com
5. The Console window also contains attribute-mapping details. These fields are required.

**Note:** Do not modify these attribute-mapping changes unless your schema is different. If you have questions about the schema or these changes, contact your company's LDAP administrator.

- a. The **First Name** text box is automatically filled with **givenName**.
  - b. The **Last Name** text box is automatically filled with **sn**.
  - c. The **Email** text box is automatically filled with **mail**.
  - d. The **Username** text box is automatically filled with **cn**. This field cannot contain spaces or special characters. Additionally, it must be a part of your DN for users to import successfully.
6. Restart the uwsgi using this command: `/siq/bin/monit restart uwsgi`
  7. Check the status using this command: `/siq/bin/monit summary`
  8. Log into IBM StoredIQ Administrator, click **Users**, and then click **Import User**. The list of users imported from the LDAP server is visible within the Import User dialog box.

## Synchronizing the LDAP server and application stack database

To keep users' details properly synchronized between the LDAP server and application stack database, a daily synchronization process occurs.

Onboarded users' details in the application stack database can become stale, meaning that they are not synchronized properly with the LDAP server. In order to keep users' details properly synchronized between the LDAP server and application stack database, a recurring background process runs once per day. This daily task avoids overloading a synchronization request on the LDAP server. However, the synchronization can also be done manually. For example, if the administrator wants to update users' details to be in application stack database, she can run the `sync-ldap` script manually, and the users' updates are synchronized immediately from the LDAP server.

**Note:** During synchronization, only active LDAP users' details are updated. If LDAP users are deleted from the LDAP server, then those users' details are marked as inactive in the application stack database.

This command performs a manual synchronization between the LDAP server and the application stack database: `/siq/bin/sync-ldap`

---

## Importing a user

Users can be imported and authenticated from an LDAP or LDAP-supported authentication systems, enabling enterprise security policy enforcement.

### Procedure

1. Click **Users**, and then click **Import User**. The Import User dialog box appears.
2. In the Import User dialog box, the **User name**, **First name**, **Last name**, and **Email address** text boxes are read-only fields. By default, these field are filled automatically using content from the **LDAP Users**.
3. To load a user into the form, select a user from the **LDAP Users** list. Once a user has been selected for import, the **Save** button is enabled. If a user has already been imported, a message appears, informing you to select another user.
4. In the **Role** list, select **Admin**, **Data User**, **Legal Ops User**, **Policy User**, or **SDK User**.
5. In the **Status** list, select **Active** or **Inactive**.
6. Click **Save**. and then click **Close**. The **Save** button resets the Import User dialog box. To import another user, select that user within the **LDAP Users** table.
7. Once you have completed importing users, click **Save**, and then click **Close**.

## Editing an imported user

When editing LDAP imported users, only the user's role and status can be modified.

### Procedure

1. Click **Users**. In the **List of users**, select the user to edit, and then click **Edit User**. The Edit Imported User dialog box appears. The **User name**, **First name**, **Last name**, and **Email address** text boxes are read-only fields.
2. In the **Role** list, select **Admin**, **Data User**, **Discovery User**, **Policy User**, or **SDK User**.
3. In the **Status** list, select **Active** or **Inactive**.
4. Click **Save**.
5. Once you have completed modifications, click **Save**, and then click **Close**.

---

## Editing a user

You can modify existing users, including their status as needed. You can also activate the disabled users within IBM StoredIQ Administrator.

### About this task

**Note:** Users become disabled after three failed log-in attempts. It is different than a user rendered inactive, which can be done only by an administrator.

### Procedure

1. Click **Users**, and then select the name of the user that you want to edit.
2. Click **Edit User**. The Edit User - Details dialog box appears.
3. In the Edit User - Detail dialog box, modify the fields as needed.

**Note:** To modify a user's status, select the wanted, changed status in the **Status** list.

**Note:** If you are an administrator and you are changing a user's password, click the **Send reset password email** link.

4. Click **Save**, and the edited user information is saved.

---

## Viewing details of a user

Basic user information such as first and surname, email address, and role can be viewed by clicking **View Details**.

### Procedure

1. Within the User Management page, select the name of the user for which you want to view details.
2. Click **View Details**, and the View User Details window appears.
3. Within the View User Details window, the following information can be seen:

| Option               | Description  |
|----------------------|--|
| <b>User Name</b>     | The user name of the selected user.  |
| <b>First Name</b>    | The first or given name of the selected user.  |
| <b>Last Name</b>     | The last or surname of the selected user.  |
| <b>Email Address</b> | The email address of the selected user.  |
| <b>Role</b>          | The role of the selected user. A role is a named collection of permissible activities within the system. Based on the assigned role of the selected user, that individual can or cannot do certain things within the system. |
| <b>Status</b>        | The status of the selected user. Options include active or inactive.   |
| <b>Last Login</b>    | The last date and time at which the selected user logged in to the system.   |

4. To view the user's access log, click the **View access log** link. The View Access History Log window appears, showing the system entries for the selected user. Within the entries, you see system activities such as successful logins, unsuccessful logins, when a password was changed. To close the View Access History Log window, click **Close**.

**Note:** These columns can be sorted by clicking the up and down arrows to the right of the column name.

5. To close the View User Details window, click **Close**.

---

## Deleting a user

You can delete existing users from the system as needed; however, the log entries of a deleted user are also deleted. In certain instances, it is a good practice that you change a user's status.

## Procedure

1. Click **Users**, and then select the name of the user that you want to delete.
2. Click **Delete User**. The Delete User window appears.

**Note:** If you opt to delete a user, then any log files that are associated with this user are also deleted.

3. To confirm that you want to delete the user, click **Delete**. The confirmation Delete User window appears, confirming that the user was deleted from the system.

---

## Changing user passwords

Either the user or the administrator can change passwords. Valid passwords are at least 8 characters in length and contain at least an uppercase letter, a lowercase letter, a number, and a special character.

### About this task

The password reset interaction can occur in four ways:

- A user clicks the **Forgot password** link on the login page, leading the user to change the password.
- A user clicks the **Did not receive password details** or **Changed your email address** link within the login screen from any of the applications.
- Users view their profile and opt to change the associated password.
- An administrator edits a user's profile and opts to reset the associated password. An email is then sent to the user, forcing individuals to change their password.

### Procedure

1. Within the email your received regarding how to change your password, click the provided link. The Change Your Password dialog box appears.
2. In the **Old password** text box, enter the previously used password for this user.

**Note:** If the password entered in this text box does not match the one listed in the system's database records, a red warning message appears. Reenter the old password.

3. In the **New password** text box, enter a new password for this user.
4. In the **Re-enter new password** text box, type the password again.

**Note:** The passwords that are entered into the **New password** and **Re-enter new password** text boxes must be identical and meet the system's security requirements. If the entered data is not identical, a red warning appears.

5. Click **Save**. A congratulatory message appears, confirming that your password is changed. Click **OK** to close the window.

---

## Resetting the user password

User passwords can be set and reset as needed by users and administrators alike.

### About this task

There are two ways to reset a password:

- For administrators, click the **Send reset password email** link in the Edit User Details window.

- For users who reset their own passwords, use the following procedure.

### **Procedure**

1. From the application login screen, click the **Forgot your password** link. The Reset Password dialog box appears.
2. In the **Email Address** text box of the Reset Password dialog box, enter the email address where a link to change the password must be sent. This email address must be linked with your account in IBM StoredIQ Administrator.
3. Click **Submit**. A confirmation window appears, stating that an email with instructions for changing your password was sent.
4. Click **OK** to close the Reset Password window.

---

## **Obtaining a new password**

Users occasionally need to obtain new passwords to be able to log in to the system.

### **Procedure**

1. From the application's login screen, click the **Did not receive a password** link.
2. Contact your system administrator about obtaining a new password.



---

## Chapter 6. Action management

Actions represent executable processes that act upon indexed data within data servers. Use the Action Management page to create and modify actions that are used by IBM StoredIQ Administrator.

With IBM StoredIQ Administrator, you can create these types of actions:

- **Copy:** The copy action copies infosets to a target set.
  - You can specify the directory structure and security settings for copied data objects.
  - If a data object exists with the same name, then the subsequent data objects that are encountered are renamed.
- **Copy to Retention:** The copy to retention action copies data objects from source volumes to a target set for a specified period.
- **Delete:** The delete action removes data objects from the source volume.
  - Only data objects, not directories, are deleted.
  - Use caution when you are deleting data objects.
- **Discovery Export EDRM XML:** The discovery export action copies data objects and generates an EDRM XML file for loading into third-party legal review tools.
- **Discovery Export DAT:** The discovery export action copies data objects and generates a Concordance DAT file for loading into third-party legal review tools.
- **Discovery Export DAT Light:** The discovery export action copies data objects and generates a Concordance DAT (Light) file for loading into third-party legal review tools.
- **Modify Attribute:** The modify attribute action simulates setting retention by manipulating specific attributes on objects.
- **Move:** The move action moves data objects in an infoset to another volume.
  - You can specify the directory structure and security settings for moved data objects.
  - If a data object exists with the same name, then the data object is renamed.
  - When the source equals the destination, the move is not allowed.
- **Watson Curation:** The Watson Curation action copies data objects to the Watson Curator repository. The Watson Curation action is available in IBM StoredIQ Policy Manager.
- **Step-up Full-Text:** The step-up full-text action can be run on an infoset, providing content to the full-text index for objects that are infoset members.
- **Step-up Snippet:** The step-up snippet action can be run on an infoset, extracting and storing text for any data object to which it is applied. These data snippets are then used by auto-classification. Infosets objects without snippets are not classified for auto-classification.

**Note:** When scheduled harvests or policies are run against a data source, snippets are not updated or generated if they are missing.

Table 22. Actions column names and descriptions

| Actions Column Name | Description                   |
|---------------------|-------------------------------|
| Action Name         | Lists the name of the action. |

Table 22. Actions column names and descriptions (continued)

| Actions Column Name | Description   |
|---------------------|---|
| Type                | Lists the action type, namely <b>Copy</b> , <b>Copy to Retention</b> , <b>Delete</b> , <b>Modify Attribute</b> , <b>Move</b> , <b>Discovery Export XML</b> , <b>Discovery Export DAT</b> , <b>Discovery Export DAT Light</b> , <b>Step-up Full-Text</b> , <b>Step-up Snippet</b> , and <b>Watson Curation</b> . |
| Last Modified       | Lists the date and time at which the action was last modified.  |
| Target Set Name     | Lists the action's destined target set.   |
| Description         | Lists the action description.   |

---

## Searching for a specific action

When you have multiple actions available to choose, you can search for a specific action instead of using the slider to move through available options.

### Procedure

1. In the **Enter key terms...** text box, enter the name of the action for which you want to search, and then press **Search**. You can enter either the full action name or a portion of it. To remove the search term, click the **X** to the left of the **Enter key terms....** text box. Actions that match the entered search term are returned.
2. Edit, clone, or delete the action as needed.

---

## Creating an action

Actions are processes that are enacted on data objects, which are defined by infosets. Actions must be defined here in IBM StoredIQ Administrator.

### About this task

The step-up snippet and step-up full-text actions are built-in actions, meaning that no options are provided within the user interface. You cannot create or edit the step-up snippet or step-up full-text action as they are provided for you as prepopulated options on the **Actions** tab.

### Procedure

1. Click **Actions**, and then click **Create Action**. The Add Action dialog box appears.
2. In the Add Action dialog box, complete these fields.
  - a. In the **Action Name** text box, enter the name of this action.
  - b. In the **Description of Action** text box, enter a brief description of this action. This action might need to be used by several people, so an accurate description can be helpful to others.
  - c. In the **Action Type** list, select the action type.
  - d. If you are creating a copy, copy to retention, discovery export, modify attribute, or move action, select a target set from the created actions or create a new target set. In **Target Set**, select a target set or click **Create a new target set**.
  - e. Click **Next** to continue creating the action. Depending on the type of action that is selected, use the corresponding tables to better understand what options to select.



| Copy action options           | Action  |
|-------------------------------|---|
| Target Set                    | In the <b>Target Set</b> area, select a target set.   |
| Destination Directory         | In the <b>Destination Directory</b> text box, either enter a file path or use the list option to select a previously entered file path.<br><b>Note:</b> For the Watson Curation action, the destination directory is not supported. |
| Directory Structure           | In <b>Directory Structure</b> , select the check box if you want to <b>Recreate directory structure on destination</b> .  |
| Hashes                        | In <b>Hashes</b> , select the check box if you want to <b>Compute a hash value for each data object</b> .   |
| Harvesting                    | In <b>Harvesting</b> , select or clear the check box for <b>Do not auto-harvest destination volume after copy</b> .   |
| Email Message Format          | In the <b>Email Message Format</b> list, select the format of the email message.  |
| SharePoint User Profile Items | In <b>SharePoint User Profile Items</b> , select the check boxes of application SharePoint items, including <b>Notes, Libraries, Blog Posts, Wikis, and Misc</b> .  |

| Copy to Retention action options | Action  |
|----------------------------------|---|
| Target Set                       | In the <b>Target Set</b> area, select a target set.   |
| Hashes                           | In <b>Hashes</b> , select the check box if you want to <b>Compute a hash value for each data object</b> .   |
| Harvesting                       | In <b>Harvesting</b> , select the check box to <b>Do not auto-harvest destination volume after copy</b> if an automatic harvest of the retention volume is not wanted. If this option is selected, then the retention volume can be harvested with the discover retention volumes job on the data server. |
| Email Message Format             | In the <b>Email Message Format</b> list, select the format of the email message.  |
| Retention Tag                    | In <b>Retention Tag</b> , enter the key term for the tag.   |
| Retention Period                 | In <b>Retention Period</b> , enter a number, and then select <b>Days, Weeks, Months, or Years</b> .   |

| Delete action options | Action   |
|-----------------------|--|
| Delete Parameters     | In <b>Delete Parameters</b> , select the check box to <b>Do not delete data objects that have been accessed since last harvest</b> . |

| Discovery Export EDRM XML action options | Action  |
|--|---|
| Destination Directory                    | In the <b>Destination Directory</b> text box, either enter a file path or use the list option to select a previously entered file path.<br><b>Note:</b> For the Watson Curation action, the destination directory is not supported.   |
| Unique ID Prefix and # of Digits         | In <b>Unique ID Prefix and # of Digits</b> , enter a unique prefix and then the number of digits to follow that prefix. For example, if you enter a prefix of feb2012 with 7 digits, this entry yields a Unique ID similar to Feb2012-1234567.<br><br>Select the check box to <b>Pad Zeros</b> .<br><br>Select the check box to <b>Save a text copy</b> . |
| Email Message Format                     | In the <b>Email Message Format</b> list, select the format of the email message.  |
| Limit Export Process                     | Select the check box to <b>Limit Export Process</b> to and enter the number of data objects.  |
| SharePoint User Profile Items            | In <b>SharePoint User Profile Items</b> , select the check boxes of application SharePoint items, including <b>Notes, Libraries, Blog Posts, Wikis, and Misc</b> .  |

| Discovery Export DAT action options | Action   |
|-------------------------------------|--|
| Destination Directory               | In the <b>Destination Directory</b> text box, either enter a file path or use the list option to select a previously entered file path.<br><b>Note:</b> For the Watson Curation action, the destination directory is not supported.  |
| Unique ID Prefix and # of Digits    | In <b>Unique ID Prefix and # of Digits</b> , enter a unique prefix and then the number of digits to follow that prefix. For example, if you enter a prefix of feb2012 with 7 digits, this entry yields a Unique ID similar to Feb2012-1234567.<br><br>Select the check box to <b>Pad Zeros</b> . |
| Email Message Format                | In the <b>Email Message Format</b> list, select the format of the email message.   |
| Limit Export Process                | Select the check box to <b>Limit Export Process</b> to and enter the number of data objects.   |
| SharePoint User Profile Items       | In <b>SharePoint User Profile Items</b> , select the check boxes of application SharePoint items, including <b>Notes, Libraries, Blog Posts, Wikis, and Misc</b> .   |

| Discovery Export DAT-Light action options | Action   |
|---|--|
| Destination Directory                     | In the <b>Destination Directory</b> text box, either enter a file path or use the list option to select a previously entered file path.<br><b>Note:</b> For the Watson Curation action, the destination directory is not supported.  |
| Unique ID Prefix and # of Digits          | In <b>Unique ID Prefix and # of Digits</b> , enter a unique prefix and then the number of digits to follow that prefix. For example, if you enter a prefix of feb2012 with 7 digits, this entry yields a Unique ID similar to Feb2012-1234567.<br><b>Note:</b> This is a required field.<br><br>Select the check box to <b>Pad Zeros</b> . |
| Email Message Format                      | In the <b>Email Message Format</b> list, select the format of the email message.   |
| Limit Export Process                      | Select the check box to <b>Limit Export Process</b> to and enter the number of data objects.   |
| SharePoint User Profile Items             | In <b>SharePoint User Profile Items</b> , select the check boxes of application SharePoint items, including <b>Notes, Libraries, Blog Posts, Wikis, and Misc</b> .   |

| Modify Attribute action options | Action  |
|---------------------------------|---|
| Action Name                     | In the <b>Action Name</b> , enter the action's name.                          |
| Action Type                     | In the <b>Action Type</b> list, select the <b>Modify Attribute</b> option.    |
| Description of Action           | In the <b>Description of Action</b> text box, enter the action's description. |
| Attribute Type                  | Select from the following options: <b>Read-only</b> or <b>Read-write</b> .    |

| Move action options   | Action  |
|-----------------------|---|
| Destination Directory | In the <b>Destination Directory</b> text box, either enter a file path or use the list option to select a previously entered file path.<br><b>Note:</b> For the Watson Curation action, the destination directory is not supported. |
| Directory Structure   | In <b>Directory Structure</b> , select the check box if you want to <b>Recreate directory structure on destination</b> .  |

| Watson Curation action options | Action  |
|--------------------------------|---|
| Destination Directory          | In the <b>Destination Directory</b> text box, either enter a file path or use the list option to select a previously entered file path.<br><b>Note:</b> For the Watson Curation action, the destination directory is not supported. |
| Directory Structure            | In <b>Directory Structure</b> , select the check box if you want to <b>Recreate directory structure on destination</b> .  |

| Watson Curation action options | Action   |
|--------------------------------|--|
| Hashes                         | In <b>Hashes</b> , select the check box if you want to <b>Compute a hash value for each data object</b> .  |
| Harvesting                     | In <b>Harvesting</b> , select the check box to <b>Do not auto-harvest destination volume after copy</b> if an automatic harvest of the volume is not wanted.       |
| Collection ID                  | In the <b>Collection ID</b> text box, enter the name of the collection in Watson Curator.  |
| SharePoint User Profile Items  | In <b>SharePoint User Profile Items</b> , select the check boxes of application SharePoint items, including <b>Notes, Libraries, Blog Posts, Wikis, and Misc</b> . |

3. Click **Save** to save your changes, click **Back** to return to the previous page, or click **Cancel** to cancel creating the action.

---

## Deleting an action

Existing actions can be deleted from the list of available actions.

### Procedure

1. In the List of Actions page, select the action that you want to delete, and then click **Delete Action**. The Delete Action window appears.
2. Click **Delete** to delete the selected action. The action is removed from the List of Actions page and it is no longer available for use.

---

## Cloning an action

Actions can be cloned or duplicated.

### Procedure

1. In the List of Actions page, select the action that you want to clone, and then click **Clone Action**. The Clone Action dialog box appears.
2. In the Clone Action dialog box, complete these fields.
  - a. In the **Action Name** text box, enter the name of this action.

**Note:** The name of the cloned action must be different from the name of the original action.

- b. In the **Action Type** list, select the action type, and then click **Next** to continue creating the action.
- c. In the **Description of Action** text box, enter a brief description of this action.

**Note:** This action might be used by several people, so the description must be accurate.

- d. The selection that is made in the **Action Type** list determines what options are available after you click **Next**. If you are creating a copy, copy to retention, discovery export, or move action, select a target set from created target sets or create a new target set. In **Target Set**, select a target set or click **Create a new target set**.

- e. Click **Next**. Depending on the type of action that is being cloned, you can see various options.
  3. Click **Save** to save your changes.
- 

## Editing an action

Existing actions can be modified.

### Procedure

1. In the List of Actions page, select the action that you want to edit, and then click **Edit Action**. The Edit Actions dialog box appears.
2. In the Edit Actions dialog box, edit the action as needed.
3. Click **Save** to save your changes.



---

## Chapter 7. Target sets

Some actions require a destination to complete, and a target set represents a mapping for each data server of the wanted target volume. To copy files, the data server must know where to copy the file to. Each data server must be configured with a list of target volumes, such as retention and discovery export volumes.

### Target Set Example

Data Server 1 has three retention volumes: Volume A, Volume B, and Volume C.

Data Server 2 has two retention volumes: Volume B, Volume X, and Volume Z.

Data Server 3 has two retention volumes: Volume B and Volume Z.

### Resulting Copy Action: You would like to create a target set for a copy action

Data Server 1 copies to Volume A.

Data Server 2 copies to Volume X.

Data Server 3 copies to Volume B.

Another user might want to create a target set for a copy action where Data Server 1, Data Server 2, and Data Server 3 copies to Volume B.

Table 23. Target set management columns and descriptions

| Target set column name | Description  |
|------------------------|--|
| Target Set Name        | Lists the name of the target set.  |
| Type                   | Lists the type of the target set, namely <b>Primary</b> , <b>Retention</b> , or <b>Export</b> .    |
| Source Type            | Lists the target set's source type, for example, <b>CIFS</b> , <b>NFS</b> , or <b>SharePoint</b> . |
| Volumes                | Lists the number of volumes in that target set.  |
| Last Modified          | Lists the date and time that the target set was last modified.                                     |
| Description            | Lists the description of the target set.   |

---

## Searching for a specific target set

When you have multiple target sets from which to choose, you can search for a specific target sets instead of using the slider to move through available options.

### Procedure

1. In the **Enter key terms...** text box, enter the name of the target set for which you would like to search, and then press **Search**. You can enter either the full target set name or a portion of it. To remove the search term, click the **X** to the left of the **Enter key terms....** text box. Target sets that match the entered search term are returned.
2. Edit, clone, or delete the target set as needed.

---

## Creating a target set

Retention, copy, move, and discovery export actions require a named destination to which data objects can be copied, moved, or exported. Target sets associate data servers and appropriate volumes, providing your actions with a destination.

### Procedure

1. Click **Target Sets**, and then click **Create Target Set**. The Create Target Set dialog box appears.
2. In the Create Target Set dialog box, complete these fields.
  - a. In the **Target Set Name** text box, enter a name for this target set.
  - b. In the **Description of Target Set** text box, enter a description.
  - c. In the **Type of Target Set** list, select the type of this target set, namely **Primary**, **Retention**, or **Export**.
  - d. In the **Source Type** list, select the source type of this target set, namely **CIFS**, **CMIS**, **FileNet**, **IBM Content Manager**, **NFS**, **SharePoint**.
  - e. In the **Target Set List** area, click **Add Data Servers**. Select a data server and then click **Add** to move it to the **Target Set List** box. Click **Done** when you finish adding data servers for the target set. Use the **Ctrl** key to add or remove several selections simultaneously. The added data servers appear within the **Target Set List** box. Click **Add/Remove Data Servers** to modify what data servers appear here.
  - f. In the Create Target Set dialog box, click the added data server and then select a volume on that data server. Do this step for each added data server.
3. Click **Save** to save your configuration changes and create the target set.

---

## Editing a target set

Target sets can be edited, modifying the data servers that are associated with the target set.

### Procedure

1. On the List of Target Sets page, click the name of the target set that you would like to edit, and then click **Edit Target Set**. The Edit Target Set dialog box appears.
2. Edit the target set fields as needed.
3. Click **Save** to save your changes.

---

## Cloning a target set

Target sets can also be cloned or duplicated.

### Procedure

1. On the List of Target Sets page, click the name of the target set that you would like to clone or duplicate, and then click **Clone Set**. The Clone Target Set dialog box appears.
2. Edit the target set fields as needed.

**Note:** The cloned target set's name must be unique.
3. Click **Save** to save your changes.



---

## Deleting a target set

Existing target sets can be deleted from the list of available target sets.

### Procedure

1. In the List of Target Sets page, select the target set you would like to delete, and then click **Delete Set**. The Delete Target Set window appears.
2. Click **Delete** to delete the selected target set. The target set is removed from the List of Target Sets page, meaning that it is no longer available for use.



---

## Chapter 8. Reports

IBM StoredIQ contains a number of default reports and the ability to upload a report package.

IBM StoredIQ provides features to inventory unstructured data. It can then collect and evaluate unstructured data, compiling reports and jobs to act on the data according to an organization's needs. Reports can then be printed and disseminated, allowing teams to analyze data in an ad hoc manner. New reports can be added by uploading a report package.

IBM StoredIQ Administrator provides a number of built-in reports, such as summaries of data objects in the system, storage use, and the number of identical documents in the system. You can create custom reports, including Query Analysis Reports for e-discovery purposes, and automatically email report notifications to administrators and other interested parties. By default, these types of reports are available.

- Compliance Report
- Content Collector Manifest File CSV Export
- CSV All Audited Object Exports
- CSV Attribute Summary
- CSV Exception List Export
- CSV Infoset Data Object Export
- Data Assessment Report
- Data Topology Report
- Duplication Summary Report
- Overlay Hit Report
- Term Hit Report

*Table 24. List of Reports options and descriptions*

| Report column option | Description                                       |
|----------------------|---|
| Name                 | Name of the report                                |
| Created              | The date and time at which the report was created |
| Description          | A description of the report                       |

**Note:** For help in customizing IBM StoredIQ reports, contact your technical service representative.

---

### Searching for a specific report

When you have multiple reports from which to choose, you can search for a specific report instead of using the slider to move through available options.

#### Procedure

1. In the **Enter key terms...** text box, enter the name of the report for which you would like to search, and then press **Search**. You can enter either the full report

name or a portion of it. To remove the search term, click the **X** to the left of the **Enter key terms....** text box. Reports that match the entered search term are returned.

2. Select the wanted report.

---

## Creating a report

### Procedure

1. Click **Reports**, and then click **Create**. The Create Report dialog box appears.
2. In the Create Report dialog box, complete these fields.
  - a. In the **Name** text box, enter a name for this report.
  - b. In the **Description** text box, enter a description of this report.
  - c. Click **Choose File**, and then find and select the appropriate report-package file.
3. Click **Create**, and the newly created report is added to the List of Reports page.

---

## Chapter 9. Auto-classification models

Auto-classification models, also called automated document categorization, integrates the IBM® Content Classification's classification model into the IBM StoredIQ Platform info-set-generation process.

### IBM Content Classification

IBM Content Classification helps organize unstructured content by analyzing the full text of documents and emails and applying rules that automate classification decisions. By managing documents and email, you organize and act on content every day. IBM Content Classification reduces the burden of manual decision making that is done by employees by accurately and automatically organizing information. Embedded with natural language processing and semantic analysis capabilities, IBM Content Classification determines the true intent of words and then uses that knowledge to automate decision making. Unlike other classification systems that are based on rules only, IBM Content Classification combines rules and contextual analysis to incorporate real-time learning that adapts to changing business needs. As a result, classification becomes accurate over time.

IBM Content Classification can organize information by policies or keywords. The classification process not only searches for a single word or phrase, but also analyzes the entire document. It then distills the main point of the text and assigns the text to a category. When it analyzes content, IBM Content Classification can recognize misspellings, abbreviations, jargon, and technical terms.

Accuracy improves over time because the system adapts to the unique nature of your business by identifying different categories from examples that you provide. You provide feedback, and a deferred retraining operation adjusts the model and implements corrections based on that feedback. The accuracy of the classification results keeps pace with changes in your business.

IBM Content Classification combines this context-based approach with a rule-based, decision-making approach. The system can identify keywords, patterns, such as account numbers and phone numbers of case identifiers, and words within a certain proximity of each other. For example, the system can identify occurrences of the phrase "Attorney General" in the same sentence as the word "California". When content that matches a condition in a rule is detected, the action that is defined for the rule is applied, and the document or email is classified.

### Examples of classification applications

You can use IBM Content Classification to achieve various business goals.

- **Enterprise content standardization:** To support document classification and taxonomy automation within your content management system, document properties or metadata can be automatically assigned when the content is classified. Documents can be automatically moved to the correct enterprise repository.
- **Compliance and records management:** Documents and email can be declared as records when they are classified and placed under the control of record retention policies and compliance standards.

- E-discovery readiness: Documents and email can be filtered to ensure that only items with business value are classified and archived. You can quickly and cost effectively prepare content for potential legal notices.
- Business process optimization: Automated decision making ensures more consistent outcomes and reduced costs. With content-based analysis, you accomplish these actions.
  - Insert documents into the workflow of a business plan.
  - Reroute email.
  - Suggest and apply agent responses within a customer-support center.

Using auto-classification, you can create and update classification models to help map data within infosets. The step-up snippet action extracts and stores text on data objects within an infoset. For auto-classification to work, you must use the step-up snippet action since infoset objects without extracted snippets do not have auto-classification scores.

The Data Expert can use IBM Content Classification to train a classification model. The classification model is then registered with IBM StoredIQ Administrator. The registered classification model can be applied to an existing infoset in IBM StoredIQ Data Workbench to generate new metadata for the objects in the infoset. Finally, this metadata can be used in rule-based filters to create new infosets.

**Note:** To use the IBM StoredIQ Administrator auto-classification function, users must have a licensed installation of the IBM Content Classification on their desktop.

---

## Applying the auto-classification feature

To use the auto-classification feature successfully, you must work in both IBM StoredIQ Administrator and IBM StoredIQ Data Workbench.

### Before you begin

Prior to preparing an IBM Content Classification model for import, you must finish downloading the classification export utility, which must be done only one time. The export utility is used for each IBM Content Classification model that you want to import.

### About this task

IBM Content Classification works by taking a sample set of documents that you adjust, constructing a classification model, and then classifying a new document. The IBM StoredIQ Platform defines the classification model as a decision plan with at least one knowledge base that is referenced by the decision plan.

### Procedure

1. In IBM StoredIQ Administrator, on the **Action** tab, the step-up snippet action is created automatically and appears in IBM StoredIQ Data Workbench.
2. In IBM StoredIQ Administrator, create an auto-classification model by importing a compressed file from IBM Content Classification.
3. In IBM StoredIQ Data Workbench, start the step-up snippet action, which is available on the **Act** tab, on an infoset.

**Note:** The infoset must be a user infoset, not a system infoset.

4. While still in IBM StoredIQ Data Workbench, apply the wanted auto-classification enhancement, which is available on the **Enhance** tab, to the same infoSet.
5. After the enhancement completes in IBM StoredIQ Data Workbench, navigate to **Create > Build Filter** and apply the auto-class filter to create a new infoSet.
6. Review the results of the newly created infoSet.

---

## Data server sizing-configuration guidelines

The inclusion of the IBM Content Classification server on the data server changed the required memory and processors. Data server sizing-configuration guidelines are provided here.

To support the auto-classification function, you must increase the virtual machine settings for processors and memory on data servers to these new minimums:

- Memory: 16 GB
- vCPUs: 4

Required storage on the data server for the extracted text (snippet cache) is roughly 13% of the size of the uncompressed content, or 130 GB per 1 TB. The size can vary depending on the object type. The maximum amount of extracted text per item is configured to not exceed 2 MB by default.

A data server with 2 TB of configured storage can support approximately 10 TB of managed storage, assuming 50 million data objects with an average size of 200 KB. Approximately 300 GB is metadata storage with the remaining 1,700 GB supporting a combination of full text and extracted text.

---

## Downloading the classification export utility

The classification export utility is a one-time-only download that must be installed before an importing a model.

### Procedure

1. In IBM StoredIQ Administrator on the **Auto-Classification** tab, click **Download Classification Export Utility**. The `siq-classification-export.zip` file is downloaded.
2. Extract the export utility to the `bin` directory of your IBM Content Classification product installation. For Windows, it is typically in the `C:\IBM\ContentClassification\Bin` directory.

---

## Building an auto-classification model

Creating rules to find documents that fit differing categories is time-consuming and requires constant, meticulous adjustments. However, importing a classification model with sets of training documents helps find other, similar documents.

### About this task

Using previously harvested data, you can create an auto-classification model.

### Procedure

1. Determine the categories into which you want the auto-classification model to classify documents.

2. Using IBM StoredIQ Data Workbench, create a filter for each category to capture documents that are representatives of the category.
3. For each filter, create an info set. The members of the resulting info set become the "training corpus" for the category.
4. For each info set, run a copy action with IBM StoredIQ Data Workbench onto a folder that is accessible by the IBM Content Classification application.
5. Use the IBM Content Classification application to create a decision plan and knowledge base by importing the training corpus that you created.

**Note:** A classification model consists of one decision plan and at least one knowledge base, which is a requirement of the IBM StoredIQ Platform auto-classification feature.

---

## Preparing an IBM Content Classification model for import

You must prepare the IBM Content Classification model for importing into IBM StoredIQ Platform with the IBM Content Classification tool `BundleDPKB.exe`.

### Before you begin

IBM StoredIQ Platform defines the IBM Content Classification model as a set of a single decision plan and one or more knowledge bases that are referenced by the decision plan. You must prepare each classification model for import by bundling the relevant decision plan and knowledge base with the IBM Content Classification export utility `BundleDPKB.exe`.

**Note:** Before you prepare an IBM Content Classification model for import, you must finish downloading and installing the classification export utility.

### Procedure

1. In a command interface, go to the `BundleDPKB` installation directory and then enter `cscript.exe ClassificationModelExporter.vbs <location of decision plan projects and knowledge bases> <decision plan directory> <optional empty directory> <optional zip file name>`. If you did not specify a directory to which the compressed file must be exported, an export directory is created in the `<location of decision plan projects and knowledge bases>` location.
2. Note the location and name of the generated compressed file.

---

## Importing an auto-classification model

You must complete these tasks before you can import an auto-classification model.

### Before you begin

- Download the classification export utility. The procedure must be done only one time.
- Prepare the IBM Content Classification model for import. This procedure must be completed for every model you want to import.

### About this task

To import a classification model, go to the **Auto-classification** tab of the IBM StoredIQ Administrator. The tab displays the already imported models as described in this table.



Table 25. Classification model column names and descriptions

| Classification model column name | Description  |
|----------------------------------|--|
| Classification model name        | Lists the name of the classification model.  |
| Attribute name                   | Lists the name of the attribute that is used by the classification model.                    |
| Status                           | Lists the classification model's status, specifically <b>Available</b> , or <b>Pending</b> . |
| Creation date                    | Lists the date and time at which the classification model was created.                       |
| Description                      | Lists the description of the classification model.   |

## Procedure

1. Within IBM StoredIQ Administrator, click **Create Model**. The Create Model dialog box appears.
2. In the **Classification Model Name** text box, enter a unique name for this auto-classification model.
3. In the **Attribute Name** text box, enter a unique name for this attribute. The **Attribute Name** must be unique within auto-classifications as it cannot be changed after the classification model is imported.
4. In the **Description** text box, enter a description of this model.
5. In the **Auto-Classification Model File** text box, click **Browse** and select the classification model file that you want to use when you are creating the model. Generally, this file is a compressed file that is created in the classification export utility. It consists of elements that are created in IBM Content Classification by the Data Expert.
6. Click **Save**, and the newly created model appears in the list of classification models.

---

## Selecting a classification model

By selecting a classification model, you can view the details of that model, including the status of the last retrain, how much feedback it has received, and how many infosets have been enhanced using this model.

### Procedure

1. Within IBM StoredIQ Administrator, click **Auto-Classification**. The List of Classification Models page appears.
2. Select the model for which you would like to view greater detail. The <model name> Details panel appears.

**Note:** The <model name> Details panel appears by default. However, if you close the panel but then later want to view details about that model again, click **View Details**.

Table 26. Row names and descriptions of the <model name> Details panel

| Row name                                | Description   |
|---|---|
| Status                                  | Lists the classification model's status, specifically <b>Available</b> , <b>Defunct</b> , <b>Deleting</b> , <b>Failed</b> , <b>Invalid</b> , <b>Pending</b> , <b>Processing</b> , or <b>Retraining</b> .<br><b>Note:</b> In the <b>Processing</b> or <b>Retraining</b> states, models cannot be edited. |
| Last retrained                          | Lists the date and time this classification model was last retrained.   |
| Last retrain status                     | Lists the classification model's retrain status. Status messages are <b>Success</b> , <b>Failed</b> , and <b>N/A</b> .  |
| Total feedbacks                         | Lists the number of times the model has received feedback.  |
| Total feedbacks after last retrain      | Lists the number of times this model received feedback after its last retrain date.   |
| Total infosets created using this model | Lists the number of infosets that use this classification model.  |
| Total infosets enhanced by this model   | Lists the number of infosets that have been enhanced by this classification model.  |

3. To close the <model name> Details panel, click **Close**.

---

## Searching for a specific classification model

When you have multiple classification models to choose, you can search for a specific classification model instead of using the slider to move through available options.

### Procedure

1. In the **Enter key terms(s)** text box, enter the name of the classification model for which you want to search, and then press **Search**. You can enter either the full classification model name or a portion of it. To remove the search term, click the **X** to the left of the **Enter key term(s)** text box. Classification models that match the entered search term are returned.
2. Edit, delete, or retrain the classification model as needed.

---

## Editing a model

The terms and formats that are associated with a particular classification model change over time, which means that the classification model must also change. Classification models can be edited or updated, modifying the model file that is associated with that particular classification model.

### Procedure

1. On the **Auto-classification** tab, click the name of the classification model that you want to edit, and then click **Edit Model**. The Edit Model window appears.
2. Edit the classification model fields as needed.

**Note:** Attribute names cannot be changed, but you can edit the name of the model without specifying a new model (.ZIP) file. If you attempt to modify a classification model that is being used, a warning appears. Click **OK** to return to the List of Classification Models page.

3. Click **Save** to save your changes.

---

## Deleting a model

Existing classification models can be deleted from the list of available models, if it was not used to enhance an info set and that info set still exists.

### Procedure

1. In the List of Classification Models page, select the classification model that you want to delete, and then click **Delete Model**. The Delete Model window appears.
2. Click **Delete** to delete the selected model. The classification model is removed from the List of Classification Models page. It is no longer available for use.

---

## Retraining a classification model

Data models are deployed regularly against data sets. Once a classification model is deployed within IBM StoredIQ, it can be applied against millions of data objects as opposed to the few hundred that were used for the initial training of the model. By applying the model to so many data objects, it gives you much more granular data points. Because it takes time and effort to "train" or prepare a classification model against a set, data experts' positive or negative feedback is useful in retraining a classification model. Is the model working satisfactorily? Where does the model not seem to function well? Are there inconsistencies? Data experts have intimate knowledge of particular data sets and classification models, and they can provide positive and negative feedback regarding a model's accuracy. This feedback can be used to reinforce or improve a model's behavior, thereby allowing you to retrain the model to improve its accuracy.

### Before you begin

With the assistance of IBM Software Support, modify the data learning settings.

1. Click **Project > Project Options**. The Project Options dialog box appears.
2. In the Project Options window, click **Advanced**. The Advanced Project Options window appears.
3. Select the **Maintain learning data set with knowledge base** option. Accept all other default values.
4. Click **OK**.

The data-learning settings can also be modified in the Create, Analyze, and Learn dialog box by clicking **Settings**. For more information, see [http://www-01.ibm.com/support/knowledgecenter/SSBRAM\\_8.8.0/com.ibm.classify.workbench.doc/c\\_WBG\\_Saving\\_Learning\\_Data.htm](http://www-01.ibm.com/support/knowledgecenter/SSBRAM_8.8.0/com.ibm.classify.workbench.doc/c_WBG_Saving_Learning_Data.htm).

### Procedure

1. Create a classification model. In IBM StoredIQ Administrator, click **Create Model** to create a classification model. You must set an attribute when creating a classification model.
2. Create a user info set. In IBM StoredIQ Data Workbench, create a user info set, and then select that user info set so that it is active.
3. Run the step-up snippet action. In IBM StoredIQ Data Workbench, run the snippet step-up action on the newly created user info set.
4. Apply an enhancement. In IBM StoredIQ Data Workbench, select an enhancement to apply to the newly created user info set, and then click **Run Enhancement**.

5. Apply a filter. In IBM StoredIQ Data Workbench, create a filter.
  - a. Select the **Auto-classify** option.
  - b. In the list below the **Auto-classify** option, select the classification model for which results should be filtered.
  - c. Select the categories. By default, the **Category** option is selected, as are all of the available categories.
  - d. Determine how the results will be displayed, selecting either **And the highest score in the selected category** or **And where the score <is/Greater than/Less than/Not equal/Greater than or equal/Less than or equal> <1>**.
6. View the objects in the Data Object Viewer. Click **Preview Filter Results**, and the objects are displayed in the **Filter Results** area. Select one of the returned objects to view it in the Data Object Viewer.
7. Provide feedback for this data object. Click the button to the right of **Auto-class Scores**. This displays the list of categories and the object's score for each category. The category with the highest score is listed at the top. As the Data Expert, select the categories to which the selected data object belongs. Data objects with a value closer to one (1) are more closely associated with that category. Data objects with a value closer to zero (0) are not closely associated with that category. Click **Submit**. This feedback helps to improve the accuracy and validity of the classification model. Repeat this step for as many different data objects as you like. The number of feedback submissions can be seen within the <model name> Details panel in IBM StoredIQ Administrator.
8. In IBM StoredIQ Administrator, click **Auto-Classification** and select the classification model. Note that the <model name> Details panel shows that it has received feedback. Click **Retrain** to launch the retrain process for this model. If the model was uploaded without a learning archive (SARC file) or if it has received no feedback, then the **Retrain** button is disabled.
9. Run the enhancement against the info set again, noting the new scores within the Data Object Viewer. The improved scores indicate greater validity and accuracy.

---

## Chapter 10. Concept management

Within IBM StoredIQ Platform, you can use the concept-management feature to relate business ideas to indexed data.

When you are using IBM StoredIQ Administrator, you use infosets, run actions, generate reports, and more generally, interact with IBM StoredIQ Platform as a whole. These technical aspects of using IBM StoredIQ Administrator are designed for more technical users. Concepts are designed for the business user and provide a user experience of creating a filter that finds documents that are owned by a particular user name, for example. This use of the product is oriented towards solving business problems. Using the product typically requires the user to translate business concepts like identity, department, vendor, and project into the various technical concepts of the product, such as filters and infosets.

A concept defines and represents an identity, custodian, vendor, and project that can be related to indexed data in a meaningful way. It is a set of attributes that describe and distinguish individual concept members. For example, an employee concept might define the attribute's user name, given name, surname, and email address.

Concept members are the granular building blocks of a concept. When concept members are defined, they can be gathered into groups for aggregate use.

The **Identity** concept is created as a predefined, preconfigured concept available within IBM StoredIQ eDiscovery.

The List of Concepts screen is simple, depicting concepts, identities, and aspects. From here, you can search for, delete, edit, and add identities.

*Table 27. Concept columns and descriptions*

| Concept Column Name | Description                            |
|---------------------|--|
| First name          | Lists the given name.                  |
| Last name           | Lists the surname.                     |
| Email address       | Lists the email address.               |
| Owner ID            | Lists the owner identification number. |
| Company             | Lists the member's company name.       |
| Department          | Lists the department of the member.    |

---

### Adding a member to a concept

Members can be added to existing concepts.

#### Procedure

1. Click **Concepts**.
2. From the list, select the type of concept you would like to add, and then click **Create Member**. The **Identity** concept was created as a predefined, preconfigured aspect. The Add Identity dialog box appears.
3. In the Add Identity dialog box, complete these fields.

- a. In the **First Name** text box, enter the identity's given name.
  - b. In the **Last Name** text box, enter the identity's surname.
  - c. In the **E-mail Address** text box, enter the identity's email address.
  - d. In the **Company** text box, enter the name of the company that is associated with this identity.
  - e. In the **Department** text box, enter the name of the identity's department.
  - f. In the **Owner ID** text box, enter the identity's owner ID.
4. Click **Cancel** to cancel adding an identity and return to the List of Concepts screen, or click **Save** to save the added member and return to the List of Concepts page.

---

## Searching for a concept

When you have multiple concepts available to choose, you can search for a specific concept instead of using the slider to move through available options.

### Procedure

1. In the **Enter key terms...** text box, enter the name of the concept for which you want to search, and then press **Search**. You can enter either the full concept name or a portion of it. To remove the search term, click the **X** to the left of the **Enter key terms....** text box. Concepts that match the entered search term are returned.
2. Edit or delete the concept as needed.

---

## Editing a member of a concept

Existing concepts and their members can be modified.

### Procedure

1. From the List of Concept page, select the concept that you want to edit, and then click **Edit**. The **Identity** concept was created as a predefined, preconfigured aspect. The Edit Identity dialog box appears.
2. Edit the concept member and click **OK** to save your changes.

---

## Deleting a member of a concept

Existing concept members can be deleted from the list of available concepts.

### About this task

If you delete a member of a concept, existing filters that use that concept's members are affected.

### Procedure

1. From the List Concepts page, select the concept member that you want to delete, and then click **Delete**. The Delete Confirmation window appears.
2. Click **OK** to delete the selected concept member. The member of the concept is removed from the table and is no longer available for use.

---

## Chapter 11. Mule scripts

Using the **Mule Script** tab, administrators can upload the Mule archive from their local directories. Mule archives are externally authored scripts, which are used by the IBM StoredIQ system to automate workflows.

This table lists and describes all of the fields that are seen within the Available Scripts page. When a Mule script is selected, it can be viewed in greater detail, edited, or deleted.

*Table 28. Mule script columns and descriptions*

| <b>Mule script column name</b> | <b>Description</b>                                   |
|--------------------------------|--|
| Name                           | Lists the name of the Mule script.                   |
| Created                        | Lists the creation date and time of the Mule script. |
| Script package                 | Lists the name of the Mule script package.           |
| Description                    | Lists the description of the Mule script.            |

**Note:** For information regarding how to set up the IBM StoredIQ environment to work with Mule Anypoint Studio and Mule scripts, see Appendix A, “IBM StoredIQ Mule script,” on page 65.

---

### Creating a Mule script

Created Mule scripts are available for use from the **Mule Scripts** page.

#### Procedure

1. Click **Mule scripts**, and then click **Create**. The Create Script dialog box appears.
2. In the Create Script dialog box, complete these fields. Newly created Mule scripts cannot be saved until these fields are complete.
  - a. In the **Name** text box, enter the name of the Mule script.
  - b. In the **Description** text box, enter a description of this newly created Mule script.
  - c. Click **Choose File**, and then navigate to and select the script package file. The name of the selected script package file appears to the right of the **Choose File** button.
  - d. Click **Create**, and Mule script appears within the list of available Mule scripts. Once Mule scripts are available within the Available Script list, the **Delete**, **Edit**, and **View Details** buttons are active.

---

### Searching for a specific Mule script

When you have multiple Mule scripts available to choose, you can search for a specific Mule script instead of using the slider to move through available options.

## Procedure

1. In the **Enter key term(s)...** text box, enter the name of the Mule script for which you want to search, and then click **Search**. You can enter either the full Mule script name or a portion of it. To remove the search term, click the **X** to the left of the **Enter key term(s)...** text box. Mule scripts that match the entered search term are returned.
2. Select a Mule script from the returned list of scripts.

---

## Viewing details of Mule scripts

Detailed information for any Mule script can be viewed.

### Procedure

1. In Available Scripts, select the Mule script for which you would like more information, and then click **View Details**. The Script Details pane appears at the bottom of the page, providing detailed information about that Mule script.

**Name** Lists the name of the Mule script.

**Created**

Lists the creation date and time of the Mule script.

**Script Package**

Lists the name of the script package. By clicking the link, you can open a browser and download the file.

**Endpoint URL**

Lists the endpoint URL.

**Description**

Lists a description of the Mule script.

**Used by**

Lists the policies that use the Mule script.

2. Click **Close** to close the Script Details pane.

---

## Editing a Mule script

Existing Mule scripts can be modified as needed.

### Procedure

1. In the Available Scripts page, select the Mule script that you want to edit, and then click **Edit**. The Edit Script dialog box appears.
2. In the Edit Script dialog box, edit the Mule script as needed.
3. Click **Save** to save your changes.

---

## Deleting a Mule script

Existing Mule scripts can be deleted from the Available Scripts page.

### About this task

Mule scripts that are being used by policies cannot be deleted, and deleted Mule scripts are not available for newly created policies. To see what policies use a Mule script, review the **Used By** section within the **Script Details**.



## Procedure

1. In the Available page, select the Mule script that you want to delete, and then click **Delete**. The Confirm Deletion window appears.
2. Click **Delete Script** to delete the selected Mule script. The Mule script is deleted from the list of available scripts.

---

## Importing the IBM StoredIQ application stack SSL certificate

For the Mule Standalone engine to work with the SSL-enabled IBM StoredIQ application stack, you must first import your IBM StoredIQ application stack SSL root certificate to the JRE used by the Mule Standalone engine.

### Before you begin

Verify that your application stack is updated to the most recent version.

### Procedure

1. Locate the JRE used by the Mule Standalone engine. It is located at `/siq/env/java/jre`.
2. Import the SSL root certificate `/etc/siq/ssl/root.crt` into `/siq/env/java/jre/lib/security/cacerts`.
3. Save the cacerts file.
4. Restart Mule using this command: `/siq/bin/monit restart mule`
5. Check status using this command: `/siq/bin/monit summary`



---

## Appendix A. IBM StoredIQ Mule script

IBM StoredIQ Policy Manager allows the policy users to create automation workflow policies from its dashboard by using Mule Script. Mule Script is used to enable data automation for IBM StoredIQ custom services. Before this type of the policy can be added to the dashboard of the IBM StoredIQ Policy Manager, a user who understands the customer's needs and requirements must help create the automation flow with Mule Script through Mule Anypoint Studio.

From the user interface of Anypoint Studio, the Mule scripts can be edited, tested, imported, and exported.

After Mule scripts are created, the administrator uses the IBM StoredIQ Administrator user interface to manage the Mule scripts to get them ready for the policy user to create policies.

For information about how to use the Mule products, see documentation on the official website of MuleSoft Inc.

---

## Setting up Mule Anypoint Studio with IBM StoredIQ

Mule Anypoint Studio is a graphic design environment that provides functions of creating, editing, testing, importing, and exporting Mule scripts. You must set up the Mule Anypoint Studio environment before you can create Mule scripts.

### About this task

Follow these steps to set up the Mule Anypoint Studio environment.

### Procedure

1. Select the correct operating system and then download Mule Anypoint Studio from <https://www.mulesoft.com/lp/dl/studio>
2. Install and start Mule Anypoint Studio.
  - a. Extract the installation files into the local directory.
  - b. Double-click `AnypointStudio.exe` to start Mule Anypoint Studio.
  - c. Choose the workspace location to work with this tool.
3. Set up the Java environment from **Windows > Preferences > Java > Installed JREs**. Ensure that it points to JRE7 or JDK7.
4. Install Mule Runtime Community Edition (CE). By default, Mule Anypoint Studio is packaged with Enterprise Engine (EE), which has a 30-day license. You need to install Community Engine with the free license to create the flow with Mule Anypoint Studio.
  - a. From **Help > Install New Software**, enter <http://studio.mulesoft.org/r4/studio-runtimes>.
  - b. Select and install Mule Server 3.6.1 CE.
5. Install the Mule StoredIQ Connector.
  - a. From **Help > Install New Software**, enter the URL of the connector update, [http://{StoredIQ\\_appStack host}/mule-connector-update](http://{StoredIQ_appStack host}/mule-connector-update), to install Community/StoredIQ Connector (Mule 3.5.0+).

- b. Verify that the StoredIQ Connector is installed, create a Mule project, and type `storediq` in the search box of the right window. A new icon **StoredIQ** displays.
  - c. Drag this connector to construct StoredIQ scripts. You can see a list of operations with the corresponding parameters in the Basic Settings window.
6. Install the `storediq_domain` project. For more information, see “Importing a domain project in Anypoint Studio” on page 71.

**Note:** The `storediq_domain` is used to share the HTTP inbound endpoint across different StoredIQ Mule scripts. The shared listening port is 8081. All IBM StoredIQ Mule Scripts must be associated with `storediq_domain` to use this shared HTTP port. Download `storediq_domain.zip` from [http://{StoredIQ\\_appstack host}/download/mule-flows/storediq\\_domain.zip](http://{StoredIQ_appstack host}/download/mule-flows/storediq_domain.zip). Import the domain project into Mule Anypoint Studio.

7. Create a Mule project.
  - a. Select **New > Mule Project**.
  - b. Enter the name of the Mule project and select **Mule Server 3.6.1 CE** as the Runtime engine.
  - c. Associate Mule Projects with `storediq_domain`. See “Associating a Mule project with a domain project” on page 71.
  - d. Drag the icons from the search box to create a Mule script with the HTTP endpoint.

**Note:** You can test the Mule project within Mule Anypoint Studio.

8. Export the Mule projects to the Mule archive, that is, script package. This Mule archive can be passed to IBM StoredIQ administrator, who checks in Mule scripts to IBM StoredIQ Administrator.
  - a. Click **Export** to export the existing Mule project into archive.
  - b. Clear **Export parent domain project**.
  - c. Save the archive as a `.zip` file in the local directory.
9. Import the Mule projects from the Mule archive. If you want to modify an existing Mule script, you can download the Mule archive from [http://{StoredIQ\\_appstack host}/download/mule-flows/<mule script>.zip](http://{StoredIQ_appstack host}/download/mule-flows/<mule script>.zip), and then import the Mule archive into Mule Anypoint Studio.

## Importing the IBM StoredIQ application stack SSL certificate

For Mule Anypoint Studio to work with the SSL enabled IBM StoredIQ application stack, you must first import your IBM StoredIQ application stack SSL root certificate to your local SDK.

### Before you begin

Make sure that your application stack is updated.

### Procedure

1. Download the SSL root certificate file from IBM StoredIQ application stack, for example, `/etc/siq/ssl/root.crt`, to your local directory.
2. Check the version of JRE that is used by Mule Anypoint Studio.
3. Use `keytool` to open the `cacerts` file under `<JRE>/lib/security` folder.
4. Import the SSL root certificate into the `cacerts` file and save the `cacerts` file.
5. Restart Mule Anypoint Studio.

---

## Mule script management

For information about use of Mule platform, see Mule documentation from its official website.

### Mule script restrictions

You must follow these rules when you work with the Mule scripts:

- Mule scripts must have an inbound end-point `http` with the `storediq_domain` shared port 8081. For example, `http://localhost:8081/mule_policy1`.
- Mule scripts should have a readme file that provides details about the script. This readme file is written by the user and meets these criteria:
  - Must be in the `.pdf` format and its file name can be accessible by URL.
  - Shows the diagram, description, and input data, if needed
  - Is put under the top level of the Mule archive
- Mule scripts may require input data. If so, that input data must be in the `.JSON` format. For example,

```
{
  "sysinfo_id": "d8242a7e-2658-4ca9-bf27-d54f30dae085",
  "filter_id": "48e225fb-b9d0-4ce4-9706-636c0832b1f1",
  "report_id": "00000000-0000-0000-0000-000000001000"
}
```

---

## IBM StoredIQ Connector operations

You can construct a Mule script with the IBM StoredIQ operation blocks.

For a complete list of IBM StoredIQ operations, their parameters, and descriptions, see Appendix B, “IBM StoredIQ Connector operations,” on page 73.

---

## Creating the IBM StoredIQ Mule script

Use Mule Anypoint Studio to create the IBM StoredIQ Mule script.

### Before you begin

Before you use a Mule script to access the IBM StoredIQ resources, you must authenticate to the IBM StoredIQ application stack server. You must configure three parameters for authentication:

- StoredIQ application stack host
- StoredIQ application stack user name
- StoredIQ application stack password

You can use either of the following ways to configure connections to the IBM StoredIQ application stack server:

- Select the **Global Mule Configuration Elements** tab from Mule script. Click **Create** and search for `storediq`.
- Drag an IBM StoredIQ connector in the Mule script. Click the **+** sign to the left of **Connector Configuration**. Type the value of the IBM StoredIQ host, user name, and password. Click **Test Connection** to ensure that the authentication is successful.

**Note:** The authentication is valid for all IBM StoredIQ connectors within the same flow.

## Procedure

1. Search and delete IBM StoredIQ resources.
  - a. Enter a name in the **Display Name** field. For example, list dataservers.
  - b. Select **Search** from the **Operation** list.
  - c. Select **dataserver** from the **Resource Type** list.
  - d. Enter information in the **Search** option for specific resources.
  - e. To delete the selected resources, select the **Delete the resource** checkbox.
2. Create and harvest the data source.
  - To create a data source:
    - a. Enter a name in the **Display Name** field, for example, create nfs datasource.
    - b. Select **StoredIQ** from **Connector Configuration**.
    - c. Enter the parameters for **Name**, for example, mule\_datasource, **DataServer Id**, for example, UUID of the data server, and select the type.
  - To harvest a data source:
    - a. Enter a name in the **Display Name** field, for example, harvest datasource.
    - b. Select **StoredIQ** from the **Connector Configuration** list.
    - c. Select **Harvest datasource** from the **Operation** list.
    - d. Enter the parameters for **Name**, for example, mule\_harvest, **DataSource Ids**, for example, UUID of the data source, and select **Harvest Type** and **Load Type** from the lists.
    - e. Select **Wait for Completion** under **Flag**.
3. Create a system infoset.
  - a. Enter a name in the **Display Name** field. For example, create system infoset.
  - b. Select **StoredIQ** from **Connector Configuration**.
  - c. Select **Create system infoset** from **Operation**.
  - d. Enter the parameters for **Infoset Name**. For example, mule\_sys\_infoset.
  - e. Enter the parameter for **DataSource Ids**. For example, UUID of the data source.
  - f. Select **Wait for Completion** under **Flag**.
4. Create a filter.
  - a. Enter a name in the **Display Name** field. For example, create user filter.
  - b. Select **StoredIQ** from **Connector Configuration**.
  - c. Select **Create filter** from **Operation**.
  - d. Enter the parameters for the filter name. For example, mule\_filter.
  - e. Enter the expression: att:"/Library/Attributes/System metadata/Extension" IS any ("txt") IN all.
5. Create a user infoset.
  - a. Enter a name in the **Display Name** field. For example, create user infoset.
  - b. Select **StoredIQ** from **Connector Configuration**.
  - c. Select **Create user infoset from filter** from **Operation**.
  - d. Enter the parameters for **Infoset Name**. For example, mule\_user\_infoset.

- e. Enter **Filter Id**. For example, UUID of the filter.
  - f. Enter the **InfoSet Source Ids**. For example, a list of UUID of the infoSet sources, which are separated by commas.
  - g. Select **Wait for Completion** under **Flag**.
6. Create a target set.
    - a. Enter a name in the **Display Name** field. For example, create targetset
    - b. Select **StoredIQ** from **Connector Configuration**.
    - c. Select **Create targetset** from **Operation**.
    - d. Enter the parameters for **Name**. For example, mule\_targetset.
    - e. Enter the parameter for **DataSource Ids**. For example, UUID of the data source.
    - f. Select **primary** as its **Type**.
  7. Create an action.
    - a. Enter a name in the **Display Name** field. For example, create action.
    - b. Select **StoredIQ** from **Connector Configuration**.
    - c. Select **Create action copy plain** from **Operation**.
    - d. Enter the parameters for **Name**. For example, mule\_action.
    - e. Enter the parameter for **TargetSet Id**. For example, UUID of the target set.
  8. Run an action.
    - a. Enter a name in the **Display Name** field. For example, run action.
    - b. Select **StoredIQ** from **Connector Configuration**.
    - c. Select **Execute action** from **Operation**.
    - d. Enter the parameters for **Name**. For example, mule\_execution\_action.
    - e. Enter the parameter for **User InfoSet Id**. For example, UUID of the user infoSet.
    - f. Enter the parameter for **Action Id**. For example, UUID of the action.
  9. Generate a report.
    - a. Enter a name in the **Display Name** field. For example, generate report.
    - b. Select **StoredIQ** from **Connector Configuration**.
    - c. Select **Generate report** from **Operation**.
    - d. Enter the parameters for **Name**. For example, mule\_report.
    - e. Enter the parameter for **User InfoSet Id**. For example, UUID of the user infoSet.
    - f. Enter the parameter for **Report Id**. For example, UUID of the report action.

**Note:** If you select **Wait for Completion**, the StoredIQ flow waits for the report to be successfully generated and then returns the report URL in the result string. If you do not select **Wait for Completion**, the StoredIQ flow does not wait for completion of the report generation and the result string does not contain the report URL.

---

## Deploying the Mule script

Mule Standalone Engine is preinstalled in IBM StoredIQ application stack. It hosts the Mule scripts without Mule Anypoint Studio.

### About this task

Use these commands to start or stop the engine:

```
/siq/bin/monit start mule
/siq/bin/monit stop mule
```

When the engine is up and running, use the following steps to deploy or undeploy the Mule script.

## Procedure

1. Export the Mule script from Anypoint Studio into an archive file in the .zip format. For example, `mule_helloworld.zip`
2. Write a readme file to explain the Mule script diagram. Provide a description and example input data in the .pdf format and with the same name as the Mule script. For example, `mule_helloworld.pdf`.

A readme file can look like the following example.

Description:

This Mule script creates a user info set from the system info set and filter and then it generates a report. The unique ID of the system info set, filter, and report can be passed in from the input file in the .json format.

Example of input data:

```
{
  "sysinfo_set_id": "d8242a7e-2658-4ca9-bf27-d54f30dae085",
  "filter_id": "48e225fb-b9d0-4ce4-9706-636c0832b1f1",
  "report_id": "00000000-0000-0000-0000-000000001000"
}
```

3. Save this readme file into the Mule archive file that was created in Step 1.
4. Pass the Mule script archive file to the administrator of IBM StoredIQ Administrator. For example, `mule_helloworld.zip`.
5. The administrator can create a Mule script with the provided Mule archive from IBM StoredIQ Administrator. See *Creating a Mule script*. After the Mule script is created successfully, it is automatically deployed into Mule Standalone Engine.
6. When the administrator deletes an existing Mule script from IBM StoredIQ Administrator user interface, the Mule script is automatically undeployed from Mule Standalone Engine.

## Results

The Mule script log traces the Mule script process. It is in the `/siq/env/mule/logs` directory.

---

## Configuring Mule script timeout lengths

By default, the Mule script timeout value is 432000, or five days. This value can be modified by administrators.

### About this task

By default, the Mule script timeout value is 432000, or five days. This value can be modified by administrators.

## Procedure

1. Verify that your IBM StoredIQ application stack is upgraded to the most recent, supported version.
2. In an SSH tool, enter `/siq/bin/mulecfg`. The Console window appears.



3. In the Console window, the **Mule Script timeout (seconds)** parameter is shown. Modify the default value of 432000.
4. Press **Tab** to select **Save** or **Save and exit**, and then press **Enter**.
5. Restart the uwsgi using this command: `/siq/bin/monit restart uwsgi`
6. Check the status using this command: `/siq/bin/monit summary`

---

## Mule domain project

Mule defines selected connectors as common resources and they are accessible to all applications that are deployed under the same domain. These resources are known as shared resources.

To use these shared resources, you must associate the Mule project with the Mule domain project, then reference the shared resource in the Mule project.

The following sections use HTTP Listener Connector as an example to demonstrate how to share HTTP host and listener port across different Mule projects.

### Importing a domain project in Anypoint Studio

The following procedure uses `storediq_domain.zip` as an example to describe how to import a Mule domain project.

#### Procedure

1. From Anypoint Studio, right-click **Package Explorer**, and from the menu select **Import > Anypoint Studio > Anypoint Studio-generated Deployable archive (.ZIP)**.
2. Specify the location of `storediq_domain.zip`, and then click **Finish**. The `mule-domain-config.xml` file displays automatically. The shared resource `http:listener-config` is defined inside.

### Associating a Mule project with a domain project

Follow these steps to associate any new or existing Mule project with the domain project.

#### Procedure

1. Select an existing Mule project that has an HTTP listener connector as the inbound endpoint. Open the project's Mule configuration xml file and select the proper domain under **Runtime > Domain**. For example, in Mule project, open `mule-project.xml` and then select `storediq_domain` as the domain.

**Note:** You can add multiple Mule projects under the same domain, but you can associate only one project with one domain at a time.

2. In the Mule project, directly refer to a connector configuration in the HTTP listener connector. For example, in Mule project, use `HTTP_Listener_storediq` from the domain project `storediq_domain` without creating a new HTTP listener configuration.
3. Use the path value in the HTTP listener connector to differentiate Mule projects that share the host and port within the same domain.



## Appendix B. IBM StoredIQ Connector operations

The following table provides information about IBM StoredIQ Connector operations, their parameters, and descriptions.

Table 29. IBM StoredIQ Connector operations

| Connector operation           | Parameter         | Description  |
|-------------------------------|-------------------|--|
| createFilter                  | filter_name       | Name of the filter                                   |
|                               | description       | Description of the filter                            |
|                               | expression        | Expression of the filter                             |
| createSystemInfoset           | infoset_name      | Name of the infoset                                  |
|                               | description       | Description of the infoset                           |
|                               | datasource_ids    | List of data source IDs separated by commas          |
|                               | access_type       | Access type of infoset, either public or private     |
|                               | user_list         | List of user IDs that can be accessed to the infoset |
|                               | waitForCompletion | Flag to indicate sync and async                      |
| createUserInfosetFromFilter   | infoset_name      | Name of the infoset                                  |
|                               | description       | Description of the infoset                           |
|                               | infoset_id        | ID of the infoset source                             |
|                               | filter_id         | ID of the filter                                     |
|                               | overlays          | Overlay filter IDs separated by comma                |
|                               | notify            | Notification mail                                    |
|                               | generate_datamap  | Flag to indicate whether a datamap is generated      |
|                               | waitForCompletion | Flag to indicate sync or async                       |
| createUserInfosetByOperations | operations        | Infoset operations                                   |
|                               | infoset_name      | Name of the infoset                                  |
|                               | description       | Description of the infoset                           |
|                               | sources           | List of source infoset IDs separated by commas       |
|                               | overlays          | Overlay filter IDs separated by commas               |
|                               | notify            | Notification email                                   |
|                               | generate_datamap  | Flag to indicate whether a datamap is generated      |
|                               | waitForCompletion | Flag to indicate sync or async                       |

Table 29. IBM StoredIQ Connector operations (continued)

| Connector operation             | Parameter                                   | Description                                     |
|---------------------------------|---|---|
| createUserInfoSetFromExceptions | infoSet_name                                | Name of the infoSet                             |
|                                 | description                                 | Description of the infoSet                      |
|                                 | infoSet_id                                  | ID of the infoSet source                        |
|                                 | event_ids                                   | Event IDs separated by commas                   |
|                                 | categories                                  | Category names that are separated by commas     |
|                                 | overlays                                    | Overlay filter IDs separated by commas          |
|                                 | notify                                      | Notification email                              |
|                                 | generate_datamap                            | Flag to indicate whether a datamap is generated |
|                                 | waitForCompletion                           | Flag to indicate sync or async                  |
| createTargetSet                 | targetSet_name                              | Name of the target set                          |
|                                 | description                                 | Description of the target set                   |
|                                 | type  | Type of the target set                          |
|                                 | dataSource_ids                              | Data source IDs separated by comma              |
| createDataSourceNfs             | dataSource_name                             | Name of the data source                         |
|                                 | dataServer_id                               | ID of the data server                           |
|                                 | dataSource_type                             | Type of the data source                         |
|                                 | nfs_server                                  | NFS server IP or host name                      |
|                                 | nfs_export                                  | NFS server export directory                     |
|                                 | scoping_information_initial_directory       | NFS server initial directory                    |
|                                 | scoping_information_include_directories     | NFS server include directories                  |
|                                 | index_options_container_metadata            | Include metadata for contained objects          |
| index_options_full_text_content | Include content tagging and full-text index |   |
| createDataSourceCifs            | dataSource_name                             | Name of the data source                         |
|                                 | dataServer_id                               | ID of data server                               |
|                                 | dataSource_type                             | Type of the data source                         |
|                                 | cifs_server                                 | CIFS server IP or host name                     |
|                                 | cifs_username                               | CIFS server user name                           |
|                                 | cifs_password                               | CIFS server password                            |
|                                 | cifs_shared                                 | CIFS server share directory                     |
|                                 | scoping_information_initial_directory       | CIFS server initial directory                   |
|                                 | scoping_information_include_directories     | CIFS server include directories                 |
|                                 | index_options_container_metadata            | Include metadata for contained objects          |
|                                 | index_options_full_text_content             | Include content tagging and full-text index     |

Table 29. IBM StoredIQ Connector operations (continued)

| Connector operation             | Parameter                                   | Description                                 |
|---------------------------------|---|---|
| createDatasourceCm8             | datasource_name                             | Name of the data source                     |
|                                 | dataserver_id                               | ID of data server                           |
|                                 | cm8_server                                  | CM8 server IP or host name                  |
|                                 | cm8_port                                    | CM8 server port                             |
|                                 | cm8_username                                | CM8 server user name                        |
|                                 | cm8_password                                | CM8 server password                         |
|                                 | cm8_repository                              | CM8 server repository                       |
|                                 | cm8_dbtype                                  | CM8 server remote DB type                   |
|                                 | cm8_remotedb                                | CM8 server remote DB                        |
|                                 | cm8_schema_name                             | CM8 server schema name                      |
|                                 | cm8_connection_string                       | CM8 server connection string                |
|                                 | scoping_information_initial_directory       | CM8 server initial directory                |
|                                 | scoping_information_include_directories     | CM8 server include directories              |
|                                 | index_options_container_metadata            | Include metadata for contained objects      |
| index_options_full_text_content | Include content tagging and full-text index |   |
| createDatasourceCmis            | datasource_name                             | Name of the data source                     |
|                                 | dataserver_id                               | ID of the data server                       |
|                                 | cmis_server                                 | CMIS server IP or host name                 |
|                                 | cmis_port                                   | CMIS server port                            |
|                                 | cmis_username                               | CMIS server user name                       |
|                                 | cmis_password                               | CMIS server password                        |
|                                 | cmis_use_ssl                                | Boolean value to indicate ssl or not        |
|                                 | cmis_service                                | CMIS server service                         |
|                                 | cmis_repository                             | CMIS server repository                      |
|                                 | index_options_container_metadata            | Include metadata for contained objects      |
|                                 | index_options_full_text_content             | Include content tagging and full-text index |

Table 29. IBM StoredIQ Connector operations (continued)

| Connector operation             | Parameter                                   | Description                                 |
|---------------------------------|---|---|
| createDatasourceExchange        | datasource_name                             | Name of the data source                     |
|                                 | dataserver_id                               | ID of the data server                       |
|                                 | exchange_server                             | Exchange server host name                   |
|                                 | exchange_username                           | Exchange server name                        |
|                                 | exchange_password                           | Exchange server password                    |
|                                 | exchange_active_directory_server            | Exchange server active directory server     |
|                                 | exchange_use_ssl                            | Exchange server use SSL flag                |
|                                 | exchange_version                            | Exchange server version                     |
|                                 | exchange_folder                             | Exchange server folder                      |
|                                 | exchange_mailbox_server                     | Exchange server mailbox server              |
|                                 | exchange_personal_archive                   | Exchange server personal archive            |
|                                 | scoping_information_initial_directory       | Exchange server initial directory           |
|                                 | scoping_information_include_directories     | Exchange server include directories         |
|                                 | index_options_container_metadata            | Include metadata for contained objects      |
| index_options_full_text_content | Include content tagging and full-text index |   |
| createDatasourceSharepoint      | datasource_name                             | Name of the data source                     |
|                                 | dataserver_id                               | ID of the data server                       |
|                                 | sharepoint_server                           | SharePoint server host name                 |
|                                 | sharepoint_port                             | SharePoint server port                      |
|                                 | sharepoint_username                         | SharePoint server user name                 |
|                                 | sharepoint_password                         | SharePoint server password                  |
|                                 | sharepoint_use_ssl                          | SharePoint server use SSL flag              |
|                                 | sharepoint_active_directory_server          | SharePoint server active directory server   |
|                                 | sharepoint_site_url                         | SharePoint server site URL                  |
|                                 | scoping_information_initial_directory       | SharePoint server initial directory         |
|                                 | scoping_information_include_directories     | SharePoint server include directories       |
|                                 | index_options_container_metadata            | Include metadata for contained objects      |
|                                 | index_options_full_text_content             | Include content tagging and full-text index |

Table 29. IBM StoredIQ Connector operations (continued)

| Connector operation        | Parameter                               | Description                                 |
|----------------------------|---|---|
| createDatasourceLivelihood | datasource_name                         | Name of the data source                     |
|                            | dataserver_id                           | ID of the data server                       |
|                            | livelihood_server                       | Livelihood server IP or host name           |
|                            | livelihood_port                         | Livelihood server port                      |
|                            | livelihood_username                     | Livelihood server user name                 |
|                            | livelihood_password                     | Livelihood server password                  |
|                            | livelihood_database                     | Livelihood server database                  |
|                            | livelihood_search_slice                 | Livelihood server search slice              |
|                            | scoping_information_initial_directory   | Livelihood server initial directory         |
|                            | scoping_information_include_directories | Livelihood server include directories       |
|                            | index_options_container_metadata        | Include metadata for contained objects      |
|                            | index_options_full_text_content         | Include content tagging and full-text index |
| createDatasourceFileNet    | datasource_name                         | Name of the data source                     |
|                            | dataserver_id                           | ID of the data server                       |
|                            | fileNet_server                          | FileNet server IP or host name              |
|                            | fileNet_port                            | FileNet server port                         |
|                            | fileNet_username                        | FileNet server user name                    |
|                            | fileNet_password                        | FileNet server password                     |
|                            | fileNet_connectionType                  | FileNet connection type                     |
|                            | fileNet_path                            | FileNet server path                         |
|                            | fileNet_stanza                          | FileNet server stanza                       |
|                            | fileNet_object_store                    | FileNet server object store                 |
|                            | fileNet_wheresql                        | FileNet sql where clause                    |
|                            | fileNet_domain                          | FileNet server domain                       |
|                            | fileNet_create_document                 | FileNet server create document flag         |
|                            | scoping_information_initial_directory   | FileNet server initial directory            |
|                            | scoping_information_include_directories | FileNet server include directories          |
|                            | index_options_container_metadata        | Include metadata for contained objects      |
|                            | index_options_full_text_content         | Include content tagging and full-text index |

Table 29. IBM StoredIQ Connector operations (continued)

| Connector operation       | Parameter                        | Description  |
|---------------------------|----------------------------------|--|
| createDatasourceNewsgator | datasource_name                  | Name of the data source  |
|                           | dataserver_id                    | ID of the data server  |
|                           | newsgator_server                 | NewsGator server host name   |
|                           | newsgator_username               | NewsGator server user name   |
|                           | newsgator_password               | NewsGator server password  |
|                           | newsgator_use_ssl                | Boolean value to indicate ssl or not                                     |
|                           | index_options_container_metadata | Include metadata for contained objects                                   |
|                           | index_options_full_text_content  | Include content tagging and full-text index                              |
| harvestDatasource         | harvest_name                     | Name of harvest  |
|                           | datasource_id                    | ID of the data source  |
|                           | harvest_type                     | Type of harvest  |
|                           | load_type                        | Type of load   |
|                           | schedule                         | Harvest schedule   |
|                           | waitForCompletion                | Boolean value to indicate sync or async                                  |
| generateReport            | report_name                      | Name of the report   |
|                           | user_infocet_id                  | ID of the user infocet   |
|                           | action_id                        | ID of the report   |
|                           | terms                            | List of terms that are separated by commas for Term Hit Report only      |
|                           | filter_ids                       | List of filter IDs that are separated by commas for Term Hit Report only |
|                           | execution_id                     | ID of execution for Audit Summary Report only                            |
|                           | notify                           | Notification email   |
|                           | waitForCompletion                | Boolean value to indicate sync or async                                  |
| executeAction             | execution_name                   | Name of the action   |
|                           | user_infocet_id                  | ID of the user infocet   |
|                           | action_id                        | ID of the action   |
|                           | waitForCompletion                | Boolean value to indicate sync or async                                  |
| cancelExecution           | id                               | ID of execution  |



Table 29. IBM StoredIQ Connector operations (continued)

| Connector operation       | Parameter                             | Description   |
|---------------------------|---------------------------------------|---|
| createActionCopyPlain     | action_name                           | Name of the action                                      |
|                           | description                           | Description of the action                               |
|                           | targetset_id                          | Target set ID   |
|                           | destination_path                      | Destination path  |
|                           | copy_sharepoint_userprofile_notes     | Boolean value to copy SharePoint user profile notes     |
|                           | copy_sharepoint_userprofile_libraries | Boolean value to copy SharePoint user profile libraries |
|                           | copy_sharepoint_userprofile_posts     | Boolean value to copy SharePoint user profile posts     |
|                           | copy_sharepoint_userprofile_wikis     | Boolean value to copy SharePoint user profile wikis     |
|                           | copy_sharepoint_userprofile_misc      | Boolean value to copy SharePoint user profile misc      |
|                           | compute_hash_value                    | Boolean value to compute the harsh value                |
|                           | recreate_directory_structure          | Boolean value to re-create directory structure          |
|                           | no_auto_harvest                       | Boolean value to indicate that there is no auto harvest |
| createActionCopyRetention | action_name                           | Name of the action                                      |
|                           | description                           | Description of the action                               |
|                           | targetset_id                          | Target set ID   |
|                           | retention_type                        | Type of retention                                       |
|                           | retention_value                       | Retention value   |
|                           | retention_tag                         | Tag of retention  |
|                           | compute_hash_value                    | Boolean value to compute hash value                     |
|                           | no_auto_harvest                       | Boolean value to indicate that there is no auto harvest |

Table 29. IBM StoredIQ Connector operations (continued)

| Connector operation               | Parameter                             | Description   |
|-----------------------------------|---------------------------------------|---|
| createActionDiscoveryExportEdrxml | action_name                           | Name of the action                                      |
|                                   | description                           | Description of the action                               |
|                                   | targetset_id                          | Target set ID   |
|                                   | destination_path                      | Destination path  |
|                                   | data_object_limit                     | Data object limit                                       |
|                                   | copy_sharepoint_userprofile_notes     | Boolean value to copy SharePoint user profile notes     |
|                                   | copy_sharepoint_userprofile_libraries | Boolean value to copy SharePoint user profile libraries |
|                                   | copy_sharepoint_userprofile_posts     | Boolean value to copy SharePoint user profile posts     |
|                                   | copy_sharepoint_userprofile_wikis     | Boolean value to copy SharePoint user profile wikis     |
|                                   | copy_sharepoint_userprofile_misc      | Boolean value to copy SharePoint user profile misc      |
|                                   | unique_document_id_prefix             | Unique document ID prefix                               |
|                                   | unique_document_id_digits             | Unique document ID digits                               |
|                                   | unique_document_id_pad_digits         | Boolean value to unique document ID pad digits          |
|                                   | save_text_copy                        | Boolean value to save the text copy                     |
| email_item_disposition            | Email item disposition                |   |
| createActionDiscoveryExportDat    | action_name                           | Name of the action                                      |
|                                   | description                           | Description of the action                               |
|                                   | targetset_id                          | Target set ID   |
|                                   | destination_path                      | Destination path  |
|                                   | data_object_limit                     | Data object limit                                       |
|                                   | copy_sharepoint_userprofile_notes     | Boolean value to copy SharePoint user profile notes     |
|                                   | copy_sharepoint_userprofile_libraries | Boolean value to copy SharePoint user profile libraries |
|                                   | copy_sharepoint_userprofile_posts     | Boolean value to copy SharePoint user profile posts     |
|                                   | copy_sharepoint_userprofile_wikis     | Boolean value to copy SharePoint user profile wikis     |
|                                   | copy_sharepoint_userprofile_misc      | Boolean value to copy SharePoint user profile misc      |
|                                   | unique_document_id_prefix             | Unique document ID prefix                               |
|                                   | unique_document_id_digits             | Unique document ID digits                               |
|                                   | unique_document_id_pad_digits         | Boolean value to unique document ID pad digits          |
|                                   | email_item_disposition                | Email item disposition                                  |

Table 29. IBM StoredIQ Connector operations (continued)

| Connector operation                 | Parameter                             | Description   |
|-------------------------------------|---------------------------------------|---|
| createActionDiscoveryExportDatLight | action_name                           | Name of the action                                      |
|                                     | description                           | Description of the action                               |
|                                     | targetset_id                          | Target set ID   |
|                                     | destination_path                      | Destination path  |
|                                     | data_object_limit                     | Data object limit                                       |
|                                     | copy_sharepoint_userprofile_notes     | Boolean value to copy SharePoint user profile notes     |
|                                     | copy_sharepoint_userprofile_libraries | Boolean value to copy SharePoint user profile libraries |
|                                     | copy_sharepoint_userprofile_posts     | Boolean value to copy SharePoint user profile posts     |
|                                     | copy_sharepoint_userprofile_wikis     | Boolean value to copy SharePoint user profile wikis     |
|                                     | copy_sharepoint_userprofile_misc      | Boolean value to copy SharePoint user profile misc      |
|                                     | unique_document_id_prefix             | Unique document ID prefix                               |
|                                     | unique_document_id_digits             | Unique document ID digits                               |
|                                     | email_item_disposition                | Email item disposition                                  |
| createActionWatsonCuration          | action_name                           | Name of the action                                      |
|                                     | description                           | Description of the action                               |
|                                     | targetset_id                          | Target set ID   |
|                                     | destination_path                      | Destination path  |
|                                     | collection_id                         | Collection ID   |
|                                     | copy_sharepoint_userprofile_notes     | Boolean value to copy SharePoint user profile notes     |
|                                     | copy_sharepoint_userprofile_libraries | Boolean value to copy SharePoint user profile libraries |
|                                     | copy_sharepoint_userprofile_posts     | Boolean value to copy SharePoint user profile posts     |
|                                     | copy_sharepoint_userprofile_wikis     | Boolean value to copy SharePoint user profile wikis     |
|                                     | copy_sharepoint_userprofile_misc      | Boolean value to copy SharePoint user profile misc      |
|                                     | compute_hash_value                    | Boolean value to compute hash value                     |
|                                     | recreate_directory_structure          | Boolean value to recreate directory structure           |
|                                     | no_auto_harvest                       | Boolean value to indicate that there is no auto harvest |
| createActionExportExceptions        | action_name                           | Name of the action                                      |
|                                     | description                           | Description of the action                               |
|                                     | export_format                         | Export format   |

Table 29. IBM StoredIQ Connector operations (continued)

| Connector operation         | Parameter                    | Description  |
|-----------------------------|------------------------------|--|
| createActionModifyAttribute | action_name                  | Name of the action                                     |
|                             | description                  | Description of the action                              |
|                             | attribute                    | Modification type                                      |
| createActionMovePlain       | action_name                  | Name of the action                                     |
|                             | description                  | Description of the action                              |
|                             | targetset_id                 | ID of the target set                                   |
|                             | destination_path             | Destination path                                       |
|                             | recreate_directory_structure | Boolean value to re-create a directory structure       |
| createActionMoveRetention   | action_name                  | Name of the action                                     |
|                             | description                  | Description of the action                              |
|                             | targetset_id                 | ID of the target set                                   |
|                             | retention_type               | Type of the retention                                  |
|                             | retention_value              | Retention value  |
| createActionDeleteNodes     | action_name                  | Name of the action                                     |
|                             | description                  | Description of the action                              |
|                             | ignore_accessed_objects      | Boolean to ignore accessed objects                     |
| search                      | resourceType                 | Type of the resource                                   |
|                             | id                           | ID of the resource                                     |
|                             | nameOptions                  | Name search options                                    |
|                             | resource_name                | Name of the resource                                   |
|                             | status                       | Status of the resource                                 |
|                             | max                          | Maximum number of the result to be returned            |
|                             | delete                       | Flag to indicate whether the resource is to be deleted |

---

## Notices

This information was developed for products and services offered in the U.S.A. This material may be available from IBM in other languages. However, you may be required to own a copy of the product or product version in that language in order to access it.

IBM may not offer the products, services, or features discussed in this document in other countries. Consult your local IBM representative for information on the products and services currently available in your area. Any reference to an IBM product, program, or service is not intended to state or imply that only that IBM product, program, or service may be used. Any functionally equivalent product, program, or service that does not infringe any IBM intellectual property right may be used instead. However, it is the user's responsibility to evaluate and verify the operation of any non-IBM product, program, or service.

IBM may have patents or pending patent applications covering subject matter described in this document. The furnishing of this document does not grant you any license to these patents. You can send license inquiries, in writing, to:

IBM Director of Licensing  
IBM Corporation  
North Castle Drive  
Armonk, NY 10504-1785  
U.S.A.

For license inquiries regarding double-byte (DBCS) information, contact the IBM Intellectual Property Department in your country or send inquiries, in writing, to:

Intellectual Property Licensing  
Legal and Intellectual Property Law  
IBM Japan Ltd.  
19-21, Nihonbashi-Hakozakicho, Chuo-ku  
Tokyo 103-8510, Japan

**The following paragraph does not apply to the United Kingdom or any other country where such provisions are inconsistent with local law:**

INTERNATIONAL BUSINESS MACHINES CORPORATION PROVIDES THIS PUBLICATION "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF NON-INFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Some states do not allow disclaimer of express or implied warranties in certain transactions, therefore, this statement may not apply to you.

This information could include technical inaccuracies or typographical errors. Changes are periodically made to the information herein; these changes will be incorporated in new editions of the publication. IBM may make improvements and/or changes in the product(s) and/or the program(s) described in this publication at any time without notice.

Any references in this information to non-IBM Web sites are provided for convenience only and do not in any manner serve as an endorsement of those Web

sites. The materials at those Web sites are not part of the materials for this IBM product and use of those Web sites is at your own risk.

IBM may use or distribute any of the information you supply in any way it believes appropriate without incurring any obligation to you.

Licensees of this program who wish to have information about it for the purpose of enabling: (i) the exchange of information between independently created programs and other programs (including this one) and (ii) the mutual use of the information which has been exchanged, should contact:

IBM Corporation  
J46A/G4  
555 Bailey Avenue  
San Jose, CA 95141-1003  
U.S.A.

Such information may be available, subject to appropriate terms and conditions, including in some cases, payment of a fee.

The licensed program described in this document and all licensed material available for it are provided by IBM under terms of the IBM Customer Agreement, IBM International Program License Agreement or any equivalent agreement between us.

Any performance data contained herein was determined in a controlled environment. Therefore, the results obtained in other operating environments may vary significantly. Some measurements may have been made on development-level systems and there is no guarantee that these measurements will be the same on generally available systems. Furthermore, some measurements may have been estimated through extrapolation. Actual results may vary. Users of this document should verify the applicable data for their specific environment.

Information concerning non-IBM products was obtained from the suppliers of those products, their published announcements or other publicly available sources. IBM has not tested those products and cannot confirm the accuracy of performance, compatibility or any other claims related to non-IBM products. Questions on the capabilities of non-IBM products should be addressed to the suppliers of those products.

All statements regarding IBM's future direction or intent are subject to change or withdrawal without notice, and represent goals and objectives only.

This information contains examples of data and reports used in daily business operations. To illustrate them as completely as possible, the examples include the names of individuals, companies, brands, and products. All of these names are fictitious and any similarity to the names and addresses used by an actual business enterprise is entirely coincidental.

#### COPYRIGHT LICENSE:

This information contains sample application programs in source language, which illustrate programming techniques on various operating platforms. You may copy, modify, and distribute these sample programs in any form without payment to IBM, for the purposes of developing, using, marketing or distributing application programs conforming to the application programming interface for the operating

platform for which the sample programs are written. These examples have not been thoroughly tested under all conditions. IBM, therefore, cannot guarantee or imply reliability, serviceability, or function of these programs. The sample programs are provided "AS IS", without warranty of any kind. IBM shall not be liable for any damages arising out of your use of the sample programs.

Each copy or any portion of these sample programs or any derivative work, must include a copyright notice as follows: © (your company name) (year). Portions of this code are derived from IBM Corp. Sample Programs. © Copyright IBM Corp. 2004, 2010. All rights reserved.

If you are viewing this information softcopy, the photographs and color illustrations may not appear.

---

## Privacy policy considerations

IBM Software products, including software as a service solutions, ("Software Offerings") may use cookies or other technologies to collect product usage information, to help improve the end user experience, to tailor interactions with the end user or for other purposes. In many cases no personally identifiable information is collected by the Software Offerings. Some of our Software Offerings can help enable you to collect personally identifiable information. If this Software Offering uses cookies to collect personally identifiable information, specific information about this offering's use of cookies is set forth below.

[Depending upon the configurations deployed, this Software Offering may use [session] [and] [persistent] cookies that collect each user's [name,] [user name,] [password,] [profile name,] [position,] or [other personally identifiable information] for purposes of [session management,] [authentication,] [enhanced user usability,] [single sign-on configuration] [or other usage tracking or functional purposes.] These cookies [cannot be disabled] [can be disabled, but disabling them will also [likely] eliminate the functionality they enable].

If the configurations deployed for this Software Offering provide you as customer the ability to collect personally identifiable information from end users via cookies and other technologies, you should seek your own legal advice about any laws applicable to such data collection, including any requirements for notice and consent.

For more information about the use of various technologies, including cookies, for these purposes, See IBM's Privacy Policy at <http://www.ibm.com/privacy> and IBM's Online Privacy Statement at <http://www.ibm.com/privacy/details> the section entitled "Cookies, Web Beacons and Other Technologies" and the "IBM Software Products and Software-as-a-Service Privacy Statement" at <http://www.ibm.com/software/info/product-privacy>.

---

## Terms and conditions for product documentation

Permissions for the use of these publications are granted subject to the following terms and conditions.

### Applicability

These terms and conditions are in addition to any terms of use for the IBM website.

### **Personal use**

You may reproduce these publications for your personal, noncommercial use provided that all proprietary notices are preserved. You may not distribute, display or make derivative work of these publications, or any portion thereof, without the express consent of IBM.

### **Commercial use**

You may reproduce, distribute and display these publications solely within your enterprise provided that all proprietary notices are preserved. You may not make derivative works of these publications, or reproduce, distribute or display these publications or any portion thereof outside your enterprise, without the express consent of IBM.

### **Rights**

Except as expressly granted in this permission, no other permissions, licenses or rights are granted, either express or implied, to the publications or any information, data, software or other intellectual property contained therein.

IBM reserves the right to withdraw the permissions granted herein whenever, in its discretion, the use of the publications is detrimental to its interest or, as determined by IBM, the above instructions are not being properly followed.

You may not download, export or re-export this information except in full compliance with all applicable laws and regulations, including all United States export laws and regulations.

IBM MAKES NO GUARANTEE ABOUT THE CONTENT OF THESE PUBLICATIONS. THE PUBLICATIONS ARE PROVIDED "AS-IS" AND WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING BUT NOT LIMITED TO IMPLIED WARRANTIES OF MERCHANTABILITY, NON-INFRINGEMENT, AND FITNESS FOR A PARTICULAR PURPOSE.

---

## **Trademarks**

IBM, the IBM logo, and [ibm.com](http://www.ibm.com) are trademarks or registered trademarks of International Business Machines Corp., registered in many jurisdictions worldwide. Other product and service names might be trademarks of IBM or other companies. A current list of IBM trademarks is available on the Web at "Copyright and trademark information" at <http://www.ibm.com/legal/copytrade.shtml>

Adobe, the Adobe logo, PostScript, and the PostScript logo are either registered trademarks or trademarks of Adobe Systems Incorporated in the United States, and/or other countries.

Linux is a registered trademark of Linus Torvalds in the United States, other countries, or both.

Microsoft, Windows, Windows NT, and the Windows logo are trademarks of Microsoft Corporation in the United States, other countries, or both.

Java™ and all Java-based trademarks and logos are trademarks or registered trademarks of Oracle and/or its affiliates.



UNIX is a registered trademark of The Open Group in the United States and other countries.

Other company, product, and service names may be trademarks or service marks of others.



---

# Index

## A

- action 1
- action types
  - copy 38
  - copy to retention 38
  - delete 38
  - discovery export DAT 38
  - discovery export DAT Light 38
  - discovery export EDRM XML 38
  - modify attribute 38
  - move 38
  - step-up full-text 38
  - step-up snippet 38
- actions 37
  - cloning 42
  - create 38
  - deleting 42
  - edit 43
  - searching for a specific action 38
  - types 37
- active user status 29
- Add User - Details dialog box 30
- All Data Servers tab 3
- All Volumes tab 3
- Anypoint Studio 65
- associate a Mule project 71
- attributes 17
- auto-classification
  - use 52
- auto-classification feature 52
- auto-classification model 51, 53
  - building 53
  - classification model
    - details 55
    - create 54
    - import 54
    - select 55
- automated document categorization 51
- automation flow 61

## B

- Box 5
  - CSV mapping file 16
  - volume configuration 15

## C

- CIFS 5
- classification export utility 52, 53
  - download 53
- classification model 52
  - search 56
- classification models 57
- CMIS 5
- Compliance Report 49
- concept 59, 60
  - concept members 59
  - Identity 59
  - search 60

- Concordance DAT 37
- Concordance DAT Light 37
- connector 71
- copy action 37, 38
- copy to retention action 37, 38
- CSV Exception List Export 49
- CSV InfoSet Data Object Export 49

## D

- Data Assessment Report 49
- Data Dashboard 3
- data server 5, 20
  - configuration guidelines 53
  - rebooting 21
  - restarting 22
  - searching for specific data server 5
  - sizing guidelines 53
  - viewing details of 20, 21, 22
- data servers
  - managing 3
- Data Topology Report 49
- delete action 37, 38
- deploy Mule script 69
- disabled user 32
- discovery export DAT 38
- discovery export DAT action 37
- discovery export EDRM XML action 37, 38
- discovery export volume
  - adding 20
- domain project 71
- Duplication Summary Report 49

## E

- exceptions 1
- Exchange 5

## F

- feedback
  - providing 57
- FileNet 5
- full harvest 23

## H

- harvest 23
- harvests 23, 24
  - delete 24
  - edit 24
  - searching for a specific harvest 23

## I

- IBM Content Classification 51
- IBM Content Classification model 52
  - prepare for import 54

- IBM Content Manager 5, 17
- IBM StoredIQ Connectors 67
- IBM StoredIQ Mule script 65, 67
- import 71
- import a domain project 71
- imported user
  - edit 32
- inactive user status 29
- incremental harvest 23
- infoset
  - private 25
  - public 25
  - system 25
- infosets 25

## L

- LDAP 30
- LDAP server 30
  - synchronizing 31
- LDAP users 32
- legal
  - notices 83
  - trademarks 86
- List of Harvests page 23
- Livelink 5

## M

- member
  - add to a concept 59
  - delete 60
  - edit 60
- model
  - delete 57
  - edit 56
  - retrain 57
- model accuracy 57
- modify attribute action 38
- move action 37, 38
- Mule Anypoint Studio 65
- Mule domain project 71
- Mule script 67, 69
  - creating 61
  - searching for a specific script 62
  - timeout 70
  - viewing details of 62
- Mule script restrictions 67
- Mule scripts 61
  - delete 62
- Mule StoredIQ Connector 65

## N

- NewsGator 5
- NFS 5
- notices
  - legal 83

## O

Overlay Hit Report 49

## P

password 34  
  change 34  
  obtain a new password 35  
  reset 34  
primary volume 5

## R

report  
  create 50  
  search 49  
reports 49  
retention volume 19  
  adding 19  
roles  
  user 29

## S

SharePoint 5  
SisDocument 17  
SSL certificate  
  application stack 63  
  importing 63  
status  
  modifying 33  
step-up full-text action 37  
step-up snippet action 37  
stopping a harvest 24  
StoredIQ Connector 67, 73  
StoredIQ Connector operation 73  
StoredIQ Connector operations 67  
System Activity 3  
system infoset  
  view infoset access 27  
system infosets 25  
  create 26  
  delete 27  
  edit 26  
  searching for a specific system  
  infoset 25  
System Status 3

## T

target set  
  cloning 46  
  creating 46  
  deleting 47  
  search 45  
target sets 45  
trademarks 86

## U

user 29, 33  
  create 30  
  delete 34  
  edit 32

user (*continued*)  
  import 32  
  searching for a specific user 30  
  viewing details of a user 33  
user password 34  
user profile 29  
  view 29  
user roles 29  
user status 29

## V

volume 5, 20, 21, 23  
  adding a primary 5  
  discovery export 20  
  removing 22  
  retention 19  
  viewing details of 21  
volumes  
  managing 3

## W

Watson Curation 37, 38





Printed in USA

SC27-5688-07

