



Configuration Guide

Version 6.1

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1. Provide a Superior Customer Experience
 - offer the best product quality and support
2. Make Cool Practical Technology
 - develop great products that customers love

Ross has become well known for the Ross Video Code of Ethics. It guides our interactions and empowers our employees. I hope you enjoy reading it below.

If anything at all with your Ross experience does not live up to your expectations be sure to reach out to us at solutions@rossvideo.com.



David Ross
CEO, Ross Video
dross@rossvideo.com

Ross Video Code of Ethics

Any company is the sum total of the people that make things happen. At Ross, our employees are a special group. Our employees truly care about doing a great job and delivering a high quality customer experience every day. This code of ethics hangs on the wall of all Ross Video locations to guide our behavior:

1. We will always act in our customers' best interest.
2. We will do our best to understand our customers' requirements.
3. We will not ship crap.
4. We will be great to work with.
5. We will do something extra for our customers, as an apology, when something big goes wrong and it's our fault.
6. We will keep our promises.
7. We will treat the competition with respect.
8. We will cooperate with and help other friendly companies.
9. We will go above and beyond in times of crisis. *If there's no one to authorize the required action in times of company or customer crisis - do what you know in your heart is right. (You may rent helicopters if necessary.)*

Streamline · Configuration Guide

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Patents

Patent numbers 4,205,346; 5,115,314; 5,280,346; 5,561,404; 7,034,886; 7,508,455; 7,602,446; 7,834,886; 7,914,332; 8307284, 2039277; 1237518; 1127289 and other patents pending.

Warranty and Repair Policy

Ross Video Limited (Ross) warrants its Streamline Server systems to be free from defects under normal use and service a time period of 15 months from the date of shipment:

If an item becomes defective within the warranty period Ross will repair or replace the defective item, as determined solely by Ross.

Warranty repairs will be conducted at Ross, with all shipping FOB Ross dock. If repairs are conducted at the customer site, reasonable out-of-pocket charges will apply. At the discretion of Ross, and on a temporary loan basis, plug in circuit boards or other replacement parts may be supplied free of charge while defective items undergo repair. Return packing, shipping, and special handling costs are the responsibility of the customer.

This warranty is void if products are subjected to misuse, neglect, accident, improper installation or application, or unauthorized modification.

In no event shall Ross Video Limited be liable for direct, indirect, special, incidental, or consequential damages (including loss of profit). Implied warranties, including that of merchantability and fitness for a particular purpose, are expressly limited to the duration of this warranty.

This warranty is TRANSFERABLE to subsequent owners, subject to Ross' notification of change of ownership.

Extended Warranty

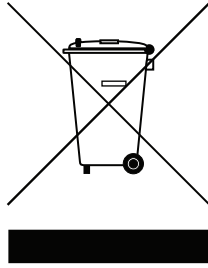
For customers that require a longer warranty period, Ross offers an extended warranty plan to extend the standard warranty period by one year increments. For more information about an extended warranty for your Streamline Server system, contact your regional sales manager.

Environmental Information

The equipment that you purchased required the extraction and use of natural resources for its production. It may contain hazardous substances that could impact health and the environment.

To avoid the potential release of those substances into the environment and to diminish the need for the extraction of natural resources, Ross Video encourages you to use the appropriate take-back systems. These systems will reuse or recycle most of the materials from your end-of-life equipment in an environmentally friendly and health conscious manner.

The crossed-out wheeled bin symbol invites you to use these systems.



If you need more information on the collection, reuse, and recycling systems, please contact your local or regional waste administration.

You can also contact Ross Video for more information on the environmental performances of our products.

Use of Hazardous Substances in Electrical and Electronic Products (China RoHS)

Ross Video Limited has reviewed all components and processes for compliance to:

“Management Methods for the Restriction of the Use of Hazardous Substances in Electrical and Electronic Products” also known as China RoHS.

The “Environmentally Friendly Use Period” (EFUP) and Hazardous Substance Tables have been established for all products. We are currently updating all of our Product Manuals.

The Hazardous substances tables are available on our website at:

<http://www.rossvideo.com/about-ross/company-profile/green-practices/china-rohs.html>

电器电子产品中有害物质的使用

Ross Video Limited 按照以下的标准对所有组件和流程进行了审查：

“电器电子产品有害物质限制使用管理办法” 也被称为中国RoHS。

所有产品都具有“环保使用期限”（EFUP）和有害物质表。目前，我们正在更新我们所有的产品手册。

有害物质表在我们的网站：

<http://www.rossvideo.com/about-ross/company-profile/green-practices/china-rohs.html>

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Introduction

A Word of Thanks

Thank you for choosing Ross Video Streamline as your media asset management solution.

We are committed to providing you with the highest level of customer satisfaction possible. If, for any reason, you have questions or comments, please call Ross Video at +1-613-652-4886 or send us an e-mail at techsupport@rossvideo.com.

We hope that you visit our website www.rossvideo.com to stay up to date with ongoing software releases, join our customer forum and learn more about the complete range of Ross Video products.

Note that software maintenance and extended warranties are available for your system to protect and extend the life of your investment. Our sales team is more than happy to provide further information on the plans available. Members of our sales team will promptly response to e-mails sent to: solutions@rossvideo.com.

Again, thank you for your purchase of a Streamline media asset management solution from Ross Video. We are confident of your future pleasure with your choice.

Yours Sincerely,

A handwritten signature in black ink that reads "Chris Kelly". The script is fluid and cursive, with the first letters of "Chris" and "Kelly" being capitalized and prominent.

Christopher Kelly
Marketing Product Manager – Asset Management & Storage
ckelly@rossvideo.com

About This Guide

This guide contains the following chapters that cover configuration of Streamline:

1. **Introduction** — summarizes the guide and provides important terms, conventions, and features.
2. **Monitoring the System** — provides instructions on how to monitor the health of your Streamline Server.
3. **User Preferences** — provides instructions on how to set the default UI language, time zone, time format, editor panel font size, and panel grid font size for all the Streamline users on a Streamline Server.
4. **Configuring System Properties** — provides instructions on how to configure a Streamline system.
5. **Managing Streamline Apps** — provides instructions on how to install and manage Streamline apps to offer new features, extended functionality, or customization to the users of your Streamline Server.
6. **Configuring User Permissions** — provides instructions on how to set role-base user permissions for Streamline users.
7. **Configuring LDAP Authentication** — provides instructions on how to use LDAP to create Streamline user accounts and roles.
8. **Managing Perspectives** — provides instructions on how to customize the layout of the Streamline user interface.
9. **Configuring MOS Connections** — provides instructions on how to configure the MOS protocol connection between Streamline and XPression).
10. **Configuring Custom Metadata** — provides instructions on how to define custom entities and attributes, and to manage existing attributes and define custom attributes.
11. **Managing Streamline Forms** — provides instructions on how to include and exclude attributes from a form, set attributes as requiring a value, and display attribute content as read-only.
12. **Configuring Metadata Elements** — provides instructions on how to specify the choices available in the metadata lists displayed in the Streamline panels.
13. **Selecting the Metadata to Upload** — provides instructions on how to create and manage mapping profiles that select the asset attributes in which to save media file metadata properties.
14. **Configuring Work Orders** — provides instructions on how to configure the e-mail addresses used to send and receive work order notifications.
15. **Configuring Asset Properties** — provides instructions on how to configure the storage location, targets, and transcoders for the assets in your Streamline system.
16. **Configuring Accounts** — provides instructions on how to create and modify the accounts Streamline uses to purchase content.
17. **Configuring Feeds** — provides instructions on how to create and modify the feeds Streamline uses to select content to purchase from media services.
18. **Selecting Feed Metadata to Ingest** — provides instructions on how to use mapping profiles to select the asset attributes in which to save feed content metadata property values.
19. **Streamline.cloud** — provides instructions on how to install and configure a Streamline.cloud service.
20. **Appendix A: Mapping Profiles** — describes media file metadata properties to Streamline properties mappings contained the mapping profiles included with a Streamline Server.

If you have questions pertaining to the operation of the Ross Video product, please contact us at the numbers listed in the section “**Contacting Technical Support**”. Our technical staff is always available for consultation, training, or service.

Documentation Conventions

This guide uses special text formats to identify parts of the user interface, text that a user must enter, or a sequence of menus and sub-menus that a user must follow to reach a particular command.

Interface Elements

Bold text identifies a user interface element such as a dialog box, a menu item, or a button. For example:

In the **Asset Browser** panel, click **Saved Searches**.

User Entered Text

Courier text identifies text that a user must enter. For example:

In the **Language** box, enter **English**.

Referenced Guides

Italic text identifies the titles of referenced guides, manuals, or documents. For example:

For more information, refer to the section “**Running a Report**” on page 3–6 in the *Streamline User Guide*.

Menu Sequences

Menu arrows identify a sequence of menu items that a user must follow to reach a particular command. For example: if a procedure step contains “**Database > Driver**,” a user should click the **Database** menu and then click **Driver**.

Important Instructions

Star icons identify important instructions or features. For example:

- ★ You must obtain Streamline feature licenses from Ross Video Technical Support before users can access some Streamline features.

Getting Help

To access the Streamline Online Help system, click the **Help** icon in the main toolbar. For help about the currently open panel, click the **Help** button in a panel title bar to view a help topic about the panel.

The Online Help system contains the following navigation tabs to locate and access Online Help topics:

- **Contents** — table of contents
- **Search** — full text search
- **Favorites** — preferred information storage and access

Ross Video also supplies print-ready PDF files of the *Streamline Installation Guide*, *Streamline Configuration Guide*, and the *Streamline User Guides* on the Streamline Software Installation DVD.

Contacting Technical Support

Technical Support is staffed by a team of experienced specialists ready to assist you with any question or technical issue.

Ross Video has technical support specialists strategically located around the globe to ensure a prompt response to technical inquiries. Our primary technical support center is located in Ottawa, Ontario, Canada. In addition, we have offices in The United Kingdom (London), Australia (Sydney), and Singapore with satellite locations in New York City, The Netherlands, and China. As we expand our presence globally, we are constantly evaluating other key locations to have a local technical support specialist in order to better service our customers.

North America

Our North America center located in Ottawa, Ontario, Canada and is open Monday to Friday 8:30 a.m. to 6:00 p.m. EST, with 24/7/365 on-call service after hours.

Our telephone number is: +1-613-686-1557

Toll free within North America: +1 844-652-0645

EMEA

Our EMEA center is open Monday to Friday 8:30 a.m. to 5:00 p.m. GMT. After hours support is provided by our North America location.

Our telephone number is: +44 (0)1189502446

International toll free: +800 3540 3545

If the local support specialist is not available, your call will be transferred automatically to our North America center.

Australia

Our Sydney, Australia office is located in Alexandria, NSW.

Our local support telephone number is: 1300 007 677

If the local support specialist is not available, your call will be transferred automatically to our North America center.

Online

E-mail: techsupport@rossvideo.com

Website: open a support request using the link <http://www.rossvideo.com/support/tech-support.html> to open a support request.

Monitoring the System

Streamline Server monitors enable you to quickly view the health of your Streamline Server system. If your Streamline Server falters, you can use system monitors to help diagnose the cause of the system fault. Along with monitoring the health of your Streamline Server, you can also monitor and control the users connected to your Streamline Server.

This chapter discusses the following topics:

- Monitor System Health
- File Storage Mirror Failure Notification and Resynchronization
- User Defined System Monitors
- View and Manage User Sessions
- Manage the Streamline SNMP Agent

Monitor System Health

As a Streamline administrator, you can monitor the health of your Streamline Server through the Configuration window of Streamline.

Streamline Server Configuration Window

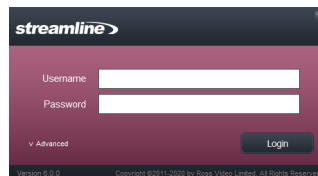
The Streamline Server Configuration window is only accessible from a desktop computer, you cannot access the Configuration window from a mobile device.

To access the Streamline Server Configuration window

1. In a one of the following supported web browsers, navigate to the Streamline web page.

- Microsoft Internet Explorer® version 11 or greater
- Google Chrome™ browser version 51 or greater
- Mozilla Firefox® version 52 or greater
- Apple Safari® version 10.2 or greater

The **Login** panel opens.



2. In the **Login** panel, enter your Streamline administrator login credentials in the **Username** and **Password** boxes.

The default Streamline administrator login credentials are as follows:

- **Username** — root
- **Password** — password

3. Click **Login**.

Streamline opens.

- ★ When Streamline displays a message indicating that the system is in maintenance mode, a Streamline administrator must establish a database connection before you can log in to your Streamline Server.

4. On the main toolbar, click the  **Configuration** icon.

The **Configuration** window opens.

5. For Streamline configuration information, click the  **Help** icon on the **Configuration** window title bar.

System Health

After accessing the Configuration window on your Streamline Server, you can monitor the health of your Streamline Server through the System Monitor tab in the Configuration window.

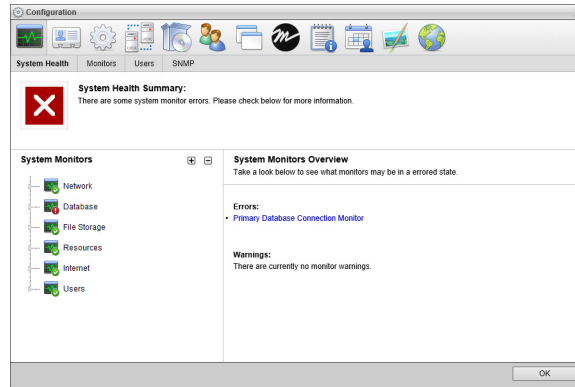
To monitor system health

1. On the **Configuration** window toolbar, click the  **System Monitor** icon.

The **System Monitor** panel opens.

2. Click the **System Health** tab.

The **System Health** tab opens.



The **System Health** Summary field displays a description of the current overall state of the Streamline Server. The monitors in the **System Monitors** tree view report details about the state of the Streamline Server.

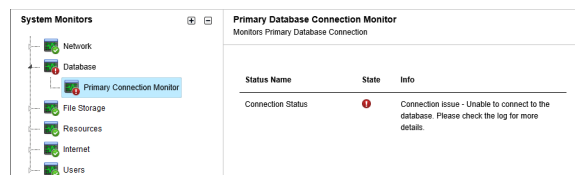
3. Double-click a **node** in the **System Monitors** tree view to expand the node and display the monitors contained in the node.



The icon in the lower right corner of System Monitors tree view nodes indicate the following health levels:

-  — **Healthy**
-  — **Warning**
-  — **Error**

4. Click a monitor in the **System Monitors** tree view to view health details reported by the selected monitor.



File Storage Mirror Failure Notification and Resynchronization

The File Storage Mirror Status Monitor node in the Configuration window System Health tab monitors the communication between a file storage and the file storage configured to mirror ingested content. When a file storage can not mirror ingested content to the configured mirror file storage, Streamline displays a notification in the status bar at the bottom of their Streamline window to notify the Streamline administrator of the mirroring failure.

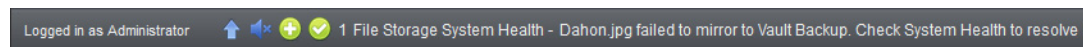


Figure 2.1 Mirror Failure Notification

The File Storage Mirror Status Monitor node and the Tasks panel also report mirroring failures.

For More Information on...

- configuring file storages, refer to the section “**Configure Asset Storage**” on page 16–14.

Mirror Resynchronization

After fixing the cause of a mirroring failure, the Streamline administrator can resynchronize file storage mirroring.

To resynchronize file storage mirroring

1. Fix the problem that caused the mirroring failure.
2. On the **Configuration** window toolbar, click the  **System Monitor** icon.

The **System Monitor** panel opens.

3. Click the **System Health** tab.

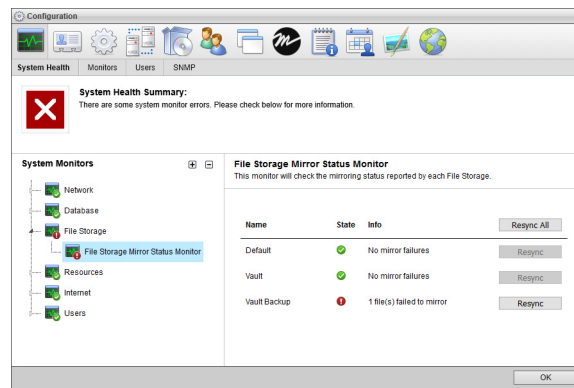
The **System Health** tab opens.

4. Double-click the **File Storage** node in the **System Monitors** tree view.

The **File Storage** node expands to display the **File Storage Mirror Status Monitor** node

5. Click the **File Storage Mirror Status Monitor** node in the expanded **File Storage** node.

The **File Storage Mirror Status Monitor** section displays the status of all the file storages managed by the Streamline Server. Streamline displays the  **Error** icon in the **State** column of the file storages that have failed to mirror ingested media files.



6. Click **Resync** to the right of a failed file storage to restart mirroring for the selected file storage. When the **File Storage Mirror Status Monitor** section displays multiple failed file storages, click **Resync All** to restart mirroring for all the failed file storages.

Streamline restarts mirroring and copies the missing asset essence media files to the mirror file storage.

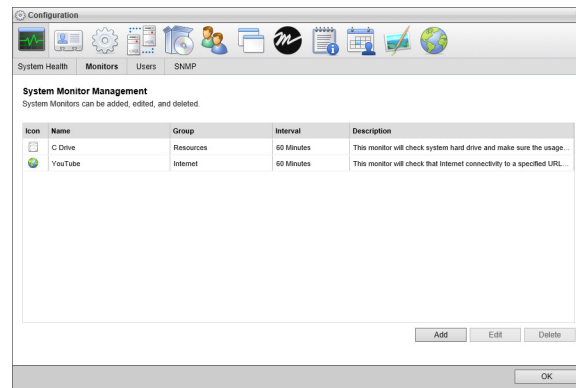
User Defined System Monitors

Streamline enables to add your own monitors to monitor the remaining storage space on a disk or the connectivity between your Streamline Server and a web site. The Monitors tab of the System Monitor panels enables you to add, edit, and delete user defined monitors.

To add a user defined monitor to the System Health tab

1. On the **Configuration** window toolbar, click the  **System Monitor** icon.
The **System Monitor** panel opens.
2. Click the **Monitors** tab.

The **Monitors** tab opens.



3. Click **Add**.

The **Create New System Monitor** page opens.

4. Use the **Monitor** list to select the type of monitor to add. The available monitor types are as follows:
 - **Disk Usage Monitor** — check a selected hard drive to make sure that the available storage does not fall below a set level.
 - **Internet Connectivity Monitor** — check that there is connectivity between the Streamline Server and a selected web site.
5. Click **Next**.

Depending on the type of monitor you are adding, the **Add a Disk Usage Monitor** or **Add an Internet Connectivity Monitor** page opens.

6. Define the selected monitor as follows:

Disk Usage Monitor

- a. In the **Name** box, enter a name for the monitor.
- b. In the **Interval** box, enter the amount of time to wait between checks of available hard disk space.
- c. Use the list to the right of the **Interval** box to select **Minute(s)** or **Second(s)** as the time unit for the time entered in the **Interval** box.
- d. Use the **Drive** list to select the Streamline Server computer hard drive to monitor.
- e. In the **Minimum Free Space** box, enter the minimum amount of disk space that the selected Drive must contain. The monitor reports an **Error** when the available space on a **Drive** drops below the set minimum disk space.
- f. Use the list to the right of the **Minimum Free Space** box to select **Gigabyte(s)** or **Megabyte(s)** as the disk space unit for the amount entered in the **Minimum Free Space** After box.

Internet Connectivity Monitor

- a. In the **Name** box, enter a name for the monitor.
- b. In the **Interval** box, enter the amount of time to wait between connectivity checks for a web site.
- c. Use the list to the right of the **Interval** box to select **Minute(s)** or **Second(s)** as the time unit for the time entered in the **Interval** box.
- d. In the **URL** box, enter the web address (for example: <http://www.rossvideo.com>) of the web site that you want to check connectivity with the Streamline Server.

7. Click **Save**.

Streamline adds the new monitor to the **System Monitor Management** list.

To edit a user defined monitor

1. In the **System Monitor Management** list, select the monitor to edit.
2. Click **Edit**.

Depending on the type of monitor you are editing, the **Edit Disk Usage Monitor** or **Edit Internet Connectivity Monitor** page opens.

3. Edit production monitor settings as required.
4. After completing the required monitor setting edits, click **Save**.

To delete a user defined monitor

1. In the **System Monitor Management** list, select the monitor to delete.
2. Click **Edit**.

A confirmation message opens, asking whether you want to delete the selected monitor. To keep the monitor, click **Cancel**.

3. In the confirmation message, click **OK**.

Streamline deletes the selected monitor from the **System Monitor Management** list and the **System Monitors** tree view on the **System Health** tab.

View and Manage User Sessions

The Users tab of the System Monitor panel enables you to view and manage the user sessions running on your Streamline Server.

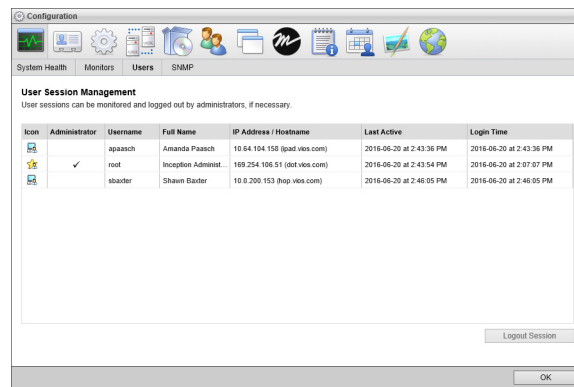
To view the user sessions running on a Streamline Server

1. On the **Configuration** window toolbar, click the  **System Monitor** icon.

The **System Monitor** panel opens.

2. Click the **Users** tab.

The **Users** tab opens.



The **User Session Management** table displays the following information about the users connected to the Streamline Server:

- **Icon** — this column displays an icon that identifies the user associated with the user session.
- **Administrator** — this column displays a check mark for users that are Streamline administrators.
- **Username** — this column displays the Streamline username of the user associated with the user session.
- **Full Name** — this column displays the first and last name of the user associated with the user session.
- **Node** — this column displays the hostname of the Streamline Server to which the user is connected for the user session.
- **IP Address** — this column displays the IP address and hostname of the computer that the user is using for the user session.
- **Last Active** — this column displays the date and time that the user last made a change to Streamline during the user session.
- **Login Time** — this column displays the date and time that the user logged into the Streamline Server to start the user session.
- **User Agent** — this column displays the web browser and operating system that the user is using for the user session.

Logout a User Session

When required, you can logout a user session from your Streamline Server. The user associated with the logged out sessions sees their session close and the Login panel open in their web browser. Streamline saves user changes before logging the user off the Streamline Server.

To logout a user session

1. In the **User Session Management** table, select the user session to logout.
2. Click **Logout Session**.

A confirmation message opens, asking whether you want to logout the selected user session. To keep the session running, click **Cancel**.

3. In the confirmation message, click **OK**.

Streamline logs out the selected user session. The user associated with the logged out sessions sees their session close and the Login panel open in their web browser.

Manage the Streamline SNMP Agent

Ross Video uses two Simple Network Management Protocol (SNMP) agents to monitor the software and hardware of your Streamline Server. SNMP traps enable an agent to send unsolicited SNMP messages to the Network Management Station (NMS) to notify the station of significant events.

The Streamline SNMP agent monitors the Streamline Server and reports significant events to your NMS as SNMP traps. Streamline Server hardware changes and errors are monitored by the Windows SNMP agent running on the Streamline Server computer. The Streamline SNMP agent forwards SNMP traps from the Windows SNMP agent to your NMS (**Figure 2.2**).

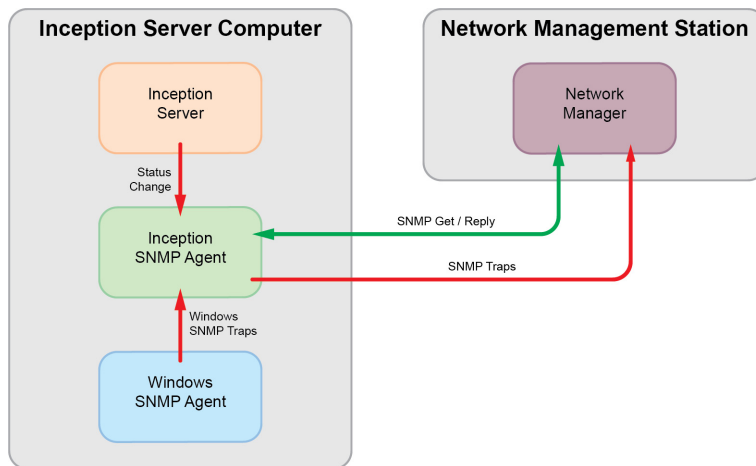


Figure 2.2 SNMP Connections

Configure the Streamline SNMP Agent

The SNMP tab of the System Monitor panel enables you to configure the Streamline SNMP agent to send SNMP trap messages to your NMS.

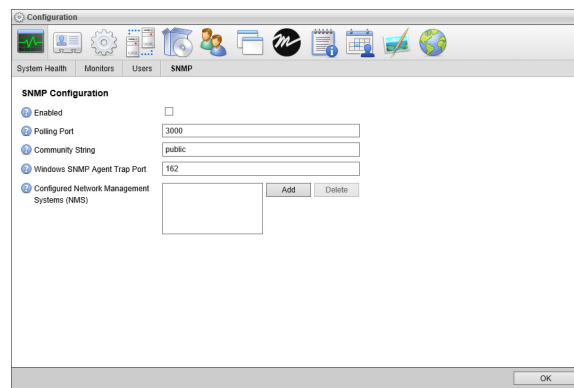
To configure the Streamline SNMP agent

1. On the **Configuration** window toolbar, click the  **System Monitor** icon.

The **System Monitor** panel opens.

2. Click the **SNMP** tab.

The **SNMP** tab opens.



3. Select the **Enabled** check box to send SNMP trap messages from the Streamline SNMP agent to your NMS.
4. In the **Polling Port** box, enter the port number through which the Streamline SNMP agent receives commands from and replies to the NMS.
5. In the **Community String** box, enter the password that allows your NMS to access the Streamline SNMP agent on your Streamline server.
- ★ When you change the **Community String** from `public` to your own password, you must enter your password on the NMS to allow access to your Streamline server.
6. In the **Windows SNMP Agent Trap Port** box, enter the port number that the Windows SNMP agent running on the Streamline Server computer uses to send SNMP trap messages.

The Streamline SNMP agent forwards SNMP trap messages from the Windows SMNP agent to your NMS through the NMS Trap Port.

7. To send SNMP trap message from the Streamline SNMP agent to one or more NMSs, add NMSs as follows:
 - a. Click **Add** to the right of the **Configured Network Management Systems (NMS)** box.
An **Alert** dialog box opens.
 - b. Enter the IP address and port number (<IP Address>:<Port Number>) of an NMS to receive SNMP trap message from the Streamline SNMP agent. For example:

10.0.2.160:3000
 - c. To add an additional NMS, repeat step **a** to step **b**.

Delete an NMS

When you no longer require an NMS, you can delete the NMS configuration.

To delete an NMS

1. In the **Configured Network Management Systems (NMS)** box, select the NMS to delete.
2. Click **Delete** to the right of the **Configured Network Management Systems (NMS)** box.

An **Alert** dialog box opens.

3. Click **OK** to delete the NMS.

Streamline deletes the selected NMS from the **Configured Network Management Systems (NMS)** box.

Configure Your NMS for Streamline

You must load the Ross Video and Streamline Management Information Base (MIB) files into your NMS to enable it to interpret the SNMP trap messages it receives from a Streamline SNMP agent. The Streamline MIB file describes the SNMP trap messages sent by the Streamline SNMP agent.

To load the Ross Video and OverDrive MIB files into your NMS

1. Get the **ROSS-VIDEO.mib** and **RWP-MIB.mib** files from one of the following locations:
 - Copy from the Streamline Server (C:\Program Files\Ross Video\Streamline\utilities\snmp)
 - Download from the Ross Video web site (www.rossvideo.com)
2. Load the **ROSS-VIDEO.mib** file into your NMS.
3. Load the **RWP-MIB.mib** file into your NMS.

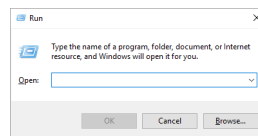
Configure the Windows SNMP Agent

To enable the Streamline SNMP agent to forward hardware SNMP trap messages to your NMS, you need to configure the Windows SNMP agent.

To configure the Windows SNMP agent:

1. From the Windows Desktop, press **Windows Key+R**.

The **Run** dialog box opens.

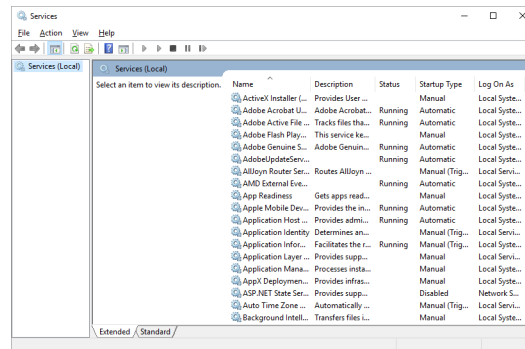


2. In the **Open** box, type the following application name:

```
services.msc
```

3. Click **OK**.

The **Services** window opens.

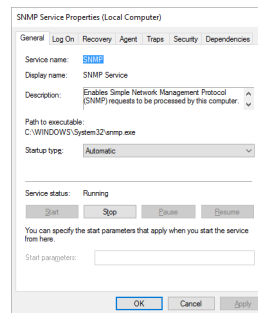


4. In the **Services** list, locate the **SNMP Service** service.

★ If you cannot find the **SNMP Service** service in the **Services** list, install the **SNMP Service** on your Streamline Server computer.

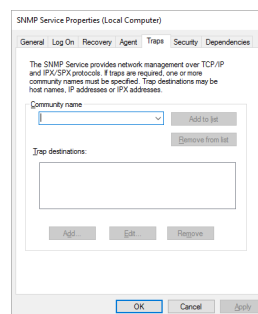
5. Right-click the **SNMP Service** service and select **Properties** from the shortcut menu.

The **SNMP Service Properties** dialog box opens.



6. Click the **Traps** tab.

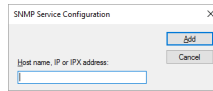
The **Traps** tab opens.



7. In the **Community name** box, enter the password that you set for the **Community String** in step 5 of the procedure “**To configure the Streamline SNMP agent**” on page 2–8.
8. Click **Add to list**.

9. In the **Trap destinations** section, click **Add**.

The **SNMP Service Configuration** dialog box opens.



10. In the **Host name, IP or IP address** box, enter `localhost`.

11. Click **Add**.

The **SNMP Service Configuration** dialog box closes.

12. In the **SNMP Service Properties** dialog box, click **OK**.

The **SNMP Service Properties** dialog box closes.

13. In the **Services** window, click **Restart** for the **SNMP Service** service.

14. Use the **File** menu to select **Exit**.

The **Services** window closes.

User Preferences

The Streamline administrator can set the default UI language, time zone, time format, editor panel font size, and panel grid font size for all the Streamline users on a Streamline Server. Streamline users can individually override the default user preferences set by the Streamline administrator. The user preferences that you set depend on the credentials that you use to log in to the Streamline web page.

- **Administrator** — set the default user preferences for all Streamline users.
- **User** — set your own user preferences to override the default user preferences set by the Streamline administrator.

This chapter discusses the following topic:

- Set Default User Preferences
- Set Individual User preferences

Set Default User Preferences

The Streamline administrator can set the default UI language, time zone, time format, editor panel font size, and panel grid font size for all the Streamline users on a Streamline Server. Streamline users can individually override the default user preferences set by the Streamline administrator.

- ★ You cannot configure Streamline from a mobile device, you must use a desktop computer to access the Configuration window.

To set the default user for all Streamline users

1. Log in to your Streamline Server as an administrator.

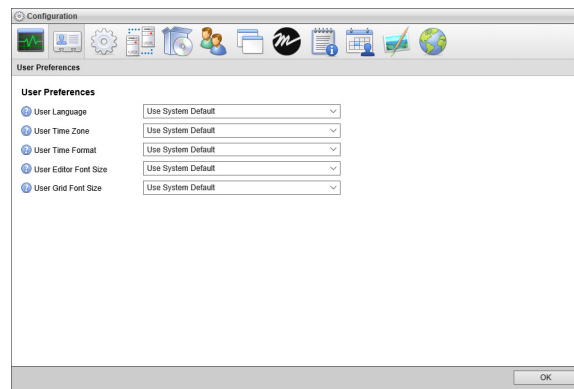
For information about Streamline Server log in, refer to the procedure “**To access the Streamline Server Configuration window**” on page 2–2.

2. On the main toolbar, click the  **Configuration** icon.

The **Configuration** window opens.

3. On the **Configuration** window toolbar, click the  **Preferences** icon.

The **User Preferences** panel of the **Configuration** window opens.



4. In the **User Preferences** tab, use the **User Language** list to select the UI language for Streamline users.
5. Use the **User Time Zone** list to select the time zone which matches the physical location of Streamline users.
6. Use the **User Time Format** list to select the format in which to display the time, **12 hr** (2:45pm) or **24 hr** (14:45) format.
7. Use the **User Editor Font Size** list to select the font size that editor panels use to display text. You can select a font size from **6** to **32** points.
8. Use the **User Grid Font Size** list to select the font size that panel grids use to display text. You can select a font size from **6** to **32** points.
9. Click **OK**.

The **Configuration** window closes.

Set Individual User preferences

When the default user preferences do not work for an individual Streamline user, the user can set their own user preferences.

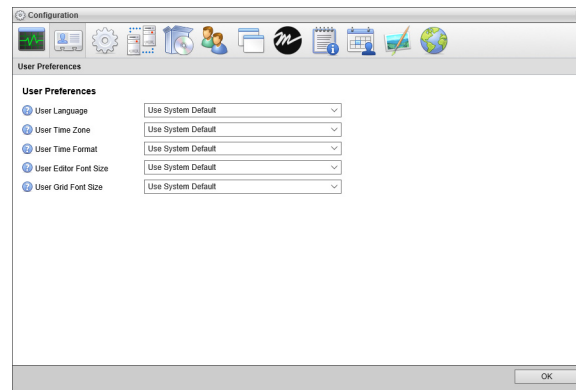
To set your own user preferences

1. Use your Streamline username and password to log in to your Streamline Server.
2. On the main toolbar, click the  **Configuration** icon.

The **Configuration** window opens.

3. On the **Configuration** window toolbar, click the  **Preferences** icon.

The **User Preferences** panel of the **Configuration** window opens.



4. In the **User Preferences** tab, use the **User Language** list to select the UI language that you want to use with Streamline. Select **Use System Default** to use the language set by the Streamline administrator.
5. Use the **User Time Zone** list to select the time zone which matches your physical location. Select **Use System Default** to use the time zone set by the Streamline administrator.
6. Use the **User Time Format** list to select the format in which to display the time, **12 hr** (2:45pm) or **24 hr** (14:45) format.
7. Use the **User Editor Font Size** list to select the font size that you want Streamline to display text in editor panels. You can select a font size from **6** to **32** points. Select **Use System Default** to use the editor font size set by the Streamline administrator.
8. Use the **User Grid Font Size** list to select the font size that you want Streamline to display text in panel grids. You can select a font size from **6** to **32** points. Select **Use System Default** to use the grid font size set by the Streamline administrator.
9. Click **OK**.

The **Configuration** window closes.

Configuring System Properties

Before you can start using your Streamline system you must configure the general system properties of your Streamline system.

This chapter discusses the following topics:

- Accessing Streamline System Properties
- Configure Database Connectivity
- Select a Search Index
- Activate a Product Key
- Reactivate a Product Key
- Deactivate a Product Key
- Manage File Systems
- Configure System Settings
- Configure the E-mail Server

Accessing Streamline System Properties

As a Streamline administrator, you access and configure system settings through the Configuration window of Streamline.

- ★ You cannot configure Streamline from a mobile device. The Configuration window is only accessible from a desktop computer.

To access Streamline Server system properties

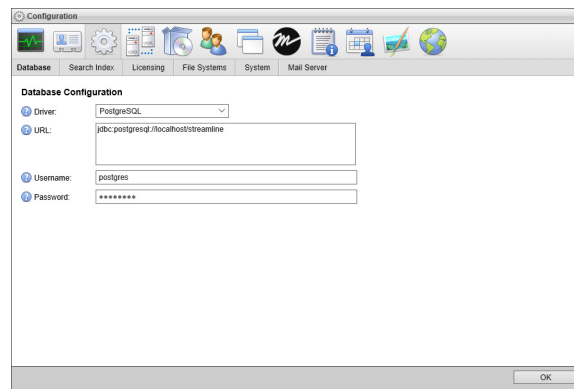
1. Log in to your Streamline Server as an administrator.
For information about Streamline Server log in, refer to the procedure “**To access the Streamline Server Configuration window**” on page 2–2.
2. On the main toolbar, click the  **Configuration** icon.
The **Configuration** window opens.
3. For Streamline configuration information, click the  **Help** icon on the **Configuration** window title bar.

Configure Database Connectivity

Database connectivity settings enable you to set the database used by Streamline and the user account that Streamline uses to connect with the database.

To configure database connectivity

1. On the **Configuration** window toolbar, click the  **System** icon in the **Tools** section.
The **System** panel opens.
2. Click the **Database** tab.
The **Database** tab opens.



3. Use the **Driver** list to select the database driver used to connect to the Streamline Database.
 4. In the **URL** box, enter the JDBC URL that the Streamline uses to connect to the Streamline Database. For example, for a database named **streamline** on PostgreSQL, use the following URL:
`jdbc:postgresql://localhost/streamline`
 5. In the **Username** box, enter the username that Streamline uses to access the database.
 6. In the **Password** box, enter the password associated with the username.
The box looks empty, even after specifying a password.
 7. Select the **Caching** check box to enable the database caching level for the best database performance.
- ★ On multi-node systems, you **MUST** clear the **Enable Caching** check box to disable database caching.

Select a Search Index

Your Streamline Server uses an index to increase search performance. By default, Streamline uses an internal file system index. You can also select optional external search index services to improve Streamline search performance on your Streamline Server.

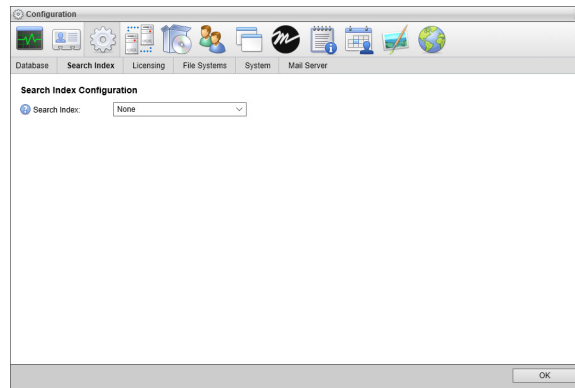
To select a search index

1. On the **Configuration** window toolbar, click the  **System** icon.

The **System** panel opens.

2. Click the **Search Index** tab.

The **Search Index** tab opens.



3. Use the **Driver** list to select the index that the Streamline Server uses to increase search performance. The available search indexes are as follows:
 - **Elasticsearch** — an optional external search index based on Lucene.
 - **File System** — the default internal search index.
 - **None** — do not use a search index.
4. When you select **Elasticsearch** as your search index, configure **Elasticsearch** as follows:
 - a. In the **URL** box, enter the URL and port number (`http://<search server>:<port number>`) that the Streamline Server uses to connect to an external search service. When entering more than one search service URL, use a space to separate consecutive URLs.
 - b. In the **Username** box, enter the username that Streamline uses to access the external search service.
 - c. In the **Password** box, enter the password associated with the username.

For security purposes, dots replace the entered password.
5. In the bottom toolbar, click **OK**.

The **Configuration** window closes.

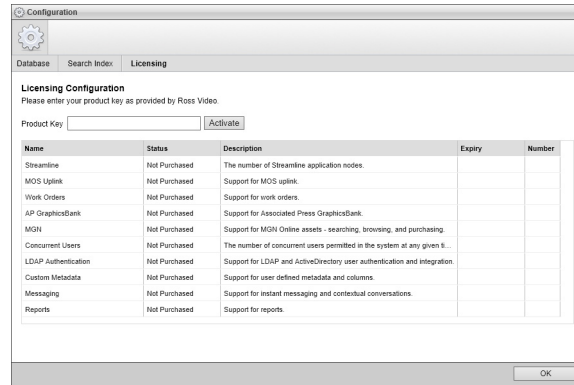
Activate a Product Key

Ross Video uses a product key and feature license keys to control user access to Streamline features. You can obtain a Streamline product key from Ross Video Technical Support.

- ★ When you activate a Streamline software product key, your Streamline computer must contact the Ross Video Activation Server.

To activate a Streamline product key

1. On the **Configuration** window toolbar, click the  **System** icon.
The **System** panel opens.
2. Click the **Licensing** tab.
The **Licensing** tab opens.



3. Obtain a Streamline product key from Ross Video Technical Support.
4. In the **Key** box, enter the product key obtained from Ross Video Technical Support.
5. Click **Activate**.

After activating the entered product key, an **Alert** dialog box opens requesting a web browser window refresh.

6. Click **OK**.

The **Alert** dialog box closes, and the **Licensing Configuration** tab updates to display the new feature licenses associated with the activated product key. The **Status** column displays one of the following states:

Background	Status	Description
 Green	Active	The feature is active and available to Streamline users.
 Yellow	Expires in # days	The feature availability for Streamline users expires in the displayed number of days.
 Red	Expired	The feature has expired and is no longer available to Streamline users.
 Red	Invalid MAC	The feature license key is invalid for the active network interface card of the Streamline computer.
 White	Not Purchased	The feature is not accessible to Streamline users, but it is available for purchase.

7. In the bottom toolbar, click **OK**.
The **Configuration** window closes.
8. Refresh your web browser window.

Streamline adds icons to the toolbar for the newly activated features if applicable.

For More Information on...

- Ross Video Technical Support phone numbers, refer to the section “**Contacting Technical Support**”.

Reactivate a Product Key

After purchasing new features for a Streamline, the Streamline product key requires a reactivation to make the purchased features available to Streamline users.

To reactivate a Streamline product key

1. On the **Configuration** window toolbar, click the  **System** icon.
The **System** panel opens.
2. Click the **Licensing** tab.
The **Licensing** tab opens.
3. Click **License Options**.
The **Product Key** field displays the currently activate product key.
4. Click **Reactivate**.
After reactivating the product key, an **Alert** dialog box opens requesting a refresh of the web browser window.
5. Click **OK**.
The **Alert** dialog box closes and the **Licensing Configuration** tab is updates to display with new feature licenses associated with the reactivated product key.
6. In the bottom toolbar, click **OK**.
The **Configuration** window closes.
7. Refresh your web browser window.
Streamline adds icons to the toolbar for the newly activated features, making the features accessible to Streamline users.

Deactivate a Product Key

When you want to move Streamline software on another computer, you must first deactivate the Streamline software on the current Streamline computer.

To deactivate a Streamline product key

1. On the **Configuration** window toolbar, click the  **System** icon.
The **System** panel opens.
2. Click the **Licensing** tab.
The **Licensing** tab opens. The **Product Key** field displays the currently activate product key.
3. Click **License Options**.
The **Product Key** field displays the currently activate product key.
4. Click **Deactivate**.
After deactivating the product key, an **Alert** dialog box opens.
5. Click **OK**.
The **Alert** dialog box closes, and the product key shown in the **Product Key** box deactivates. You can use the deactivated product key to activate Streamline software on another computer.

Deactivating a product key removes Streamline user access to all the Streamline features associated with the product key.

Manage File Systems

Streamline uses files systems to store the media files ingested into Streamline through a file storage. Streamline has default files systems that you can use to store ingested media files, or you can define your own file systems. You can define file systems to store media files on a local disk, a network accessible file share, or an external cloud storage service.

After you define a file system, use the File Storage tab to associate your file system with a file storage. Streamline users can use the associated file storage to ingest media files into Streamline and store them in your file system.

★ If your organization subscribes to a Streamline.cloud service, refer to the chapter “**Streamline.cloud**” on page 20–1 for instructions on adding file systems to your service.

For More Information on...

- associating a file system with a file storage, refer to the section “**Create a File Storage**” on page 16–2.

Add a File System

When you add a file system, you name the file system and select the location to store media source media files.

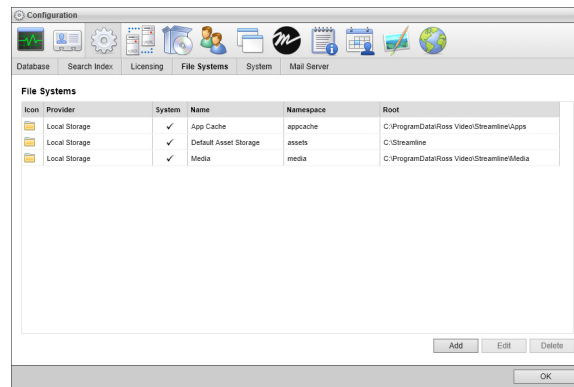
To add a file system

1. On the **Configuration** window toolbar, click the  **System** icon.

The **System** panel opens.

2. Click the **File Systems** tab.

The **File Systems** tab opens.



3. Click **Add**.

The **Create File System** settings open.

4. Use the **Provider** list to select the type of file system to add:

- **Abekas** — a directory on an Abekas Mira or Tria video servers.
- **Amazon S3** — a directory on the Amazon Simple Storage Service, an external service that you require an account to use.
- **Amazon S3 Glacier** — an archive on the Amazon Simple Storage Service, an external service that you require an account to use. Transfers to file storages associated with an Amazon S3 Glacier file system may take longer than to file storages associated with other file system providers.

You can only associate an Amazon S3 Glacier file system with an offline file storage. Streamline uses offline storages to archive assets. Streamline users cannot directly upload assets to an offline file storage, they can only send an asset to an offline file storage after uploading it to Streamline.

- **Azure Blob Storage** — a directory on the Microsoft Azure Blob storage service, an external service that you require an account to use.
- **Cloud Gateway** — a file system configured on a Ross Cloud Gateway cloud gateway to enable access to the remote content from your Streamline Server.
- **FTP** — a directory on an FTP server.
- **Google Cloud Storage** — a directory on the Google Cloud Storage service, an external service that you require an account to use.
- **Local Storage** — a directory on your Streamline Server local disk or a network accessible file share.

5. Click **Next**.

The **Create File System** settings open for the selected **Provider**.

6. Use the steps for the selected **Provider** to define the file system.

Abekas

- a. In the **Name** box, enter a name for the file system.
- b. In the **Namespace** box, enter the name that Streamline uses to access the file system.
Once you create a file system, you cannot change the **Namespace** set for the file system.
- c. In the **Root** box, enter the directory path for the root directory of the Abekas video folder.
- d. In the **Host** box, enter the hostname or IP address of the Abekas video server.
- e. In the **API Port** box, enter the port number that the Abekas video server uses to communicate with your Streamline Server.
- f. Select the **Enable Direct Access** check box to enable devices to directly access files stores in the file system without having to send file access requests through Streamline.

Amazon S3

- a. In the **Name** box, enter a name for the file system.
- b. In the **Namespace** box, enter the name that Streamline uses to access the file system.
Once you create a file system, you cannot change the **Namespace** set for the file system.
- c. In the **Bucket** box, enter the name of the Amazon S3 bucket in which to store file system files.
- d. In the **Access Key** box, enter the access key for the selected Amazon S3 bucket.
- e. In the **Access Secret** box, enter the access secret for the selected Amazon S3 bucket.
- f. In the **Root** box, enter the directory path for the file system root directory in the selected Amazon S3 bucket.
- g. Select the **Enable Direct Access** check box to enable devices to directly access files stores in the file system without having to send file access requests through Streamline.

Amazon S3 Glacier

★ You can only associate an Amazon S3 Glacier file system with an offline file storage. Streamline uses offline storages to archive assets. Streamline users cannot directly upload assets to an offline file storage, they can only send an asset to an offline file storage after uploading it to Streamline.

- a. In the **Name** box, enter a name for the file system.
- b. In the **Namespace** box, enter the name that Streamline uses to access the file system.
Once you create a file system, you cannot change the **Namespace** set for the file system.
- c. In the **Bucket** box, enter the name of the Amazon S3 Glacier bucket in which to store file system files.
- d. In the **Access Key** box, enter the access key for the selected Amazon S3 Glacier bucket.
- e. In the **Access Secret** box, enter the access secret for the selected Amazon S3 Glacier bucket.
- f. In the **Root** box, enter the directory path for the file system root directory in the selected Amazon S3 Glacier bucket.

Microsoft Azure Blob Storage

- a. In the **Name** box, enter a name for the file system.
- b. In the **Namespace** box, enter the name that Streamline uses to access the file system.
Once you create a file system, you cannot change the **Namespace** set for the file system.
- c. In the **Container** box, enter the name of the Microsoft Azure Blob Storage container in which to store file system files.
- d. In the **Account Name** box, enter the account name for the selected Microsoft Azure Blob Storage container.
- e. In the **Account Key** box, enter the account key for the selected Microsoft Azure Blob Storage container.
- f. In the **Root** box, enter the directory path for the file system root directory in the selected Microsoft Azure Blob Storage container.
- g. Select the **Enable Direct Access** check box to enable devices to directly access files stores in the file system without having to send file access requests through Streamline.

Cloud Gateway

- a. In the **Name** box, enter a name for the file system.
- b. In the **Namespace** box, enter the name that Streamline uses to access the file system.
Once you create a file system, you cannot change the **Namespace** set for the file system.
- c. In the **Gateway ID** box, enter the ID of the Ross Cloud Gateway that contains the file system access.
- d. In the **Remote Namespace** box, enter the name that Streamline uses to access the remote file system on a Ross Cloud Gateway.

FTP

- a. In the **Name** box, enter a name for the file system.
- b. In the **Namespace** box, enter the name that Streamline uses to access the file system.
Once you create a file system, you cannot change the **Namespace** set for the file system.
- c. In the **Host** box, enter the hostname or IP address of the FTP server.

- d. Use the Encryption list to select how authentication information and data files are encrypted during transit. The available encryption options are as follows:
- **None (FTP)** — do not encrypt authentication information and data.
 - **Explicit FTP over TLS (FTPS)** — use explicit security to transmit encrypted authentication information and data.
 - **Implicit FTP over SSL (FTPS)** — use implicit security to transmit encrypted authentication information and data.
- e. In the **Port** box, enter port number that the FTP server uses to communicate with your Streamline Server.
- f. In the **Username** box, enter the username for the FTP account that Streamline uses to access the FTP server.
- g. In the **Password** box, enter the password for the FTP account.
- h. In the **Root** box, enter the path to the folder on the FTP server to open upon initial connection.
- i. Select the **Passive Mode** check box to use the passive FTP connection mode. Clear this check box to use the active FTP connection mode.
- j. Select the **Enable Direct Access** check box to enable devices to directly access files stores in the file system without having to send file access requests through Streamline.

Google Cloud Storage

- a. In the **Name** box, enter a name for the file system.
- b. In the **Namespace** box, enter the name that Streamline uses to access the file system.
- Once you create a file system, you cannot change the **Namespace** set for the file system.
- c. In the **Bucket** box, enter the name of the Google Cloud Storage bucket in which to store file system files.
- d. Click **Browse** to the right of the **Credentials** box to use the **Open** dialog box to select a file that contains Google Cloud JSON credentials for your Google Cloud Storage.
- e. In the **Project ID** box, enter the Google Cloud project ID for the selected Google Cloud Storage bucket.
- f. In the **Private Key ID** box, enter the private key ID for the selected Google Cloud Storage bucket.
- g. In the **Private Key** box, enter the private key for the selected Google Cloud Storage bucket.
- h. In the **Client ID** box, enter the Google Cloud client ID for the selected Google Cloud Storage bucket.
- i. In the **Client E-Mail** box, enter the Google Cloud client email address for the selected Google Cloud Storage bucket.
- j. In the **Root** box, enter the directory path for the file system root directory in the selected Google Cloud Storage bucket.
- k. Select the **Enable Direct Access** check box to enable devices to directly access files stores in the file system without having to send file access requests through Streamline.

Local Storage

- a. In the **Name** box, enter a name for the file system.
- b. In the **Namespace** box, enter the name that Streamline uses to access the file system.
Once you create a file system, you cannot change the **Namespace** set for the file system.
- c. In the **Root** box, enter the directory path for the file system root directory on your Streamline Server local disk or a network accessible file share.
- d. Select the **Enable Direct Access** check box to enable devices to directly access files stores in the file system without having to send file access requests through Streamline.

★ When the **Enable Direct Access** check box is selected you must also setup a public network share to the file system root directory specified in the **Root** box.

7. Click **Create**.

Streamline adds the new file system to the **File Systems** list.

For More Information on...

- how to edit file systems, refer to the section “**Edit a File System**” on page 4–10
- how to delete file systems, refer to the section “**Delete a File System**” on page 4–11

Edit a File System

★ You cannot edit the Namespace of an existing file system.

To edit a file system

1. On the **Configuration** window toolbar, click the  **System** icon.
The **System** panel opens.
2. Click the **File Systems** tab.
The **File Systems** tab opens, listing all the available file systems.
3. From the **File Systems** list, select the file system to edit.
4. Click **Edit**.
The **Create File System** settings open.
5. Use the **Provider** list to select a file system type for the selected file system:
6. Click **Next**.
The **Edit File System** settings open for the selected **Provider**.
7. Edit the file system settings as required.
8. Click **Save**.

For More Information on...

- how to create file systems, refer to the section “**Add a File System**” on page 4–6
- how to delete file systems, refer to the section “**Delete a File System**” on page 4–11

Delete a File System

Deleting a file system disconnects it from associated media sources but does not delete the media files contained in the file system root directory.

To delete a file system

1. On the **Configuration** window toolbar, click the  **System** icon.

The **System** panel opens.

2. Click the **File Systems** tab.

The **File Systems** tab opens, listing all the available file systems.

3. From the **File Systems** list, select the file system to delete.

4. Click **Delete**.

A confirmation dialog box opens.

5. Click **OK**.

Streamline deletes the selected file system.

For More Information on...

- how to create file systems, refer to the section “**Add a File System**” on page 4–6
- how to edit file systems, refer to the section “**Edit a File System**” on page 4–10

Configure System Settings

Streamline administrators can set the language, time zone, font sizes, and data sharing folder for all the users of a Streamline Server.

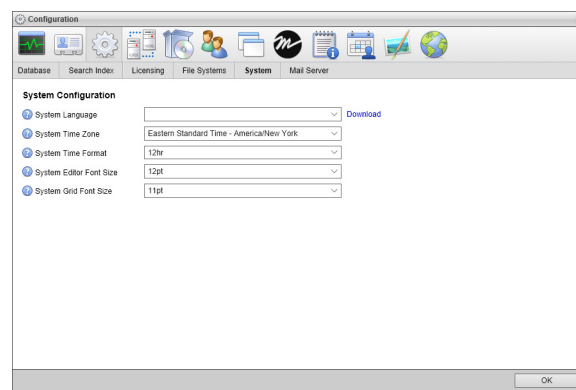
To set the language, time zone, time format, and font sizes for a Streamline Server

1. On the **Configuration** window toolbar, click the  **System** icon.

The **System** panel opens.

2. Click the **System** tab.

The **System** tab opens.



3. Use the **System Language** list to select the Streamline user interface language for all users of a Streamline Server. Streamline users can use the **User Preferences (User)** tab of the **System** panel to override the selected **System Language**.

If you want to download a Streamline language pack, follow these steps.

- a. Click the **Download** link.

The **Download Selected Language Pack** and **Download Empty Language Pack** buttons display below the **System Language** list.

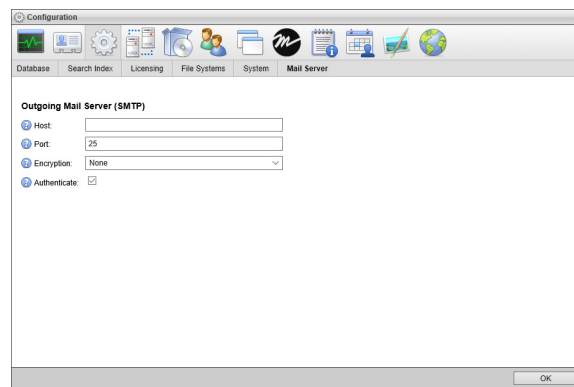
- b. Click **Download Selected Language Pack** to download the selected **System Language** to your computer as a Streamline language pack file.
 - c. Click **Download Empty Language Pack** to download a template that you can use to create a Streamline language pack file.
4. Use the **System Time Zone** list to select the time zone which matches the physical location of the Streamline Server computer. Streamline users can use the **User Preferences (User)** tab of the **System** panel to override the selected **System Time Zone**.
 5. Use the **System Time Format** list to select the format in which to display the time, 12 hr (2:45pm) or 24 hr (14:45) format. Streamline users can use the **User Preferences (User)** tab of the **System** panel to override the selected **System Time Format**.
 6. Use the **System Editor Font Size** list to select the font size, 6 to 32 points, that Streamline uses to display text in editor panels. Streamline users can use the **User Preferences (User)** tab of the **System** panel to override the selected **System Editor Font Size**.
 7. Use the **System Grid Font Size** list to select the font size, 6 to 32 points, that Streamline uses to display text in panel grids. Streamline users can use the **User Preferences (User)** tab of the **System** panel to override the selected **System Grid Font Size**.

Configure the E-mail Server

You will need to configure the e-mail server feature of the Streamline system if you wish to notify Streamline users that they are assigned to a work order when it is submitted.

To configure the e-mail server

1. On the **Configuration** window toolbar, click the  **System** icon.
The **System** panel opens.
2. Click the **Mail Server** tab.
3. The **Mail Server** tab opens.



4. In the **Outgoing Mail Server** section, enter the host name of the outgoing e-mail server in the **Host** box.
5. In the **Port** box, enter the port number used for communicating with the outgoing e-mail server.
6. Use the **Encryption** list to select the encryption protocol used by the outgoing e-mail server.
7. Select the **Authenticate** check box to enable authentication for the outgoing e-mail server.
Clear this check box to not use authentication for outgoing e-mail.

Managing Streamline Nodes

Multiple Streamline Servers can connect to a single database to form a Redundant Node Streamline system. Each Streamline Server in a Redundant Node Streamline system acts as a node to run one or more Streamline services to load balance the overall system.

- ★ To configure a Redundant Node Streamline system, you must have licenses for two or more Streamline Servers. Please contact Ross Video to purchase additional Streamline Servers licenses for your Redundant Node Streamline system.

This chapter discusses the following topics:

- Configure Database Connectivity
- View the Nodes in Your System
- Manage Streamline Services

Configure Database Connectivity

Each Streamline Server acting as a node in your Redundant Node Streamline system must connect to the same database. You must log in to each Streamline Server as an Streamline administrator and configure the server to connect to the same database as the other servers in your Redundant Node Streamline system.

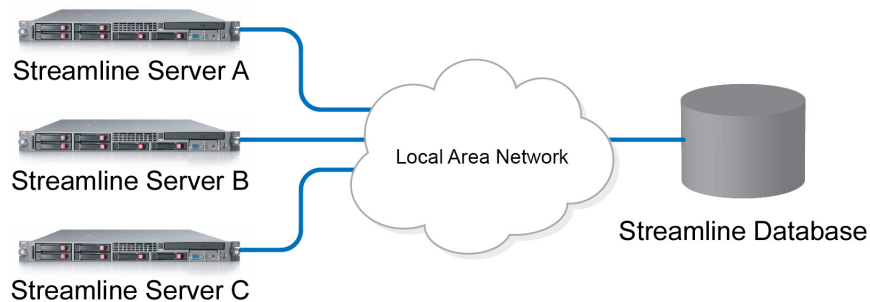


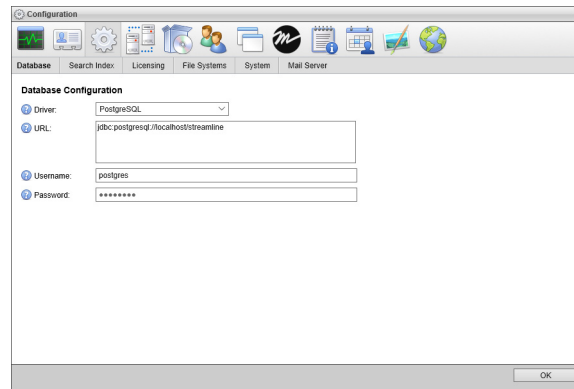
Figure 5.1 Database Connection in a Redundant Node Streamline System

To configure database connectivity for each node

1. Log in to your Streamline Server as an Streamline administrator.
For information about Streamline Server log in, refer to the procedure “**To access the Streamline Server Configuration window**” on page 2–2.
2. On the main toolbar, click the  **Configuration** icon.
The **Configuration** window opens.
3. On the **Configuration** window toolbar, click the  **System** icon.
The **System** panel opens.

- Click the **Database** tab.

The **Database** tab opens.



- Use the **Driver** list to select the database driver used to connect to the Streamline Database.
Select the same Driver for each Streamline Server node in your Redundant Node Streamline system.
- In the **URL** box, enter the JDBC URL that connects your Streamline Server with Streamline Database. For example, for a database named Streamline on PostgreSQL, use the following URL:
jdbc:postgresql://localhost/Streamline
Enter the same URL for each Streamline Server node in your Redundant Node Streamline system.
- In the **Username** box, enter the username that Streamline uses to access the database.
Enter the same Username for each Streamline Server node in your Redundant Node Streamline system.
- In the **Password** box, enter the password associated with the username.
For security purposes, dots replace the entered password. Enter the same Password for each Streamline Server node in your Redundant Node Streamline system.
- Repeat this procedure on each Streamline Server node in your Redundant Node Streamline system.

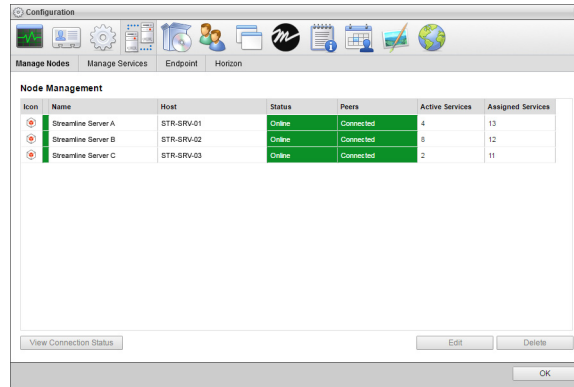
View the Nodes in Your System

After you configure all the Streamline Server nodes in your Redundant Node Streamline system to connect to the same database, you can view the nodes through the Node Management tab in the Configuration window.

To view the nodes in your system

- On the **Configuration** window toolbar, click the  **Network** icon.
The **Network** panel opens.
- Click the **Manage Nodes** tab.

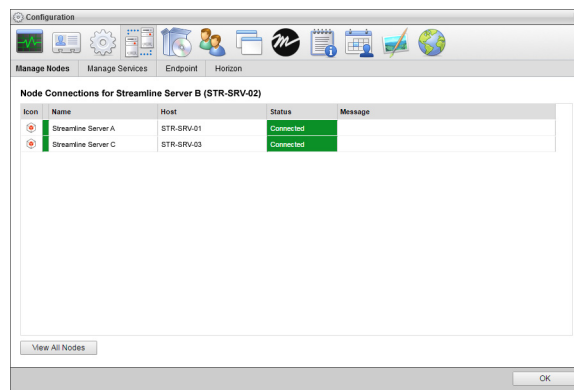
The **Manage Nodes** tab opens.



The **Node Management** table displays the following information about the nodes in a Redundant Node Streamline system:

- **Icon** — this column displays an icon that identifies the node.
 - **Name** — this column displays the name of the node.
 - **Host** — this column displays the host name of the node computer.
 - **Status** — this column displays the current status of the node.
 - **Peers** — this column displays the current connection status between the node and the other nodes in the Redundant Node Streamline system.
 - **Active Services** — this column displays the number of Streamline services currently running on the node.
 - **Assigned Services** — this column displays the number of Streamline services assign to run on the node.
3. To view the nodes connected to a selected node, select the node in the **Node Management** table and then click **View Connection Status**.

The **Node Connections** page opens for the selected node.



The **Node Connections** table displays the following information about the nodes connected to a selected node:

- **Icon** — this column displays an icon that identifies the node.
 - **Name** — this column displays the name of the node.
 - **Host** — this column displays the host name of the node computer.
 - **Status** — this column displays the current connection status between the selected node and the listed node.
 - **Message** — this column displays additional information about the connection between nodes.
4. Click **View All Nodes** to return to the **Node Management** page of the **Manage Nodes** tab.

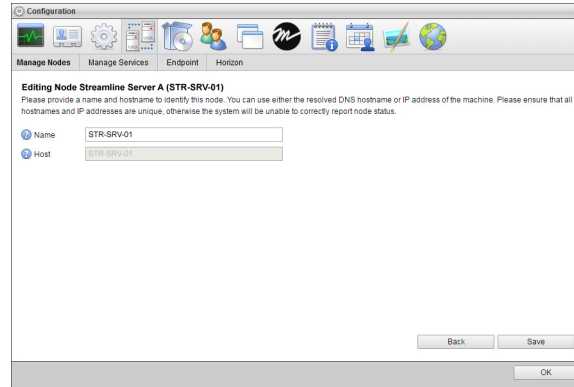
Change Node Names

To help you keep track of the nodes in your Redundant Node Streamline system, you can edit the node names.

To change the name of a node

1. In the **Node Management** table, select the node that you want to change the name.
2. Click **Edit** tab.

The **Editing Nodes** page opens.



3. In the **Name** box, enter a name for the node.
4. Click **Save** to save the new node name.

The **Node Management** page opens.

Manage Streamline Services

Each Streamline Server in a Redundant Node Streamline system acts as a node to run one or more Streamline services to load balance the overall system. For each available Streamline service, you can choose the node to run the service and the nodes that the Streamline service can use to continue running if the active node were to falter.

★ You must assign an Streamline service to at least one node to make it available to Streamline users.

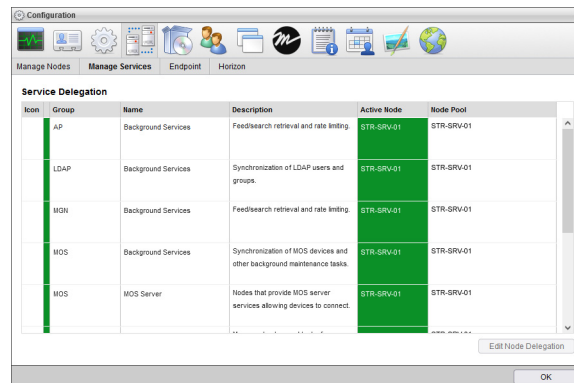
To assign Streamline services to nodes

1. On the **Configuration** window toolbar, click the  **Network** icon.

The **Network** panel opens.

2. Click the **Manage Services** tab.

The **Manage Services** tab opens.

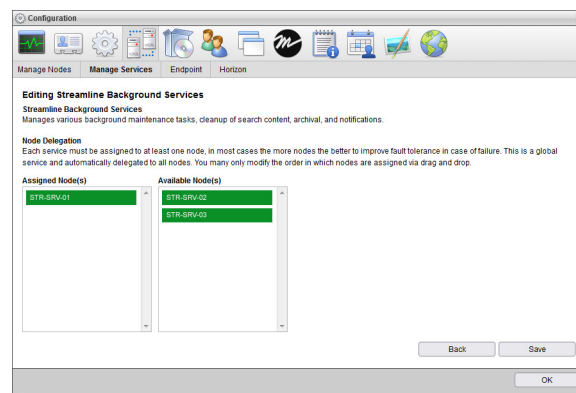


The **Service Delegation** table displays the following information about Streamline services and the nodes that the services run on in a Redundant Node Streamline system:

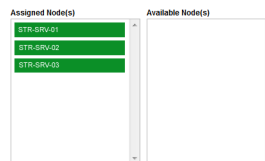
- **Icon** — this column displays an icon that identifies the group to which the Streamline service belongs.
- **Group** — this column displays the name of the group to which the Streamline service belongs.
- **Name** — this column displays the name of the Streamline service.
- **Description** — this column displays a description of the Streamline service.
- **Active Node** — this column displays the hostname of the node that is currently running the Streamline service.
- **Node Pool** — this column lists the hostnames of the nodes that the Streamline service can use to continue running if the active node were to falter.

3. In the **Service Delegation** table, select the Streamline service to assign to a node.
4. Click **Edit Node Delegation**.

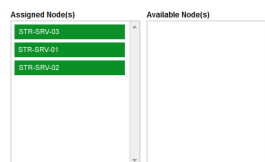
The **Editing Background Services** page open for the selected Streamline service.



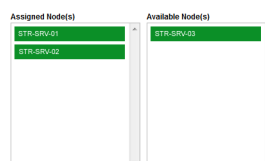
5. To assign the selected Streamline Service to a node, drag the node to assign from the **Available Node(s)** list to the **Assigned Node(s)** list.



6. To change the priority of a node, drag the node up or down in the **Assigned Node(s)** list. The selected Streamline service starts running on the the node at the top of the **Assigned Node(s)** list, the active node.



7. To unassign the selected Streamline Service from a node, drag the node to unassign from the **Assigned Node(s)** list to the **Available Node(s)** list.



8. After assigning the selected Streamline services to the appropriate nodes, click **Save**.
Streamline displays the updated Streamline service in the **Service Delegation** table.

Managing Streamline Apps

Streamline apps enable you to offer new features, extended functionality, or customization to the users of your Streamline Server. After you install an app on your Streamline Server, access to the app depends on the user permissions set for a user. Ross Video, third party developers, or your own in-house developers can create Streamline apps.

This chapter discusses the following topics:

- Install Apps
- Uninstall Apps

Install Apps

Streamline apps are contained in .app files that you can install on your Streamline Server. The availability of installed Streamline apps depends on the user permissions set for a user.

To install a Streamline app

1. Log in to your Streamline Server as an administrator.

For information about Streamline Server log in, refer to the procedure “**To access the Streamline Server Configuration window**” on page 2–2.

2. On the main toolbar, click the  **Configuration** icon.

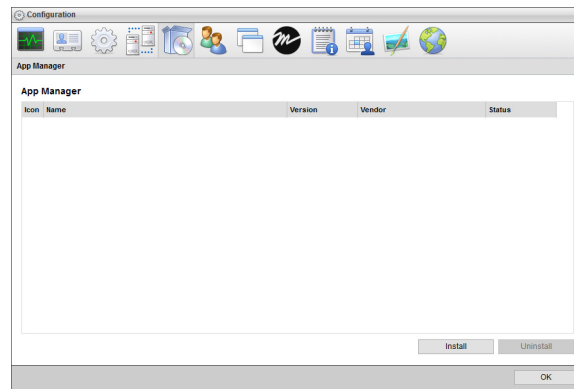
The **Configuration** window opens.

3. On the **Configuration** window toolbar, click the  **Apps** icon.

The **Apps** panel opens.

4. Click the **App Manager** tab.

The **App Manager** tab opens.



5. Click **Install**.

The **Install App** page opens.

6. Click **Browse** to the right of the **App File** box.

The **Open** dialog box opens displaying the local file system of your computer.

7. Locate and select the **App** file (.app) that contains the Streamline app to install on your Streamline Server.

8. Click **Open**.

Streamline installs the selected app. The **Install App** page closes and Streamline adds the app to the **App Manager** list.

Uninstall Apps

When you no longer require a Streamline app on your Streamline Server, you can uninstall the app.

To uninstall a Streamline app

1. On the main toolbar, click the  **Configuration** icon.

The **Configuration** window opens.

2. On the **Configuration** window toolbar, click the  **Apps** icon.

The **Apps** panel opens.

3. In the **App Manager** list, select the app to uninstall.
4. Click **Uninstall**.

Streamline uninstalls the selected app. The **Install App** page closes and Streamline removes the app to the **App Manager** list.

5. Click **OK** to close the **Configuration** window.

Configuring User Permissions

User permissions define the actions users have permission to perform and determine which buttons, messages, and controls they see in the Streamline user interface. In most Streamline systems, the system administrator assigns users with the user permissions that are appropriate for their role in using Streamline.

User permissions are role-based. Each user account has one or more user roles, such as journalist or producer. Each user role has a set of permissions. The role-based permissions model enables administrators to precisely define user permissions for each user, to ensure conformance to your organization's business processes.

A system administrator can create user accounts and roles within Streamline or imported them from a Lightweight Directory Access Protocol (LDAP) server. Streamline can use a combination of created and imported user accounts and roles.

To configure user permissions, you create user roles and assign permissions to them, and then create user accounts and assign user roles to them.

User permission settings belong to the following categories, represented by tabs on the Users configuration panel:

- **Manage Users** — Properties related to individual users, including role assignments.
- **Manage Roles** — Properties related to user roles, including permissions associated with user roles.
- **LDAP Configuration** — Properties related to establishing connectivity with an LDAP directory server.
- **LDAP User Configuration** — Mappings to enable Streamline to import user accounts from an LDAP directory server.
- **LDAP Role Configuration** — Mappings to enable Streamline to import user roles (groups) from an LDAP directory server.

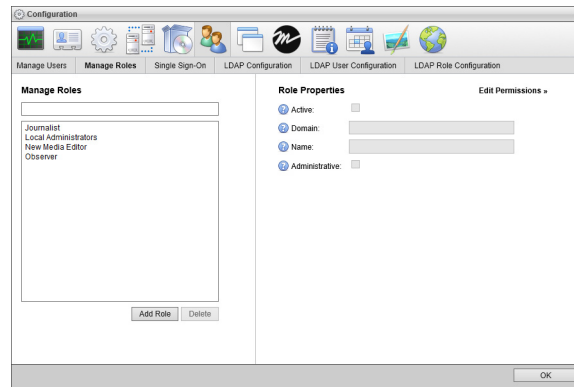
This chapter discusses the following topics:

- Creating a User Role
- Modifying a User Role
- Typical User Role Permissions
- New Account Role Permissions
- Deleting a User Role
- Creating a User Account
- Modifying a User Account
- Deleting a User Account
- Configure Single Sign-On for Inception and Streamline

Creating a User Role

To create a user role

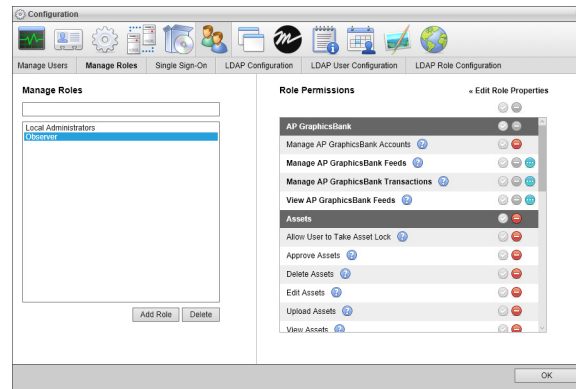
1. Log in to your Streamline Server as an administrator.
2. On the main toolbar, click the  **Configuration** icon.
The **Configuration** window opens.
3. On the **Configuration** window toolbar, click the  **Users** icon. If the **Users** icon is not visible, you are not an administrator and cannot configure user roles.
The **Users** panel opens.
4. Click the **Manage Roles** tab.
The **Manage Roles** tab opens.



5. In the **Manage Roles** section, click **Add Role**.
Streamline automatically saves property values set for a new user role.
6. In the **Role Properties** section, select the **Active** check box to make the role operational.
Clear this check box to deactivate a user role. Inactive roles cannot convey permissions to user accounts.
7. In the **Name** box, enter a name for the user role.
8. Select the **Administrative** check box to grant the user role all user permissions and enable the user role to configure all administrative settings.
Clear this check box to only include selected permissions with the user role.
9. Select the **Remotely Assignable** check box to enable Horizon to use the user role to assign remote user permissions on the Streamline Server.
Clear this check box to only use the user role to assign local user permissions.

10. Click **Edit Permissions**.

The **Role Permissions** list opens.



Hover the mouse pointer over a  icon to the right of a permission to view a description of the permission.

11. In the **Role Permissions** list, set the role permissions for the user role as follows:

- **Role Permissions** — use the following icons displayed to the right of a role permission to grant or deny the role permission to the selected role:
 -  — click this icon to grant the role permission to the selected role.
 -  — click this icon to deny the role permission from the selected role.
 - **Categories** — the Role Permissions list is divided into categories to make it easier to find the role permissions to set for the selected role. Streamline uses a dark gray shading to highlight category headings in the list. Use the following icons displayed in a category heading to grant or deny all category role permissions to the selected role:
 -  — click this icon to grant all category role permissions to the selected role. Sometimes it is quicker to grant all role permissions and deny the unwanted role permissions than to just grant the required role permissions.
 -  — click this icon to deny all category role permissions from the selected role.
 - **Accounts** — role permissions displayed in bold text are account-based role permissions. Use the following icons displayed to the right of an account-based role permission to grant or deny the role permission to all accounts for the selected role:
 -  — click this icon to grant the role permission to all accounts for the selected role. Sometimes it is quicker to grant a role permission to accounts and deny the role permission from unwanted accounts than to just grant the role permission to required accounts.
 -  — click this icon to deny the role permission from all accounts for the selected role.
- You can also control the role permission for individual accounts by clicking the  icon to the right of an account-based role permission to view the individual accounts controlled by the role permission. Use the following icons displayed to the right of an account:
-  — click this icon to grant the role permission to the account for the selected role.
 -  — click this icon to deny the role permission from the account for the selected role.

Streamline automatically saves account permission assignment changes. After finishing the configuration of a user role, you can assign it to a user.

For More Information on...

- user roles, refer to the sections “**Modifying a User Role**” on page 7–4, and “**Deleting a User Role**” on page 7–8.
- user accounts, refer to the sections “**Creating a User Account**” on page 7–9, “**Modifying a User Account**” on page 7–10, and “**Deleting a User Account**” on page 7–11.
- typical user permissions, refer to the section “**Typical User Role Permissions**” on page 7–5.

Modifying a User Role

Within Streamline you are only able to modify the properties of user roles created in Streamline. To modify roles (groups) imported from an LDAP directory server, you must modify them on the LDAP directory server.

To modify a user role

1. On the **Configuration** window toolbar, click the  **Users** icon.

The **Users** panel opens.

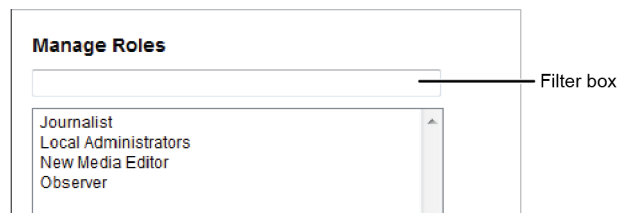
2. Click the **Manage Roles** tab.

The **Manage Roles** tab opens.

3. In the **User Role** list, select the name of the user role to modify.

You can filter the **User Role** list by typing any of the following information in the **Filter** box above the list:

- Any part of a user role name. As you enter a user role name, the list automatically updates to only show user roles that match what you have entered.
- Enter **local** to list only the user roles created in Streamline.
- Enter **LDAP** to list only the user roles imported from an LDAP directory.



4. In the **Role Properties** section, edit the user role properties as required.

Streamline automatically saves property value changes made to a user role.

5. Click **Edit Permissions**.

The **Role Permissions** list opens.

6. In the **Role Permissions** list, edit the user role permission assignments as required.

Streamline automatically saves permission assignment changes made to a user role and applies the changes to all the users assigned to the user role.

For More Information on...

- user roles, refer to the sections “**Creating a User Role**” on page 7–2, and “**Deleting a User Role**” on page 7–8.
- user accounts, refer to the sections “**Creating a User Account**” on page 7–9, “**Modifying a User Account**” on page 7–10, and “**Deleting a User Account**” on page 7–11.
- typical user permissions, refer to the section “**Typical User Role Permissions**” on page 7–5.

Typical User Role Permissions

The following tables list the available user role permissions and typical user role assignments.

Table 7.1 AP Media

Permission	Producer	Media Editor	Character Generator Operator	News Director	Broadcast Journalist	Artist	News Anchor
Manage AP Media Accounts	✓	✓		✓			
Manage AP Media Feeds	All Accounts	Selected Accounts		All Accounts			
Manage AP Media Transactions	All Accounts	Selected Accounts		All Accounts			
View AP Media Feeds	All Accounts	Selected Accounts		All Accounts	All Accounts	All Accounts	All Accounts

Table 7.2 Assets

Permission	Producer	Media Editor	Character Generator Operator	News Director	Broadcast Journalist	Artist	News Anchor
Allow User To Take Asset Lock	✓			✓		✓	
Approve Assets	✓			✓			
Delete Assets	✓			✓			
Edit Assets						✓	
Upload Assets			✓			✓	
View Assets	✓	✓	✓	✓	✓	✓	✓

Table 7.3 Directory

Permission	Producer	Media Editor	Character Generator Operator	News Director	Broadcast Journalist	Artist	News Anchor
Modify Directories	✓	✓		✓	✓	✓	
View Directories	✓	✓	✓	✓	✓	✓	✓

Table 7.4 MGN Online

Permission	Producer	Media Editor	Character Generator Operator	News Director	Broadcast Journalist	Artist	News Anchor
Download MGN Online Assets	All Accounts	All Accounts		All Accounts	All Accounts	All Accounts	
Manage MGN Online Accounts	✓	✓		✓			
Manage MGN Online Feeds	All Accounts	Selected Accounts		All Accounts			
View MGN Online Feeds	All Accounts	Selected Accounts		All Accounts	All Accounts	All Accounts	All Accounts

Table 7.5 Metadata

Permission	Producer	Media Editor	Character Generator Operator	News Director	Broadcast Journalist	Artist	News Anchor
Configure Metadata	✓			✓			
Modify Custom Entity Instances	✓			✓			
View Custom Entity Instances	✓	✓	✓	✓	✓	✓	✓

Table 7.6 Reports

Permission	Producer	Media Editor	Character Generator Operator	News Director	Broadcast Journalist	Artist	News Anchor
Modify Reports	✓	✓		✓			
View Reports	✓	✓		✓			

Table 7.7 Search

Permission	Producer	Media Editor	Character Generator Operator	News Director	Broadcast Journalist	Artist	News Anchor
View Search Manager	✓	✓	✓	✓	✓	✓	✓

Table 7.8 Searches

Permission	Producer	Media Editor	Character Generator Operator	News Director	Broadcast Journalist	Artist	News Anchor
Manage Global Searches	✓	✓	✓	✓		✓	

Table 7.9 Services

Permission	Producer	Media Editor	Character Generator Operator	News Director	Broadcast Journalist	Artist	News Anchor
Cloud Gateway Connection	✓			✓			
MOS Connection	✓			✓			

Table 7.10 Work Orders

Permission	Producer	Media Editor	Character Generator Operator	News Director	Broadcast Journalist	Artist	News Anchor
Allow User To Take Work Order Lock	✓			✓	✓		
Create/Edit/Delete Work Orders	✓			✓	✓		
View Work Orders	✓	✓	✓	✓	✓	✓	✓

Permission Dependencies

Some user permissions depend on others. For example, you cannot upload a file to an asset if you do not have permission to edit assets. When you add user roles intended for creating and modifying assets, work orders, and reports, you should assign the permissions listed in the following table:

Table 7.11 Dependant Permissions

Permission Category	Permission	Description
Assets	View Assets	Enables users to view the details of an asset.
	Modify Assets	Enables users to create, modify, and delete assets.
Work Order	View Work Orders	Enables users to open work orders.
	Create/Edit/Delete Work Orders	Enables users to create, edit, and delete work orders.
Reports	View Reports	Enables user to view reports.
	Modify Reports	Enables user to create, modify, and delete reports.

For More Information on...

- user role assignment, refer to the sections “**Creating a User Role**” on page 7–2, “**Modifying a User Role**” on page 7–4, and “**Deleting a User Role**” on page 7–8
- user account configuration, refer to the sections “**Creating a User Account**” on page 7–9, “**Modifying a User Account**” on page 7–10, and “**Deleting a User Account**” on page 7–11
- role-based user permissions, refer to the chapter “**Configuring User Permissions**” on page 7–1

New Account Role Permissions

When you create a new AP Media or MGN Online account, it is a good idea to review account role permissions set for user roles. When you create several accounts at the same time, it is most efficient to create all accounts and then assign permissions to manage them.

To assign account role permissions to a user role

1. On the **Configuration** window toolbar, click the  **Users** icon.
The **Users** panel opens.
 2. Click the **Manage Roles** tab.
The **Manage Roles** tab opens.
 3. In the **User Role** list, select the name of the user role to assign account management permissions.
 4. Click **Edit Permissions**.
The **Role Permissions** list opens.
 5. In the **Role Permissions** list, scroll down to an account role permission.
For example, **AP Media**.
 6. Use the following icons displayed to the right of an account-based role permission to grant or deny the role permission to all accounts for the selected role:
 -  — click this icon to grant the role permission to all accounts for the selected role. Sometimes it is quicker to grant a role permission to accounts and deny the role permission from unwanted accounts than to just grant the role permission to required accounts.
 -  — click this icon to deny the role permission from all accounts for the selected role.
 7. You can also control the role permission for individual accounts by clicking the  icon to the right of an account-based role permission to view the individual accounts controlled by the role permission. Use the following icons displayed to the right of an account:
 -  — click this icon to grant the role permission to the account for the selected role.
 -  — click this icon to deny the role permission from the account for the selected role.
- After you finish editing a user role, Streamline applies the account permission assignment changes to all the users assigned to the user role.

Deleting a User Role

You can delete user roles created in Streamline.

★ You cannot delete user roles (groups) imported from an LDAP directory server.

To delete a user role

1. On the **Configuration** window toolbar, click the  **Users** icon.
The **Users** panel opens.
2. Click the **Manage Roles** tab.
The **Manage Roles** tab opens.
3. In the **User Role** list, select the name of the user role to delete.

4. Click **Delete**.

A confirmation message opens, asking you if you want to delete the selected user role.

5. Click **OK**.

Streamline deletes the selected user role from the system and from assigned users. Deleting a user role from a user removes the permissions contained in the user role from the user.

For More Information on...

- user roles, refer to the sections “**Creating a User Role**” on page 7–2, and “**Modifying a User Role**” on page 7–4.
- user accounts, refer to the sections “**Creating a User Account**” on page 7–9, “**Modifying a User Account**” on page 7–10, and “**Deleting a User Account**” on page 7–11.

Creating a User Account

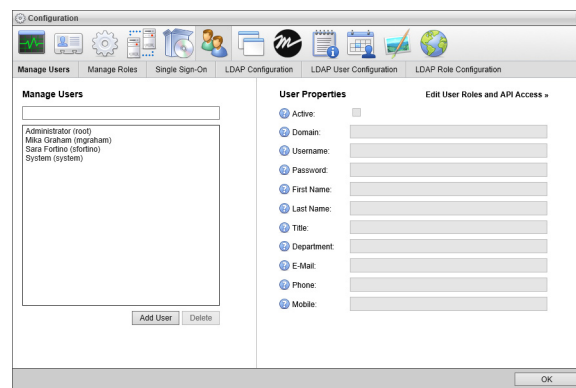
To create a user account

1. On the **Configuration** window toolbar, click the  **Users** icon.

The **Users** panel opens.

2. Click the **Manage Users** tab.

The **Manage Users** tab opens.



3. In the **Manage Users** section, click **Add User**.

Streamline automatically saves property values set for a new user.

4. In the **User Properties** section, select the **Active** check box to make the user operational.

Clear this check box to deactivate a user. Streamline retains information associated with an inactive user account but does not allow you to use the account to log in to your Streamline.

5. In the **Username** box, enter a name for the user.

Use this username to log in to your Streamline. Usernames are case sensitive.

6. In the **Password** box, enter a password of at least five characters for the user. All user accounts must have a password.

Use this password is along with the set username to log in to your Streamline. Passwords are case sensitive.

7. In the **First Name** box, enter the first or proper name of the user.

8. In the **Last Name** box, enter the last or family name of the user.

After logging in to Streamline with a username and password, the status bar displays the first and last name associated with the username.

9. In the **Title** box, enter the job title of the user within the organization.
10. In the **Department** box, enter the department to which the user belongs within the organization.
11. In the **E-Mail** box, enter the corporate e-mail address of the user.
12. In the **Phone** box, enter the corporate telephone number of the user.
13. In the **Mobile** box, enter the mobile telephone number of the user.
14. Click **Edit User Roles**.
15. In the **User Roles** list, select the check boxes associated with the user roles to assign to the user. Clear the check box associated with a user role to unassign it from the user.

For More Information on...

- user accounts, refer to the sections “**Modifying a User Account**” on page 7–10, and “**Deleting a User Account**” on page 7–11.
- user roles, refer to the sections “**Creating a User Role**” on page 7–2, “**Modifying a User Role**” on page 7–4, and “**Deleting a User Role**” on page 7–8.
- typical user permissions, refer to the section “**Typical User Role Permissions**” on page 7–5.

Modifying a User Account

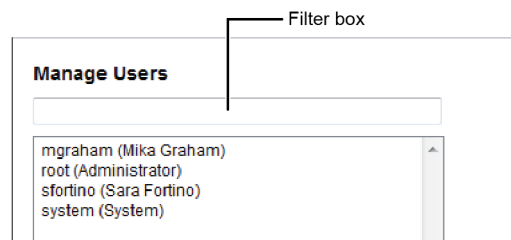
You can modify the properties of user accounts created in Streamline. If you want to modify users imported from an LDAP directory server, you must change them on the LDAP directory server.

To modify a user account

1. On the **Configuration** window toolbar, click the  **Users** icon.
The **Users** panel opens.
2. Click the **Manage Users** tab.
The **Manage Users** tab opens.
3. In the **User s** list, select the name of the user to modify.

You can filter the **Users** list by typing any of the following information in the **Filter** box above the list:

- Any part of a user name. As you enter a user name, the list automatically updates to only show user names that match what you have entered.
- Enter **local** to list only the users created in Streamline.
- Enter **LDAP** to list only the users imported from an LDAP directory.



4. In the **User Properties** section, edit the user properties as required.
Streamline automatically saves property value changes made to a user.

5. Click **Edit User Roles**.

The **User Roles** list opens.

6. In the **User Roles** list, edit the user roles assignments as required.

Streamline automatically saves user role assignment changes made to a user.

For More Information on...

- user accounts, refer to the sections “**Creating a User Account**” on page 7–9, and “**Deleting a User Account**” on page 7–11.
- user roles, refer to the sections “**Creating a User Role**” on page 7–2, “**Modifying a User Role**” on page 7–4, and “**Deleting a User Role**” on page 7–8.
- typical user permissions, refer to the section “**Typical User Role Permissions**” on page 7–5.

Deleting a User Account

You can delete user accounts created in Streamline.

★ You cannot delete user accounts imported from an LDAP directory server.

To delete a user account

1. On the **Configuration** window toolbar, click the  **Users** icon.

The **Users** panel opens.

2. Click the **Manage Users** tab.

The **Manage Users** tab opens.

3. In the **Users** list, select the name of the user to delete.

4. Click **Delete**.

A confirmation message opens, asking you if you want to delete the selected user.

5. Click **OK**.

Streamline deletes the selected user.

6. After completing your configuration tasks, click **OK** in the lower toolbar to close the **Configuration** panel.

For More Information on...

- user accounts, refer to the sections “**Creating a User Account**” on page 7–9, and “**Modifying a User Account**” on page 7–10.
- user roles, refer to the sections “**Creating a User Role**” on page 7–2, “**Modifying a User Role**” on page 7–4, and “**Deleting a User Role**” on page 7–8.

Configure Single Sign-On for Inception and Streamline

Single sign-on enables Inception users to automatically log in to Streamline when they open Streamline as a MOS plugin to Inception. Configuring single sign-on between an Inception Server and a Streamline Server involves the following:

- “**Verify Matching Inception and Streamline Users**” on page 7–12
- “**Add a Single Sign-On Trust Relationship to Both Servers**” on page 7–12
- “**Create a Streamline MOS device on the Inception Server**” on page 7–14

Verify Matching Inception and Streamline Users

Log in to the Inception Server and Streamline Server to verify that the Inception user that uses the Streamline plugin also exists on the Streamline Server. Users can be manually created or added through LDAP on the Inception Server and the Streamline Server.

For More Information on...

- manually creating user accounts on a Streamline Server, refer to the section “**Creating a User Account**” on page 7–9.
- using LDAP to add user accounts to a Streamline Server, refer to the chapter, “**Configuring LDAP Authentication**” on page 8–1.
- adding user accounts to Inception, refer to the *Inception Configuration Guide* or **Online Help** system.

Add a Single Sign-On Trust Relationship to Both Servers

Single sign-on requires a trust relationship be added to both the Inception Server and the Streamline Server. On the Inception server you need to add a single sign-on trust relationship with the Streamline Server. On the Streamline Server you need to add a single sign-on trust relationship with the Inception Server.

Inception Server

To add a single sign-on trust relationship with the Streamline Server

- Log in to your Inception Server as an administrator.
- On the main toolbar, click the  **Configuration** icon. If the **Configuration** icon is not visible, you are not an administrator and cannot configure the server.

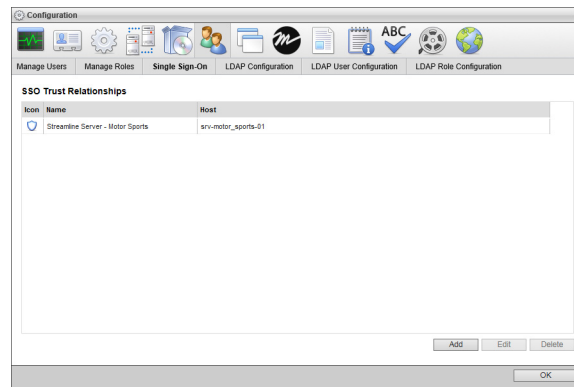
The **Configuration** window opens.

- On the **Configuration** window toolbar, click the  **Users** icon.

The **Users** panel opens.

- Click the **Single Sign-On** tab.

The **Single Sign-On** tab opens.



- Click **Add**.

The **Create SSO Trust Relationship** page opens

- In the **System Name** box, enter a name for the Streamline Server to trust.
- In the **Trusted Host** box, enter the hostname or IP address of the Streamline Server to trust.
- Click **Save**.

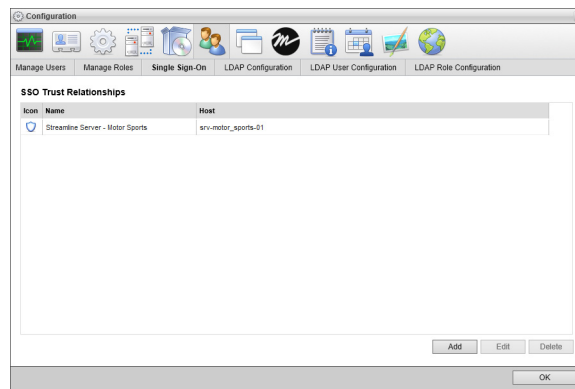
The **Create SSO Trust Relationship** page closes and Inception adds the new single sign-on trust relationship to the **SSO Trust Relationship** list.

9. When building a single sign-on trust relationship with a redundant or enterprise Streamline system that contains multiple Streamline Servers, complete the following steps:
 - a. For each Streamline Server in the Streamline system, repeat step **5** to step **8** to create a single sign-on trust relationship for the Streamline Server.
 - b. Click **Add** to open the **Create SSO Trust Relationship** page.
 - c. In the **System Name** box, enter a name for the load balancer in the Streamline system.
 - d. In the **Trusted Host** box, enter the hostname or IP address of the load balancer in the Streamline system.
 - e. Click **Save**.
10. In the bottom toolbar, click **OK**.
The **Configuration** window closes.
11. Exit from the Inception Server.

Streamline Server

To add a single sign-on trust relationship with the Inception Server

1. Log in to your Streamline Server as an administrator.
2. On the main toolbar, click the  **Configuration** icon. If the **Configuration** icon is not visible, you are not an administrator and cannot configure the server.
The **Configuration** window opens.
3. On the **Configuration** window toolbar, click the  **Users** icon.
The **Users** panel opens.
4. Click the **Single Sign-On** tab.
The **Single Sign-On** tab opens.



5. Click **Add**.
The **Create SSO Trust Relationship** page opens
6. In the **System Name** box, enter a name for the Inception Server to trust.
7. In the **Trusted Host** box, enter the hostname or IP address of the Inception Server to trust.
8. Click **Save**.
The **Create SSO Trust Relationship** page closes and Streamline adds the new single sign-on trust relationship to the **SSO Trust Relationship** list.

9. When building a single sign-on trust relationship with a redundant or enterprise Inception system that contains multiple Inception Servers, complete the following steps:
 - a. For each Inception Server in the Inception system, repeat step 5 to step 8 to create a single sign-on trust relationship for the Inception Server.
 - b. Click **Add** to open the **Create SSO Trust Relationship** page.
 - c. In the **System Name** box, enter a name for the load balancer in the Inception system.
 - d. In the **Trusted Host** box, enter the hostname or IP address of the load balancer in the Inception system.
 - e. Click **Save**.
10. In the bottom toolbar, click **OK**.
The **Configuration** window closes.

Create a Streamline MOS device on the Inception Server

After configuring matching users and trust relationships on both servers for single sign-on, create a Streamline MOS device that uses single sign-on to complete single sign-on configuration. With single sign-on configured, Inception users can open Streamline in Inception without having to enter login credentials for Streamline.

To add a Streamline MOS device to Inception

1. Log in to your Inception Server as an administrator.
2. On the main toolbar, click the  **Configuration** icon. If the **Configuration** icon is not visible, you are not an administrator and cannot configure the server.

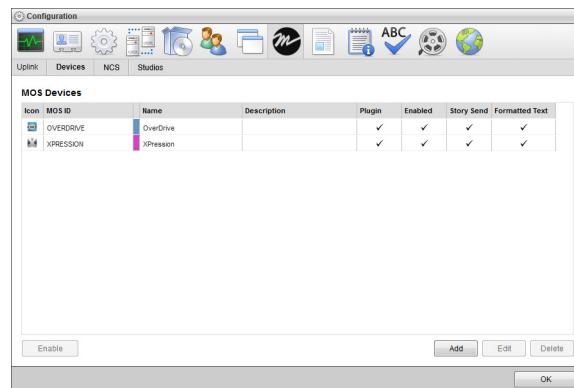
The **Configuration** window opens.

3. On the **Configuration** window toolbar, click the  **MOS** icon in the **Configuration** window toolbar.

The **MOS** panel opens.

4. Click the **Devices** tab. If the **Devices** tab is not visible, you do not have an NCS license for your Inception Server and you cannot add MOS devices to the server.

The **Devices** tab opens.



5. Click **Add**.

The **Create MOS Device** page opens and displays the **Device Settings** section for a new MOS device.

6. Use the **Device** list to select **Streamline**.

Inception updates the **Device Settings** section with default MOS device settings for a Streamline Server.

7. In the **MOS ID** box, enter the MOS ID of the Streamline Server.
8. In the **Host** box, enter the hostname or IP address of the Streamline Server.

9. In the **Description**, enter a description for the Streamline MOS device.
10. Click **Next**.

The next page opens and displays the **MOS Plugin** and the **Web Plugin** sections for the Streamline MOS device.
11. In the **Web Plugin** section, select the User Single Sign-On check box.
12. Click **Next**.

The next page opens and displays the **Appearance** and the **MOS Settings** sections for the Streamline MOS device.
13. Click **Save**.

Inception adds the new Streamline MOS device to the **MOS Devices** list.
14. Exit from the Inception Server.

Manage Single Sign-On Trust Relationships

Managing the single sign-on relationships between the current Inception Server and Streamline Server includes the following procedures:

- Edit Single Sign-On Trust Relationship Properties
- Delete Single Sign-On Trust Relationships

Edit Single Sign-On Trust Relationship Properties

To maintain system security, ensure that the hostname or IP address of the Streamline Server in a single sign-on trust relationship is entered correctly and kept up to date.

To edit the properties of a single sign-on trust relationship

1. From the **SSO Trust Relationships** table in the **Single Sign-On** tab of the **Users** panel, select the single sign-on trust relationship to edit.
2. Click **Edit**.

The **Edit SSO Trust Relationship** page opens.
3. In the **Edit SSO Trust Relationship** page, edit the single sign-on trust relationship properties as required.
4. Click **Save**.

Inception updates the single sign-on trust relationship and returns to the **SSO Trust Relationships** page.

Delete Single Sign-On Trust Relationships

Deleting out of date single sign-on trust relationships from an current Inception Server helps maintain system security.

To delete a single sign-on trust relationship

1. From the **SSO Trust Relationships** table in the **Single Sign-On** tab of the **Users** panel, select the single sign-on trust relationship to delete.
2. Click **Delete**.

A confirmation message opens, asking whether you want to delete the selected single sign-on trust relationship. To keep the single sign-on trust relationship, click **Cancel**.
3. In the confirmation message, click **OK**.

Inception deletes the selected single sign-on trust relationship from the current Inception Server.

Configuring LDAP Authentication

Lightweight Directory Access Protocol (LDAP) is a protocol for accessing and maintaining distributed directory information services over a network. Streamline can import data related to user accounts and user roles (groups) from an LDAP directory server. The Manage Users and Manager Roles tabs lists users and user roles imported from LDAP directory servers alongside user accounts and user roles created in Streamline. You cannot alter the properties of imported user accounts and user roles.

Streamline configuration settings related to LDAP belong to the following categories, represented by tabs on the Users configuration panel:

- **LDAP Configuration** — Properties related to establishing connectivity with an LDAP directory server.
- **LDAP User Configuration** — Mappings to enable Streamline to import user accounts from the LDAP directory server.
- **LDAP Role Configuration** — Mappings to enable Streamline to import user roles (groups) from the LDAP directory server.

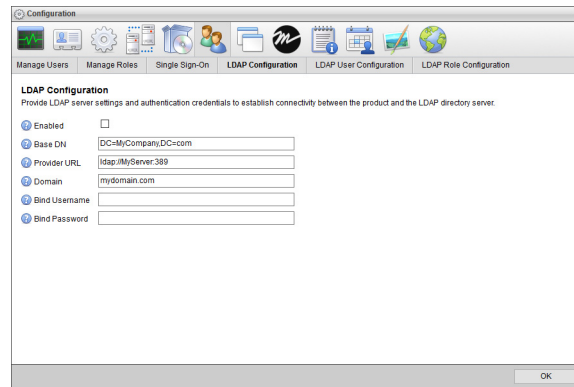
This chapter discusses the following topics:

- Connect to an LDAP Directory Server
- Map to LDAP User Data
- Map to LDAP Group (Role) Data

Connect to an LDAP Directory Server

To connect to an LDAP directory server

1. Log in to your Streamline Server as an administrator.
2. On the main toolbar, click the  **Configuration** icon.
The **Configuration** window opens.
3. On the **Configuration** window toolbar, click the  **Users** icon. If the **Users** icon is not visible, you are not an administrator and cannot configure the server.
The **Users** panel opens.
4. Click the **LDAP Configuration** tab.
The **LDAP Configuration** tab opens.



5. Select the **Enabled** box to enable LDAP user authentication.
If you clear this box, users are only able to log in to your Streamline with user accounts created by Streamline.
6. In the **Base DN** box, enter the name of the root LDAP node for user data.
Example: DC=MyCompany,DC=com
7. In the **Provider URL** box, enter the URL of the LDAP provider, with optional port.
Example: ldap://MyServer:389
8. In the **Domain** box, enter the domain name to append to users upon login.
Example: rossvideo.com
9. In the **Bind Username** box, enter the distinguished name (DN) used to log in to the directory server.
10. In the **Bind Password** box, enter the password used to log in to the directory server.

For More Information on...

- LDAP Authentication, refer to the chapter “**Configuring LDAP Authentication**” on page 8–1
- how to import LDAP user account data, refer to the section “**Map to LDAP User Data**” on page 8–3
- how to Import LDAP user role data, refer to the section “**Map to LDAP Group (Role) Data**” on page 8–4

Map to LDAP User Data

You can synchronize users between an LDAP directory server and the Users table of the Streamline Database.

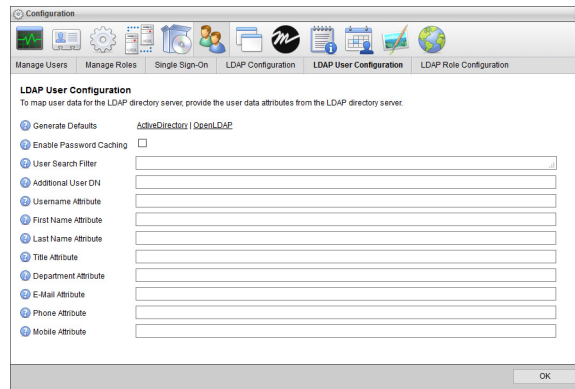
To map to LDAP user data

1. On the **Configuration** window toolbar, click the  **Users** icon.

The **Users** panel opens.

2. Click the **LDAP User Configuration** tab.

The **LDAP User Configuration** tab opens.



3. To populate the **LDAP User Configuration** tab with editable default values, click one of the following **Generate Defaults** links:

- **Active Directory** — your organization uses Active Directory.
- **OpenLDAP** — your organization uses an OpenLDAP directory server.

4. Select the **Enable Password Caching** check box to cache encrypted user password data on the Streamline and use this data for user authentication when Streamline is unable to contact the directory server.
5. In the **User Search Filter** box, enter a valid LDAP query to define the filter that returns a list of potential Streamline users.

During LDAP user synchronization, Streamline only imports LDAP users who meet the criteria of the LDAP User Search filter into the Streamline Database. During LDAP user synchronization, Streamline deletes LDAP users imported by previous User Search filter queries from the Streamline Database.

6. In the **Additional Group DN** box, enter the distinguished name (DN) of the user to optimize efficiency of the search defined in the **User Search Filter** box.
7. In the **Username Attribute** box, enter the attribute for the user account login on the LDAP directory server.

Example: uid or sAMAccountName

8. In the **First Name Attribute** box, enter the attribute for the user first name on the LDAP directory server.

Example: givenName

9. In the **Last Name Attribute** box, enter the attribute for the user surname on the LDAP directory server.

Example: sn

10. In the **Title Attribute** box, enter the attribute for the user organizational title on the LDAP directory server.

Example: title

11. In the **Department Attribute** box, enter the attribute for the user department on the LDAP directory server.

Example: department

12. In the **E-Mail Attribute** box, enter the attribute for the user e-mail on the LDAP directory server.

Example: mail

13. In the **Phone Attribute** box, enter the attribute for the user telephone number on the LDAP directory server.

Example: telephoneNumber

14. In the **Mobile Attribute** box, enter the attribute for the user mobile phone number on the LDAP directory server.

Example: mobile

For More Information on...

- LDAP Authentication, refer to the chapter “**Configuring LDAP Authentication**” on page 8–1
- how to connect to an LDAP directory server, refer to the section “**Connect to an LDAP Directory Server**” on page 8–2
- how to import LDAP user role data, refer to the section “**Map to LDAP Group (Role) Data**” on page 8–4

Map to LDAP Group (Role) Data

You can synchronize roles between an LDAP directory server and the Roles table of the Streamline system.

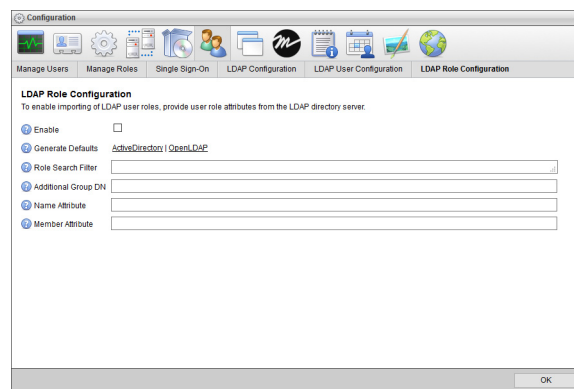
To map to LDAP group (role) data

1. On the **Configuration** window toolbar, click the  **Users** icon.

The **Users** panel opens.

2. Click the **LDAP Role Configuration** tab.

The **LDAP Role Configuration** tab opens.



3. To populate the **LDAP Roles Configuration** tab with editable default values, click one of the following **Generate Defaults** links:

- **Active Directory** — your organization uses Active Directory.
- **OpenLDAP** — your organization uses an OpenLDAP directory server.

4. In the **Role Search Filter** box, enter a valid LDAP query to filter group (role) data to limit the list of roles available in Streamline.

During LDAP role synchronization, Streamline only imports LDAP roles that meet the criteria of the LDAP Role Search filter into the Streamline Database. During LDAP role synchronization, Streamline deactivates LDAP roles imported by previous Role Search filter queries.

5. In the **Additional Group DN** box, enter the distinguished name (DN) of the group (role) to optimize efficiency of the search defined in the **Role Search Filter** box.

6. In the **Name Attribute** box, enter the attribute for the role name on the LDAP directory server.

Example: `cn`

7. In the **Member Attribute** box, enter the user attribute that indicates group (role) membership on the LDAP directory server.

Example: `memberOf`

8. After completing your configuration tasks, click **OK** in the lower toolbar to close the **Configuration** panel.

For More Information on...

- LDAP Authentication, refer to the chapter “**Configuring LDAP Authentication**” on page 8–1
- how to connect to an LDAP directory server, refer to the section “**Connect to an LDAP Directory Server**” on page 8–2
- how to import LDAP user account data, refer to the section “**Map to LDAP User Data**” on page 8–3

Managing Perspectives

A user perspective is a customized view of the Streamline user interface. It is a mapping of Streamline panel types to positions in the user interface layout. Perspectives also save the columns displayed in the Asset Browser, Reports Manager, and Work Order Manager panels.

For example, you can create a perspective that includes a work order in the left column, a report in the top middle, and an Asset Editor panel in the right column. When you later use this perspective, any work order you open display in the left column. Reports open in the middle. Asset Editor open in the right column.

Perspectives can include any or all panel types:

- Approval Manager
- Asset Browser (Including panel columns)
- Asset Editor
- Reports Manager
- Work Orders Manager (Including panel columns)
- Work Order Editor

This chapter discusses the following topics:

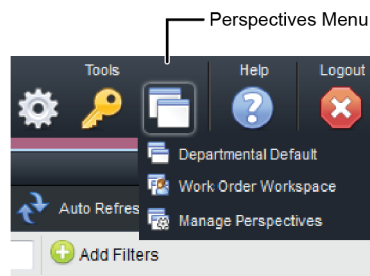
- Creating a New Perspective
- Opening a Saved Perspective
- Editing a Perspective
- Changing the Layout of a Perspective
- Making a User Perspective Global
- Deleting a Perspective

Creating a New Perspective

All Streamline users can create perspectives for their own use. Streamline administrators can also create global perspectives available to all users.

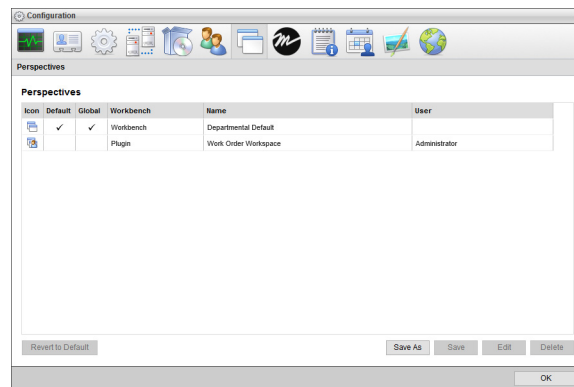
To create a new perspective for your own use

1. Log in to your Streamline Server as an administrator.
2. Open one of each type of panel you want to include in the new perspective.
3. Rearrange the panels to the positions you want them to occupy in the perspective.
For more information about repositioning panels, refer to the *Streamline User Guide*.
4. In **Work Order**, **Reports**, and **Asset Browser** panels, display the panel columns to include in the perspective.
For more information about displaying panel columns, refer to the *Streamline User Guide*.
5. On the main toolbar, point to the  **Perspectives** icon.



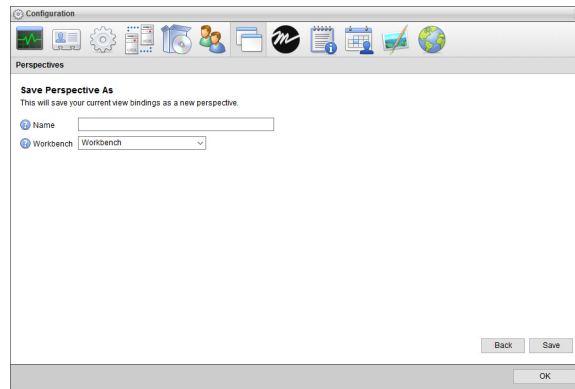
6. In the list, click **Manage Perspectives**.

The **Configuration** window opens, showing the **Perspectives** tab.



7. Click **Save As**.

The **Save Perspective As** page opens.



8. In the **Name** box, enter a name for the new perspective.
9. Use the **Workbench** list to select the environment in which to use the new perspective. The available options are as follows:
 - **Workbench** — use the perspective in Streamline.
 - **Plugin** — use the perspective in the Streamline plugin.
10. Click **Save**.

The **Save Perspective As** page closes and Streamline adds the new perspective to the **Perspectives** list.
11. Click **OK** to close the **Configuration** window.

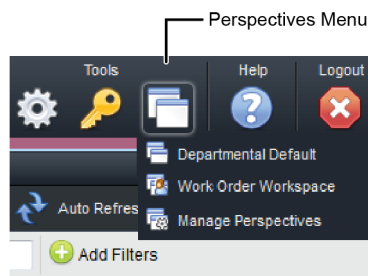
Opening a Saved Perspective

Panels may not always open exactly where you expect. As you open and close panels, Streamline adjusts the layout to optimize use of the available space. For example, if the current perspective includes a work order in the left column and you use it to open only a work order, the work order occupies all the available space. As you open more panel types, Streamline adjusts the layout to conform with the perspective.

To open a saved perspective

1. On the main toolbar, point to the  **Perspectives** icon.

A list of saved perspectives opens. The last item on the list, **Manage Perspectives**, is not a perspective.



2. In the list, click the perspective to open.

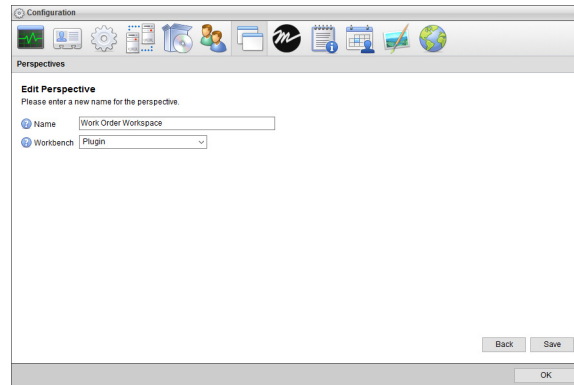
Streamline repositions the open panels to conform to the layout in the selected perspective.

Editing a Perspective

You can edit an existing perspective to change the perspective name or usage environment.

To rename a perspective

1. On the main toolbar, use the  **Perspectives** icon to select **Manage Perspectives** from the list.
The **Configuration** window opens, showing the **Perspectives** tab.
2. In the **Perspectives** list, select the perspective to rename.
3. Click **Edit**.
The **Edit Perspective** page opens.



4. In the **Name** box, enter a new name for the selected perspective.
5. Click **Save**.
The name of the perspective updates in the **Perspectives** list.
6. Use the **Workbench** list to select the environment in which to use the new perspective. The available options are as follows:
 - **Workbench** — use the perspective in Streamline.
 - **Plugin** — use the perspective in the Streamline plugin.
7. Click **OK** to close the **Configuration** window.

Changing the Layout of a Perspective

To change the layout of a perspective

1. Rearrange the panels in a perspective to form the new layout for the perspective.
2. In the **Work Order Manager**, **Reports Manager**, and **Asset Browser** panels, display the panel columns to include in the perspective.
3. On the main toolbar, use the  **Perspectives** icon to select **Manage Perspectives** from the list.
The **Configuration** window opens, showing the **Perspectives** tab.
4. In the **Perspective** list, select the perspective for the new panel layout.
5. Click **Save**.
A confirmation message opens, asking whether you want to overwrite the perspective.
6. In the confirmation message, click **OK**.
The confirmation message closes and Streamline saves the set panel layout is with the selected perspective.
7. Click **OK** to close the **Configuration** window.

Reverting a Perspective to the Default Layout

When you first use Streamline, it opens certain types of panels in certain panel positions by default. Streamline continues to use the default layout until you move a panel or open a saved perspective.

You can revert a saved perspective to Streamline's default layout. This is useful if you want to make the default layout permanently available as a perspective, or if you want to use it as a starting point for creating a new customized perspective. When a user reverts to the default layout Streamline also reverts the columns displayed in the Work Order Manager, Reports Manager, and Asset Browser panels to their default columns.

The following illustration describes the default layout.



Figure 9.1 Default Panel Layout

Default layout positions are as follows:

- Grid-based panels open in the top middle box. These include the Work Order Manager, Reports Manager, the Asset Browser, and the Approval Manager panels.
- The Asset Editor and Work Order Editor interfaces open in the right column.

By default, Streamline does not occupy all eight positions with a panel. Streamline does optimize a layout by expanding open panels to fill all available space. When you use the default layout and open instances of every type of panel, panels display as follows:



Figure 9.2 Actual Layout with all Panel Types Open

To revert a perspective to the default layout

1. On the main toolbar, use the  **Perspectives** icon to select **Manage Perspectives** from the list.
The **Configuration** window opens, showing the **Perspectives** tab.
2. In the **Perspective** list, select the perspective to apply the default layout.
3. Click or tap **Revert to Default**.
A confirmation message opens, asking whether you want to revert the perspective to the default layout.
- ★ There is no undo for this change. When you revert to the default layout Streamline also reverts the columns displayed in the panels to their default columns. Click or tap **Cancel** to keep the current perspective layout.
4. In the confirmation message, click or tap **OK**.
The confirmation message closes and Streamline saves the default panel layout with the selected perspective.
5. Click **OK** to close the **Configuration** window.

Making a User Perspective Global

A user-specific perspective is only available to the Streamline user who created it. Global perspectives are available to all Streamline users. If you are a Streamline administrator, you can make a user-specific perspective global.

To make a perspective global

1. Log in to your Streamline Server as an administrator.
Only administrators can make a perspective available to all users.
2. On the main toolbar, use the  **Perspectives** icon to select **Manage Perspectives** from the list.
The **Configuration** window opens, showing the **Perspectives** tab.
3. In the **Perspectives** list, select the user-specific perspective to make available to all users.
Perspectives that do not have a check mark in the **Global** column of the **Perspectives** list are user-specific and only available to the users that created them. A check mark in the **Global** column of the **Perspectives** list indicates that a perspective is global and available to all users.
4. Click **Set as Global**. This option is only available to Streamline administrators.
A check mark displays in the **Global** column of the selected perspective, which indicates that all users now have access the perspective from the  **Perspectives** icon.
5. Click **OK** to close the **Configuration** window.

To make a global perspective user-specific

1. As an administrator, use the  **Perspectives** icon to select **Manage Perspectives** from the list.
The **Configuration** window opens, showing the **Perspectives** tab.
2. In the **Perspectives** list, select the global perspective to make user-specific.
A check mark in the **Global** column of the **Perspectives** list indicates that a perspective is global and available to all users. Perspectives that do not have a check mark are user-specific.
When the selected perspective is the set default perspective, complete the procedure “**To remove a perspective as the default perspective**” on page 9–7 before continuing with the next step in this procedure.
3. Click **Set as User**. This option is only available to Streamline administrators.
Streamline removes the check mark from the **Global** column of the selected perspective, which indicates that only the user who created the perspective can use it.
4. Click **OK** to close the **Configuration** window.

Setting the Default Perspective

When a user first opens Streamline, the default perspective opens selected panels in set positions. Users continue to use the default layout until they move a panel or open a saved perspective. Any global perspective can be set as the default perspective for Streamline users.

To set the default perspective

1. Log in to your Streamline Server as an administrator.
Only administrators can set the default perspective for all users.
2. On the main toolbar, use the  **Perspectives** icon to select **Manage Perspectives** from the list.
The **Configuration** window opens, showing the **Perspectives** tab.
3. In the **Perspectives** list, select the global perspective to set as the default perspective for all users.
A check mark in the **Global** column of the **Perspectives** list indicates the global perspectives that you can select to set as the default perspective.
4. Click **Set as Default**. This option is only available to Streamline administrators.
A check mark displays in the **Default** column of the selected perspective. You can only set one perspective as the default perspective.
5. Click **OK** to close the **Configuration** window.

To remove a perspective as the default perspective

1. Log in to your Streamline Server as an administrator.
Only administrators can remove a perspective as the default perspective.
2. On the main toolbar, use the  **Perspectives** icon to select **Manage Perspectives** from the list.
The **Configuration** window opens, showing the **Perspectives** tab.
3. In the **Perspectives** list, select the current default perspective.
A check mark in the **Default** column of the **Perspectives** list indicates the current default perspective.
4. Click **Remove as Default**. This option is only available to Streamline administrators.
Streamline removes the check mark from the **Default** column of the selected perspective. Without selected default perspective, Streamline uses a built-in perspective as the default perspective.
5. Click **OK** to close the **Configuration** window.

Deleting a Perspective

Streamline users can only delete perspectives that they created. You must log in to Streamline as an administrator to delete global perspectives.

To delete a perspective

1. On the main toolbar, use the  **Perspectives** icon to select **Manage Perspectives** from the list.
The **Configuration** window opens, showing the **Perspectives** tab.
2. In the **Perspectives** list, select the perspective to delete.
3. Click or tap **Delete**.
A confirmation message opens, asking whether you want to delete the perspective. Click or tap **Cancel** to keep the perspective.

4. In the confirmation message, click **OK**.
Streamline deletes the selected perspective from the **Perspectives** list.
5. Click **OK** to close the **Configuration** window.

Configuring MOS Connections

Streamline can be configured to communicate with various systems using the MOS protocol.

This chapter discusses the following topics:

- Streamline MOS Configuration
- Connecting Streamline with XPression
- Uplink Streamline Assets with an NCS
- Map Asset Attributes to NCS Properties

Streamline MOS Configuration

Before your Streamline Server can use the MOS protocol to communicate with Ross XPression, Ross Inception, and other systems you need to configure your Streamline Server for MOS. The MOS ID that you specify for your Streamline Server uniquely identifies your server as a MOS device.

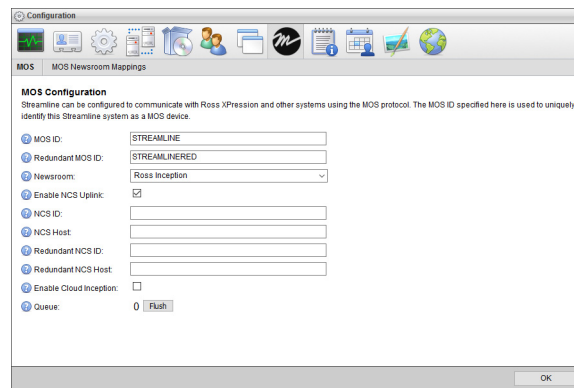
To define the MOS configuration for your Streamline Server

1. Log in to your Streamline Server as an administrator.
2. On the main toolbar, click the  **Configuration** icon.

The **Configuration** window opens.

3. On the **Configuration** window toolbar, click the  **MOS** icon. If the **MOS** icon is not visible, you are not an administrator and cannot configure MOS connections.

The **MOS** panel opens.



Your Streamline Server does not have a MOS Uplink license when the following settings do not display on the **MOS** panel: **Enable NCS Uplink**, **NCS ID**, **NCS Host**, **Redundant NCS ID**, **Redundant NCS Host**, **Enable Cloud Inception**, and **Queue**.

4. In the **MOS ID** box, enter a MOS ID for your Streamline Server to uniquely identify the server as a MOS device.
5. In the **Redundant MOS ID** box, enter a MOS ID for your redundant Streamline instance.
6. Record the MOS IDs that you set for your Streamline Server.
7. Select the **Enable NCS Uplink** check box to establish a connection between the Streamline Server and the NCS specified in the **NCS ID**, **NCS Host**, **Redundant NCS ID**, and **Redundant NCS Host** boxes.
8. In the **NCS ID** box, enter the NCS ID of your newsroom.
9. In the **NCS Host** box, enter the hostname or IP address of your newsroom or NCS gateway.
10. In the **Redundant NCS ID** box, enter the NCS ID of your redundant newsroom.
11. In the **Redundant NCS Host** box, enter the hostname or IP address of your redundant newsroom or NCS gateway.
12. Click **OK**.

Connecting Streamline with XPression

After configuring MOS on your Streamline Server, you can create an API key and a MOS device to complete the connection between your Streamline Server and your XPression system.

API Key

XPression requires an API key to enable communication with a Streamline Server. In Streamline, API keys are associated with users. On your Streamline Server you need an XPression connection user with an API key that you can use to connect your Streamline Server and XPression system.

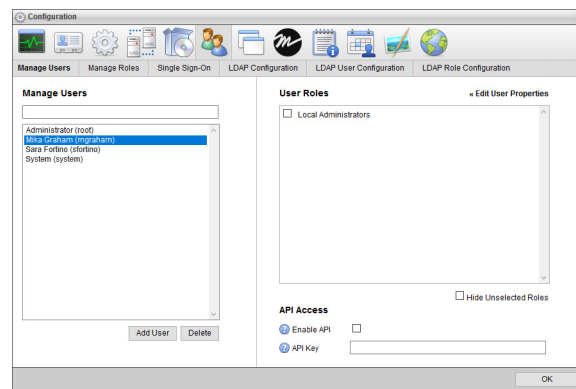
To create the XPression connection user

1. Log in to your Streamline Server as an administrator.
2. On the main toolbar, click the  **Configuration** icon.
The **Configuration** window opens.
3. On the **Configuration** window toolbar, click the  **Users** icon. If the **Users** icon is not visible, you are not an administrator and cannot configure a user account for API access.

The **Manage Users** tab of the **Users** panel opens.

4. In the **Manage Users** list, select the user account for which to enable API access.
5. Select **Edit User Roles and API Access**.

The **Manage Users** tab updates to display the **API Access** fields.



6. In the **API Access** section, select the **Enable API** check box.

The **API Key** field displays the API key that Streamline automatically assigned to the selected user. You can use the displayed API key to identify your Streamline Server to your XPression system.

7. Record the API key displayed in the **API Key** field.
8. Click **OK**.

The **Configuration** window closes.

XPression MOS Connection

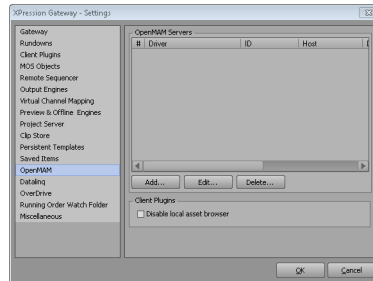
After setting an API key for the XPression connection user on your Streamline Server, you can configure a MOS connection between your Streamline Server and XPression system.

To set up a connection between your Streamline Server and XPression system

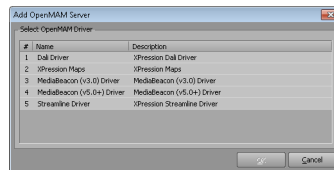
1. Open the your **XPression Gateway**.
2. Use the **Gateway** menu to select **Settings**.
The **XPression Gateway - Settings** dialog box opens.

3. Click **OpenMAM**.

The **OpenMAM Servers** and **Client Plugins** sections open in the configuration area.

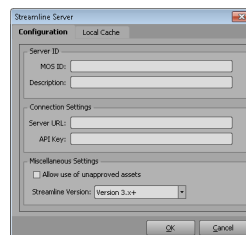


4. In the **OpenMAM Servers** section, click **Add**.
The **Add OpenMAM Server** dialog box opens.



5. Select **Streamline Driver**.
6. Click **OK**.

The **Streamline Server** dialog box opens.



7. In the **Server ID** section, enter the MOS ID that you set for your Streamline Server in the **MOS ID** box.
The MOS ID of your Streamline Server is set in step 4 of the procedure “**To define the MOS configuration for your Streamline Server**” on page 10–2.
8. In the **Description** box, enter a description for the Streamline Server.
9. In the **Connection Setting** section, enter the URL that you used to access your Streamline Server in the **Server URL** box.

10. In the **API Key** box, enter the API Key of the **XPression connection** user that you created on your Streamline Server.

The API Key of your cloud connection user is set in step 6 of the procedure “**To create the XPression connection user**” on page 10–3.

11. In the **Miscellaneous Settings** section, select the **Allow use of unapproved assets** check box if you want to allow XPression to use unapproved assets from Streamline.
12. Use the **Streamline Version** list to select **Version 3.x +**.
13. Click **OK**.

The **Streamline Server** dialog box closes and the XPression Gateway adds the defined Streamline driver to the **OpenMAM Servers** section of the **XPression Gateway - Settings** dialog box.

14. In the **Client Plugins** section of the **XPression Gateway - Settings** dialog box, select the **Disable local asset browser** check box to disable browsing of the local cache.
15. In the **XPression Gateway - Settings** dialog box, click **OK**.

The **XPression Gateway - Settings** dialog box closes.

Uplink Streamline Assets with an NCS

After configuring your Streamline Server for MOS, you can add a MOS device to your NCS to enable your Streamline Server to uplink assets to the NCS. How you create a Streamline Server MOS device depends on whether you use the Ross Inception NCS or a third-party NCS.

★ You require a MOS Uplink license for your Streamline Server to uplink assets with an NCS.

Ross Inception Streamline Server MOS Device

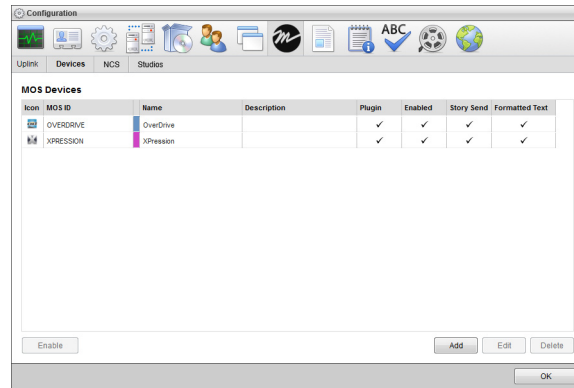
When you use Inception as your NCS, Inception uses MOS to enable journalists to see, use, and control MOS media devices inside of a Broadcast story. Journalists use a plugin associated with a MOS device to insert and control the device in a Broadcast story.

To add a Streamline Server MOS media device to Inception

1. Log in to your Inception Server as an administrator.
For information about Inception Server log in, refer to the *Inception Configuration Guide*.
2. On the main toolbar, click the  **Configuration** icon.
The **Configuration** window opens.
3. On the **Configuration** window toolbar, click the  **MOS** icon.
The **MOS** panel opens.

- Click the **Devices** tab. If the **Devices** tab is not visible, you do not have an NCS license for your Inception Server and you cannot add MOS devices to the server.

The **Devices** tab opens.



- Click **Add**.

The **Create MOS Device** page opens and displays the **Device Settings** section for the new MOS device.

- In the **Device Settings** section, use the **Device** list to select **Ross Streamline**.

The **Device Settings** section updates with setting values for the **Ross Streamline** MOS device.

- In the **MOS ID** box, enter the MOS ID that you set for your Streamline Server.

The MOS ID of your Streamline Server is set in step 4 of the procedure “**To define the MOS configuration for your Streamline Server**” on page 10–2.

- In the **MOS ID Mask** box, enter a pattern of characters and the * wildcard to match the MOS ID of one or more MOS devices of the same type in different locations. The * wildcard matches zero or more characters in a MOS ID. Leave this box blank for devices that do not support MOS redirection.

Profile 6 of the MOS Protocol recommends using the following naming convention for MOS IDs for MOS redirection:

<family>.<machine>.<location>.<enterprise>.mos

MOS redirection example,

MOS Device 1	MOS Device 2
• MOS ID: Ross.CG.Ottawa.CBC.mos • MOS ID Mask: Ross.CG.*.CBC.mos	• MOS ID: Ross.CMS.Ottawa.CBC.mos • MOS ID Mask: none
• The Device 1 MOS plugin opens for MOS objects with the MOS ID Ross.CG.Ott.CBC.mos. • The Device 1 MOS plugin opens for MOS objects with the MOS ID Ross.CG.Van.CBC.mos. • The Device 2 MOS plugin opens for MOS objects with the MOS ID Ross.CMS.Ott.CBC.mos. • A MOS plugin does not open for MOS objects with the MOS ID Ross.CMS.Van.CBC.mos.	

- In the **Host** box, enter the hostname or IP address of your Streamline Server.
- Use the **MOS Version** list to select MOS version **2.8.4**.
- In the **Name** box, enter a name for the Streamline Server MOS device.
- In the **Description**, enter a description for the Streamline Server MOS device.
- Click **Next**.

The next page opens and displays the **MOS Plugin**, **Web Plugin**, and **Advance Options** sections.

14. In the **Web Plugin** section, verify that the automatically set web plugin URL in the **URL** box matches the hostname or IP address of your Streamline Server.

The format of the **URL** box is as follows, where **<Your Streamline Server>** is the hostname or IP address of your Streamline Server:

http://<Your Streamline Server>/plugin

If the automatically set URL does not match your Streamline Server, click in the **URL** box and change the **<Your Streamline Server>** part of the URL to match your Streamline Server.

15. Select the **Use Single Sign-On** check box to enable users with matching logins on Inception and Streamline Servers to automatically log in to Streamline when they use the Streamline web plugin with Inception.
16. To allow additional connections to the Streamline Server MOS device, complete the following steps:

- a. Click **Add** to the right of the **Inbound Hosts** box.

An **Alert** opens.

- b. In the **Alert**, enter the hostname or IP address of a host to connect to the Streamline Server MOS device.
- c. Click **OK**.

The **Alert** closes and the entered hostname or IP address displays in the **Inbound Hosts** box.

- d. Repeat this procedure to add additional host connections.

17. Click **Next**.

The next page opens and displays the **Appearance** and **MOS Settings** sections.

18. In the **Appearance** section, use the **Icon** list to select **Ross Streamline**.

19. Click the **Background** color square to use a color picker to select the background color that Inception uses to display the Streamline.cloud service MOS device in a Broadcast story.

As you click in the color picker, the box to the right of the color square displays the HTML color code of the selected color. You can also enter an HTML color code in the box to the right of the color square. As you enter an HTML color code, the color square displays the color of the entered code.

20. Click the **Foreground** color square to use a color picker to select the text color that Inception uses to display the Streamline.cloud service MOS device in a Broadcast story.

As you click in the color picker, the box to the right of the color square displays the HTML color code of the selected color. You can also enter an HTML color code in the box to the right of the color square. As you enter an HTML color code, the color square displays the color of the entered code.

21. In the **MOS Settings** section, select the **Enable Story Send** check box to send story text and MOS items in a Broadcast story to the Streamline.cloud service MOS device.

22. Select the **Send Formatted Text** check box to include HTML markup with story text sent to the Streamline.cloud service MOS device.

23. Select the **Enable Object Browsing** check box to use the **MOS Objects** panel to add MOS objects from the Streamline.cloud service MOS device to a Broadcast story.

24. Select the **Synchronize Objects** check box to set the delay parameter for the mosReqAll message that Inception sends to the Streamline.cloud service MOS device to request a list of MOS objects from the device. For information about the mosReqAll message, refer to the section **3.2.1 mosReqAll - Request All Object Data from MOS** in the MOS Protocol.

Inception displays the **Synchronization Interval** box below the **Synchronize Objects** check box.

25. In the **Synchronization Interval** box, enter **1** as the amount of time for the delay parameter in the mosReqAll message that Inception sends to the Streamline.cloud service MOS device to request a list of MOS objects from the device.

This box is only available after selecting the **Synchronize Objects** check box.

26. Select the **Enable Placeholders** check box to enable users to add placeholders to Broadcast stories for MOS objects that do not yet exist on the Streamline.cloud service MOS device.
Inception exchanges the placeholder with the requested MOS object when the MOS object is created on the Streamline.cloud service MOS device.
27. Select the **Require Item Status** check box to display the status of the Streamline.cloud service MOS device in the **MOS Status** and **MOS Device** columns of the table in the **Running Order** panel.
28. Clear the **Enable Timing Control** check box.
29. Click **Save**.
Inception adds the Streamline.cloud service MOS device to the **MOS Devices** list.

Third-party NCS Streamline.cloud Service MOS Device

Use the following settings to add a Streamline Server MOS device to an NCS other than Inception:

- **MOS ID**: enter the MOS ID that you set for your Streamline Server in step 4 of the procedure “**To define the MOS configuration for your Streamline Server**” on page 10–2.
- **Hostname**: enter the hostname or IP address of your Streamline Server.
- **Web Plugin**: enter the URL of the of your Streamline Server web plugin. Streamline Server web plugin URLs use the following format, where **<Your Streamline Server>** is the hostname or IP address of your Streamline Server:

`http://<Your Streamline Server>/plugin`

For More Information on...

- the Cloud Gateway, refer to the *Cloud Gateway Configuration Guide*.
- adding MOS devices to your NCS, refer to the *User Guide* for your NCS.

Streamline Asset MOS Status

When a Streamline asset is not ready in an NCS rundown, Streamline sends a MOS status message to the NCS to report why the asset is not ready.

- ★ If an asset has multiple destinations, Streamline reports the first found non-READY status. There is no predictable order in which Streamline finds the first non-READY status to report from multiple destinations.

The possible MOS status messages that Streamline can send to the NCS for MOS items are as follows:

- **READY** — asset file exists on all destinations.
- **TRANSFERRING** — asset file is being transferred to the storage.
- **NO VALID FORMATS** — none of the asset's formats pass the storage validation rules.
- **UNFULFILLED PLACEHOLDER** — the asset is a placeholder and has no files to transfer.
- **ASSET NOT FOUND** — the asset for the item cannot be found in the database.
- **INVALID OBJECT** — Streamline was unable to parse the provided MOS object.
- **STORAGE UNREACHABLE** — attempts to contact the storage to check item status have failed.
- **TRANSFER FAILED** — the last transfer attempt failed.
- **NEVER TRANSFERRED** — the asset was never requested to transfer.
- **UNKNOWN** — Streamline was unable to determine a reason for an asset not existing on the storage.

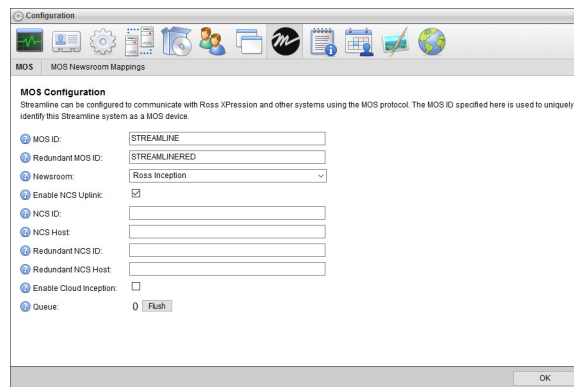
Map Asset Attributes to NCS Properties

In Streamline you can map asset attributes to NCS properties. The first time an asset is used in a story that is part of a monitored rundown, Streamline uses the defined mappings to save NCS property values to the associated asset attributes. Changes made to NCS properties while a rundown is monitored also update the values of the associated asset attributes. After the first use of an asset in the story of a monitored rundown, asset attribute values are not updated with NCS property values.

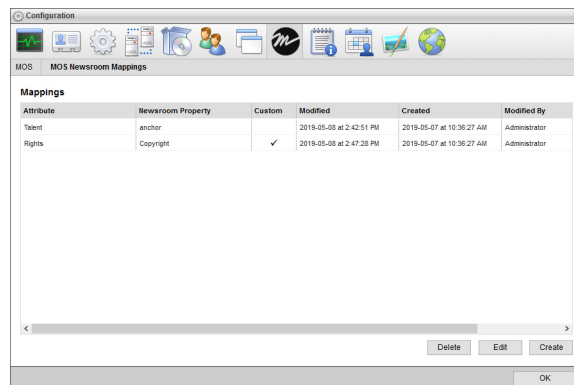
- ★ When mapping asset attributes to NCS properties, Ross Video recommends mapping Inception User and Multi-User data types to Single-Line Strings in Streamline to enable text searching of users. Streamline attempts to map data by user names when they map to a Streamline User/Multi-User data type.

To create MOS newsroom mappings

1. Log in to your Streamline Server as an administrator.
2. On the main toolbar, click the  **Configuration** icon.
The **Configuration** window opens.
3. On the **Configuration** window toolbar, click the  **MOS** icon. If the **MOS** icon is not visible, you are not an administrator and cannot configure MOS connections.
The **MOS** panel opens.

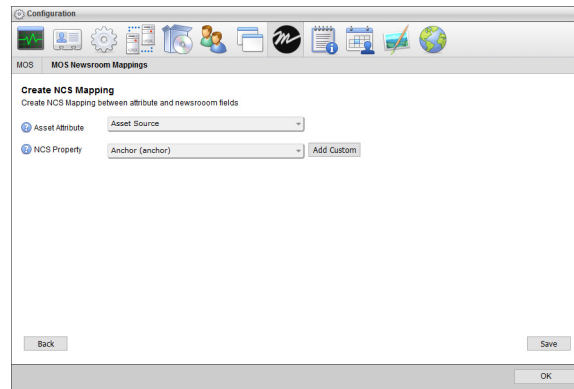


4. Use the **Newsroom** list to select the newsroom for which to map NCS properties to asset attributes.
- ★ Changing the newsroom deletes the MOS newsroom mappings defined for the current newsroom.
5. Click the **MOS Newsroom Mappings** tab.
The **MOS Newsroom Mappings** tab opens.



6. Click **Create**.

The **Create Mapping** page opens.



7. Use the **Asset Attribute** list to select the asset attribute to set with the value contained in the mapped NCS property.
You can filter the **Asset Attribute** list by typing any part of an attribute name in the **Filter** box. As you enter an attribute name, the list automatically updates to only show attribute names that match what you have entered. Clear the **Filter** box to list all available asset attributes.
8. Use the **NCS Property** list to select the NCS property that contains the value to set for the mapped asset attribute. The NCS Property list displays the MOS message tag for an NCS property in parentheses to the right of the property.
You can filter the **NCS Property** list by typing any part of a property name in the **Filter** box. As you enter a property name, the list automatically updates to only show property names that match what you have entered. Clear the **Filter** box to list all available NCS properties.
9. When the **NCS Property** list does not contain the property to map to the selected asset attribute, complete the following steps to enter a custom NCS property:
 - a. Click **Add Custom** to the right of the **NCS Property** list.
The **NCS Property** list changes to the **Add NCS Property** box and the **Add Custom** button changes to **Existing**.
 - b. In the **Add NCS Property** box, enter the name of a custom NCS property that contains the value to set for the mapped asset attribute.
To return to the **NCS Property** list, click **Existing**.
10. Click **Save**.
Streamline saves the defined mapping and opens the **Mappings** page.
11. Repeat step 6 to step 10 for each mapping that you want to define for the newsroom.

Manage MOS Newsroom Mappings

Managing the MOS newsroom mappings on your Streamline Server includes the following procedures:

- Edit Mappings
- Delete Mappings

After editing mappings, Streamline uses the revised mappings to set asset attribute values the next time an asset is first used in a story that is part of a monitored rundown. The asset attributes do not change for previously used assets.

Edit Mappings

You can edit a defined mapping to change the associated asset attributes and NCS properties.

To edit a mapping

1. In the **Mappings** table of the **Mappings** page, select a mapping to edit.
2. Click **Edit**.
The **Edit NCS Mappings** page opens.
3. Edit the mapping between associated asset attributes and NCS properties as required.
4. Click **Save**.
Streamline updates the mapping and opens the **Mappings** page.

Delete Mappings

Deleting a mapping does not change any of the previously set asset attribute values.

To delete a mapping

1. In the **Mappings** table of the **Mappings** page, select a mapping to delete.
2. Click **Delete**.
A confirmation message opens, asking whether you want to delete the selected mapping. To keep the mapping, click **Cancel**.
3. In the confirmation message, click **OK**.
Streamline deletes the selected mapping from the **Mappings** table.

Configuring Custom Metadata

Custom metadata configuration enables you to define custom entities and attributes, and to manage existing attributes and define custom attributes for the following Streamline entities:

- Assets
- Work Orders

The custom entities and attributes that you define are local to your Streamline Server and independent of standard Streamline entities and attributes. This feature also provides a method of representing cross-product metadata.

This chapter discusses the following topics:

- Create Custom Entities
- Manage Custom Entities
- Plan Custom Attributes
- Create Custom Attributes
- Manage Attributes
- Create Choice Lists for Custom Attributes
- Manage Choice Lists and Choices
- Create Managers
- Manage Managers

Create Custom Entities

Custom entities enable you to design Streamline grids to store information that is particular to your organization. After you create a custom entity, you can specify the metadata to store in the entity by adding custom attributes to the entity.

To create a custom entity

1. Log in to your Streamline Server as an administrator.
2. On the main toolbar, click the  **Configuration** icon. If the **Configuration** icon is not visible, you are not an administrator and cannot configure the server.

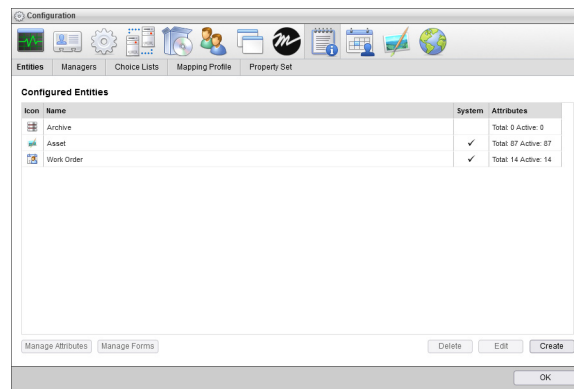
The **Configuration** window opens.

3. On the **Configuration** window toolbar, click the  **Metadata** icon.

The **Metadata** panel opens.

4. Click the **Entities** tab.

The **Entities** tab opens.



5. Click **Create**.

The **Create Entity** page opens.

6. In the **Name** box, enter the name to display for the custom entity in the  **Custom Entities** list on the main toolbar.
7. In the **Grid Name** box, enter the grid name to display in the title bar of the Streamline grid associated with the entity.
8. Select the **Paged Grid** check box if you want to use pages to display the information contained in the custom entity. When you select this option, Streamline adds paging controls to the bottom of the Streamline grid associated with the entity.
9. Select the **Manual Sort** check box if you want users to manually sort the information contained in the custom entity by drag and drop. Selecting this option disables column sorting.
10. Select the **Globally Searchable** check box to include the information contained in the custom entity in global searches of Streamline content. The more entities that you include in global searches, the longer it takes Streamline to report the results of a global search.
11. Click **Next**.

The next page opens and displays the **Icon** list for you to select an icon to identify your custom entity.

12. Use the **Icon** list to select an icon to identify your custom entity and display in the title bar of the Streamline grid associated with the entity.

If the icons in the list are not appropriate for your custom entity, do the following:

- a. Use the **Icon** list to select **Upload an Icon**.

Streamline displays a **Browse** button.

- b. Click **Browse**.

The **File Upload** dialog box opens.

- c. Use the **File Upload** dialog box to select the image file to use as the icon for your custom entity.

- d. Click **Open**.

Streamline adds the image contained in the selected image file to the **Icon** list as the **Uploaded Icon** option, and automatically selects the uploaded image as the icon for your custom entity. You can only upload one image to the **Icon** list at a time. Uploading another image to the **Icon** list replaces the current uploaded image with the new image.

13. Click **Save**.

Streamline adds the new custom entity to the **Configured Entities** page.

14. To view the new custom entity, select it from the  **Custom** list on the main toolbar.

Streamline automatically adds the **ID**, **Modified**, **Modified By**, **Created**, and **Created By** attributes to all custom entities. You can also add your own custom attributes to your new custom entity.

For More Information on...

- creating custom attributes for entities, refer to the sections “**Plan Custom Attributes**” on page 11–4 and “**Create Custom Attributes**” on page 11–5.

Manage Custom Entities

Managing the custom entities on your Streamline Server includes the following procedures:

- Edit Custom Attribute Properties
- Delete Custom Attributes

Edit Custom Entity Properties

Streamline enables you to edit all the properties of an existing custom entity.

To edit the properties of a custom entity

1. From the **Configured Entities** table in the **Entities** tab of the **Metadata** panel, select the custom entity to edit.
2. Click **Edit**.

The **Edit Entity** page opens for the selected custom entity.

3. Edit the custom entity properties as required.
4. Click **Next**.

The next page of custom entity properties opens.

5. Edit the additional custom entity properties as required.
6. Click **Save**.

Streamline updates the custom entity and opens the **Configured Entities** page.

7. To view the updated custom entity, select it from the  **Custom** list on the main toolbar.

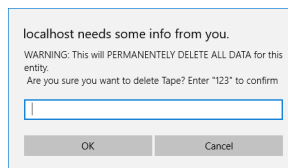
Delete Custom Entities

- ★ When you delete a custom entity you also delete the custom attributes and attribute data associated with the custom entity.

To delete a custom entity

1. From the **Configured Entities** table in the **Entities** tab of the **Metadata** panel, select the custom entity to delete.
2. To be able to restore a custom entity after you delete it, record the **Name** and **Grid Name** of the selected custom entity. You can use the recorded **Name** and **Grid Name** to recreate the deleted custom entity.
3. Click **Delete**.

An **Alert** opens.



To keep the custom entity, click **Cancel**.

4. In the confirmation message, enter 123 in the text box and click **OK**.

Streamline deletes the selected custom entity from the **Configured Entities** page. Deleting a custom entity also deletes the custom attributes and attribute data associated with the custom entity.

Plan Custom Attributes

Before you start using the Metadata panel to add custom attributes to Streamline, you should answer the following questions to help you plan the definition of your custom attributes:

- In which Streamline grid do you want users to enter or view data for the custom attribute?
The association between Streamline entities and grids is as follows:
 - › **Assets** — the **Assets** panel lists the assets available on a Streamline Server.
 - › **Work Order** — the **Work Orders** panel lists requests to develop content for assets.
 - › **Custom** — custom entity panels that store information particular to your organization.
- What type of data do you want to save in the custom attribute: text, numeric, date, time, true/false, or Streamline user?
- ★ Changing the data type for a custom attribute that contains data can cause loss of data.
- Do you want users to select custom attribute values from a choice list?
- ★ Editing the choice list used to select data for a custom attribute that contains data can cause loss of data.

Create Custom Attributes

After completing your custom attribute plan, you are ready to start the process of adding custom attributes to your Streamline Server. The following diagram (**Figure 11.1**) illustrates the different phases of the custom attribute creation workflow.

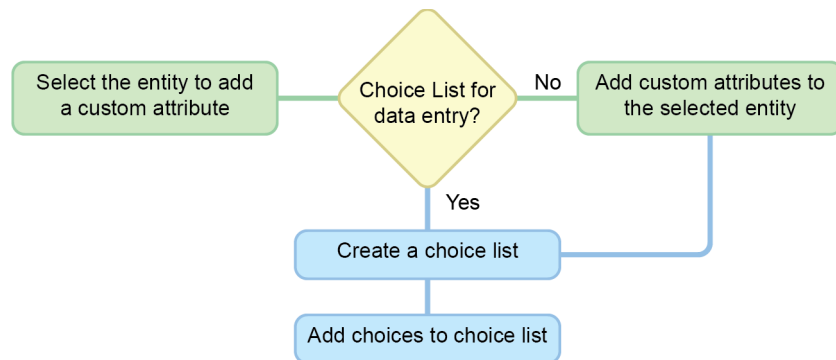
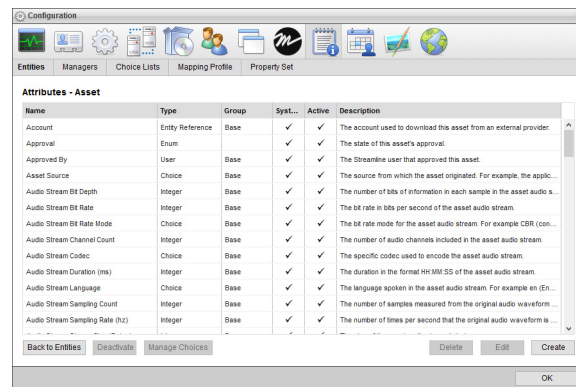


Figure 11.1 Custom Attribute Creation Workflow

To create a custom attribute for a Streamline or custom entity

1. In the **Configured Entities** table, select the Streamline or custom entity to add a custom attribute.
2. Click **Manage Attributes**.

The **Attributes** page opens for the selected entity.



3. Click **Create**.

The **Create Attribute** page opens.

4. In the **Name** box, enter the column name to display for the custom attribute in the Streamline grid associated with the entity.
5. In the **Key Name** box, enter the name to use as the identifier for the custom attribute. When you click in this box, Streamline enters a suggested key name that you can edit.

★ You cannot change the **Key Name** of a custom attribute after you save the custom attribute.

6. Use the **Type** list to select the type of data that users can enter in the custom attribute.

★ You cannot change the **Type** of a custom attribute after you save the custom attribute.

The available data types are as follows:

- **Single-Line String** — character string on a single line.
 - **Multi-Line String** — character string on multiple lines, press Enter to start a new line.
 - **Integer** — whole number without a fractional part.
 - **Decimal** — decimal number that may contain a fractional part.
 - **Date** — calendar date (year, month, day).
 - **Date & Time** — calendar date (year, month, day) and time of day (hh:mm:ss).
 - **Duration** — duration time (hh:mm:ss).
 - **Boolean** — logical Boolean (true or false).
 - **User** — a single Streamline user.
 - **Multiple User** — one or more Streamline users.
 - **Choice** — a single selection from a choice list.
 - **Multiple Choice** — one or more selections from a choice list.
7. Depending on the selected **Type** for the custom attribute, continue creating your custom attribute with the following steps or procedures:
 - **Single-Line String** — continue with step 8 in this procedure.
 - **Multi-Line String** — continue with step 8 in this procedure.
 - **Integer** — continue with step 8 in this procedure.
 - **Decimal** — continue with step 8 in this procedure.
 - **Date** — continue with step 8 in this procedure.
 - **Date & Time** — continue with step 8 in this procedure.
 - **Duration** — continue with step 8 in this procedure.
 - **Boolean** — refer to the section “**Boolean Type Configuration**” on page 11–8.
 - **User** — refer to the section “**User Type Configuration**” on page 11–9.
 - **Multiple User** — refer to the section “**Multiple User Type Configuration**” on page 11–10.
 - **Choice** — refer to the section “**Choice Type Configuration**” on page 11–11.
 - **Multiple Choice** — refer to the section “**Multiple Choice Type Configuration**” on page 11–12.
 8. Depending on the selected **Type** for the custom attribute, enter one of the following values to set the **Minimum** for the custom attribute:

Type	Minimum Value
Single-Line String	Enter the minimum number of characters that the entered text must contain.
Multi-Line String	Enter the minimum number of characters that the entered text must contain.
Integer	Enter the minimum value for the entered whole number.
Decimal	Enter the minimum value for the entered decimal number.
Date	Use the Calendar tool to select the start date of the valid date range for the custom attribute.
Time	Enter the minimum duration for the entered time (hh:mm:ss).
Date & Time	Use the Calendar tool to select the start date and time of the valid date and time range for the custom attribute.

9. Depending on the selected **Type** for the custom attribute, enter one of the following values to set the **Maximum** for the custom attribute:

Type	Value
Single-Line String	Enter the maximum number of characters that the entered text must contain.
Multi-Line String	Enter the maximum number of characters that the entered text must contain.
Integer	Enter the maximum value for the entered whole number.
Decimal	Enter the maximum value for the entered decimal number.
Date	Use the Calendar tool to select the end date of the valid date range for the custom attribute.
Time	Enter the maximum duration for the entered time (hh:mm:ss).
Date & Time	Use the Calendar tool to select the end date and time of the valid date and time range for the custom attribute.

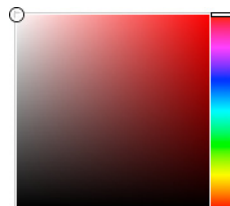
10. Depending on the selected **Type** for the custom attribute, enter one of the following values to set the **Default** for the custom attribute:

Type	Value
Single-Line String	Enter the default text for the custom attribute.
Multi-Line String	Enter the default text for the custom attribute.
Integer	Enter the default whole number value for the custom attribute.
Decimal	Enter the default decimal number value for the custom attribute.
Date	Use the Calendar tool to select the default date for the custom attribute.
Time	Enter the default time (hh:mm:ss) for the custom attribute.
Date & Time	Use the Calendar tool to select the default date and time for the custom attribute.

★ Default Values must fall within the **Minimum** and **Maximum** values set for the custom attribute.

11. Click the **Empty Cell Color** color square.

The **Color Picker** opens.



12. Use the **Color Picker** to select the background color that Streamline uses to display custom attribute cells that do not contain data.

Drag the slider on the right side of the **Color Picker** to select a color, and then click in the area to the left to select the color shade. As you use the **Color Picker**, the color square displays the selected color and a box to the right displays the HTML color code of the selected color. You can also enter an HTML color code in the box to select a color. As you enter an HTML color code, the color square displays the color of the entered code.

13. For the **Populated Cell Color** setting, click the **Background** color square to use the **Color Picker** to select the background color that Streamline uses to display custom attribute cells that contain data.

14. Click the **Foreground** color square to use the **Color Picker** to select the text color that Streamline uses to display custom attribute cells that contain data.
15. In the **Description** box, enter a description of the custom attribute.
Only the **Create Attribute** and **Edit Attribute** pages display the description of a custom attribute.
16. Click **Save**.
Streamline adds the new custom attribute to the **Custom Attributes** page of the selected entity.
17. To view the new custom attribute, open the Streamline grid associated with the entity that to which you added the custom attribute.

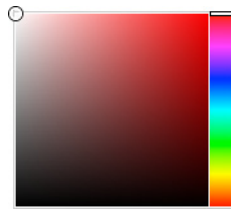
Boolean Type Configuration

When you select Boolean as the Type for a custom attribute, you need to configure settings that are specific to the Boolean data type.

To configure a Boolean type custom attribute

1. Select the **Default Value** check box to set **true** as the default value for the custom attribute. Clear the **Default Value** check box to set **false** as the default value for the custom attribute.
2. Click the **Empty Cell Color** color square.

The **Color Picker** opens.



3. Use the **Color Picker** to select the background color that Streamline uses to display custom attribute cells that do not contain data.
Drag the slider on the right side of the **Color Picker** to select a color, and then click in the area to the left to select the color shade. As you use the **Color Picker**, the color square displays the selected color and a box to the right displays the HTML color code of the selected color. You can also enter an HTML color code in the box to select a color. As you enter an HTML color code, the color square displays the color of the entered code.
4. Click the **Checked Cell Color** color square to use the **Color Picker** to select the background color that Streamline uses to display custom attribute cells that contain a selected check box.
5. In the **Description** box, enter a description of the custom attribute.
Only the **Create Attribute** and **Edit Attribute** pages display the description of a custom attribute.
6. Click **Save**.
Streamline adds the new custom attribute to the **Custom Attributes** page of the selected entity.
7. To view the new custom attribute, open the Streamline grid associated with the entity that to which you added the custom attribute.

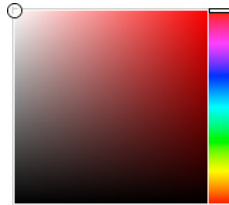
User Type Configuration

When you select User as the Type for a custom attribute, you need to configure settings that are specific to the User data type.

To configure a User type custom attribute

1. Use the **Included Roles** list to select one or more roles that contain the Streamline users that are suitable for the custom attribute.
2. Select the **Exclude Inactive** check box to exclude inactive Streamline users from the list of available users for the custom attribute. Clear this check box to include inactive Streamline users in the list of available users for the custom attribute.
3. Use the **Default Value** list to select the default Streamline user for the custom attribute.
4. Click the **Empty Cell Color** color square.

The **Color Picker** opens.



5. Use the **Color Picker** to select the background color that Streamline uses to display custom attribute cells that do not contain data.

Drag the slider on the right side of the **Color Picker** to select a color, and then click in the area to the left to select the color shade. As you use the **Color Picker**, the color square displays the selected color and a box to the right displays the HTML color code of the selected color. You can also enter an HTML color code in the box to select a color. As you enter an HTML color code, the color square displays the color of the entered code.

6. For the **Populated Cell Color** setting, click the **Back** color square to use the **Color Picker** to select the background color that Streamline uses to display custom attribute cells that contain a selected Streamline user.
7. Click the **Fore** color square to use the **Color Picker** to select the text color that Streamline uses to display custom attribute cells that contain a selected Streamline user.
8. In the **Description** box, enter a description of the custom attribute.

Only the **Create Attribute** and **Edit Attribute** pages display the description of a custom attribute.

9. Click **Save**.

Streamline adds the new custom attribute to the **Custom Attributes** page of the selected entity.

10. To view the new custom attribute, open the Streamline grid associated with the entity that to which you added the custom attribute.

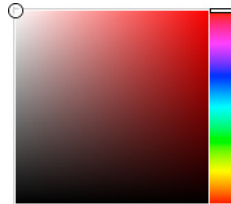
Multiple User Type Configuration

When you select Multiple User as the Type for a custom attribute, you need to configure settings that are specific to the Multiple User data type.

To configure a Multiple User type custom attribute

1. Use the **Included Roles** list to select one or more roles that contain the Streamline users that are suitable for the custom attribute.
2. Select the **Exclude Inactive** check box to exclude inactive Streamline users from the list of available users for the custom attribute. Clear this check box to include inactive Streamline users in the list of available users for the custom attribute.
3. In the **Minimum** box, enter the minimum number of Streamline users that a user must select for the custom attribute.
4. In the **Maximum** box, enter the maximum number of Streamline users that a user can select for the custom attribute.
5. Use the **Default Value** list to select the default Streamline user or users for the custom attribute.
6. Click the **Empty Cell Color** color square.

The **Color Picker** opens.



7. Use the **Color Picker** to select the background color that Streamline uses to display custom attribute cells that do not contain data.

Drag the slider on the right side of the **Color Picker** to select a color, and then click in the area to the left to select the color shade. As you use the **Color Picker**, the color square displays the selected color and a box to the right displays the HTML color code of the selected color. You can also enter an HTML color code in the box to select a color. As you enter an HTML color code, the color square displays the color of the entered code.

8. For the **Populated Cell Color** setting, click the **Back** color square to use the **Color Picker** to select the background color that Streamline uses to display custom attribute cells that contain a selected Streamline user or users.
9. Click the **Fore** color square to use the **Color Picker** to select the text color that Streamline uses to display custom attribute cells that contain a selected Streamline user or users.
10. In the **Description** box, enter a description of the custom attribute.

Only the **Create Attribute** and **Edit Attribute** pages display the description of a custom attribute.

11. Click **Save**.

Streamline adds the new custom attribute to the **Custom Attributes** page of the selected entity.

12. To view the new custom attribute, open the Streamline grid associated with the entity that to which you added the custom attribute.

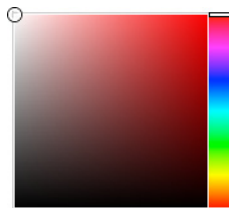
Choice Type Configuration

When you select Choice as the Type for a custom attribute, you need to configure settings that are specific to the Choice data type.

To configure a Choice type custom attribute

1. Use the **Choice List** list to select the choice list that contains applicable values for the custom attribute.
If the Choice List list does not contain a suitable choice list, follow these steps to create a new choice list:
 - a. Click **Create** to the left of the **Choice List** list.
The **Choice List** list changes to the **Choice List Name** box.
 - b. In the **Choice List Name** box, enter a name for the new choice list.
 - c. Use the **Choice List Type** to select the data type for the choices in the new choice list. The available data types are as follows:
 - **Single-Line String** — character string on a single line.
 - **Integer** — whole number without a fractional part.
 - **Decimal** — decimal number that may contain a fractional part.
 - **Date** — calendar date (year, month, day).
 - **Duration** — duration time (hh:mm:ss).
 - **Date & Time** — calendar date (year, month, day) and time of day (hh:mm:ss).
 - d. New choice lists do not contain choices. After you save the custom attribute, refer to the procedure “**To add choices to a choice list**” on page 11–16 to add choices to a new choice list.
2. Use the **Order** list to select how to order the choices in the selected choice list. The available ordering methods are as follows:
 - **As Entered** — the order in which choices were added to the choice list.
 - **Alphabetical Ascending By Name** — A to Z by choice name.
 - **Alphabetical Descending By Name** — Z to A by choice name.
 - **Natural Ascending By Value** — lowest to highest choice value.
 - **Natural Descending By Value** — highest to lowest choice value.
3. Select the **Free Add** check box to enable users to add choices to the choice list while editing a custom attribute.
4. Use the **Default Value** list to select a choice from the choice list as the default value for the custom attribute.
This list is not available when you create a new choice list.
5. Click the **Empty Cell Color** color square.

The **Color Picker** opens.



6. Use the **Color Picker** to select the background color that Streamline uses to display custom attribute cells that do not contain data.

Drag the slider on the right side of the **Color Picker** to select a color, and then click in the area to the left to select the color shade. As you use the **Color Picker**, the color square displays the selected color and a box to the right displays the HTML color code of the selected color. You can also enter an HTML color code in the box to select a color. As you enter an HTML color code, the color square displays the color of the entered code.

7. For the **Populated Cell Color** setting, click the **Back** color square to use the **Color Picker** to select the background color that Streamline uses to display custom attribute cells that contain a selected choice.
8. Click the **Fore** color square to use the **Color Picker** to select the text color that Streamline uses to display custom attribute cells that contain a selected choice.
9. In the **Description** box, enter a description of the custom attribute.
Only the **Create Attribute** and **Edit Attribute** pages display the description of a custom attribute.
10. Click **Save**.
Streamline adds the new custom attribute to the **Custom Attributes** page of the selected entity.
11. To view the new custom attribute, open the Streamline grid associated with the entity that to which you added the custom attribute.

Multiple Choice Type Configuration

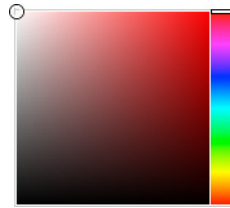
When you select Multiple Choice as the Type for a custom attribute, you need to configure settings that are specific to the Multiple Choice data type.

To configure a Multiple Choice type custom attribute

1. Use the **Choice List** list to select the choice list that contains applicable values for the custom attribute.
If the Choice List list does not contain a suitable choice list, follow these steps to create a new choice list:
 - a. Click **Create** to the left of the **Choice List** list.
The **Choice List** list changes to the **Choice List Name** box.
 - b. In the **Choice List Name** box, enter a name for the new choice list.
 - c. Use the **Choice List Type** to select the data type for the choices in the new choice list. The available data types are as follows:
 - **Single-Line String** — character string on a single line.
 - **Integer** — whole number without a fractional part.
 - **Decimal** — decimal number that may contain a fractional part.
 - **Date** — calendar date (year, month, day).
 - **Duration** — duration time (hh:mm:ss).
 - **Date & Time** — calendar date (year, month, day) and time of day (hh:mm:ss).
 - d. New choice lists do not contain choices. After you save the custom attribute, refer to the procedure “**To add choices to a choice list**” on page 11–16 to add choices to a new choice list.
2. Use the **Order** list to select how to order the choices in the selected choice list. The available ordering methods are as follows:
 - **As Entered** — the order in which choices were added to the choice list.
 - **Alphabetical Ascending By Name** — A to Z by choice name.
 - **Alphabetical Descending By Name** — Z to A by choice name.
 - **Natural Ascending By Value** — lowest to highest choice value.
 - **Natural Descending By Value** — highest to lowest choice value.
3. In the **Minimum** box, enter the minimum number of choices that a user must select for the custom attribute.
4. In the **Maximum** box, enter the maximum number of choices that a user can select for the custom attribute.
5. Use the **Default Value** list to select the default choice or choices for the custom attribute.
This list is not available when you create a new choice list.

6. Click the **Empty Cell Color** color square.

The **Color Picker** opens.



7. Use the **Color Picker** to select the background color that Streamline uses to display custom attribute cells that do not contain data.

Drag the slider on the right side of the **Color Picker** to select a color, and then click in the area to the left to select the color shade. As you use the **Color Picker**, the color square displays the selected color and a box to the right displays the HTML color code of the selected color. You can also enter an HTML color code in the box to select a color. As you enter an HTML color code, the color square displays the color of the entered code.
8. For the **Populated Cell Color** setting, click the **Back** color square to use the **Color Picker** to select the background color that Streamline uses to display custom attribute cells that contain a selected choice.
9. Click the **Fore** color square to use the **Color Picker** to select the text color that Streamline uses to display custom attribute cells that contain a selected choice.
10. In the **Description** box, enter a description of the custom attribute.

Only the **Create Attribute** and **Edit Attribute** pages display the description of a custom attribute.
11. Click **Save**.

Streamline adds the new custom attribute to the **Custom Attributes** page of the selected entity.
12. To view the new custom attribute, open the Streamline grid associated with the entity that to which you added the custom attribute.

Manage Attributes

Managing the attributes associated with a Streamline entity includes the following procedures:

- Change Attribute Active Status
- Edit Custom Attribute Properties
- Delete Custom Attributes

Change Attribute Active Status

Streamline displays all Active attributes in their associated grids or forms. Inactive attributes are hidden from their associated grids and forms. Inactive attributes do not lose user entered data.

To change the active status of a attribute

1. From the **Configured Entities** table in the **Entities** tab of the **Metadata** panel, select the Streamline entity that contains the custom attribute to change.
2. Click **Manage Attributes**.

The **Attributes** page opens for the selected entity.
3. In the **Attributes** table, select the attribute to change.

4. Change the active status for the selected attribute as follows:
 - If the selected attribute is active, click **Deactivate**.
Streamline grays out the selected attribute and removes the check mark from the **Active** column of the attribute to indicate that the attribute is inactive and hidden from grids and forms.
 - If the selected attribute is inactive, click **Activate**.
Streamline adds a check mark to the **Active** column of the selected attribute to indicate that the custom attribute is active and available in grids and forms.

Edit Custom Attribute Properties

To maintain data integrity, Streamline only allows you to edit some of the properties of an existing custom attribute. You cannot edit the properties of system attributes.

To edit the properties of a custom attribute

1. From the **Configured Entities** table in the **Entities** tab of the **Metadata** panel, select the Streamline entity that contains the custom attribute to edit.
2. Click **Manage Attributes**.
The **Attributes** page opens for the selected entity.
3. In the **Attributes** table, select the custom attribute to edit.
The **Edit Attribute** page opens.
4. Edit the custom attributes properties as required.
Properties that you cannot edit are grayed out.
5. Click **Save**.
Streamline updates the custom attribute and opens the **Attributes** page of the selected entity.
6. To view the updated custom attribute, open the Streamline grid associated with the entity that contains the updated custom attribute.

Delete Custom Attributes

After you delete a custom attribute, you can restore the custom attribute data by creating a new custom attribute with the same Key Name and Type as the deleted custom attribute.

To delete a custom attribute

1. From the **Configured Entities** table in the **Entities** tab of the **Metadata** panel, select the Streamline entity that contains the custom attribute to delete.
2. Click **Manage Attributes**.
The **Attributes** page opens for the selected entity.
3. In the **Attributes** table, select the custom attribute to delete.
4. To be able to restore custom attribute data after you delete a custom attribute, record the **Key Name** and **Type** of the selected custom attribute. Use the recorded **Key Name** and **Type** to create a new custom attribute to restore the data from the deleted custom attribute.
5. Click **Delete**.
A confirmation message opens, asking whether you want to delete the selected custom attribute. To keep the custom attribute, click **Cancel**.
6. In the confirmation message, click **OK**.
Streamline deletes the selected custom attribute from the Streamline entity.

Create Choice Lists for Custom Attributes

A choice lists contains a list of choices from which users can select for a value for custom attributes with a data type of Choice or Multiple Choice. Choice lists help simplify data entry and control the data entered for a custom attribute.

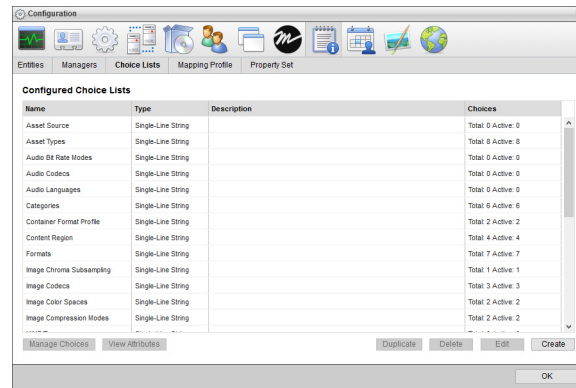
To create a choice list

1. On the **Configuration** window toolbar, click the  **Metadata** icon.

The **Metadata** panel opens.

2. Click the **Choice Lists** tab.

The **Choice Lists** tab opens.



3. Click **Create**.

The **Create Choice** page opens.

4. In the **Name** box, enter a name for the new choice list.

5. Use the **Choice List Type** to select the data type for the choices in the new choice list. The available data types are as follows:

- **Single-Line String** — character string on a single line.
- **Integer** — whole number without a fractional part.
- **Decimal** — decimal number that may contain a fractional part.
- **Date** — calendar date (year, month, day).
- **Date & Time** — calendar date (year, month, day) and time of day (hh:mm:ss).
- **Duration** — duration time (hh:mm:ss).

6. In the **Description** box, enter a description of the choice list.

Only the **Configured Choice Lists** page displays the description of a choice list.

7. Click **Save**.

Streamline adds the new choice list to the **Configured Choice Lists** page.

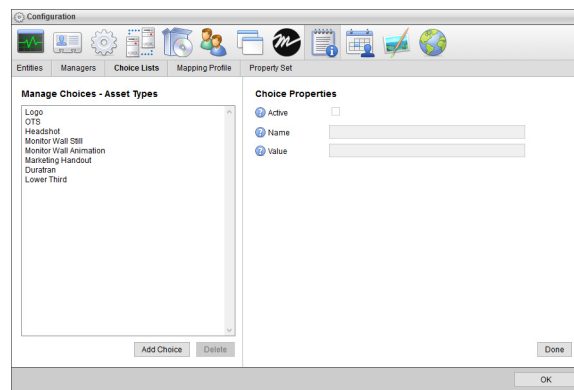
New choice lists do not contain choices, refer to the procedure “**To add choices to a choice list**” on page 11–16 to add choices to a new choice list.

Add Choices to Choice Lists

New choice lists created from the Create Attribute or Create Choice List pages of the Metadata panel do not contain choices. After you create a choice list you need to add choices to the choice list.

To add choices to a choice list

1. On the **Configuration** window toolbar, click the  **Metadata** icon.
The **Metadata** panel opens.
2. Click the **Choice Lists** tab.
The **Choice Lists** tab opens.
3. In the **Configured Choice Lists** table, select the choice list to add choices.
4. Click **Manage Choices**.
The **Manage Choices** page opens.



5. In the **Manage Choices** section, click **Add Choice**.
Streamline creates a new choice named “New Choice” and saves the property values set for the new choice.
6. In the **Choice Properties** section, select the **Active** check box to activate the new choice and enable users to select this choice from the choice list. Clear this box to deactivate the choice and remove it from the choice list.

★ Deactivating a choice also removes the choice from all the custom attributes assigned the choice.
7. In the **Name** box, enter the name to display in the choice list that a user selects to choose this choice for a custom attribute.
8. In the **Value** box, enter the value that Streamline stores when a use selects this choice. When you click in this box, Streamline enters a suggested value that you can edit.

This value is sent as the value for a custom attribute when your Streamline Server sends out MOS messages and RSS feeds.
9. To add another choice to the choice list, click **Add Choice** in the **Manage Choices** section. To finish adding choices to a choice list, click **Done** in the **Choice Properties** section.

Manage Choice Lists and Choices

Managing choice lists includes the following procedures:

- View Choice List Usage
- Duplicate Choice Lists
- Edit Choice List Properties
- Delete Choice Lists

Managing the choices in a choice list includes the following procedures:

- Edit Choices in a Choice List
- Delete Choices from a Choice List

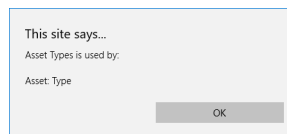
View Choice List Usage

Viewing the attributes of a choice list shows you the custom attributes that use the selected choice list, which is good information to check before editing a choice list.

To view the custom attributes that use a choice list

1. From the **Configured Choice Lists** table in the **Choice Lists** tab of the **Metadata** panel, select the choice list to view usage information about.
2. Click **View Attributes**.

A message opens with a list of the custom attributes that use the selected choice list.



3. Click **OK** to close the usage message.

Duplicate Choice Lists

Duplicating existing choices lists is a quick method of creating new choice lists.

To duplicate a choice list

1. From the **Configured Choice Lists** table in the **Choice Lists** tab of the **Metadata** panel, select the choice list to duplicate.
2. Click **Duplicate**.

Streamline adds a duplicate of the selected choice list to the **Configured Choice Lists** table, and names the new choice list “New Choice List” or “New Choice List (#)”. You can edit the new choice list to change the name of the choice list. Manage the new choice list to add choices to the choice list.

Edit Choice List Properties

To maintain data integrity, Streamline only allows you to edit some of the properties of an existing choice list.

To edit the properties of a choice list

1. From the **Configured Choice Lists** table in the **Choice Lists** tab of the **Metadata** panel, select the choice list to edit.
2. In the **Custom Attributes** table, select the custom attribute to edit.

The **Edit Attribute** page opens for the selected custom attribute.

3. Edit the custom attributes properties as required.
Properties that you cannot edit are grayed out.
4. Click **Save**.
Streamline updates the custom attribute and opens the **Custom Attributes** page of the selected entity.

Delete Choice Lists

To maintain data integrity, Streamline only allows you to delete choice lists that are not used to enter data in a custom attribute.

To delete a choice list

1. From the **Configured Choice Lists** table in the **Choice Lists** tab of the **Metadata** panel, select the choice list to delete.
2. Click **Delete**.
A confirmation message opens, asking whether you want to delete the selected choice list. To keep the choice list, click **Cancel**.
3. In the confirmation message, click **OK**.
Streamline deletes the selected choice list from the **Configured Choice Lists** table.

Edit Choices in a Choice List

Streamline allows you to edit all the properties of a choice.

★ Changing the value of a choice may cause data loss if the choice is assigned to custom attributes.

To edit the properties of a choice in a choice list

1. From the **Configured Choice Lists** table in the **Choice Lists** tab of the **Metadata** panel, select the choice list that contains the choice to edit.
2. Click **Manage Choices**.
The **Manage Choices** page opens.
3. In the **Choices** list, select the choice to edit.
The **Choice Properties** section displays the properties of the selected choice.
4. Edit the choice properties as required. When you edit a choice, keep in mind the following conditions:
 - Clearing the **Active** check box removes the selected choice from the choice list and from all the custom attributes assigned the choice.
 - Changing the **Name** of a choice changes the choice name displayed in the choice list and all the custom attributes assigned the choice.
 - Changing the **Value** of a choice may cause data loss if the choice is assigned to custom attributes.
5. Click **Done** or select another choice in the **Choices** list to save the edited choice.

When you edit the **Value** of a choice, an alert opens warning that changing the choice value may cause data loss if the choice is assigned to custom attributes. Click **OK** to save the new value for the choice or click **Cancel** to keep the old value for the choice.

Delete Choices from a Choice List

After you delete a choice from a choice list, you can restore the choice by re-adding it to the choice list using the same Name and Value.

To delete a choice from a choice list

1. From the **Configured Choice Lists** table in the **Choice Lists** tab of the **Metadata** panel, select the choice list that contains the choice to edit.

2. Click **Manage Choices**.

The **Manage Choices** page opens.

3. In the **Choices** list, select the choice to delete.

4. To be able to restore a choice after you delete it, record the **Name** and **Value** of the selected choice. Use the recorded **Name** and **Value** to re-add the choice to the choice list.

5. Click **Delete**.

A confirmation message opens, asking whether you want to delete the selected choice. To keep the choice, click **Cancel**.

6. In the confirmation message, click **OK**.

Streamline deletes the selected choice attribute from the **Choices** list.

Create Managers

After you create your custom entities and forms you must add them to a manager so that Streamline users can access them from the  Custom Managers list on the main toolbar. A manager can contain one or more custom entities. From a manger users can create and manage custom entity content.

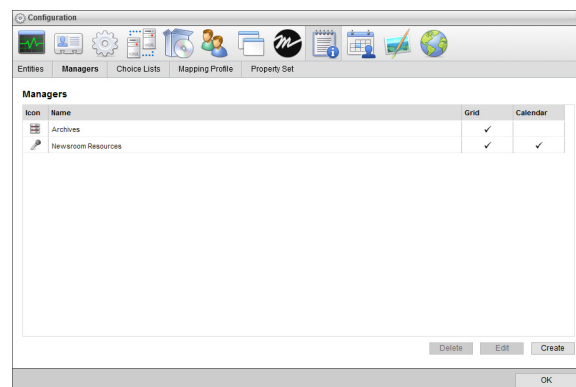
To associate custom entities with a manager

1. On the **Configuration** window toolbar, click the  **Metadata** icon.

The **Metadata** panel opens.

2. Click the **Managers** tab.

The **Managers** tab opens.



3. Click **Create**.

The **Create Manager** page opens.

4. In the **Name** box, enter the name to display for the manager in the  **Custom Managers** list on the main toolbar and in the title bar of the **Manager** panel.

5. Use the **Icon** list to select an icon to identify the manager and display in the title bar of the Streamline grid associated with the manager.

If the icons in the list are not appropriate for your manager, do the following:

- a. Use the **Icon** list to select **Upload an Icon**.

Streamline displays a **Browse** button.

- b. Click **Browse**.

The **File Upload** dialog box opens.

- c. Use the **File Upload** dialog box to select the image file to use as the icon for your manager.

- d. Click **Open**.

Streamline adds the image contained in the selected image file to the **Icon** list as the **Uploaded Icon** option, and automatically selects the uploaded image as the icon for your manager. You can only upload one image to the **Icon** list at a time. Uploading another image to the **Icon** list replaces the current uploaded image with the new image.

6. Select the **Show in Main Toolbar** check box to place the icon used to access the **Manager** panel in the main toolbar **Custom** section instead of in the **Custom** list. Clear this check box to place the **Manager** panel icon in the **Custom** list.

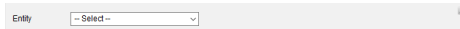
★ When you place all **Manager** icons in the main toolbar **Custom** section Streamline removes the **Custom** list icon from the main toolbar.

7. Click **Next**.

The **Entity Selection** page opens.

8. Click **Add**.

Streamline adds a new blank entity to the **Entity Association List** box.



To delete an entity from the **Entity Association List** box, click the  icon in the upper right corner of the entity to delete.

9. Use the **Entity** list to select the entity to add to the manager.

Streamline adds the **Create Form** and **Edit Form** lists to the entity.

10. Use the **Create Form** list to select the form that Streamline users use to create new custom entity records. This list only displays the forms created for the custom entity selected in the **Entity** list. Select **None** to use the **Manager** grid to create records.

11. Use the **Edit Form** list to select the form that Streamline users use to edit custom entity records. This list only displays the forms created for the custom entity selected in the **Entity** list. Select **None** to use the **Manager** grid to edit records.

12. When you selected an **Edit Form**, use the **Open In** list to set the location to open the edit form. The available options are as follows:

- **Dialog** — open the selected form in a pop-up dialog box.
- **View** — open the selected form in an **Editor** panel.

13. To add another entity to the manager, repeat step 8 to step 12.

14. Click **Next**.

The **Displays** page opens.

15. Select the **Enable Grid** check box to enable the manager and add it to the  **Custom Managers** list on the main toolbar. Clear this check box to remove the Grid view from the panel.

This check box is only available after selecting the **Enable Calendar** check box.
16. Select the **Manual Sort** check box to manually sort entity information in the manager by drag and drop. Clear this check box to enable automatic column sorting for the manager.

This check box is only available after selecting the **Enable Grid** check box.
17. Select the **Paged Grid** check box to use pages to display the information contained in the custom entities associated with the manager. When you select this option, Streamline adds paging controls to the bottom of the **Manager** panel. Clear this check box to scroll the information contained in the manager.

This check box is only available after selecting the **Enable Grid** check box.
18. Select the **Enable Calendar** check box to enable the **Calendar** view for the **Manager** panel. Clear this check box to remove the Calendar view from the panel.

This check box is only available after selecting the **Enable Grid** check box.
19. Use each **Entity Type** list to select the attribute that contains the date used by the **Calendar** view to display instances of the associated entity type. The **Enable Calendar** section contains an **Entity Type** list for each entity associated with the manager.

Entity Type lists are only available after selecting the **Enable Calendar** check box.
20. Click **Save**.

Streamline adds the new manager to the **Managers** page and to the  **Custom Managers** list on the main toolbar.

Manage Managers

Managing the managers in your Streamline system includes the following procedures:

- Edit Managers
- Delete Managers

Edit Managers

Streamline enables you to edit all the properties of an existing manager.

To edit the properties of a manager

1. From the **Managers** table in the **Managers** tab of the **Metadata** panel, select the manager to edit.
2. Click **Edit**.

The **Edit Manager** page opens.
3. In the **Edit Manager** page, edit the manager properties as required.
4. Click **Next**.

The **Entity Selection** page opens.
5. In the **Entity Selection** page, edit the custom entity properties as required.
6. Click **Next**.

The **Displays** page opens.

7. In the **Displays** page, edit the display properties as required.

8. Click **Save**.

Streamline updates the manager and opens the **Managers** page.

9. To view the updated manager, select the manager from the  **Custom Managers** list on the main toolbar.

Delete Managers

★ When you delete a manager you also remove access to the custom entities associated with the manager. Streamline does not delete the information contained in the associated custom entities.

To delete a manager

1. From the **Managers** table in the **Managers** tab of the **Metadata** panel, select the manager to delete.

2. Click **Delete**.

A confirmation message opens, asking whether you want to delete the selected manager. To keep the manager, click **Cancel**.

3. In the confirmation message, click **OK**.

Streamline deletes the selected manager from the **Managers** page.

Managing Streamline Forms

Streamline enables you to include and exclude attributes from a form, set attributes as requiring a value, and display attribute content as read-only. You can create custom forms and customize the forms associated with the following Streamline entities:

- **Asset**
 - › **Details** — Descriptive tab in the Asset Editor panel
 - › **Request** — New Asset Request section in the Work Order panel
- **Work Orders**
 - › **Create** — New Work Order dialog box
 - › **Details** — Work Order Details section in the Work Order panel

This chapter discusses the following topics:

- Create Custom Forms
- Manage Forms

Create Custom Forms

You can create custom forms that Streamline users can use to enter information in the attributes of a custom entity.

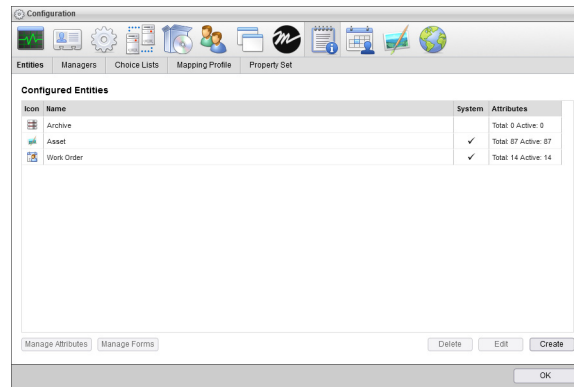
To add custom attributes to a custom form

1. On the **Configuration** window toolbar, click the  **Metadata** icon.

The **Metadata** panel opens.

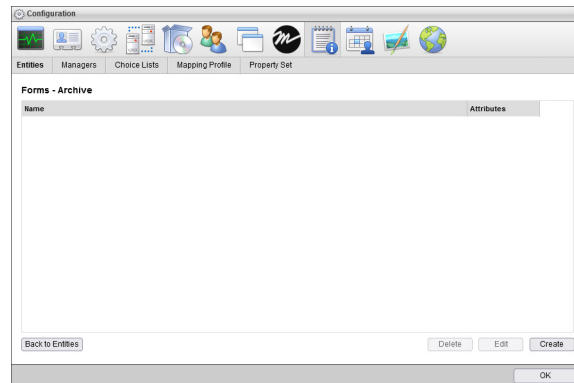
2. Click the **Entities** tab.

The **Entities** tab opens.



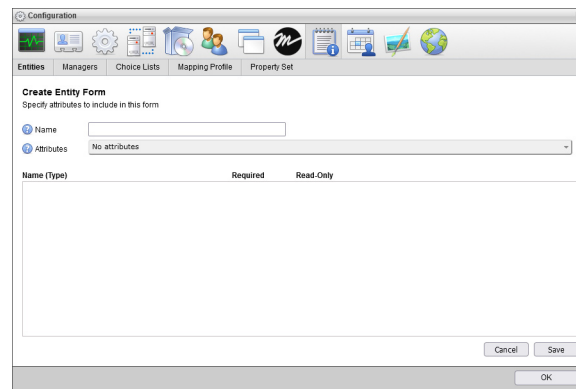
3. In the **Configured Entities** table, select the **form** to delete.
4. Click **Delete**.
5. A confirmation dialog box opens. Custom Entity for which to create a custom form.
6. Click **Manage Forms**.

The **Forms** page opens for the selected entity.



7. Click **Create**.

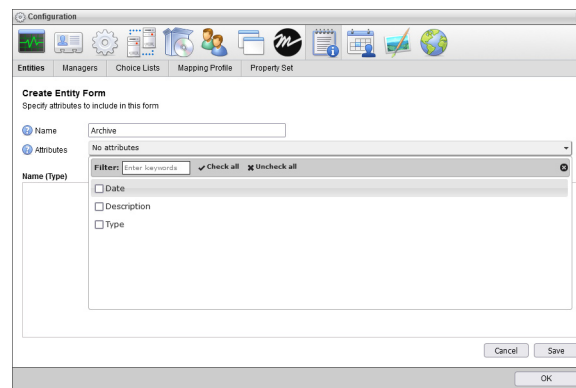
The **Create Entity Form** page opens.



8. In the **Name** box, enter a name for the entity form.

9. Click the **Attributes** list.

The **Attribute** list opens displaying the list attributes that you can add to the entity form.



10. To filter the **Attributes** list, enter in the **Filter** box a portion of the attribute name you want to select.

You do not need to enter the start of an attribute name, just any portion of the name filters the **Attributes** list. The **Attributes** list automatically updates to display only the attributes with names that contain the text entered in the **Filter** box. Clear the **Filter** box to display all the available attributes in the **Attributes** list.

11. In the **Attributes** list, select the check box to the left of each attribute that you want to add the entity form.

Click **Check All** to select all the attributes in the **Attributes** list, click **Uncheck All** to deselect all attributes.

12. After you select the attributes to add to the entity form, click the  **Close** icon.

The **Attributes** list closes, and the **Name** list displays the selected attributes.

13. In the **Name (Type)** list, drag the attributes in the list to set the display order for the **Drupal Story Editor**.

14. Click **Save**.

Streamline adds the new custom form to the **Forms** page of the custom entity.

Delete Custom Forms

When you no longer require a custom form for a custom entity you can delete it from the Forms page associated with the entity.

To delete a custom form

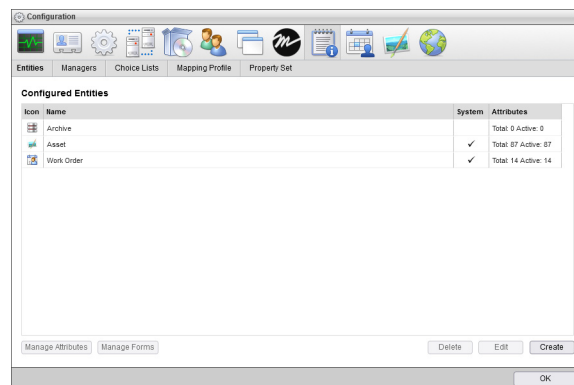
1. On the **Configuration** window toolbar, click the  **Metadata** icon.
The **Metadata** panel opens.
2. Click the **Entities** tab.
The **Entities** tab opens.
3. In the **Configured Entities** table, select the **Custom Entity** associated with the custom form to delete.
4. Click **Manage Forms**.
The **Forms** page opens for the selected custom entity.
5. In the **Forms** list, select the **Custom Form** to delete.
6. Click **Delete**.
An **Alert** opens.
7. Click **OK**.
Streamline deletes the selected custom form from the **Forms** page of the custom entity.

Manage Forms

You can customize the forms associated with the Asset and Work Order entities to match your workflow and enable users to quickly enter the required information for assets and work orders.

To manage the forms for an entity

1. Log in to your Streamline server as a system administrator.
2. On the main toolbar, click the  **Configuration** icon. If the **Configuration** icon is not visible, you are not an administrator and cannot configure the server.
The **Configuration** window opens.
3. On the **Configuration** window toolbar, click the  **Metadata** icon.
The **Metadata** panel opens.
4. Click the **Entities** tab.
The **Entities** tab opens.

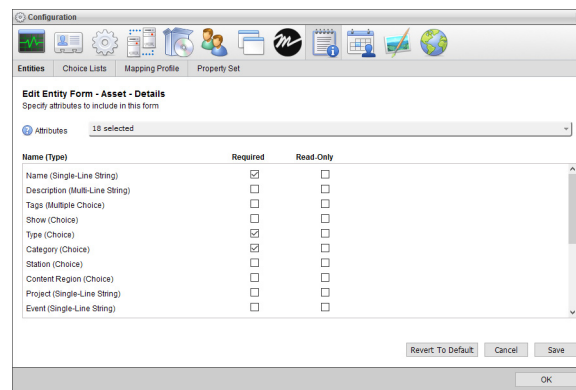


5. From the **Configured Entities** table in the **Entities** tab, select the entity associated with the form to customize. The entities that have associated forms as follows:
 - **Asset**
 - **Work Orders**
6. Click **Manage Forms**.

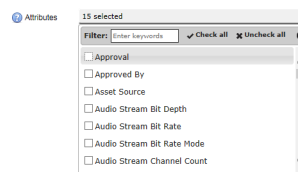
The **Forms** page opens for the selected entity. The available forms depend on the selected entity.

 - **Asset**
 - › **Details** — Descriptive tab in the Asset Editor panel
 - › **Request** — New Asset Request section in the Work Order panel
 - **Work Orders**
 - › **Create** — New Work Order dialog box
 - › **Details** — Work Order Details section in the Work Order panel
7. From the **Forms** table, select the form to edit.
8. Click **Edit**.

The **Edit Entity Form** for the selected form opens.



9. Use the **Attributes** list to select the entity attributes to include in the entity form. The **Attributes** list contains all the system and custom attributes associated with the entity associated with the selected entity form.
 - a. In the **Attributes** list, select the check box to the left of each entity that you want to include in the form.



- b. Clear the check box to the left of each entity that you want to exclude from the form.
 - c. Click the  **Close** icon.

Streamline closes the **Attributes** list and adds the selected attributes to the **Edit Entity Form** page.

10. For the attributes in a form that users are required to set value for, select the **Required** check box to the right of the attribute in the list of attributes included in the form.
 11. For the attributes in a form that users can view but not edit, select the **Read-Only** check box to the right of the attribute in the list of attributes included in the form.
- ★ Do not select the **Read-Only** check box for attributes that are set as **Required**.

12. After configuring a form, click **Save**.

Streamline saves the revised form and opens the **Forms** page.

13. Click **Back to Entities** to return the **Configured Entities** page.

14. Click **OK** to close the **Configuration** window.

For More Information on...

- creating custom attributes for an entity, refer to “**Create Custom Attributes**” on page 11–5.

Configuring Metadata Elements

Streamline uses metadata elements to configure or set asset types, asset categories, file formats, priority levels, show slots, identify stations, and define keywords (tags). Use the Metadata panel in the Configuration window to configure or set metadata properties that are available for selection in the Streamline interface.

This chapter discusses the following topics:

- Pre-defined Metadata Elements
- Managing the Choices for Metadata Elements

Pre-defined Metadata Elements

The metadata elements display in the Descriptive and Structural tabs of the Asset Editor panel, the Asset Browser panel, Work Order Editor panel, Attachment field in the Attachments view of a work order, the Create Work Order interface, the By and And Then By menus in the Report Manager panel.

Asset Source

The Asset Source defines where the asset originates from. This can be the application used to create the asset file (e.g. Adobe® Captivate®), or a group with your organization (e.g. Social Media Marketing).

Asset Type

The Asset Type defines the application of the asset, or the intended use of the file. By default, the asset type is configured to include the following elements:

- **Duratron** — used to create the backgrounds that appear behind news anchors.
- **Headshot** — a portrait or photograph of a person's head.
- **Logo** — a graphic mark, icon, or symbol used as an identifier for a company, organization, or other group.
- **Lower Third** — an image used in the title-safe area.
- **Marketing Handout** — a form of printed advertisement intended for wide distribution. For example, letterhead (A4), or postcard (A6).
- **Monitor Wall Animation** — a video clip used as the wallpaper for a monitor wall setup.
- **Monitor Wall Still** — a still image that is stored as a single frame of video.
- **OTS** — an over the shoulder shot; the image is taken from the perspective or camera angle from the shoulder of another person.

Categories

An asset category defines the object class of the asset. By default, the category metadata is configured to include the following elements: Audio, Document, Image, Other, and Video.

Content Region

This metadata defines the geographical or network affiliate level associated with the asset. By default, the content region metadata is configured to include the following elements: International, Local, Nation, and State.

Formats

This metadata defines the format of the file that is associated with the asset in the Streamline system. No elements are pre-defined for this metadata. Instead, the Streamline system automatically updates this list whenever assets are added.

Priorities

This metadata specifies the level of importance of the asset. For example, a Rush priority would be assigned to a work order that is due immediately versus a work order with a priority of Low that is due in a week. By default, the priority metadata is configured to include the following elements: High, Low, Medium, and Rush.

Shows

This metadata identifies the program or segment associated with the asset. No elements are pre-defined for this metadata.

Stations

This metadata identifies the call sign of the commercial television station identified with the asset. No elements are pre-defined for this metadata.

Tags

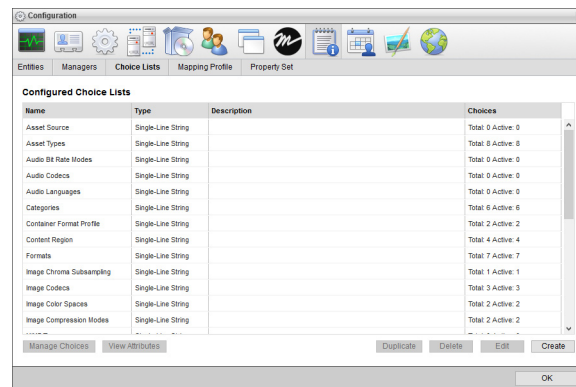
This metadata is a keyword or term that describes an asset and facilitates searches of the Streamline system. For example, adding the tags “**child**”, “**American**” and “**flag**” to an asset that includes a still image of a child posing with an American flag would list the asset in searches for “American” or “flag” or “child”. No elements are pre-defined for this metadata.

Managing the Choices for Metadata Elements

You can add new choices or delete existing choices from metadata elements, enabling you to customize the values that users can select for metadata fields when editing assets.

To add a new choice to a metadata element

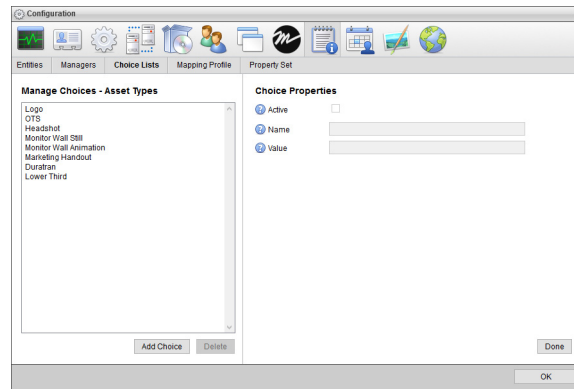
1. Log in to your Streamline Server as an administrator.
2. On the main toolbar, click the  **Configuration** icon.
The **Configuration** window opens.
3. On the **Configuration** window toolbar, click the  **Metadata** icon.
The **Metadata** panel opens.
4. Click the **Choice Lists** tab.
The **Choice Lists** tab opens.



5. In the **Configured Choice Lists** table, select the choice list to add choices.

6. Click **Manage Choices**.

The **Manage Choices** page opens.



7. In the **Manage Choices** section, click **Add Choice**.
Streamline creates a new choice named “New Choice” and saves the property values set for the new choice.
8. In the **Choice Properties** section, select the **Active** check box to activate the new choice and enable users to select this choice from the choice list. Clear this box to deactivate the choice and remove it from the choice list.

★ Deactivating a choice also removes the choice from all the custom attributes assigned the choice.
9. In the **Name** box, enter the name to display in the choice list that a user selects to choose this choice for a custom attribute.
10. In the **Value** box, enter the value that Streamline stores when a use selects this choice. When you click in this box, Streamline enters a suggested value that you can edit.

This value is sent as the value for a custom attribute when your Streamline Server sends out MOS messages and RSS feeds.
11. To add another choice to the choice list, click **Add Choice** in the **Manage Choices** section. To finish adding choices to a choice list, click **Done** in the **Choice Properties** section.

Delete Choices from a Choice List

After you delete a choice from a choice list, you can restore the choice by re-adding it to the choice list using the same Name and Value.

To delete a choice from a choice list

1. From the **Configured Choice Lists** table in the **Choice Lists** tab of the **Metadata** panel, select the choice list that contains the choice to edit.
2. Click **Manage Choices**.
The **Manage Choices** page opens.
3. In the **Choices** list, select the choice to delete.
4. To be able to restore a choice after you delete it, record the **Name** and **Value** of the selected choice. Use the recorded **Name** and **Value** to re-add the choice to the choice list.
5. Click **Delete**.
A confirmation message opens, asking whether you want to delete the selected choice. To keep the choice, click **Cancel**.
6. In the confirmation message, click **OK**.
Streamline deletes the selected choice attribute from the **Choices** list.

Selecting the Metadata to Upload

When you upload a media file, Streamline reads the XMP and Windows metadata from the media file and stores it in the Streamline asset created for the media file. Streamline uses mapping profiles to select the asset attributes in which to save media file metadata properties.

This chapter discusses the following topics:

- Plan a Mapping Profile
- Create Custom Attributes
- Create a Property Set
- Manage Property Sets
- Create a Mapping Profile
- Manage Mapping Profiles

Plan a Mapping Profile

Streamline mapping profiles pair media file metadata properties with asset attributes. On upload of a media file, Streamline reads information from the media file metadata properties and saves the information in that associated attributes of the asset created for the media file.

Before you create a mapping profile you need to do the following:

- **Custom Attributes** — you need define custom attributes for media file metadata properties that Streamline does not import by default.
- **Property Set** — for the types of media files that you want to upload to Streamline, you need to build a list of the media file properties that contain the information that you want to save with assets.

For More Information on...

- creating custom attributes, refer to the section “**Create Custom Attributes**” on page 11–5.

Create Custom Attributes

Custom attributes enable you to save information from media file metadata properties that are not supported by the default Streamline asset attributes. You can add custom attributes to Streamline entities, or you can create custom entities for your custom attributes.

Before you start creating a mapping profile, confirm that your Streamline Server contains the appropriate attributes to save information from the metadata properties of the media files that you intend to upload.

For More Information on...

- creating custom attributes, refer to the section “**Create Custom Attributes**” on page 11–5.

Create a Property Set

A property set contains a list of media file metadata properties from which Streamline can read information. When building a property set you do not need to enter each property into the set, just select the type of media file or files that contain the properties that you want to include in the property set.

To create a property set

1. Log in to your Streamline Server as an administrator.
2. On the main toolbar, click the  **Configuration** icon. If the **Configuration** icon is not visible, you are not an administrator and cannot configure the server.

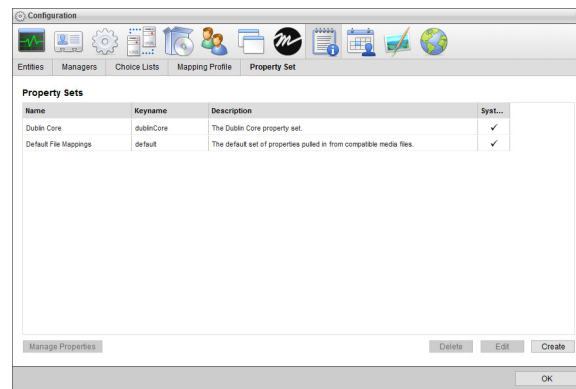
The **Configuration** window opens.

3. On the **Configuration** window toolbar, click the  **Metadata** icon.

The **Metadata** panel opens.

4. Click the **Property Set** tab.

The **Property Set** tab opens.



Streamline Servers contain the following system property sets that you cannot edit or delete:

- **Default File Mappings** — refer to the section “**Default File Mappings**” on page A–2 to view mappings.
- **Dublin Core** — refer to the section “**Dublin Core**” on page A–3 to view mappings.

5. Click **Create**.

The **Property Set** page opens.

6. In the **Name** box, enter the name for the property set.
7. In the **Key Name** box, enter the identifier for the property set. When you click in this box, Streamline enters a suggested key name that you can edit.
8. In the **Description** box, enter a description of the property set.
9. Click **Save**.

The **Property Set** page closes and Streamline adds the new property set to the **Property Sets** page.

Add Media File Properties to a Property Set

After you create a property set, you can add properties to the property set by selecting the type of media file or files that contain the properties that you want in the property set. You can add all the media file properties that you want to ingest into a single property set, or you can create individual property sets that contain specific types media file properties. You can use one or more property sets to build a mapping profile.

To add media file properties to a property set

1. From the **Property Set** tab, select the property set to which to add media file properties.
2. Click **Manage Properties**.

The **Property Set** page opens for the selected property set.

3. Click **Upload File**.

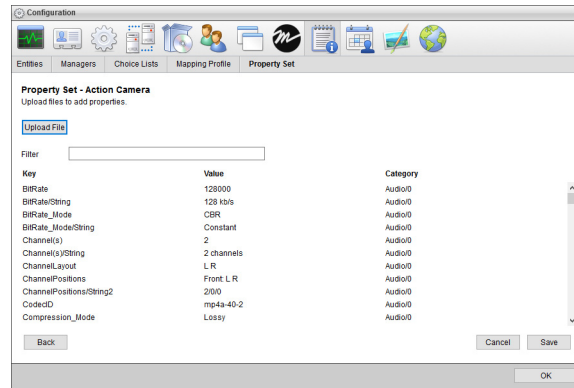
The **Choose File to Upload** dialog opens.

4. In the **Choose File to Upload** dialog, navigate to and select the type of media file that contains the metadata properties to add to the selected property set.

For quicker loading of metadata properties, select media files with a small file size.

5. Click **Open**.

The **Choose File to Upload** dialog closes and Streamline displays the metadata properties read from the selected media file in the **Property Set** page.



To add more media file properties to a property set, click **Upload File**. Streamline adds the properties from the additional selected media file to the properties list.

6. To filter the property list, enter in the **Filter** box a portion of the **Key**, **Value**, or **Category** associated with the properties you are looking for. Clear the **Filter** box to list all the loaded media file properties.
7. Click **Save**.

Streamline adds the loaded media file properties to the property list and opens the **Property Sets** page.

Manage Property Sets

Managing the property sets on your Streamline Server includes the following procedures:

- Edit Property Sets
- Delete Property Sets

Edit Property Sets

Streamline enables you to edit the properties of an existing property set. After editing a property set, Streamline updates the mapping profiles that reference the property set with the new properties of the property set.

To edit the properties of a property set

1. From the **Property Set** tab, select the property set to edit.
2. Click **Edit**.

The **Property Set** page opens for the selected property set.

3. Edit the property set properties as required.
4. Click **Save**.

Streamline updates the property set and opens the **Property Sets** page.

Delete Property Sets

Streamline only allows you to delete property sets that are not currently referenced by a mapping profile.

To delete a property set

1. From the **Property Set** tab, select the property set to delete.
2. Click **Delete**.

A confirmation message opens, asking whether you want to delete the selected property set. To keep the property set, click **Cancel**.

3. In the confirmation message, click **OK**.

Streamline deletes the selected property set from the **Property Sets** page.

Create a Mapping Profile

Streamline mapping profiles contain one or more mappings that pair default values or media file metadata property values with asset attributes. On upload of a media file, Streamline uses a mapping profile to save set default values or read media file metadata values in the associated attributes of the asset created from the media file.

To create a mapping profile

1. Log in to your Streamline Server as an administrator.
2. On the main toolbar, click the  **Configuration** icon. If the **Configuration** icon is not visible, you are not an administrator and cannot configure the server.

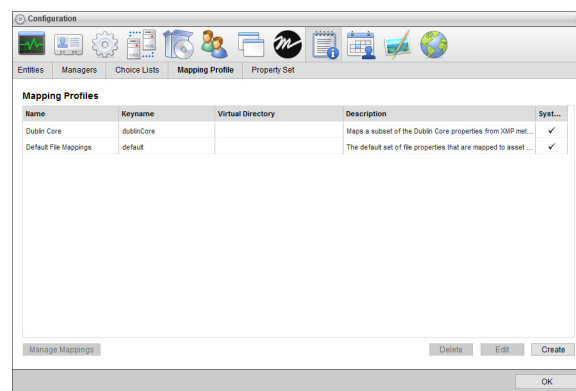
The **Configuration** window opens.

3. On the **Configuration** window toolbar, click the  **Metadata** icon.

The **Metadata** panel opens.

4. Click the **Mapping Profile** tab.

The **Mapping Profile** tab opens.



Streamline Servers contain the following system mapping profiles that you cannot edit or delete:

- **Default File Mappings** — refer to the section “**Default File Mappings**” on page A–2 to view mappings.
- **Dublin Core** — refer to the section “**Dublin Core**” on page A–3 to view mappings.

5. Click **Create**.

The **Mapping Profile** page opens.

6. In the **Name** box, enter the name for the mapping profile.
7. In the **Key Name** box, enter the identifier for the mapping profile. When you click in this box, Streamline enters a suggested key name that you can edit.
8. In the **Virtual Directory** box, enter the directory path to the folder in the **Assets** panel **Folder** tree view to store the assets created by uploading media files using the mapping profile. Use a backslash (\) to separate the folders in the directory path. For example:

Tree View	Directory Path
Assets	
News	News
Local	News\Local

9. In the **Description** box, enter description of the property set.
10. Use the **Inherit From** list to select the mapping set to use to ingest the structural properties from uploaded media files into the asset created for the media file.
11. Click **Save**.

The **Mapping Profile** page closes and Streamline adds the new mapping profile the **Mapping Profiles** page.

Add Mappings to a Mapping Profile

After you create a mapping profile, you can add mappings to the profile to define the values to enter in the attributes of the asset created by uploading a media file to Streamline. Mapping profiles can contain mappings that use media file properties from one or more property sets to set the value for an asset attribute.

To add mappings to a mapping profile

1. From the **Mapping Profile** tab, select the mapping profile to which to add mappings.
2. Click **Manage Properties**.

The **Mappings** page opens.

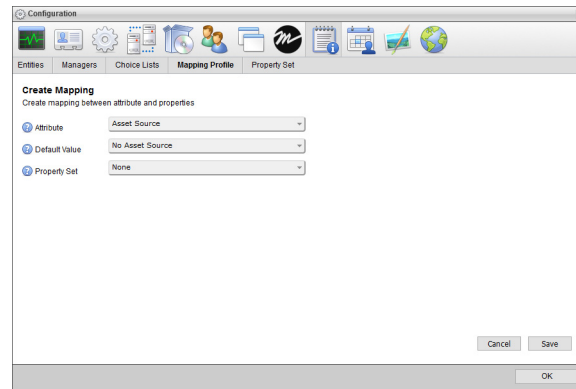
The screenshot shows the 'Configuration' window with the 'Mapping Profile' tab selected. The 'Mappings - Action Camera' section displays a table with the following data:

Attribute	Default Value	Mapping Property	Category
Exif Tool Version		ExifToolVersion	ExifTool
Creator	Action Camera		

At the bottom of the window, there are buttons for 'Back', 'Delete', 'Edit', 'Create', and 'OK'.

3. Click **Create**.

The **Create Mapping** page opens.



4. Use the **Attributes** list to select the asset attribute for which to set a value. Attributes with a gray background already have a set mapping and cannot be selected.
5. To enter a value for the selected attribute, use the provided **Default Value** text box or list to enter or select a value for the selected attribute.
6. To set the value of the selected attribute from a media file property:
 - a. Use the **Property Set** list to select the property set that contains the media file property to set the value for the selected attribute.
 - b. Use the **Mapping Property** list to select the media file property to set the value for the selected attribute. This list is only available after selecting a property set from the **Property Set** list.
 - c. If the selected **Property Set** does not contain the media file property to set the value for the selected attribute, click **Create** to open the **Property Key** box. Enter the property key name of the missing media file property in the **Property Key** box.
 - d. For date **Attributes**, enter in the **Date Format** box the date format of the date value contained in the media file property. Use the Java Simple Date Format to enter the data format. This box is only available after selecting a date attribute from the Attributes list.
7. Click **Save**.

The **Create Mapping** page closes and Streamline adds the new mapping to the **Mappings** page.

8. To add more mappings to the mapping profile, click **Create** and then repeat step 3 to step 7.

For More Information on...

- the Java Simple Date Format, refer to the web page <http://docs.oracle.com/javase/7/docs/api/java/text/SimpleDateFormat.html>.

Manage Mapping Profiles

Managing the mapping profiles on your Streamline Server includes the following procedures:

- Edit Mappings
- Delete Mappings from a Mapping Profile
- Edit Mapping Profiles
- Delete Mapping Profiles

After editing a mapping profile, Streamline updates the watch folders that use the revised mapping profile to upload media files.

Edit Mappings

You can edit the properties of a mapping to change the values ingested into asset attributes.

To edit the properties of a mapping

1. From the **Mapping Profile** tab, select the mapping profile that contains the mapping to edit.
2. Click **Manage Mappings**.

The **Mappings** page opens for the selected mapping profile.

3. In the **Mappings** table, select the mapping to edit.

The **Edit Mapping** page opens.

4. Edit the mapping properties as required.
5. Click **Save**.

Streamline updates the mapping and opens the **Mappings** page.

Delete Mappings from a Mapping Profile

Deleting a mapping from a mapping profile does not change any of the assets that were loading into Streamline using the mapping profile from which you deleted a mapping.

To delete a mapping from a mapping profile

1. From the **Mapping Profile** tab, select the mapping profile that contains the mapping to delete.
2. Click **Manage Mappings**.

The **Mappings** page opens for the selected mapping profile.

3. In the **Mappings** table, select the mapping to delete.
4. Click **Delete**.

A confirmation message opens, asking whether you want to delete the selected mapping. To keep the mapping, click **Cancel**.

5. In the confirmation message, click **OK**.

Streamline deletes the selected mapping from the **Mappings** page.

6. Click **Back** to return to the **Mapping Profiles** page.

Edit Mapping Profiles

Streamline enables you to edit the properties of an mapping profile.

To edit the properties of a mapping profile

1. From the **Mapping Profile** tab, select the mapping profile to edit.
2. Click **Edit**.

The **Mapping Profile** page opens for the selected mapping profile.

3. Edit the mapping profile properties as required.
4. Click **Save**.

Streamline updates the mapping profile and opens the **Mapping Profiles** page.

Delete Mapping Profiles

Streamline only allows you to delete mapping profiles that are not currently used by a watch folder to upload media files.

To delete a mapping profile

1. From the **Mapping Profile** tab, select the mapping profile to delete.
2. Click **Delete**.

A confirmation message opens, asking whether you want to delete the selected mapping profile. To keep the mapping profile, click **Cancel**.

3. In the confirmation message, click **OK**.

Streamline deletes the selected mapping profile from the **Mapping Profiles** page.

Configuring Work Orders

You can enable Streamline to notify users via e-mail when a work order is submitted to the system and remind users when a deadline is near. You can also configure the location to save asset placeholders associated with a work order.

This chapter discusses the following topics:

- Enable Work Order Notifications via E-mail
- Select the Asset Location Strategy

Enable Work Order Notifications via E-mail

Streamline enables you to setup which users to automatically notify, via e-mail, when a work order is submitted.

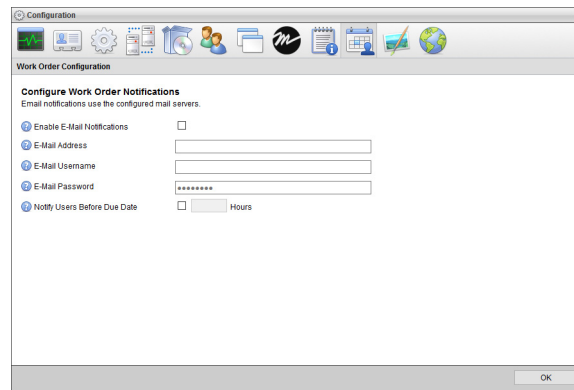
To enable work order notifications

1. Log in to your Streamline Server as an administrator.
2. On the main toolbar, click the  **Configuration** icon.

The **Configuration** window opens.

3. On the **Configuration** window toolbar, click the  **Work Order** icon. If the **Word Order** icon is not visible, you are not an administrator and cannot enable notifications.

The **Work Order Configuration** panel opens.



4. Select the **Enable E-Mail Notifications** check box to enable Streamline to send work order notification e-mails to Streamline users.
5. In the **E-Mail Address** box, enter the e-mail address that Streamline uses to send work order notification e-mails to Streamline users.
6. In the **E-Mail Username** box, enter the username of the e-mail account associated with the e-mail address that Streamline uses to send work order notification e-mails to Streamline users.
7. In the **E-Mail Password** box, enter the password for the e-mail account.
8. Select the **Notify Users Before Deadline** check box to send a work order notification e-mail to the assignee before the work order deadline.
9. In the **Hours** box, enter the number of hours before the work order deadline to send a work order notification to the assignee.
10. Click **OK** to close the **Configuration** window.

Select the Asset Location Strategy

You can select the location strategy that Streamline uses to save the asset placeholders created by a work order.

To select the asset location strategy

1. On the **Configuration** window toolbar, click the  **Work Order** icon.

The **Work Order Configuration** panel opens.

2. Use the **Asset Location Strategy** list to select the location strategy to save asset placeholders created for a work order. The available location strategies are as follows:
 - **Use Mapping Profile** — save asset placeholders in the folder set by the mapping profile selected for the work order.
 - **Use Work Order Directory** — save asset placeholders in the folder selected in the Folders tree view of the Work Orders panel when you create the work order. Asset placeholder do not move with a work order if you move the work order to another folder.

Configuring Asset Properties

This chapter provides instructions for configuring file storages, asset storage, asset life cycle, placeholder watch folders, profiles, transcoders, and watch folders for the media files that you ingest into your Streamline Server.

This chapter discusses the following topics:

- Manage File Storages
- Create Offline File Storages
- Configure Asset Storage
- Configure Asset Life Cycle
- Set Placeholder Watch Folders
- Integrate Streamline with Third Party Media Asset Managers
- Configure Profiles
- Define Transcoders
- Set Watch Folders

Manage File Storages

Streamline uses file storages to configure, control, and store the media files that Streamline users ingest into your Streamline Server. The file storage that a user selects to ingest a media file into Streamline configures the media file as follows:

- **Naming Rules** — sets the case, length, and space character for the file name of the ingested media file.
- **Pathing Rules** — sets the directory storage path within the Streamline file system for the ingested media file.
- **Push Validations** — validates the media file against set rules for ingestion into the Streamline Server.
- **Push Triggers** — triggers tasks to ingest media files.
- **Auto-Purge Rules** — automatically delete assets from a file storage.

Create a File Storage

Streamline contains a default file storage that you can use to ingest media files and store them in the default file system on your Streamline Server. You can also create custom file storages to store ingested media files into the file systems on your Streamline Server. Before you create a file storage, use the File Systems tab to add a file system to store the media files that you ingest.

For More Information on...

- adding Streamline file systems, refer to the section “**Add a File System**” on page 4–6.

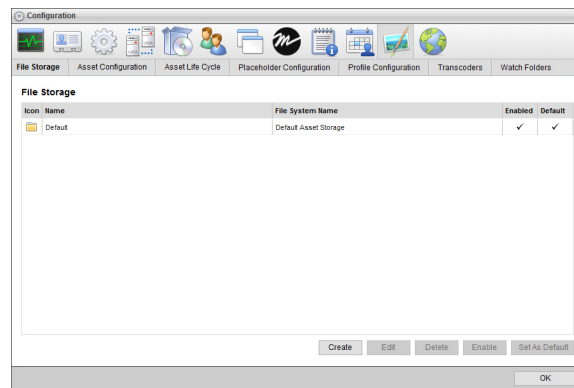
To create a file storage

1. On the **Configuration** window toolbar, click the  **Asset** icon.

The **Asset** panel opens.

2. Click the **File Storage** tab.

The **File Storage** tab opens.



3. Click **Create**.

The **Preset** page opens.

4. Use the **Type** list to select the preset file storage definition with which to create a file storage. The selected **Type** automatically sets the required **Naming Rules**, **Pathing Rules**, **Push Triggers**, and/or **Auto-Purge Rules** properties for the new file storage. The properties set by the selected preset display below the **Type** list.

Select **No Preset** from the **Type** list to leave all file storage properties blank

5. Click **Next**.

The **Setup** page opens. The **Steps** list displays your progress through the new file storage creation procedure. You can also use the **Steps** list to revisit completed steps in the procedure.

- ★ An asterisk (*) identifies the required settings for which you must enter a value before continuing with the next step in creating a new file storage.

6. In the **Name** box, enter a name for the file storage.
7. In the **Key Name** box, enter the name to use as the identifier for the file storage. When you click in this box, Streamline enters a suggested **Key Name** that you can edit.
 - ★ You cannot change the **Key Name** of a file storage after you save the file storage.
8. Use the **File System** list to select the Streamline file system in which to save media files that Streamline users ingest using the file storage.
 - ★ You cannot change the file system associated with a file storage after you save the file storage.

The **File System** list only contains the file systems available on your Streamline Server. You can use the **File Systems** tab to view, add, and manage the file systems on your Streamline Server.
 - ★ File systems that use **Amazon S3 Glacier** to archive assets on the Amazon Simple Storage Service must be associated with an offline file storage. To create an offline file storage for an Amazon S3 Glacier based file system, follow the procedure “**To create an offline file storage**” on page 16–10.
9. Select the **Indexed** check box to use the file storage to automatically ingest media files from in the associated file system associated that your Streamline Server does not contain. Streamline runs an indexing process in the background to find media files that your Streamline Server does not contain.

Clear this check box to not use the file storage to automatically ingest media files that your Streamline Server does not contain.
10. In the **Indexed File Extensions** box, enter the file extension that a media file must have for Streamline to ingest the file with the file storage from the associated file system. Clear this box to ingest media files that have any file extension. This box is only available when you select the Indexed check box.
 - ★ Do not include the initial period with the file extensions that you enter.

When entering more than one file extension, use a comma (,) to separate the file extensions. For example, enter the following to ingest .avi, .m4a, and .mp4 media files:

avi, m4a, mp4

Inception will not ingest media files that have file extensions that differ from the indexed file extensions.
11. Select the **Allow XMP Metadata Write for Supported Files** check box to write XMP Metadata to supported files when ingesting media files into the file storage.
12. Use the **Icon** list to select an icon to identify the file storage.

If the icons in the list are not appropriate for the file storage, do the following:

 - a. Use the **Icon** list to select **Upload an Icon**.

Streamline displays a **Browse** button.
 - b. Click **Browse**.

The **File Upload** dialog box opens.
 - c. Use the **File Upload** dialog box to select the image file to use as the icon for the file storage.
 - d. Click **Open**.

Streamline adds the image contained in the selected image file to the **Icon** list as the **Uploaded Icon** option, and automatically selects the uploaded image as the icon for the file storage. You can only upload one image to the **Icon** list at a time. Uploading another image to the **Icon** list replaces the current uploaded image with the new image.
13. Click **Next**.

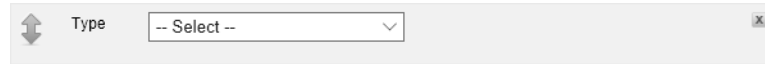
The **Naming Rules** page opens.

14. Use the **Ingest Naming Rules** box to define rules that set the case, length, and space character for the file names of the media files ingested using the file storage.

To add naming rules to the **Ingest Naming Rules** box, do the following:

- a. Click **Add**.

Streamline adds a new blank naming rule to the **Ingest Naming Rules** box.

A screenshot of a user interface element for adding naming rules. It features a light gray background. On the left is a vertical double-headed arrow icon. To its right is the word 'Type' in a small font. Further right is a dropdown menu with the text '-- Select --' and a downward-pointing arrow. On the far right is a small square button with an 'X' icon.

- b. Use the **Type** list to select the type of naming rule to add to the file storage. The available naming rule types are as follows:

- **Casing** — select the capitalization for the media file name. Select the **Uppercase** option change all letters in a media file name to uppercase (**SPORTS INTRO**). Select the **Lowercase** option change all letters in a media file name to lowercase (**sports intro**).
- **Max Length** — set the maximum length of a media file name. In the **Max Length** box, enter the maximum number of characters (1 to 64) for a media file name. Streamline truncates media file name characters beyond the set Max Length. When this rule follows the Attach File Relation or the Add Unique Suffix rules the characters added to a file name by the rules are included in the set Max Length for the file name.
- **Replace Spaces** — replace the spaces in a media file name with underscore (_) characters. For example: the media file name Sports Intro would change to **Sports_Intro**.
- **Attach File Relation** — for non-essence files add the name of the relationship with the asset to the media file name, for example: thumbnail or proxy. Select one of the following options to set the location of the relationship name in the media file name:
 - › **Append** — add the relationship name to the end of the media file name.
 - › **Prepend** — add the relationship name to the start of the media file name.
- **Add Unique Suffix** — add a Streamline generated unique suffix to the end of the media file name. A suffix consists of an underscore (_) character followed a unique ID number.

- c. Click **Add** to add additional ingest naming rules as required. The **Ingest Naming Rules** box displays the ingest naming rules in the order that the file storage applies the rules to the file names of ingested media files. You can manage the ingest naming rules associated with a file storage as follows:

- **Reposition** — click and drag the  icon at the left side of an ingest naming rule to reposition the selected rule in the order that Streamline applies the rules to the file names of ingested media files.
- **Delete** — click the  icon in the upper right corner of an ingest naming rule to delete the selected rule from the list of rules that Streamline applies to the file names of ingested media files.

15. Click **Next**.

The **Pathing Rules** page opens.

16. Use the **Ingest Pathing Rules** box to define rules that set the directory storage path within a Streamline file system for the media files ingested using the file storage.

To add pathing rules to the **Ingest Pathing Rules** box, do the following:

- a. Click **Add**.

Streamline adds a new blank pathing rule to the **Ingest Pathing Rules** box.

A screenshot of a user interface element for adding pathing rules. It features a light gray background. On the left, there is a vertical double-headed arrow icon. To its right is the label 'Type'. Further right is a dropdown menu with the text '-- Select --' and a downward-pointing arrow. On the far right, there is a small square icon with an 'X' inside, representing a close button.

- b. Use the **Type** list to select the type of pathing rule to add to the file storage. The available pathing rule types are as follows:

- **Preserve File Path** — append the directory path of the media file to the virtual path of the asset created for the ingested media file.
- **Unique Folder** — append a new and unique folder to the current directory path.
- **Static Path** — append a defined path to the current directory path. In the **Path** box, enter the path to append to the current directory path. The **Path** can contain forward slashes (/) to separate directories but cannot start or end with a forward slash.
- **Asset Guid** — append a new folder to the current directory path with the guid of the asset associated with the media file.
- **File Guid** — append a new folder to the current directory path with the guid of the media file.

- c. Click **Add** to add additional ingest pathing rules as required. The **Ingest Pathing Rules** box displays the ingest pathing rules in the order that the file storage applies the rules to the storage path of ingested media files. You can manage the ingest pathing rules associated with a file storage as follows:

- **Reposition** — click and drag the  icon at the left side of an ingest pathing rule to reposition the selected rule in the order that Streamline applies the rules to the storage path of ingested media files.
- **Delete** — click the  icon in the upper right corner of an ingest pathing rule to delete the selected rule from the list of rules that Streamline applies to the storage path of ingested media files.

17. Click **Next**.

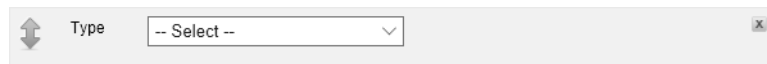
The **Ingest Validations** page opens.

18. Use the **Ingest Validation Rules** box to define the rules that validate the media files pushed to Streamline through a file storage.

To add validation rules to the **Ingest Validation Rules** box, do the following:

- a. Click **Add**.

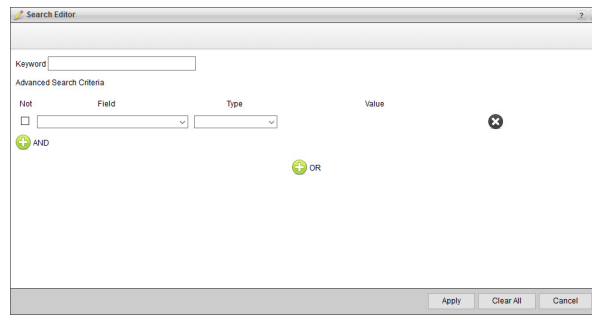
Streamline adds a new blank validation rule to the **Ingest Validation Rules** box.

A screenshot of a user interface element for adding validation rules. It features a light gray background. On the left, there is a vertical double-headed arrow icon. To its right is the label 'Type'. Further right is a dropdown menu with the text '-- Select --' and a downward-pointing arrow. On the far right, there is a small square icon with an 'X' inside, representing a close button.

- b. Use the **Type** list to select the type of validation rule to add to the file storage. The available validation rule types are as follows:

- **Require Asset Approval** — only ingest media files associated with approved assets.
- **Source Transcoder** — only ingest media files with formats generated from selected transcoders. Use the **Source Transcoders** list to select one or more transcoders that generate media files with the appropriate formats to ingest.
 - › In the **Transcoder** list, select the check box to the left of each transcoder that generate media files with the appropriate formats to ingest.
 - › Clear the check box to the left of the transcoders that you do not want to select.
 - › Click or tap the  **Close** icon.

- **Supported Files Filter** — only ingest media files that match the filter defined in the **Search Editor**. Click **Edit Filter** to open the **Search Editor** dialog box to define a media file ingest filter.



For more information about using the Search Editor, refer to the **Using the Search Editor** section in the *Streamline User Guide*.

- **Profile** — select this rule type to only ingest media files with formats categorized by a selected profile. Use the **Profile** list to select the profile that media files must categorize as to be ingested.
- c. Click **Add** to add additional ingest validation rules as required. The **Ingest Validation Rules** box displays the ingest validation rules in the order that the file storage applies the rules to validate a media file for ingestion. You can manage the ingest validation rules associated with a file storage as follows:
- **Reposition** — click and drag the  icon at the left side of an ingest validation rule to reposition the selected rule in the order that Streamline applies the rules to validate a media file for ingestion.
 - **Delete** — click the  icon in the upper right corner of an ingest validation rule to delete the selected rule from the list of rules that Streamline applies to validate a media file for ingestion.

19. Click **Next**.

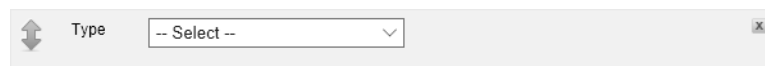
The **Ingest Triggers** page opens.

20. Use the **Ingest Triggers** box to define additional tasks to run for the media files ingested into the file storage.

To add ingestion triggers to the **Ingest Triggers** box, do the following:

- a. Click **Add**.

Streamline adds a new blank trigger task to the **Ingest Triggers** box.



- b. Use the **Type** list to select the type of trigger task to add to the file storage. The available trigger task types are as follows:

- **Mirror** — select one or more file storages to mirror to the current file storage. When one of the selected file storages ingests a media file, the current file storage also ingests the same media file. Use the **File Storages** list to select the file storages from which to mirror ingested media files.
- **Rundown Studios** — set the Inception Studio IDs from which to ingest media files when Inception monitors a rundown with a set Studio ID. When Inceptions monitors a rundown with one of the set Studio IDs, Streamline uses this file storage to ingest the media files from the rundown that are not contained in your Streamline Server. In the **Studio IDs** box, enter the associated studio IDs to trigger this task. Use a comma (,) to separate studio IDs.

- c. Click **Add** to add additional trigger tasks as required. The **Ingest Triggers** box displays the ingest trigger tasks in the order that they run when the file storage ingests a media file. You can manage the ingest trigger tasks associated with a file storage as follows:

- **Reposition** — click and drag the  icon at the left side of an ingest trigger task to reposition the selected trigger in the order that Streamline runs the triggers when the file storage ingests a media file.

- **Delete** — click the  icon in the upper right corner of an ingest trigger task to delete the selected trigger from the list of triggers that Streamline runs when the file storage ingests a media file.

21. Click **Next**.

The **Auto-Purge Rules** page opens.

22. Use the **Auto-Purge Rules** box to define rules to automatically delete assets from a file storage.

To add auto-purge rules to the **Auto-Purge Rules** box, do the following:

a. Click **Add**.

Streamline adds a new blank auto-purge rule to the **Auto-Purge Rules** box.



b. Use the **Type** list to select the type of auto-purge rule to add to the file storage. The available auto-purge rule types are as follows:

- **Pushed via MOS** — select this rule type to delete assets pushed via MOS to a rundown after a set amount of time.
 - › In the **Expiry** box, enter the amount of time to wait after an asset is last reference by a rundown before deleting the asset from the file storage.
 - › Use the list the right of the **Expiry** box to select the time unit for the time amount entered in the **Expiry** box.

c. Click **Add** to add additional auto-purge rules as required. The **Auto-Purge Rules** box displays the auto-purge rules in the order that they run when Streamline pushes an asset from the file storage to a rundown via MOS. You can manage the auto-purge rules associated with a file storage as follows:

- **Reposition** — click and drag the  icon at the left side of an auto-purge rule to reposition the selected rule in the order that Streamline runs the rules when Streamline pushes an asset from the file storage to a rundown via MOS.
- **Delete** — click the  icon in the upper right corner of an auto-purge rule to delete the selected rule from the list of rules that Streamline runs when Streamline pushes an asset from the file storage to a rundown via MOS.

23. Click **Finish**.

The Auto-Purge Rules page closes and Streamline adds the new file storage to the **File Storage** table in the **File Storage** tab.

Manage Available File Storages

You can create any number of file storages for your Streamline Server. You can enable or disable the file storages on your Streamline Server match the requirements of your users. You can also select one of the file storages as the default file storage used by Streamline users to ingest media files.

To enable or disable a file storage

1. On the **Configuration** window toolbar, click the  **Asset** icon.

The **Asset** panel opens.

2. Click the **File Storage** tab.

The **File Storage** tab opens.

3. In the **File Storage** table, select the file storage to enable or disable.

Depending on the state of the selected file storage, Streamline displays either the **Enable** or **Disable** button below the **File Storage** list.

4. Do one of the following to control the availability of the selected file storage on your Streamline Server:
 - **Enabled File Storages** — if the selected file storage is currently enabled, click **Disable**.
The disabled file storage is no longer available to Streamline users for ingesting media files.
 - **Disabled File Storages** — if the selected file storage is currently disabled, click **Enable**.
Streamline enables the selected file storage and makes it available to Streamline users.

Select the Default File Storage

From the active file storages, you can also select one of the file storages as the default file storage used by Streamline users to ingest media files.

To select the default file storage

1. On the **Configuration** window toolbar, click the  **Asset** icon.
The **Asset** panel opens.
2. Click the **File Storage** tab.
The **File Storage** tab opens.
3. In the **File Storage** table, select the file storage to use as the default file storage for ingesting media files.
4. Click **Set As Default**.
The **Default** column displays a check mark for the selected file storage.

Edit File Storages

When editing a file storage, you cannot change the key name or file system set for the file storage.

To edit a file storage

1. On the **Configuration** window toolbar, click the  **Asset** icon.
The **Asset** panel opens.
2. Click the **File Storage** tab.
The **File Storage** tab opens.
3. In the **File Storage** table, select the file storage to edit.
4. Click **Edit**.
The **Setup** page opens for the selected file storage.
5. Edit the file storage configuration settings as required.
You can use the **Steps** column quickly navigate between the storage method configuration setting pages.
6. Click **Finish** to save your changes.

Delete File Storages

Deleting a file storage does not delete the file system associated with the method.

To delete a file storage

1. On the **Configuration** window toolbar, click the  **Asset** icon.
The **Asset** panel opens.
2. Click the **File Storage** tab.
The **File Storage** tab opens.

3. In the **File Storage** table, select the file storage to delete.

4. Click **Delete**.

A confirmation dialog box opens.

5. Click **Yes**.

Streamline deletes the selected file storage from the **File Storage** list.

Create Offline File Storages

The Amazon S3 Glacier file system is an archive on the Amazon Simple Storage Service, an external service that you require an account to use. You can associate an Amazon S3 Glacier file system with an offline file storage to archive assets. Offline files storages offer a safe location to archive assets, but include the following limitations:

- Streamline users cannot directly upload assets to an offline file storage, they can only send an asset to an offline file storage after uploading it to a regular Streamline file storage.
- Streamline users cannot download assets from an offline file storage.
- Indexing is not available for offline file storages.
- XMP Metadata is not available for offline file storages.
- Ingest Triggers are not available for offline file storages.
- Auto-Purge Rules are not available for offline file storages.
- Watch folder transcoders cannot use offline file storages.
- Watch folders cannot directly use offline file storages. You can configure a watch folder to move files from the watch folder file system to an offline file system.
- Placeholder watch folders cannot use offline file storages.
- Third party MAM integration cannot use offline file storages.

Before you create an offline file storage, use the File Systems tab to add an Amazon S3 Glacier based file system to archive assets.

To create an offline file storage

1. On the **Configuration** window toolbar, click the  **Asset** icon.

The **Asset** panel opens.

2. Click the **File Storage** tab.

The **File Storage** tab opens.

3. Click **Create**.

The **Preset** page opens.

4. Use the **Type** list to select **No Preset**.

5. Click **Next**.

The **Setup** page opens. The **Steps** list displays your progress through the new file storage creation procedure. You can also use the **Steps** list to revisit completed steps in the procedure.

★ An asterisk (*) identifies the required settings for which you must enter a value before continuing with the next step in creating a new file storage.

6. In the **Name** box, enter a name for the file storage.

7. In the **Key Name** box, enter the name to use as the identifier for the file storage. When you click in this box, Streamline enters a suggested **Key Name** that you can edit.

★ You cannot change the **Key Name** of a file storage after you save the file storage.

8. Use the **File System** list to select a Streamline file system that uses **Amazon S3 Glacier** to archive assets on the Amazon Simple Storage Service.

★ You cannot change the file system associated with a file storage after you save the file storage.

The **File System** list only contains the file systems available on your Streamline Server. You can use the **File Systems** tab to view, add, and manage the file systems on your Streamline Server.

9. Use the **Icon** list to select an icon to identify the file storage.

If the icons in the list are not appropriate for the file storage, do the following:

- a. Use the **Icon** list to select **Upload an Icon**.

Streamline displays a **Browse** button.

- b. Click **Browse**.

The **File Upload** dialog box opens.

- c. Use the **File Upload** dialog box to select the image file to use as the icon for the file storage.

- d. Click **Open**.

Streamline adds the image contained in the selected image file to the **Icon** list as the **Uploaded Icon** option, and automatically selects the uploaded image as the icon for the file storage. You can only upload one image to the **Icon** list at a time. Uploading another image to the **Icon** list replaces the current uploaded image with the new image.

10. Click **Next**.

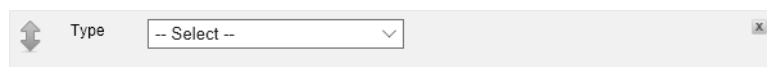
The **Naming Rules** page opens.

11. Use the **Ingest Naming Rules** box to define rules that set the case, length, and space character for the file names of the media files ingested using the file storage.

To add naming rules to the **Ingest Naming Rules** box, do the following:

- a. Click **Add**.

Streamline adds a new blank naming rule to the **Ingest Naming Rules** box.

A screenshot of a user interface element for adding a naming rule. It consists of a light gray rectangular box. On the left side of the box is a vertical double-headed arrow icon. To the right of the arrow is the text 'Type'. Further right is a dropdown menu with the text '-- Select --' and a small downward-pointing chevron icon. On the far right of the box is a small square button with an 'X' icon inside.

- b. Use the **Type** list to select the type of naming rule to add to the file storage. The available naming rule types are as follows:

- **Casing** — select the capitalization for the media file name. Select the **Uppercase** option change all letters in a media file name to uppercase (**SPORTS INTRO**). Select the **Lowercase** option change all letters in a media file name to lowercase (**sports intro**).
- **Max Length** — set the maximum length of a media file name. In the **Max Length** box, enter the maximum number of characters (1 to 64) for a media file name. Streamline truncates media file name characters beyond the set Max Length. When this rule follows the Attach File Relation or the Add Unique Suffix rules the characters added to a file name by the rules are included in the set Max Length for the file name.
- **Replace Spaces** — replace the spaces in a media file name with underscore (`_`) characters. For example: the media file name Sports Intro would change to **Sports_Intro**.

- **Attach File Relation** — for non-essence files add the name of the relationship with the asset to the media file name, for example: thumbnail or proxy. Select one of the following options to set the location of the relationship name in the media file name:
 - › **Append** — add the relationship name to the end of the media file name.
 - › **Prepend** — add the relationship name to the start of the media file name.
 - **Add Unique Suffix** — add a Streamline generated unique suffix to the end of the media file name. A suffix consists of an underscore (_) character followed a unique ID number.
- c. Click **Add** to add additional ingest naming rules as required. The **Ingest Naming Rules** box displays the ingest naming rules in the order that the file storage applies the rules to the file names of ingested media files. You can manage the ingest naming rules associated with a file storage as follows:
- **Reposition** — click and drag the  icon at the left side of an ingest naming rule to reposition the selected rule in the order that Streamline applies the rules to the file names of ingested media files.
 - **Delete** — click the  icon in the upper right corner of an ingest naming rule to delete the selected rule from the list of rules that Streamline applies to the file names of ingested media files.

12. Click **Next**.

The **Pathing Rules** page opens.

13. Use the **Ingest Pathing Rules** box to define rules that set the directory storage path within a Streamline file system for the media files ingested using the file storage.

To add pathing rules to the **Ingest Pathing Rules** box, do the following:

- a. Click **Add**.

Streamline adds a new blank pathing rule to the **Ingest Pathing Rules** box.



- b. Use the **Type** list to select the type of pathing rule to add to the file storage. The available pathing rule types are as follows:
- **Preserve File Path** — append the directory path of the media file to the virtual path of the asset created for the ingested media file.
 - **Unique Folder** — append a new and unique folder to the current directory path.
 - **Static Path** — append a defined path to the current directory path. In the **Path** box, enter the path to append to the current directory path. The **Path** can contain forward slashes (/) to separate directories but cannot start or end with a forward slash.
 - **Asset Guid** — append a new folder to the current directory path with the guid of the asset associated with the media file.
 - **File Guid** — append a new folder to the current directory path with the guid of the media file.
- c. Click **Add** to add additional ingest pathing rules as required. The **Ingest Pathing Rules** box displays the ingest pathing rules in the order that the file storage applies the rules to the storage path of ingested media files. You can manage the ingest pathing rules associated with a file storage as follows:
- **Reposition** — click and drag the  icon at the left side of an ingest pathing rule to reposition the selected rule in the order that Streamline applies the rules to the storage path of ingested media files.
 - **Delete** — click the  icon in the upper right corner of an ingest pathing rule to delete the selected rule from the list of rules that Streamline applies to the storage path of ingested media files.

14. Click **Next**.

The **Ingest Validations** page opens.

15. Use the **Ingest Validation Rules** box to define the rules that validate the media files pushed to Streamline through a file storage.

To add validation rules to the **Ingest Validation Rules** box, do the following:

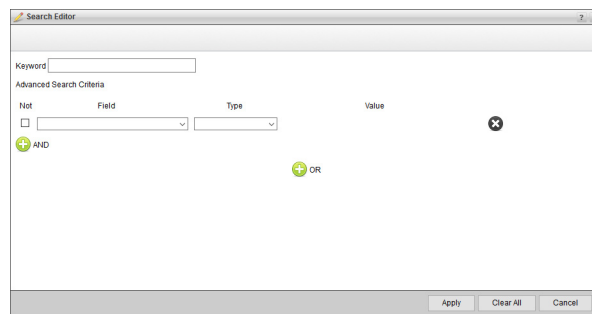
- a. Click **Add**.

Streamline adds a new blank validation rule to the **Ingest Validation Rules** box.



- b. Use the **Type** list to select the type of validation rule to add to the file storage. The available validation rule types are as follows:

- **Require Asset Approval** — only ingest media files associated with approved assets.
- **Source Transcoder** — only ingest media files with formats generated from selected transcoders. Use the **Source Transcoders** list to select one or more transcoders that generate media files with the appropriate formats to ingest.
 - › In the **Transcoder** list, select the check box to the left of each transcoder that generate media files with the appropriate formats to ingest.
 - › Clear the check box to the left of the transcoders that you do not want to select.
 - › Click or tap the  **Close** icon.
- **Supported Files Filter** — only ingest media files that match the filter defined in the **Search Editor**. Click **Edit Filter** to open the **Search Editor** dialog box to define a media file ingest filter.



For more information about using the Search Editor, refer to the **Using the Search Editor** section in the *Streamline User Guide*.

- c. Click **Add** to add additional ingest validation rules as required. The **Ingest Validation Rules** box displays the ingest validation rules in the order that the file storage applies the rules to validate a media file for ingestion. You can manage the ingest validation rules associated with a file storage as follows:

- **Reposition** — click and drag the  icon at the left side of an ingest validation rule to reposition the selected rule in the order that Streamline applies the rules to validate a media file for ingestion.
- **Delete** — click the  icon in the upper right corner of an ingest validation rule to delete the selected rule from the list of rules that Streamline applies to validate a media file for ingestion.

16. Click **Finish**.

The Ingest Validations page closes and Streamline adds the new file storage to the **File Storage** table in the **File Storage** tab.

For More Information on...

- managing offline file storages refer to the following sections:
 - › “**Manage Available File Storages**” on page 16–8
 - › “**Edit File Storages**” on page 16–9
 - › “**Delete File Storages**” on page 16–9

Configure Asset Storage

Before you start to ingest media files into your Streamline Server, you can configure default asset storage settings. Asset storage settings enable you to generate video file thumbnail images, generate proxy videos, and choose the default file storage for ingested media files.

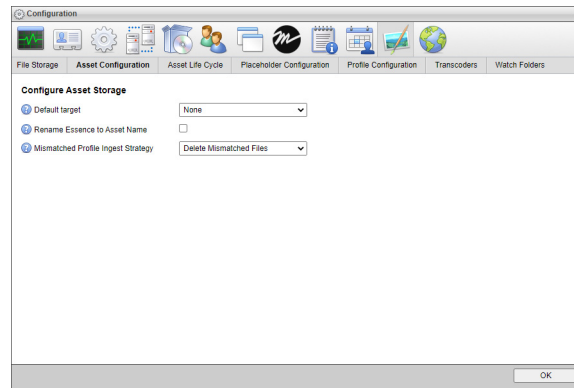
To configure default asset storage settings

1. On the **Configuration** window toolbar, click the  **Asset** icon.

The **Asset** panel opens.

2. Click the **Asset Configuration** tab.

The **Asset Configuration** tab opens.



3. Use the **Default Target** list to select the File Storage to automatically push ingested media files to devices; such as, video servers for playout. File Storages are defined in the **File Storage** tab of the **Asset** panel.
4. Select the **Rename Essence to Asset Name** check box to automatically rename the media file associated with an asset to match the asset name. Streamline automatically renames media files when you fulfill a placeholder, edit the asset name, or update the essence of an asset.

Clear the **Rename Essence to Asset Name** check box to retain the original filename of the media file associated with an asset.

5. On a **Streamline Cloud** system select the **Enable XPression Encoder** check box to use the XPression encoder to transcode ingested video files and create a second format for new assets. This check box is only available on Streamline Cloud systems.

Selecting the **Enable XPression Encoder** check box also adds the **XPression** encoder to the **Transcode** menu in the **Assets** panel. Clearing this check box removes the **XPression** encoder from the **Transcode** menu.

Configure Asset Life Cycle

An asset life cycle enables you to continually manage your Streamline assets at a set time interval. Assets contained in a rundown are ignored by the asset life cycle while the rundown is monitored.

A filter selects the assets for the asset life cycle to manage. The set check interval defines how often the asset life cycle manages the selected assets. The asset life cycle can delete assets from a Streamline Server or copy asset essence files to a file system before deleting the assets.

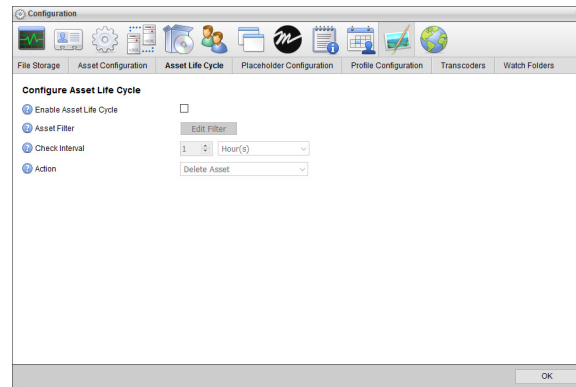
To configure an asset life cycle

1. On the **Configuration** window toolbar, click the  **Asset** icon.

The **Asset** panel opens.

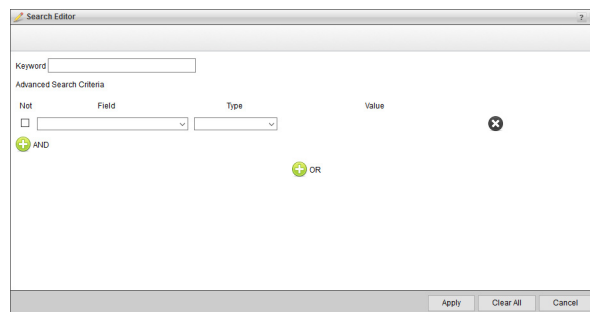
2. Click the **Asset Life Cycle** tab.

The **Asset Life Cycle** tab opens.



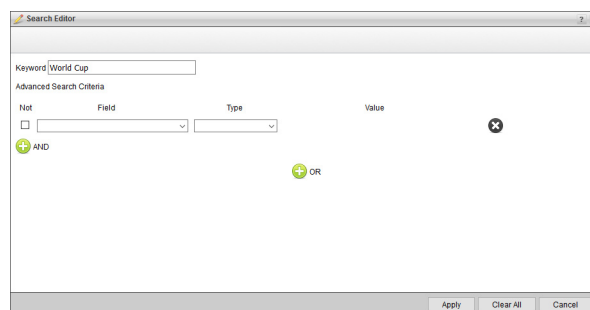
3. Select the **Enable Asset Life Cycle** check box to enable the defined asset life cycle to continually manage assets at a set time interval. Life cycle configuration settings are only available when you select the **Enable Asset Life Cycle** check box.
4. Click **Edit Filter** to open the **Search Editor** to define the filter that selects the assets to manage with the action selected from the **Action** list.

The **Search Editor** window opens.



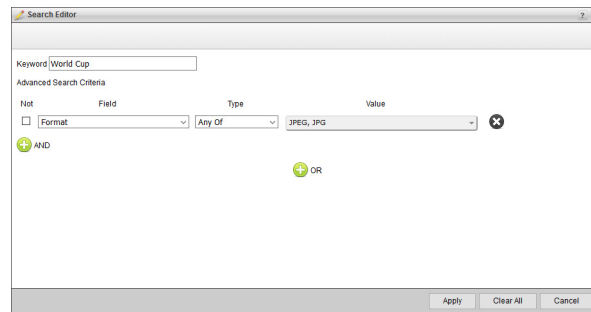
5. In the **Keyword** box, enter the text to search for in the text-based metadata fields to select the assets to manage. When you leave the **Keyword** box blank, Streamline does not apply a general query to your search.

The following example search selects assets that contain the text “**World Cup**”:



6. Use the **Field**, **Type**, and **Value** options in conjunction to specify a filter for your search.

The following example search selects assets that contain the text “**World Cup**” and have a format of JPEG or JPG.



7. Select the **Not** check box for a filter when you want to select assets that do not match the set **Field**, **Type**, and **Value** options.
8. Click the **+** **AND** icon to add another filter to the search.
9. Click the **+** **OR** icon to add an alternative filter to the search.
10. Click **Apply** to save the defined filter.

The **Search Editor** window closes. The **Asset Life Cycle** tab **Asset Filter** field displays the defined asset selection filter.

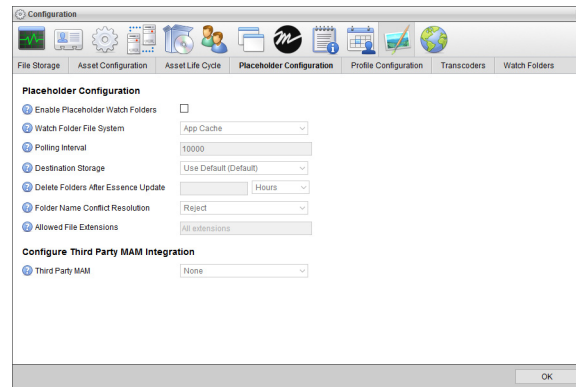
11. Use the **Check Interval** box to enter or select the amount of time between applications of the action selected from the **Action** list to manage assets.
12. Use the **Option** list to select the time unit (**Days** or **Hours**) for the time entered in the **Check Interval** box.
13. Use the **Action** list to select the action to manage assets at the set **Check Interval**. The available actions are rules are as follows:
 - **Delete Asset** — delete the selected assets from the Streamline Server. This option deletes the asset and all associated files.
 - **Move and Delete Asset** — copy the asset essence files to the selected Destination File System and delete the selected assets from the Streamline Server.
14. When you select **Move and Delete Asset** from the **Action** list, configure the destination file system as follows:
 - a. Use the **Destination File System** list to select the file system to copy asset essence files.
 - b. Enter in the **Destination File Storage Path** box the directory path in which to store asset essence files copied to the selected **Destination File System**.

Set Placeholder Watch Folders

Users outside of Streamline can save or place media files in designated watch folders to fulfill placeholders for assets in Streamline. You can configure Streamline to automatically create a watch folder for each placeholder that Streamline users create to fulfill an asset. Streamline names the watch folder created for the placeholder with the placeholder name.

To configure Streamline to automatically create watch folders for placeholders

1. On the **Configuration** window toolbar, click the  **Asset** icon.
The **Asset** panel opens.
2. Click the **Placeholder Configuration** tab.
The **Placeholder Configuration** tab opens.



3. In the **Configure Placeholder Watch Folders** section, select the **Enable Placeholder Watch Folders** check box to automatically create a watch folder for each placeholder that Streamline users create to fulfill an asset.
4. Use the **Watch Folder File System** list to select the Streamline file system to contain the watch folder that Streamline automatically creates for a placeholder in a work order. Streamline uses the work order name to create a watch folder in the selected file system.
5. Enter in the **Polling Interval** box the amount of time in milliseconds to wait between successive checks of the watch folder for new media files to upload.
6. Use the **Destination Storage** list to select the file storage to ingest media files into your Streamline System from the watch folder.

A file storage sets the physical location to store the ingested media files along with setting the lifecycle, naming, folder path, validation, and triggers for the media file. Streamline contains a default file storage that you can use to ingest media files and store them in the default file system on your Streamline Server. Your Streamline System may also have custom file storages to ingest media files into the various file systems on your Streamline Server.

7. Enter in the **Delete Folders After Essence Update** box the amount of time to wait before automatically deleting the watch folder after it ingests a media file to fulfill a placeholder.
8. Use the list the right of the **Delete Folders After Essence Update** box to select the time unit for the time amount entered in the **Delete Folders After Essence Update**.
9. Use the **Folder Name Conflict Resolution** list to select how to name a placeholder watch folder when an existing folder has the same name as the placeholder. Streamline uses the name of placeholder to create the watch folder for the placeholder. The available options are as follows:
 - **Reject** — do not create a watch folder for the placeholder. To create a watch folder for the placeholder, you must rename the placeholder with a name that does not match existing folders in the selected File System.
 - **Append to Name** — automatically add an underscore (**_**) followed by an incremental number to the end of the placeholder name and the name of the watch folder created for the placeholder.
 - **Prepend to Name** — automatically add an underscore (**_**) followed by an incremental number to the start of the placeholder name and the name of the watch folder created for the placeholder.
 - **Fulfill Multiple Placeholders** — use the existing folder as the watch folder for the placeholder. Saving or placing a media file in a watch folder shared by multiple placeholders fulfills all the placeholders with the same media file.

10. In the **Allowed File Extensions** box, enter the file extension that a media file must have for Streamline to ingest the file from a placeholder watch folder. Clear this box to ingest media files that have any file extension.

★ Do not include the initial period with the file extensions that you enter.

When entering more than one file extension, use a comma (,) to separate the file extensions. For example, enter the following to ingest .gif, .jpg, and .png media files:

gif, jpg, png

Inception will not ingest media files that have file extensions that differ from the allowed file extensions.

11. Select the **Enable Work Order Name in Folder Path** check box to create a folder in the watch folder file system with the work order name that contains a folder with the placeholder name. The work order and placeholder folders are automatically created when you add a placeholder to a work order.

Clear this check box to create a single folder with the placeholder name.

12. Click **Save**.

Streamline automatically creates a watch folder in the selected File System for each created placeholder.

Integrate Streamline with Third Party Media Asset Managers

Streamline can integrate with third party Media Asset Managers (MAM) to manage assets or fulfill placeholders.

Generic MAM

Streamline uses metadata files stored in a file system to integrate with third party MAMs. When a Streamline user creates an asset or placeholder Streamline also creates a metadata file for the asset or placeholder in the file system selected from the File System list. When a user edits an asset Streamline also edits the associated metadata file.

To integrate a third party MAM with Streamline

1. On the **Configuration** window toolbar, click the  **Asset** icon.
The **Asset** panel opens.
2. Click the **Placeholder Configuration** tab.
The **Placeholder Configuration** tab opens.
3. Select the **Enable Placeholder Watch Folders** check box to automatically create a watch folder for each placeholder that Streamline users create to fulfill an asset.
4. Use the settings in the **Placeholder Configuration** section to configure placeholder watch folders as required.
5. In the **Configure Third Party MAM Integration** section, select **Generic** from the **Third Party MAM** list.
6. Use the **File System** list to select the Streamline file system in which to save metadata files created for assets and placeholders.
7. Click **Save**.

Studio Network Solutions EVO MAM

Streamline uses metadata files stored in a file system to enable the Studio Network Solutions EVO MAM to fulfill placeholders in Streamline. When a Streamline user creates a placeholder Streamline also creates a metadata file for the placeholder in the file system selected from the File System list. An external SNS EVO MAM can use the created metadata file to fulfill the placeholder in Streamline. After the time set in the Delete Folders After Essence Update box elapses, Streamline deletes the metadata file associated with the fulfilled placeholder.

To integrate an SNS EVO MAM with Streamline

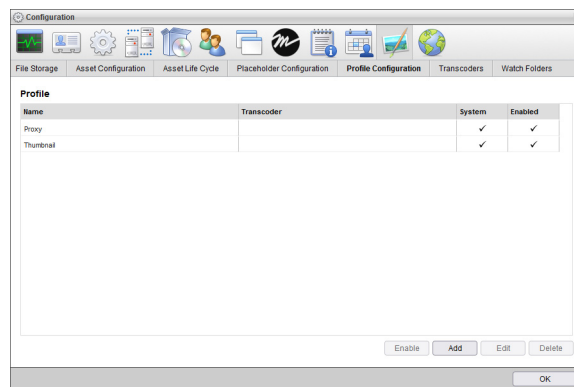
1. On the **Configuration** window toolbar, click the  **Asset** icon.
The **Asset** panel opens.
2. Click the **Placeholder Configuration** tab.
The **Placeholder Configuration** tab opens.
3. Select the **Enable Placeholder Watch Folders** check box to automatically create a watch folder for each placeholder that Streamline users create to fulfill an asset.
4. Use the settings in the **Placeholder Configuration** section to configure placeholder watch folders as required.
5. In the **Configure Third Party MAM Integration** section, select **EVO** from the **Third Party MAM** list.
6. Use the **File System** list to select the Streamline file system in which to save metadata files created for placeholders.
7. Use the **Bin Naming Strategy** list to select how EVO names asset bins. The available options are as follows:
 - **Creation Date** — use the asset creation date to name the asset bin. Streamline assigns each new placeholder a new asset bin name containing the placeholder creation date.
 - **Static** — enter a name for the asset bin in the **Static Bin Name** box. Streamline assigns each new placeholder with the asset bin name entered in the **Static Bin Name** box.
8. When you select **Static** from the **Bin Naming Strategy** list, enter a static name for the asset bin in the **Static Bin Name** box.
9. Click **Save**.

Configure Profiles

Streamline users can configure format profiles to identify technical image, video, and audio profiles by a common name. Configuration profiles can also contain a transcoder to transcode media files on ingest or existing assets. An optional filter set for a configuration profile automatically associates the profile with the assets created during media file ingest that match the filter.

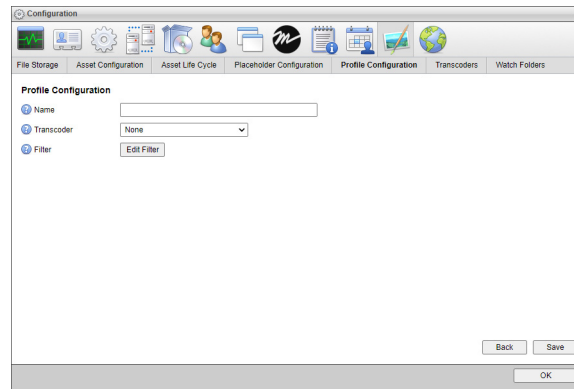
To add a profile

1. On the **Configuration** window toolbar, click the  **Asset** icon.
The **Asset** panel opens.
2. Click the **Profile Configuration** tab.
The **Profile Configuration** tab opens.



3. Click **Add**.

The **Profile Configuration** page opens.



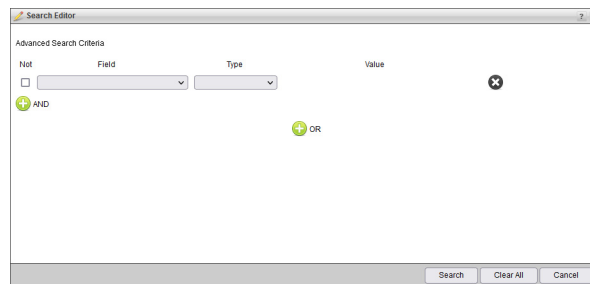
4. In the **Name** box, enter a name for the profile.
5. In the **Priority** box enter or select a number from 1 to 32767 to set the profile priority.

Streamline uses profile priorities to select a profile for media file ingest when multiple profiles contain the same filter. Profiles with lower priority numbers are selected before profiles with higher priority numbers. Profiles with the same priority are further prioritized alphabetically by name.

6. Use the **Transcoder** list to select the transcoder that the profile uses to generate thumbnail images or compressed preview videos for ingested video files. This list contains the transcoders defined in the **Transcoders** tab of the **Asset panel**.
7. To define a filter to automatically associate the profile with the assets created during media file ingest, complete the following steps:

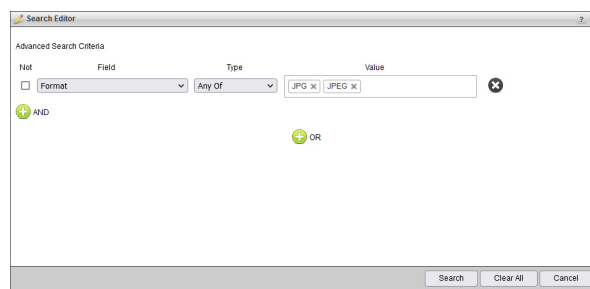
- a. Click **Edit Filter**.

The **Search Editor** window opens.



- b. Use the **Field**, **Type**, and **Value** options in conjunction to specify a filter for your search.

The following example search selects assets that have a format of JPEG or JPG.



- c. Select the **Not** check box for a filter when you want to select assets that do not match the set **Field**, **Type**, and **Value** options.

- d. Click the  **AND** icon to add another filter to the search.

All AND criteria are grouped together. Assets must match all AND criteria to be associated with the profile.

- e. Click the  **OR** icon to add an alternative filter to the search. Assets must at least one of the OR criteria to be associated with the profile.
- f. Click **Search** to save the defined filter.

The **Search Editor** window closes. The **Asset Life Cycle** tab **Asset Filter** field displays the defined asset selection filter.

8. Click **Save** to save the new profile and add it to the **Profile** list.

For More Information on...

- creating transcoders, refer to the section “**Define Transcoders**” on page 16–22.

Enable or Disable a Profile

Streamline does not automatically enable new profiles. After you create a profile you can choose to enable the profile and make it available to all users. When you do not want users to access a profile, you can disable the profile and make it unavailable to users.

To enable a profile

1. On the **Configuration** window toolbar, click the  **Asset** icon.
The **Asset** panel opens.
2. Click the **Profile Configuration** tab.
The **Profile Configuration** tab opens displaying the list of available profiles.
3. In the **Profile** list, select the disabled profile to enable.
Disabled profiles have an empty **Enabled** column, no check mark displayed.
4. Click **Enable**.
Streamline adds a check mark to the **Enabled** column of selected profile.

To disable a profile

1. On the **Configuration** window toolbar, click the  **Asset** icon.
The **Asset** panel opens.
2. Click the **Profile Configuration** tab.
The **Profile Configuration** tab opens displaying the list of available profiles.
3. In the **Profile** list, select the enabled profile to disable.
Enabled profiles have a check mark displayed in their **Enabled** column.
4. Click **Disable**.
Streamline removes the check mark from the **Enabled** column of selected profile.

Edit Profiles

For System profiles you can only edit the transcoder setting. You cannot edit the filter used by profiles associated with assets.

To edit a profile

1. On the **Configuration** window toolbar, click the  **Asset** icon.
The **Asset** panel opens.
2. Click the **Profile Configuration** tab.
The **Profile Configuration** tab opens displaying the list of available profiles.
3. In the **Profile** list, select the disabled profile to edit.
4. Click **Edit**.
The **Profile Configuration** page for the selected profile opens. When a profile has a set filter the **Filter** field displays a description of the filter.
5. Edit the profile configuration settings as required.
You cannot edit the filters used by the default Streamline profiles.
6. Click **Save** to save your changes.

Delete Profiles

You cannot delete System profiles or profiles associated with assets.

To delete a profile

1. On the **Configuration** window toolbar, click the  **Asset** icon.
The **Asset** panel opens.
2. Click the **Profile Configuration** tab.
The **Profile Configuration** tab opens displaying the list of available profiles.
3. In the **Profile** list, select the disabled profile to delete.
4. Click **Delete**.
A confirmation dialog box opens.
5. Click **Yes**.
Streamline deletes the selected profile from the **Profile** list.

Define Transcoders

Transcoders enable Streamline to automatically generate thumbnail images or compressed preview videos for assets when users upload video files to Streamline to create assets.

Add a Transcoder

You can add the following types of transcoders to you Streamline Server:

- **Telestream Vantage** — use a Telestream Vantage server to generate thumbnails and preview video for assets.
- **Watch Folder** — a transcoder takes input files from a specified folder, transcodes the files, and outputs the transcoded file in another specified folder.
- **XPression Transcoder** — use the XPression transcoder software to generate thumbnails and preview video for assets.

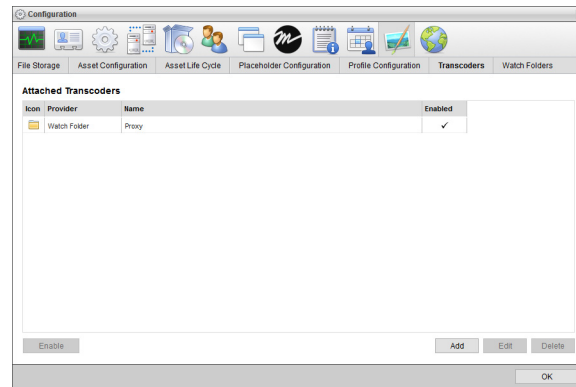
To add a transcoder

1. On the **Configuration** window toolbar, click the  **Asset** icon.

The **Asset** panel opens.

2. Click the **Transcoders** tab.

The **Transcoders** tab opens.



3. Click **Add**.

The **Attach Transcoder** page opens.

4. Use the **Transcoder Type** list to select the type of transcoder to add. The available transcoder types are as follows:

- **Telestream Vantage** — use a Telestream Vantage server to generate thumbnails and preview video for assets.
- **Watch Folder** — a transcoder takes input files from a specified folder, transcodes the files, and outputs the transcoded file in another specified folder.
- **XPression Transcoder** — use the XPression Video Coder software to generate thumbnails and preview video for assets.

5. Click **Next**.

The page that opens depends on the selected **Transcoder Type**.

6. In the page that opens, configure the selected **Transcoder Type** as follows:

Vantage Transcoder Configuration

- a. In the **Name** box, enter a name for the transcoder.
- b. In the **URL** box, enter the URL of the Telestream Vantage server.
- c. In the **Shared Path** box, enter the full pathname of the folder in which to save transcoded output files. This folder must be accessible by both the Streamline Server and the Telestream Vantage server.
- d. In the **Suffix** box, enter in this box the text to add to the end of the input file name to create the name for the output file.
- e. Select the **Create Profile on Ingest** check box to use this transcoder to automatically transcode video files ingested by Streamline.
- f. Click **Next**.
- g. On the second **Vantage Transcoder Configuration** page, click **Choose File**.
- h. In the **Open** dialog box, select the **Vantage flip descriptor** file to create a thumbnail or preview video for assets.
- i. Click **Open** to save the new transcoder and add it to the **Attached Transcoders** list.

Watch Folder Transcoder Configuration

- a. In the **Name** box, enter a name for the transcoder.
- b. Use the **File System** list to select the file system that contains the input and output watch folders on the Streamline computer.
- c. In the **Input Folder** box, enter the pathname from the root of the selected **File System** to the input folder from which the transcoder takes input files for transcoding. This folder must be accessible by both the Streamline Server and the transcoder.
- d. In the **Output Folder** box, enter in this box the pathname from the root of the selected **File System** to the output folder in which to save transcoded output files. This folder must be accessible by both the Streamline Server and the transcoder.
- e. In the **Suffix** box, enter in this box the text to add to the end of the input file name to create the name for the output file.
- f. In the **Polling Interval** box, enter the amount of time in milliseconds to wait between successive checks of the output folder for new transcoded output files.
- g. Select the **Create Profile on Ingest** check box to use this transcoder to automatically transcode video files ingested by Streamline.
- h. Click **Next** to save the new transcoder and add it to the **Attached Transcoders** list.

XPression Transcoder Configuration

- a. In the **Name** box, enter a name for the transcoder.
- b. In the **XPression Video Coder Path** box, enter the executable path for the XPression Video Coder software installed on the Streamline Server.
- c. Select the **Create Profile on Ingest** check box to use this transcoder to automatically transcode video files ingested by Streamline.
- d. Click **Save** to save the new transcoder and add it to the **Attached Transcoders** list.

For More Information on...

- creating Vantage flip descriptor files, refer to the *Telestream Vantage User Guide*.

Edit Transcoders

To edit a transcoder

1. On the **Configuration** window toolbar, click the  **Asset** icon.
The **Asset** panel opens.
2. Click the **Transcoder** tab.
The **Transcoders** tab opens.
3. In the **Attached Transcoders** list, select the transcoder to edit.
4. Click **Edit**.
The **Configuration** page for the selected transcoder opens.
5. Edit the transcoder type configuration settings as required.
6. Click **Next**.
The **Target Configuration** page opens.
7. Edit the target configuration settings as required. You cannot change the transcoder type.

8. For **Telestream Vantage** transcoders, click **Next** to edit the **Vantage flip descriptor** file used to create thumbnails or preview videos for assets.
9. Click **Next** to save your changes.

Delete Transcoders

To delete a transcoder

1. On the **Configuration** window toolbar, click the  **Asset** icon.
The **Asset** panel opens.
2. Click the **Transcoder** tab.
The **Transcoders** tab opens.
3. In the **Attached Transcoders** list, select the transcoder to delete.
4. Click **Delete**.
A confirmation dialog box opens.
5. Click **OK**.
Streamline deletes the selected transcoder from the **Attached Transcoders** list.

Set Watch Folders

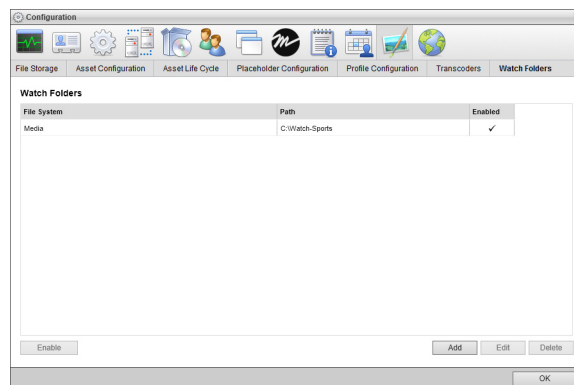
Streamline users can place media files in designated watch folders to automatically upload the media files to a Streamline Server using the mapping profile associated with the watch folder. After uploading the media file, Streamline creates a new asset for the media file. New assets are named the same as the loaded media file, but without the filename extension.

Watch folders can exist locally on the Streamline computer or remotely on a network drive. Streamline users must have read and write access to watch folders so that they can place files in a watch folder and view the files that the watch folder contains.

- ★ For watch folders on a network drive, the user that runs the Streamline service on the Streamline computer must have full access to the network drive that contains the watch folders.

To add a watch folder

1. On the **Configuration** window toolbar, click the  **Asset** icon.
The **Asset** panel opens.
2. Click the **Watch Folders** tab.
The **Watch Folders** tab opens.



3. Click **Add**.

The **Watch Folder Configuration** page opens.

4. To add a watch folder to a storage provider, complete the following steps:
 - a. Create a Streamline file system for the storage provider that contains the watch folder in which users place media files for automatic upload. For the steps on how to create a Streamline file system, refer the section “**Add a File System**” on page 4–6.
 - b. Use the **File System** list to select the Streamline file system that you created for the storage provider. This list only contains the file systems available on your Streamline Server.
 - c. In the **Path** box, enter the path to the watch folder from within the root directory of the selected file system. For example: to use the **News** folder in the selected file system to upload detected media files, enter **News** in the **Path** box. To use the **Photos** folder inside the **News** folder to upload media files, enter **News\Photos** in the **Path** box.

5. To add a watch folder to a local folder on the Streamline computer or to a network drive, complete the following steps:
 - a. Create a Streamline file system for a local or network drive that contains the watch folder in which users can place media files for automatic upload. For the steps on how to create a Streamline file system, refer the section “**Add a File System**” on page 4–6.
 - b. Use the **File System** list to select the Streamline file system that you created for the local or network drive. This list only contains the file systems available on your Streamline Server.

When the folder that you want to use as a watch folder is not contained in a file system on your Streamline Server, select **No File System** from the **File System** list.

- c. In the **Path** box, enter the path to the watch folder from within the root directory of the selected file system. For example: to use the **News** folder in the selected file system to upload detected media files, enter **News** in the **Path** box. To use the **Photos** folder inside the **News** folder to upload media files, enter **News\Photos** in the **Path** box.

When you selected **No File System** from the **File System** list, enter the full pathname to the watch folder in the **Path** box. For example: **C:\News\Video** for a local folder or **\\SRV_EST\News\Video** for a network drive.

6. In the **Polling Interval** box, enter the amount of time in milliseconds to wait between successive checks of the watch folder for new media files to upload.
7. Use the **Ingest Strategy** list to select the action to take when Streamline detects a new media file in the watch folder. The available actions are as follows:
 - **Create New Asset** — select this action to create new assets by ingesting detected media files from the watch folder. When you select this action, use the following settings to define how to ingest detected media files:
 - › **Mapping Profile** — use this list to select the mapping profile to set attribute values for the assets created by ingesting media files from the watch folder.
 - › **Destination Storage** — use this list to select the file storage to ingest media files into your Streamline System from the watch folder. A file storage sets the physical location to store the ingested media files along with setting the lifecycle, naming, folder path, validation, and triggers for the media file.

Select the **Use Default** option to ingest media files into the default file storage set for your Streamline Server. Streamline displays the name of the default file storage in parentheses to the right of the **Use Default** option.

- **Move to File System** — select this action to save media files detected in the watch folder to a Streamline file system. When you select this action, use the following settings to select the Streamline file system in which to save detected media files:
 - › **Destination File System** — use this list to select the Streamline file system in which to save detected media files. This list only contains the file systems available on your Streamline Server.
 - › **Destination Path** — enter in this box the directory storage path within the selected Destination File System to save detected media files.

8. Click **Save**.

Streamline adds the new watch folder to the **Watch Folders** list. New watch folders are enabled by default.

Manage Available Watch Folders

You can create any number of watch folders for your Streamline Server. You can enable or disable the watch folders on your Streamline Server match the requirements of your users.

To enable or disable a watch folder

1. On the **Configuration** window toolbar, click the  **Asset** icon.
The **Asset** panel opens.
2. Click the **Watch Folders** tab.
The **Watch Folders** tab opens.
3. In the **Watch Folders** list, select the watch folder to enable or disable.
Depending on the state of the selected watch folder, Streamline displays either the **Enable** or **Disable** button below the **Watch Folders** list.
4. Do one of the following to control the availability of the selected watch folder on your Streamline Server:
 - **Enabled Watch Folders** — if the selected watch folder is currently enabled, click **Disable**.
Streamline no longer uploads media files from the disabled watch folder.
 - **Disabled Watch Folders** — if the selected target is currently disabled, click **Enable**.
Streamline uploads the media files placed in the enabled watch folder.

Edit Watch Folders

When editing a target, you change the path and mapping profile of a watch folder.

To edit a watch folder

1. On the **Configuration** window toolbar, click the  **Asset** icon.
The **Asset** panel opens.
2. Click the **Watch Folders** tab.
The **Watch Folders** tab opens.
3. In the **Watch Folders** list, select the watch folder to edit.
4. Click **Edit**.
The **Watch Folder Configuration** page for the selected watch folder opens.
5. Edit the watch folder configuration settings as required.
6. Click **Save**.

Delete Watch Folders

To delete a watch folder

1. On the **Configuration** window toolbar, click the  **Asset** icon.

The **Asset** panel opens.

2. Click the **Watch Folders** tab.

The **Watch Folders** tab opens.

3. In the **Watch Folders** list, select the watch folder to delete.

4. Click **Delete**.

A confirmation dialog box opens.

5. Click **OK**.

Streamline deletes the selected watch folder from the **Watch Folders** list. Deleting a watch folder from Streamline does not delete the associated folder from the operating system.

Configuring Accounts

Through configured accounts you can purchase content from media services and directly load the purchased assets into Streamline. Use the Accounts and Feeds panel to create and modify the accounts Streamline uses to purchase content.

This chapter discusses the following topics:

- AP Media Account Configuration
- MGN Online Account Configuration
- Enable or Disable an Account
- Delete an Account

AP Media Account Configuration

AP Media offers an extensive library of over 500,000 ready-to-use graphics and graphic elements for on-air and digital use. From within Streamline you can quickly download purchased graphics and integrated the graphics into your production systems.

To create an AP Media account

1. Log in to your Streamline Server as an administrator.
2. On the main toolbar, click the  **Configuration** icon. If the **Configuration** icon is not visible, you are not an administrator and cannot configure the server.

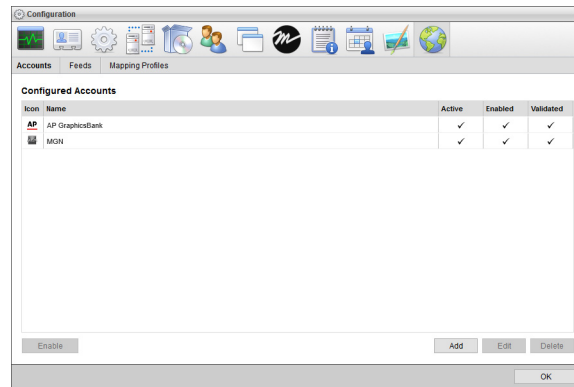
The **Configuration** window opens.

3. On the **Configuration** window toolbar, click the  **Accounts and Feeds** icon.

The **Accounts and Feeds** panel opens.

4. Click the **Accounts** tab.

The **Accounts** tab opens.



5. Click **Add**.

The **Create New Account** settings open.

6. Use the **Account** list to select **AP Media**.

7. Click **Next**.

The **Create AP Account** settings open.

8. In the **Name** box, enter a unique name for the AP Media account.

AP Media account names must be unique on a Streamline Server.

9. In the **Purge After** box, enter the amount of time after which to delete old content from the associated AP Media managed feed.

The purge after time must be greater than or equal to 15 minutes and less than or equal to 7 days.

10. Use the list to the right of the **Purge After** box to select the time unit (**Days**, **Hours**, or **Minutes**) for the time entered in the **Purge After** box.

11. Click **Next**.

The AP Media account settings open.

12. In the **API Key** box, enter the API key that you received from Associated Press for your AP Media account.

If you have not received your API key, please contact **AP Customer Support** (<http://aphelp.ap.org/>).

13. In the **Queries Per Day** box, enter the number of AP Media queries that your API key allows you to run in a day.

14. In the **Queries Per Second** box, enter the number of AP Media queries that your API key allows you to run in a second.
15. Click **Save**.

Streamline adds the new AP Media account to the list of available accounts.

To edit an AP Media account

1. On the **Configuration** window toolbar, click the  **Accounts and Feeds** icon.
The **Accounts and Feeds** panel opens.
2. Click the **Accounts** tab.
The **Accounts** tab opens showing the list of available accounts.
3. In the **Configured Accounts** list, select the **AP Media** account to edit.
4. Click **Edit**.
The **Edit AP Account** settings open.
5. Edit accounts settings as required.
6. To edit the **API Key**, **Queries Per Day**, and **Queries Per Second** settings for an account complete following steps:
 - a. Click **Deauthorize**.
An **Alert** opens.
 - b. Click **OK**.
The **Alert** closes.
 - c. Click **Next**.
 - d. Edit the **API Key**, **Queries Per Day**, and **Queries Per Second** settings as required.
You cannot use deauthorized AP Media accounts until you re-establish authentication credentials.
7. After completing the required account setting edits, click **Save**.

For More Information on...

- how to assign account management permissions, refer to the section “**New Account Role Permissions**” on page 7–8.
- how to enable or disable accounts, refer to the section “**Enable or Disable an Account**” on page 17–5
- how to delete accounts, refer to the section “**Delete an Account**” on page 17–6

MGN Online Account Configuration

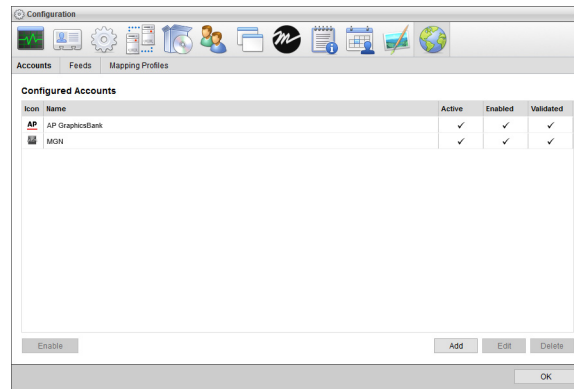
MGN Online is America’s premier resource for still and animated news graphics. From within Streamline you can quickly download purchased graphics and integrated the graphics into your production systems.

To create an MGN Online account

1. Log in to your Streamline Server as an administrator.
2. On the main toolbar, click the  **Configuration** icon. If the **Configuration** icon is not visible, you are not an administrator and cannot configure the server.
The **Configuration** window opens.
3. On the **Configuration** window toolbar, click the  **Accounts and Feeds** icon.
The **Accounts and Feeds** panel opens.

- Click the **Accounts** tab.

The **Accounts** tab opens.



- Click **Add**.

The **Create New Account** settings open.

- Use the **Account** list to select **MGN Online**.

- Click **Next**.

The **Create MGN Account** settings open.

- In the **Name** box, enter a unique name for the MGN Online account.

MGN Online account names must be unique on a Streamline Server.

- In the **Purge After** box, enter the amount of time after which to delete old content from the associated MGN Online managed feed.

The purge after time must be greater than or equal to 15 minutes and less than or equal to 180 days.

- Use the list to the right of the **Purge After** box to select the time unit (**Days**, **Hours**, or **Minutes**) for the time entered in the **Purge After** box.

- Click **Next**.

The MGN Online account settings open.

- In the **User ID** box, enter the user ID for your MGN Online account.

If you do not know the **User ID** and **User Key** for your MGN Online account, log in to **MGN Online** (<http://new.mgnonline.com/Account/Login?ReturnUrl=%2f3rd-party-access>) to retrieve your credentials.

- In the **User Key** box, enter the user key for your MGN Online user ID.

- Click **Save**.

Streamline adds the new MGN Online account to the list of available accounts.

To edit an MGN Online account

- On the **Configuration** window toolbar, click the  **Accounts and Feeds** icon.

The **Accounts and Feeds** panel opens.

- Click the **Accounts** tab.

The **Accounts** tab opens showing the list of available accounts.

- In the **Configured Accounts** list, select the **MGN Online** account to edit.

4. Click **Edit**.
The **Edit MGN Account** settings open.
5. Edit accounts settings as required.
6. Click **Next** and **Back** to access the available accounts settings.
7. After completing the required account setting edits, click **Save** on the last page of account settings.

For More Information on...

- how to assign account management permissions, refer to the section “**New Account Role Permissions**” on page 7–8.
- how to enable or disable accounts, refer to the section “**Enable or Disable an Account**” on page 17–5
- how to delete accounts, refer to the section “**Delete an Account**” on page 17–6

Enable or Disable an Account

Streamline automatically enables all new accounts that you create. You can disable an account, making it unavailable to users. Temporarily disabling accounts enables you to create many accounts and manage which ones are available for purchasing. You can create any number of accounts, but your Streamline license limits the number of accounts that you can enable at one time.

Only active accounts are available for publishing. To activate an account, you must enable and validate the account. Streamline validates accounts by connecting to the application associated with the account.

To disable an account

1. On the **Configuration** window toolbar, click the  **Accounts and Feeds** icon.
The **Accounts and Feeds** panel opens.
2. Click the **Accounts** tab.
The **Accounts** tab opens showing the list of available accounts.
3. In the **Configured Accounts** list, select the enabled account to disable.
Enabled accounts have a check mark displayed in their **Enabled** column.
4. Click **Disable**.
Streamline removes the check marks from the **Active** and **Enabled** columns of selected account.

To enable an account

1. On the **Configuration** window toolbar, click the  **Accounts and Feeds** icon.
The **Accounts and Feeds** panel opens.
2. Click the **Accounts** tab.
The **Accounts** tab opens showing the list of available accounts.
3. In the **Configured Accounts** list, select the disabled account to enable.
Disabled accounts have an empty **Enabled** column, no check mark displayed.
4. Click **Enable**.
Streamline adds check marks to the **Active** and **Enabled** columns of selected account.

Delete an Account

You cannot delete an account that contains links to a Streamline asset.

To delete an account

1. On the **Configuration** window toolbar, click the  **Accounts and Feeds** icon.
The **Accounts and Feeds** panel opens.
2. Click the **Accounts** tab.
The **Accounts** tab opens showing the list of available accounts.
3. In the **Configured Accounts** list, select the account to delete.
4. Click **Delete**.
A confirmation dialog box opens.
5. Click **OK**.
Streamline deletes the selected account from the list of accounts.

Configuring Feeds

Feeds enable you to select content from media services to purchase and load into Streamline. Use the Accounts and Feeds panel to create and modify the feeds Streamline uses to select content to purchase from media services.

This chapter discusses the following topics:

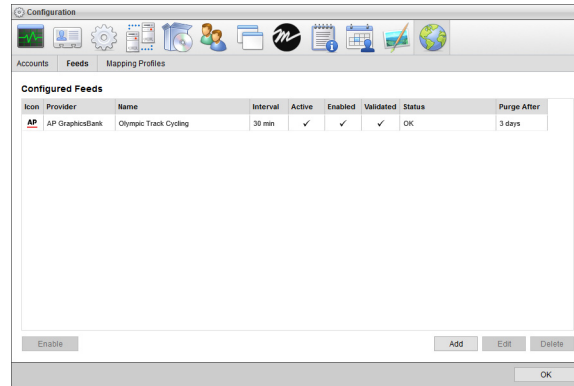
- AP Media Feed Configuration
- MGN Online Feed Configuration
- Enable or Disable a Feed
- Delete a Feed

AP Media Feed Configuration

AP Media feeds enable you to search the extensive Associated Press Media library of over 500,000 ready-to-use graphics and graphic elements for on-air and digital use. Follow the procedures in this section to create or edit a feed to search the AP Media for content.

To create an AP Media feed

1. On the **Configuration** window toolbar, click the  **Accounts and Feeds** icon.
The **Accounts and Feeds** panel opens.
2. Click the **Feeds** tab.
The **Feeds** tab opens.

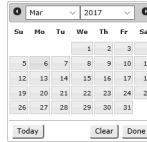


3. Click **Add**.
The **Create New Feed** settings open.
4. Use the **Feed** list to select **AP Media**.
5. Click **Next**.
The **Create AP Feed** settings page opens.
6. In the **Name** box, enter a name for the AP Media feed.
7. Use the **Account** list to select the configured AP Media account to search for and purchase AP Media content.
8. In the **Query** box, enter the term or terms with which to search for content in the AP Media.
Use the * (asterisk) character as a wild card to match one or more characters.
9. Select the **Enabled** check box to active the feed and make it available to all users.
10. In the **Purge After** box, enter the amount of time after which to delete old content from the feed.
The purge after time must be greater than or equal to 15 minutes and less than or equal to 60 days.
11. Use the list to the right of the **Purge After** box to select the time unit (**Days**, **Hours**, or **Minutes**) for the time entered in the **Purge After** box.
12. Click **Next**.
13. Use the **Content Set** list to select the type of AP Media content to search, graphics or photos.
14. In the **Person(s)** box, enter the name or names of people that content must feature. Use a comma to separate multiple names.

15. In the **Subject(s)** box, enter the AP Media category or categories of which content must be a part. Use a comma to separate multiple categories.

The AP Media Subject Vocabulary defines the available categories.

16. Select the date on which the AP Media must have published content.
 - a. Click in the **Published Date** box to open the **Calendar** tool.



- b. Use the **Month** menu to select the month for the publish date.
 - c. Use the **Year** menu to select the year for the publish date.
 - d. In the **Calendar** area, select the day for the publish date.

Alternatively, you can click **Today** to select the current date.

- e. Click **Done**.

Streamline adds the new AP Media feed to the list of configured feeds. To view AP Media content found by the feed, open the feed in the **Feed Viewer** panel.

17. Click **Save**.

Streamline adds the new AP Media feed to the list of available feeds.

To edit an AP Media feed

1. On the **Configuration** window toolbar, click the  **Accounts and Feeds** icon.

The **Accounts and Feeds** panel opens.
2. Click the **Feeds** tab.

The **Feeds** tab opens showing the list of available feeds.
3. In the **Configured Feeds** list, select the **AP Media** feed to edit.
4. Click **Edit**.

The **Edit AP Feed** settings open.
5. Edit feed settings as required.
6. After completing the required feed setting edits, click **Save**.

For More Information on...

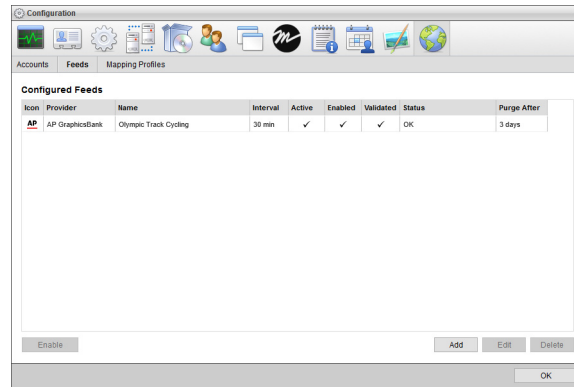
- how to disable feeds, refer to the section “**Enable or Disable a Feed**” on page 18–5
- how to delete feeds, refer to the section “**Delete a Feed**” on page 18–6

MGN Online Feed Configuration

MGN Online feeds enable you to search America's premier resource for still and animated news graphics. Follow the procedures in this section to create or edit a feed to search MGN Online for content.

To create an MGN Online feed

1. On the **Configuration** window toolbar, click the  **Accounts and Feeds** icon.
The **Accounts and Feeds** panel opens.
2. Click the **Feeds** tab.
The **Feeds** tab opens.



3. Click **Add**.
The **Create New Feed** settings open.
4. Use the **Feed** list to select **MGN Online**.
5. Click **Next**.
The **Create MGN Feed** settings opens.
6. In the **Name** box, enter a name for the MGN Online feed.
7. Use the **Account** list to select the configured MGN Online account to search for and purchase MGN Online content.
8. In the **Query** box, enter the term or terms with which to search for MGN Online content.
Use the * (asterisk) character as a wild card to match one or more characters.
9. Use the **Area** list to select the type of content for which to search.
10. Select the **Enabled** check box to active the feed and make it available to all users.
11. In the **Purge After** box, enter the amount of time after which to delete old content from the feed.
The purge after time must be greater than or equal to 15 minutes and less than or equal to 60 days.
12. Use the list to the right of the **Purge After** box to select the time unit (**Days**, **Hours**, or **Minutes**) for the time entered in the **Purge After** box.
13. Click **Next**.
Streamline adds the new MGN Online feed to the list of configured feeds. To view MGN Online content found by the feed, open the feed in the **Feed Viewer** panel.

To edit an MGN Online feed

1. On the **Configuration** window toolbar, click the  **Accounts and Feeds** icon.
The **Accounts and Feeds** panel opens.
2. Click the **Feeds** tab.
The **Feeds** tab opens showing the list of available feeds.
3. In the **Configured Feeds** list, select the **MGN Online** feed to edit.
4. Click **Edit**.
The **Edit AP Feed** settings open.
5. Edit feed settings as required.
6. After completing the required feed setting edits, click **Save**.

For More Information on...

- how to disable feeds, refer to the section “**Enable or Disable a Feed**” on page 18–5
- how to delete feeds, refer to the section “**Delete a Feed**” on page 18–6

Enable or Disable a Feed

After you create a feed you can choose to enable the feed and make it available to all users. When you do not want users to access information ingested by a feed, you can disable the feed and make it unavailable to users.

To disable a feed

1. On the **Configuration** window toolbar, click the  **Accounts and Feeds** icon.
The **Accounts and Feeds** panel opens.
2. Click the **Feeds** tab.
The **Feeds** tab opens showing the list of available feeds.
3. In the **Configured Feeds** list, select the enabled feed to disable.
Enabled feeds have a check mark displayed in their **Enabled** column.
4. Click **Disable**.
Streamline removes the check marks from the **Active** and **Enabled** columns of selected feed.

To enable a feed

1. On the **Configuration** window toolbar, click the  **Accounts and Feeds** icon.
The **Accounts and Feeds** panel opens.
2. Click the **Feeds** tab.
The **Feeds** tab opens showing the list of available feeds.
3. In the **Configured Feeds** list, select the disabled feed to enable.
Disabled feeds have an empty **Enabled** column, no check mark displayed.
4. Click **Enable**.
Streamline adds check marks to the **Active** and **Enabled** columns of selected account.

Delete a Feed

To delete a feed

1. On the **Configuration** window toolbar, click the  **Accounts and Feeds** icon.
The **Accounts and Feeds** panel opens.
2. Click the **Feeds** tab.
The **Feeds** tab opens showing the list of available feeds.
3. In the **Configured Feeds** list, select the feed to delete.
4. Click **Delete**.
A confirmation dialog box opens.
5. Click **OK**.
Streamline deletes the selected searched-base feed from the list of feeds.

Selecting Feed Metadata to Ingest

When you download content from a feed, Streamline reads the metadata from the content and saves it in the Streamline asset created for the downloaded feed content. Streamline uses a mapping profile to select the asset attributes in which to save feed content metadata property values.

This chapter discusses the following topics:

- Create Feed Content Property Mappings
- Manage Feed Content Property Mappings

Create Feed Content Property Mappings

For each content provider available to Streamline, you can create mappings between content provider metadata properties or default values and Streamline asset attributes. When you use a feed to download content from a content provider, Streamline uses mappings to save read content metadata values or set default values in the associated attributes of the asset created from the downloaded feed content.

To create mappings for a content provider

1. Log in to your Streamline Server as an administrator.
2. On the main toolbar, click the  **Configuration** icon. If the **Configuration** icon is not visible, you are not an administrator and cannot configure the server.

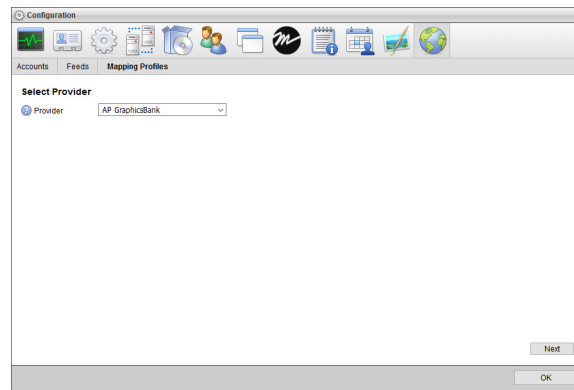
The **Configuration** window opens.

3. On the **Configuration** window toolbar, click the  **Accounts and Feeds** icon.

The **Accounts and Feeds** panel opens.

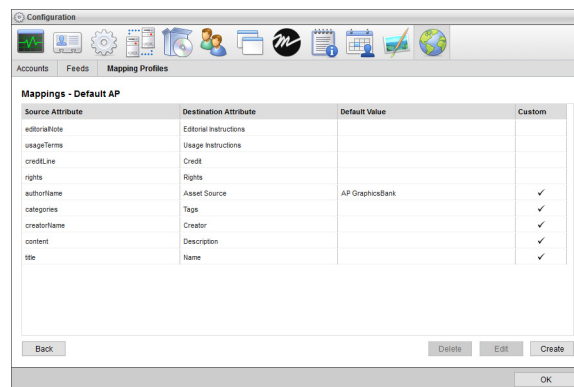
4. Click the **Mapping Profiles** tab.

The **Mapping Profiles** tab opens.



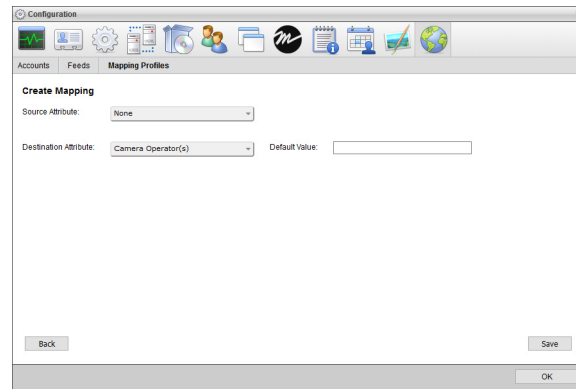
5. Use the **Provider** list to select the content provider for which to create mappings.
6. Click **Next**.

The **Mappings** page opens to list the set mappings for the selected content provider.



7. Click **Create**.

The **Create Mapping** page opens.



8. Use the **Source Attribute** list to select the content provider attribute from which to read a value the value to save in an asset attribute. Select **None** to set a default value instead of reading a value from an attribute.

You can filter the **Source Attribute** list by typing any part of an attribute name in the **Filter** box. As you enter an attribute name, the list automatically updates to only show attribute names that match what you have entered. Clear the **Filter** box to list all available content provider attributes.
9. Use the **Destination Attribute** to select the asset attribute in which to save the read or set value for the selected **Source Attribute**.

You can filter the **Destination Attribute** list by typing any part of an attribute name in the **Filter** box. As you enter an attribute name, the list automatically updates to only show attribute names that match what you have entered. Clear the **Filter** box to list all available content provider attributes.
10. Enter in the **Default Value** box the default value to set for the selected **Destination Attribute**.

Streamline always uses the set **Default Value** when **None** is the selected **Source Attribute**. When a content provider attribute is the selected **Source Attribute**, Streamline only uses the set **Default Value** when the content provider attribute contains no value.
11. Click **Save**.

Streamline saves the defined mapping and opens the **Mappings** page.
12. Repeat step 7 to step 11 for each mapping that you want to define for a content provider.

Manage Feed Content Property Mappings

Managing the feed content mappings on your Streamline Server includes the following procedures:

- Edit Mappings
- Delete Mappings

After editing mappings, Streamline uses the revised mappings for new content that you download from a feed. The asset properties do not change for previously downloaded feed content.

Edit Mappings

You can edit the properties of a mapping to change the values ingested into asset attributes.

To edit the properties of a mapping

1. In the **Mappings** table of the **Mappings** page, select a mapping to edit that has a check mark displayed in the **Custom** column.

You can only edit **Custom** mappings.

2. Click **Edit**.

The **Edit Mapping** page opens.

3. Edit the mapping properties as required.

4. Click **Save**.

Streamline updates the mapping and opens the **Mappings** page.

Delete Mappings

Deleting a mapping does not change any of the assets that were loading into Streamline from a feed associated with the content provider that uses deleted mapping.

To delete a mapping from a mapping profile

1. In the **Mappings** table of the **Mappings** page, select a mapping to delete that has a check mark displayed in the **Custom** column.

You can only delete **Custom** mappings.

2. Click **Delete**.

A confirmation message opens, asking whether you want to delete the selected mapping. To keep the mapping, click **Cancel**.

3. In the confirmation message, click **OK**.

Streamline deletes the selected mapping from the **Mappings** table.

Streamline.cloud

For organizations that subscribe to Streamline.cloud they access a central cloud-based Streamline Server instead of a local Streamline Server. Streamline.cloud offers organizations the power of Streamline with the flexibility and scale of the cloud. For Streamline.cloud services you can create cloud based or local file systems to store the media files ingested into Streamline through a file storage. You can also configure your Streamline.cloud service to communicate with various systems using the MOS protocol.

This chapter discusses the following topics:

- Cloud Gateway Installation
- Create a Cloud Connection User
- Configure the Cloud Gateway
- Create Cloud File Systems for Your Content
- Create Local File Systems for Your Content
- Streamline.cloud Service MOS Configuration
- Connecting Streamline with XPression
- Uplink Streamline Assets with an NCS

★ Before you create file systems or MOS connections for your Streamline.cloud service, you must complete the procedures in the following sections of this chapter:

- “**Cloud Gateway Installation**” on page 20–2
- “**Create a Cloud Connection User**” on page 20–2
- “**Configure the Cloud Gateway**” on page 20–3

Cloud Gateway Installation

Organizations that subscribe to a Streamline.cloud service only need to install the Cloud Gateway on a local computer to connect to the Streamline.cloud service. The Cloud Gateway connects the content storage locations and the MOS devices that an organization uses with the Streamline.cloud service.

Before you start configuring your Streamline.cloud service, verify that your organization has Cloud Gateway Version 3.0 or greater installed on a local computer.

For More Information on...

- installing the Cloud Gateway, refer to the *Cloud Gateway Configuration Guide*.

Create a Cloud Connection User

The cloud connection user on your Streamline.cloud service connects the service to the Cloud Gateway installed on a local computer in your system.

To create the cloud connection user

- Use a web browser to open the Streamline.cloud web page provided to you. Streamline.cloud services URLs use the following format:

`https://<Customer Name>.streamline.cloud`

The **Login** panel opens.

- Log in to your Streamline.cloud service as an administrator.

- On the main toolbar, click the  **Configuration** icon.

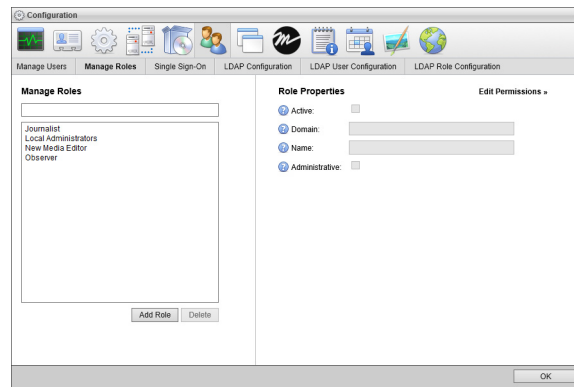
The **Configuration** window opens.

- On the **Configuration** window toolbar, click the  **Users** icon.

The **Users** panel opens.

- Click the **Manage Roles** tab.

The **Manage Roles** tab opens.



- In the **Manage Roles** section, click **Add Role**.

Streamline automatically saves property values set for a new user role.

- In the **Role Properties** section, select the **Active** check box to make the role operational.

- In the **Name** box, enter the user role name **Cloud Gateway**.

- Click **Edit Permissions**.

The **Role Permissions** list opens.

10. Locate the **Services** permission.



11. Click the  icon to the right of the **Services** role permission to grant **Cloud Gateway Connection** and **MOS Connection** role permissions to the **Cloud Gateway** role.



12. Click the **Manage Users** tab.

The **Manage Users** tab opens.

13. In the **Manage Users** section, click **Add User**.

Streamline automatically saves property values set for a new user.

14. In the **User Properties** section, select the **Active** check box to make the user operational.

15. In the **Username** box, enter the user name **CloudConnect**.

Username are case sensitive.

16. In the **Password** box, enter a password of at least five characters for the **CloudConnect** user.

Passwords are case sensitive.

17. Click **Edit User Roles and API Access**.

18. In the **User Roles** list, select the check box associated with the **Cloud Gateway** user role.

19. Select the **Enable API** check box to enable the **Cloud** user to make API requests.

The API Key field displays the API key that Streamline automatically assigned to the **CloudConnect** user.

20. Record the API key displayed in the **API Key** field.

21. Click **OK**.

The **Configuration** window closes.

Configure the Cloud Gateway

After defining the cloud connect user on your Streamline.cloud service you can configure the Cloud Gateway to connect with your Streamline.cloud service. The API key set for the cloud connect user makes the connection between your Streamline.cloud service and the Cloud Gateway running a local computer in your system.

To configure the Cloud Gateway

1. Use one of the following methods to open the **Cloud Gateway** web page:

- On the Desktop, double-click the **Cloud Gateway** icon.
- Use the **Start** menu to select **All Programs > Cloud Gateway > Cloud Gateway**.

The **Cloud Gateway Login** screen opens. If the **Cloud Gateway Login** screen does not open, please contact Ross Video Technical Support.

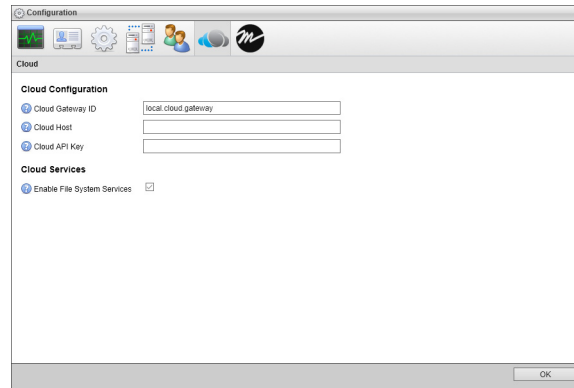
2. At the **Cloud Gateway Login** screen, enter the following user name and password in the provided boxes to log into your Cloud Gateway as an administrator:

- **Username** — `root`
- **Password** — `password`

3. Click **Login**.

You are logged into the Cloud Gateway as an administrator.

4. On the main toolbar, click the  **Configuration** icon.
The **Configuration** window opens.
5. On the **Configuration** window toolbar, click the  **Cloud Gateway** icon.
The **Cloud** panel opens.



6. In the **Cloud Host** box, enter the hostname of your Streamline.cloud service. Streamline.cloud service hostnames use the following format:
<Customer Name>.streamline.cloud
7. In the **Cloud API Key** box, enter the API Key of the **CloudConnect** user you created on your Streamline.cloud service.
You recorded the API Key of your **CloudConnect** user in step **20** of the procedure “**To create the cloud connection user**” on page 20–2.
8. Select the **Enable File System Services** check box.
9. Close the **Configuration** window and log out of your Cloud Gateway.

Create Cloud File Systems for Your Content

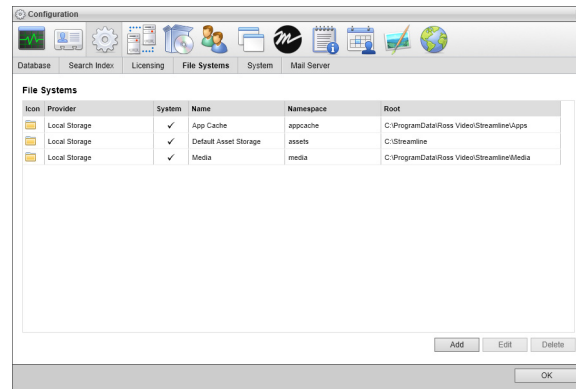
With your Streamline.cloud service connected to your local Cloud Gateway, you are ready to create a file system to store the media files ingested into Streamline through a file storage. You can store your Streamline content in the cloud by creating file systems that use the following cloud storage services: Amazon S3, Microsoft Azure Blob Storage, or Google Cloud Storage.

To create a file system to store Streamline content in the cloud

1. Log in to your Streamline.cloud service as an administrator.
2. On the main toolbar, click the  **Configuration** icon.
The **Configuration** window opens.
3. On the **Configuration** window toolbar, click the  **System** icon.
The **System** panel opens.

4. Click the **File Systems** tab.

The **File Systems** tab opens.



5. Click **Add**.

The **Create File System** settings open.

6. Use the **Provider** list to select one of the following types of cloud file system to add:

- **Amazon S3** — a directory on the Amazon Simple Storage Service, an external service that you require an account to use.
- **Microsoft Azure Blob Storage** — a directory on the Microsoft Azure Blob storage service, an external service that you require an account to use.
- **Google Cloud Storage** — a directory on the Google Cloud Storage service, an external service that you require an account to use.

7. Click **Next**.

The **Create File System** settings open for the selected **Provider**.

8. Use the steps for the selected **Provider** to define the file system.

Amazon S3

- a. In the **Namespace** box, enter the name that Streamline uses to access the file system.
After you create a file system, you cannot change the **Namespace** set for the file system.
- b. In the **Name** box, enter a name for the file system.
- c. In the **Bucket** box, enter the name of the Amazon S3 bucket in which to store file system files.
- d. In the **Access Key** box, enter the access key for the selected Amazon S3 bucket.
- e. In the **Access Secret** box, enter the access secret for the selected Amazon S3 bucket.
- f. In the **Directory** box, enter the directory path for the file system root directory in the selected Amazon S3 bucket.

Microsoft Azure Blob Storage

- a. In the **Namespace** box, enter the name that Streamline uses to access the file system.
After you create a file system, you cannot change the **Namespace** set for the file system.
- b. In the **Name** box, enter a name for the file system.
- c. In the **Container** box, enter the name of the Microsoft Azure Blob Storage container in which to store file system files.
- d. In the **Account Name** box, enter the account name for the selected Microsoft Azure Blob Storage container.
- e. In the **Account Key** box, enter the account key for the selected Microsoft Azure Blob Storage container.
- f. In the **Root** box, enter the directory path for the file system root directory in the selected Microsoft Azure Blob Storage container.

Google Cloud Storage

- a. In the **Namespace** box, enter the name that Streamline uses to access the file system.
After you create a file system, you cannot change the **Namespace** set for the file system.
 - b. In the **Name** box, enter a name for the file system.
 - c. In the **Bucket** box, enter the name of the Google Cloud Storage bucket in which to store file system files.
 - d. Click **Browse** to the right of the **Credentials** box to use the **Open** dialog box to select a file that contains Google Cloud JSON credentials for your Google Cloud Storage.
 - e. In the **Project ID** box, enter the Google Cloud project ID for the selected Google Cloud Storage bucket.
 - f. In the **Private Key ID** box, enter the private key ID for the selected Google Cloud Storage bucket.
 - g. In the **Private Key** box, enter the private key for the selected Google Cloud Storage bucket.
 - h. In the **Client ID** box, enter the Google Cloud client ID for the selected Google Cloud Storage bucket.
 - i. In the **Client E-Mail** box, enter the Google Cloud client email address for the selected Google Cloud Storage bucket.
 - j. In the **Root** box, enter the directory path for the file system root directory in the selected Google Cloud Storage bucket.
9. Click **Create**.
Streamline adds the new file system to the **File Systems** list.
 10. Close the **Configuration** window.

Create Local File Systems for Your Content

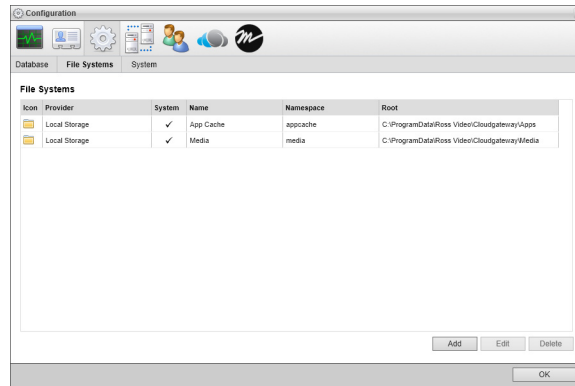
With your Streamline.cloud service connected to your local Cloud Gateway, you are ready to create a local file system to store the media files ingested into Streamline through a file storage. A local file system is a directory on your Cloud Gateway local disk or a network accessible file share.

To create a file system to store Streamline content locally

1. Log in to your Cloud Gateway as an administrator.
2. On the main toolbar, click the  **Configuration** icon.

The **Configuration** window opens.

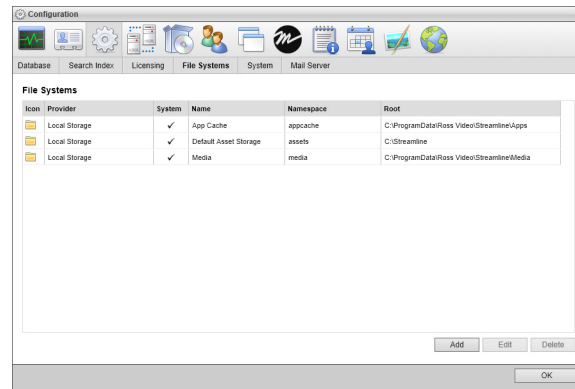
3. On the **Configuration** window toolbar, click the  **System** icon.
The **System** panel opens.
4. Click the **File Systems** tab.
The **File Systems** tab opens.



5. Click **Add**.
The **Create File System** settings open.
6. Use the **Provider** list to select **Local Storage**.
The **Local Storage** provider is a directory on your Cloud Gateway local disk or a network accessible file share.
7. Click **Next**.
The **Create File System** settings open for the **Local Storage** provider.
8. In the **Namespace** box, enter the name that Streamline uses to access the file system.
After you create a file system, you cannot change the **Namespace** set for the file system.
9. Record the name you entered in the **Namespace** box.
10. In the **Name** box, enter a name for the file system.
11. In the **Root** box, enter the directory path for the file system root directory on your Streamline Server local disk or a network accessible file share.
12. Click **Create**.
Streamline adds the new file system to the **File Systems** list.
13. Log in to your Streamline.cloud service as an administrator.
14. On the main toolbar, click the  **Configuration** icon.
The **Configuration** window opens.
15. On the **Configuration** window toolbar, click the  **System** icon.
The **System** panel opens.

16. Click the **File Systems** tab.

The **File Systems** tab opens.



17. Click **Add**.

The **Create File System** settings open.

18. Use the **Provider** list to select **Cloud Gateway**.

The **Cloud Gateway** provider connects to a local file system defined on your Cloud Gateway.

19. Click **Next**.

The **Create File System** settings open for the selected **Cloud Gateway** provider.

20. In the **Namespace** box, enter the name that Streamline uses to access the file system.

After you create a file system, you cannot change the **Namespace** set for the file system.

21. In the **Name** box, enter a name for the file system.

22. In the **Gateway ID** box, enter the hostname or IP address of your Cloud Gateway.

23. In the **Remote Namespace** box, enter the **Namespace** of the local file system you created on your Cloud Gateway.

You recorded the **Namespace** of your local file system in step 9 of this procedure on page 20–6.

24. Click **Create**.

Streamline adds the new file system to the **File Systems** list.

25. Close the **Configuration** window.

Streamline.cloud Service MOS Configuration

With your Streamline.cloud service connected to you local Cloud Gateway, you are ready to configure your Streamline.cloud service to communicate with Ross XPression, Ross Inception, and other systems using the MOS protocol. The MOS ID that you specify for your Streamline.cloud service uniquely identifies your service as a MOS device.

To define the MOS configuration for your Streamline.cloud service

1. Log in to your Streamline.cloud service as an administrator.
2. On the main toolbar, click the  **Configuration** icon.

The **Configuration** window opens.

3. On the **Configuration** window toolbar, click the  **MOS** icon. If the **MOS** icon is not visible, you are not an administrator and cannot configure MOS connections.

The **MOS** panel opens.

Your Streamline.cloud service does not have a MOS Uplink license when the following settings do not display on the **MOS** panel: **Enable NCS Uplink**, **NCS ID**, **NCS Host**, **Redundant NCS ID**, **Redundant NCS Host**, **Enable Cloud Inception**, and **Queue**.

4. In the **MOS ID** box, enter a MOS ID for your Streamline.cloud service to uniquely identify the service as a MOS device.
5. In the **Redundant MOS ID** box, enter a MOS ID for your redundant Streamline instance.
6. Record the MOS IDs that you set for your Streamline Server.
7. Select the **Enable NCS Uplink** check box to establish a connection between the Streamline Server and the NCS specified in the **NCS ID**, **NCS Host**, **Redundant NCS ID**, and **Redundant NCS Host** boxes.
8. In the **NCS ID** box, enter the NCS ID of your newsroom.
9. In the **NCS Host** box, enter the hostname or IP address of your newsroom or NCS gateway.
10. In the **Redundant NCS ID** box, enter the NCS ID of your redundant newsroom.
11. In the **Redundant NCS Host** box, enter the hostname or IP address of your redundant newsroom or NCS gateway.
12. Select the **Enable Cloud Inception** check box when your NCS is an Inception.cloud service.

The **Cloud API Key** box opens below the check box.

13. In the **Cloud API Key** box, enter the API Key of the **CloudConnect** user you created for your Inception.cloud service.
14. Click **OK**.

Connecting Streamline with XPression

After creating a cloud connection user on your Streamline.cloud service and configuring the service for MOS, you can set up a connection between your Streamline.cloud service and a local XPression system.

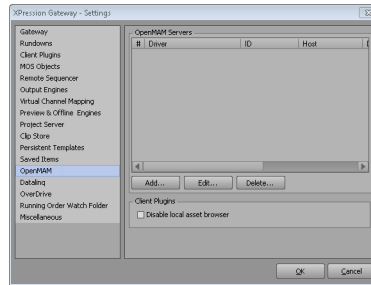
To set up a connection between your Streamline.cloud service and local XPression system

1. Open the your **XPression Gateway**.
2. Use the **Gateway** menu to select **Settings**.

The **XPression Gateway - Settings** dialog box opens.

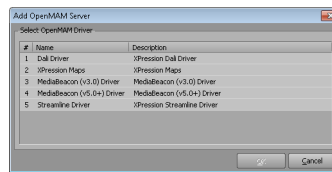
3. Click **OpenMAM**.

The **OpenMAM Servers** and **Client Plugins** sections open in the configuration area.



4. In the **OpenMAM Servers** section, click **Add**.

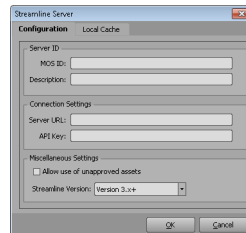
The **Add OpenMAM Server** dialog box opens.



5. Select **Streamline Driver**.

6. Click **OK**.

The **Streamline Server** dialog box opens.



7. In the **Server ID** section, enter the MOS ID that you set for your Streamline.cloud service in the **MOS ID** box.

The MOS ID of your Streamline.cloud service is set in step 4 of the procedure “**To define the MOS configuration for your Streamline.cloud service**” on page 20–8.

8. In the **Description** box, enter a description for the Streamline.cloud service.

1. In the **Connection Setting** section, enter the URL that you used to access your Streamline.cloud service in the **Server URL** box. Streamline.cloud services URLs use the following format:

https://<Customer Name>.streamline.cloud/

2. In the **API Key** box, enter the API Key of the **cloud connection** user that you created on your Streamline.cloud service.

The API Key of your cloud connection user is set in step 19 of the procedure “**To create the cloud connection user**” on page 20–2.

3. In the **Miscellaneous Settings** section, select the **Allow use of unapproved assets** check box if you want to allow XPression to use unapproved assets from Streamline.

4. Use the **Streamline Version** list to select **Version 3.x +**.

5. Click **OK**.

The **Streamline Server** dialog box closes and the XPression Gateway adds the defined Streamline driver to the **OpenMAM Servers** section of the **XPression Gateway - Settings** dialog box.

6. In the **Client Plugins** section of the **XPression Gateway - Settings** dialog box, select the **Disable local asset browser** check box to disable browsing of the local cache.
7. In the **XPression Gateway - Settings** dialog box, click **OK**.

The **XPression Gateway - Settings** dialog box closes.

For More Information on...

- XPression Gateway, refer to the *XPression Distributed Workflow User Guide*.

Uplink Streamline Assets with an NCS

After configuring your Streamline.cloud service for MOS, you can add a MOS device to your NCS to enable your Streamline.cloud service to uplink assets to the NCS. How you create a Streamline.cloud service MOS device depends on whether you use the Ross Inception NCS or a third-party NCS.

★ You require a MOS Uplink license for your Streamline Server to uplink assets with an NCS.

Ross Inception Streamline.cloud Service MOS Device

When you use Inception as your NCS, Inception uses MOS to enable journalists to see, use, and control MOS media devices inside of a Broadcast story. Journalists use a plugin associated with a MOS device to insert and control the device in a Broadcast story.

To add a Streamline.cloud service MOS media device to Inception

1. Log in to your Inception Server as an administrator.

For information about Inception Server log in, refer to the *Inception Configuration Guide*.

2. On the main toolbar, click the  **Configuration** icon.

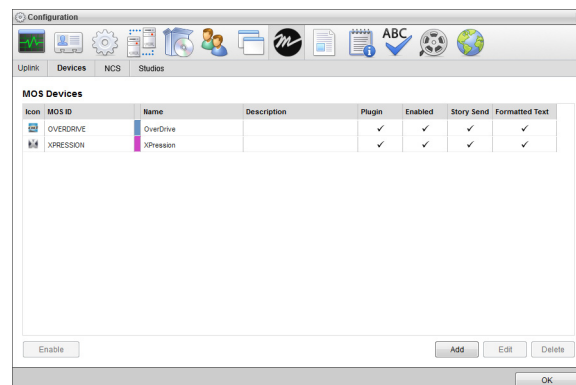
The **Configuration** window opens.

3. On the **Configuration** window toolbar, click the  **MOS** icon.

The **MOS** panel opens.

4. Click the **Devices** tab. If the **Devices** tab is not visible, you do not have an NCS license for your Inception Server and you cannot add MOS devices to the server.

The **Devices** tab opens.



5. Click **Add**.

The **Create MOS Device** page opens and displays the **Device Settings** section for the new MOS device.

6. In the **Device Settings** section, use the **Device** list to select **Ross Streamline Cloud**.

The **Device Settings** section updates with setting values for the **Ross Streamline Cloud** MOS device.

7. In the **MOS ID** box, enter the MOS ID that you set for your Streamline.cloud service.

The MOS ID of your Streamline.cloud service is set in step 4 of the procedure “**To define the MOS configuration for your Streamline.cloud service**” on page 20–8.

8. In the **MOS ID Mask** box, enter a pattern of characters and the * wild card to match the MOS ID of one or more MOS devices of the same type in different locations. The * wild card matches zero or more characters in a MOS ID. Leave this box blank for devices that do not support MOS redirection.

Profile 6 of the MOS Protocol recommends using the following naming convention for MOS IDs for MOS redirection:

<family>.<machine>.<location>.<enterprise>.mos

MOS redirection example,

MOS Device 1		MOS Device 2	
• MOS ID: <code>Ross.CG.Ottawa.CBC.mos</code> • MOS ID Mask: <code>Ross.CG.*.CBC.mos</code>		• MOS ID: <code>Ross.CMS.Ottawa.CBC.mos</code> • MOS ID Mask: none	
• The Device 1 MOS plugin opens for MOS objects with the MOS ID <code>Ross.CG.Ott.CBC.mos</code>. • The Device 1 MOS plugin opens for MOS objects with the MOS ID <code>Ross.CG.Van.CBC.mos</code>. • The Device 2 MOS plugin opens for MOS objects with the MOS ID <code>Ross.CMS.Ott.CBC.mos</code>. • A MOS plugin does not open for MOS objects with the MOS ID <code>Ross.CMS.Van.CBC.mos</code>.			

9. In the **Host** box, enter the hostname of your Streamline.cloud service. Streamline.cloud service hostnames use the following format:

<Customer Name>.streamline.cloud

10. Use the **MOS Version** list to select MOS version **2.8.4**.

11. In the **Name** box, enter a name for the Streamline.cloud service MOS device.

12. In the **Description**, enter a description for the Streamline.cloud service MOS device.

13. In the **Cloud Options** section, enter the API Key of the **CloudConnect** user you created on your Streamline.cloud service in the **API Key** box.

You recorded the API Key of your **CloudConnect** user in step 20 of the procedure “**To create the cloud connection user**” on page 20–2.

14. Click **Next**.

The next page opens and displays the **MOS Plugin**, **Web Plugin**, and **Advance Options** sections.

15. In the **MOS Plugin** section, use the **Plugin** list to select **Web Plugin**.

16. In the **Web Plugin** section, enter the URL of the of your Streamline.cloud service web plugin. Streamline.cloud service web plugin URLs use the following format:

https://<Customer Name>.streamline.cloud/plugin

17. Select the **Use Single Sign-On** check box to enable users with matching logins on Inception and Streamline Servers to automatically log in to Streamline when they use the Streamline web plugin with Inception.

18. To allow additional connections to the Streamline.cloud service MOS device, complete the following steps:
 - a. Click **Add** to the right of the **Inbound Hosts** box.

An **Alert** opens.
 - b. In the **Alert**, enter the hostname or IP address of a host to connect to the Streamline.cloud service MOS device.
 - c. Click **OK**.

The **Alert** closes and the entered hostname or IP address displays in the **Inbound Hosts** box.
 - d. Repeat this procedure to add additional host connections.
19. Click **Next**.

The next page opens and displays the **Appearance** and **MOS Settings** sections.
20. In the **Appearance** section, use the **Icon** list to select **Ross Streamline**.
21. Click the **Background** color square to use a color picker to select the background color that Inception uses to display the Streamline.cloud service MOS device in a Broadcast story.

As you click in the color picker, the box to the right of the color square displays the HTML color code of the selected color. You can also enter an HTML color code in the box to the right of the color square. As you enter an HTML color code, the color square displays the color of the entered code.
22. Click the **Foreground** color square to use a color picker to select the text color that Inception uses to display the Streamline.cloud service MOS device in a Broadcast story.

As you click in the color picker, the box to the right of the color square displays the HTML color code of the selected color. You can also enter an HTML color code in the box to the right of the color square. As you enter an HTML color code, the color square displays the color of the entered code.
23. In the **MOS Settings** section, select the **Enable Story Send** check box to send story text and MOS items in a Broadcast story to the Streamline.cloud service MOS device.
24. Select the **Send Formatted Text** check box to include HTML markup with story text sent to the Streamline.cloud service MOS device.
25. Select the **Enable Object Browsing** check box to use the **MOS Objects** panel to add MOS objects from the Streamline.cloud service MOS device to a Broadcast story.
26. Select the **Synchronize Objects** check box to set the delay parameter for the mosReqAll message that Inception sends to the Streamline.cloud service MOS device to request a list of MOS objects from the device. For information about the mosReqAll message, refer to the section **3.2.1 mosReqAll - Request All Object Data from MOS** in the MOS Protocol.

Inception displays the **Synchronization Interval** box below the **Synchronize Objects** check box.
27. In the **Synchronization Interval** box, enter **1** as the amount of time for the delay parameter in the mosReqAll message that Inception sends to the Streamline.cloud service MOS device to request a list of MOS objects from the device.

This box is only available after selecting the **Synchronize Objects** check box.
28. Select the **Enable Placeholders** check box to enable users to add placeholders to Broadcast stories for MOS objects that do not yet exist on the Streamline.cloud service MOS device.

Inception exchanges the placeholder with the requested MOS object when the MOS object is created on the Streamline.cloud service MOS device.
29. Select the **Require Item Status** check box to display the status of the Streamline.cloud service MOS device in the **MOS Status** and **MOS Device** columns of the table in the **Running Order** panel.

30. Clear the **Enable Timing Control** check box.

31. Click **Save**.

Inception adds the Streamline.cloud service MOS device to the **MOS Devices** list.

Third-party NCS Streamline.cloud Service MOS Device

Use the following settings to add a Streamline.cloud service MOS device to an NCS other than Inception:

- **MOS ID:** enter the MOS ID that you set for your Streamline.cloud service in step 4 of the procedure “**To define the MOS configuration for your Streamline.cloud service**” on page 20–8.
- **Hostname:** enter the hostname or IP address of the Cloud Gateway on a local computer in your organization.
- **Web Plugin URL:** enter the URL of the of your Streamline.cloud service web plugin. Streamline.cloud service web plugin URLs use the following format:

`https://<Customer Name>.streamline.cloud/plugin`

For More Information on...

- the Cloud Gateway, refer to the *Cloud Gateway Configuration Guide*.
- adding MOS devices to your NCS, refer to the *User Guide* for your NCS.

Appendix A: Mapping Profiles

The sections in this appendix describes media file metadata properties to Streamline properties mappings contained the mapping profiles included with a Streamline Server.

This appendix lists the mappings contained in the following mapping profiles:

- Default File Mappings
- Dublin Core

Default File Mappings

This profile maps standard media file properties to Streamline asset attribute properties.

Table A.1 Mappings Contained in the Default File Mapping Profile

Asset Attribute	Media File Property	XMP Category
encodedDate	Encoded_Date	General
format	Format	General
duration	Duration	General
overallBitRate	OverallBitRate	General
fileSize	FileSize	General
videoStreams_duration	Duration	Video
videoStreams_bitRate	BitRate	Video
videoStreams_codec	Codec	Video
videoStreams_width	Width	Video
videoStreams_height	Height	Video
videoStreams_pixelAspectRatio	PixelAspectRatio	Video
videoStreams_displayAspectRatio	DisplayAspectRatio	Video
videoStreams_rotation	Rotation	Video
videoStreams_frameRateMode	FrameRate_Mode/String	Video
videoStreams_frameRate	FrameRate	Video
videoStreams_frameCount	FrameCount	Video
videoStreams_interlacement	Interlacement	Video
videoStreams_standard	Standard	Video
videoStreams_colorSpace	ColorSpace	Video
videoStreams_chromaSubsampling	ChromaSubsampling	Video
videoStreams_bitDepth	BitDepth	Video
videoStreams_compressionMode	Compression_Mode	Video
videoStreams_streamSize	StreamSize	Video
videoStreams_language	Language	Video
audioStreams_duration	Duration	Audio
audioStreams_bitRate	BitRate	Audio
audioStreams_samplingRate	SamplingRate	Audio
audioStreams_samplingCount	SamplingCount	Audio
audioStreams_channels	Channels	Audio
audioStreams_bitDepth	BitDepth	Audio
audioStreams_language	”Language	Audio
audioStreams_streamSize	StreamSize	Audio
audioStreams_codec	Codec	Audio

Table A.1 Mappings Contained in the Default File Mapping Profile

Asset Attribute	Media File Property	XMP Category
imageStreams_codec	Codec	Image
imageStreams_width	Width	Image
imageStreams_height	Height	Image
imageStreams_colorSpace	ColorSpace	Image
imageStreams_chromaSubsampling	ChromaSubsampling	Image
imageStreams_bitDepth	BitDepth	Image
imageStreams_compressionMode	Compression_Mode	Image
imageStreams_streamSize	StreamSize	Image

Dublin Core

This profile contains the all the mappings from the Default mapping profile and adds mappings for the standard Dublin Core metadata properties. For more information about Dublin Core metadata properties, refer to the web page <https://dublincore.org/>.

Table A.2 Additional Mappings Contained in the Dublin Core Mapping Profile

Asset Attribute	Media File Property	XMP Category
type	Type	XMP-dc
name	Title	XMP-dc
creator	Creator	XMP-dc
contentRegion	Coverage	XMP-dc
tags	Subject	XMP-dc
language	Language	XMP-dc
rights	Rights	XMP-dc
description	Description	XMP-dc

