Using Extron Streaming Content Manager

Extron Electronics
INTERFACING, SWITCHING AND CONTROL

Contents

Prerequisites

System and Web Browser Requirements

Web Browser Requirements

In order to open and use Streaming Content Manager, use one of the supported Web browsers (and versions) listed below.

- Google® Chrome™ version 35 or higher
- Mozilla® Firefox® version 28 or higher

> **NOTE:** Recordings created with SMP 351 Streaming Media Processors using firmware version 1.00.*xxx* do not play within Firefox. Recordings created on SMP units that use newer firmware do play within Firefox.

- Microsoft® Internet Explorer® version 9 or higher (for Windows® operating systems)

> **NOTE:** If you are using Internet Explorer, compatibility mode must be turned off (see "Turning Off Internet Explorer Compatibility Mode", below, for details).

- Apple® Safari® version 6 or higher (for Mac® OS X® operating systems)

Browser preferences

- Chrome is the preferred browser for sighted users.
- Firefox is the preferred browser for screen reader users. SCM has been tested to work with Firefox and the NVDA (NonVisual Desktop Access) screen reader, which is available at **http://www.nvaccess.org/**.

> **NOTE:** SCM is accessible to users with screen readers and those who use keyboard controls for navigation. The interface is accessible, and supports commonly available screen readers.

Turning Off Internet Explorer Compatibility Mode

The Streaming Content Manager does not support compatibility mode in Microsoft Internet Explorer.

To check compatibility view settings:

1. From the `Tools` menu of the browser, select `Compatibility View Settings`. The `Compatibility View Settings` dialog box opens.

2. Be sure that the `Display all websites in Compatibility View` check box is cleared and that the DNS name or IP address of the SCM is <u>not</u> in the list of websites that have been added to Compatibility view.

About Streaming Content Manager

About Streaming Content Manager

General Product Overview

Extron Streaming Content Manager (SCM) is a software management tool for processing, packaging, and delivering enhanced packages of recording files produced by the Extron SMP 351 Streaming Media Processor and other recording devices. SCM processes and transfers recording packages to a network storage directory and provides a way to manage access to the recordings.

> **NOTE:** SCM is accessible to users with screen readers and those who use keyboard controls for navigation. The interface is accessible, and supports commonly available screen readers.

What SCM Does

Preparing and Managing Recordings

Streaming Content Manager monitors the designated network server location for new recordings. When SCM detects new recordings on the server, SCM integrates the basic SMP recording package (.m4v recording files, recording metadata, and time-synchronized thumbnails) with an advanced set of playback controls into a package with Extron Media Player (EMP). EMP operates from almost any PC or personal device using a variety of browser applications. SCM then transfers recording packages to a managed network storage directory. From the network storage location, SCM automatically distributes recording packages to event presenters and viewers via a secure web page interface.

Within SCM, administrators define the recording ingest and storage directories and determine whether or not unauthenticated users (those who do not have accounts within SCM) will be able to access public and unlisted recordings.

The SCM web portal provides users and administrators with access for managing AV recordings, identifying the total number of recordings, and monitoring recent activity. Recording data include:

- The quantity of recordings by each user
- The date, time, and title or file name of each recording
- The privacy setting (private, public, or unlisted) of the recording

- The source device location name
- File package size.

Recordings can be sorted based on recording title or file name, date and time, and recording source device location name. Recordings can be deleted or downloaded, and links to recordings can be shared with others who have access to the SCM system.

Managing Users and Access to AV Recordings

With data from standard LDAP/AD (Lightweight Directory Access Protocol, Active Directory®) network services or from a locally defined set of users and passwords, SCM identifies, authenticates, and manages user access to recording packages (see **LDAP** and **Active Directory® (AD)** in the glossary for definitions). Recordings that cannot be authenticated by SCM are saved to a guest account that is controlled by the SCM administrator. See **User Roles** and **Comparing User Types Based on Origin (Local or AD Accounts)** for a more detailed discussion about types of user accounts.

The SCM web portal provides administrators with the ability to add and delete users and includes tools to manage and update user profiles.

Within SCM, administrators select and set up the users and their roles. Users can be added and access can be managed using standard network directory services (LDAP/Active Directory [AD]). SCM, or an AD system via SCM, authenticates users and provides them access to download or share their recording packages.

Administrators can access summary data about users such as the date and time of last log-in, the date and time of the last uploaded recording, and the total number of recordings made by that user, broken out by privacy status (private, public, and unlisted).

Signal Flow Within Streaming Content Manager

1. Recordings (and their thumbnail and chapter marker images, timing data, and metadata) are created by a recording device such as an SMP 351.
2. Recordings are automatically uploaded from the SMP into a designated server folder. This folder is the "ingest location" for the SCM system.
3. SCM monitors ("watches") the ingest location for new recordings and for when each recording has finished uploading to the server.
4. When the recording is uploaded, SCM transfers ("ingests") the raw recording package, moving it into its own server, checking the metadata, verifying that the components (including video, thumbnails, chapter markers, metadata, and timing data) are included.
5. SCM packages the recording with the EMP player files along with instructions on how to synchronize the recording and its associated files. It then transfers (distributes) the complete recording package to the SCM storage directory.

6. Once the recording package is stored in the storage directory, the raw recording is deleted from the ingest location. It may still be available in the recording device (SMP) for a brief period until the device determines that memory is needed for new recordings, at which time the recording is deleted or overwritten.

> **NOTE:** For an SMP 351, if internal storage space is nearly full, the SMP uses an automatic disk cleanup feature to make room for new recordings. As the need arises, the unit automatically deletes old recordings. Recordings can be marked as "locked" to prevent them from being removed by automatic disk cleanup.
>
> - If the SMP is set up to automatically upload recordings to a server, and if the recordings have been successfully uploaded to the server, the unit deletes recordings (starting with the oldest) until there is enough free space on the disk.
> - If an the SMP has been set up to upload recordings to a server but some recordings were not successfully uploaded, then successfully uploaded recordings are deleted first. Then, if more space is still needed, the SMP deletes recordings that have not been uploaded, starting with the oldest files.
> - If there is no upload method configured, the SMP deletes the oldest **unlocked** files first and then deletes newer files until enough space is available.

7. The recording package appears in the All Recordings list (viewable by administrators) within SCM, and its privacy level is set to "private" by default. If the owner of the recording has an account in SCM, and if e-mail connection is configured and enabled for SCM, the recording owner receives an e-mail notifying them that the recording is available in SCM in their My Recordings list.

8. The user logs in to SCM, and SCM or an Active Directory system validates their credentials. SCM opens to the `My Recordings` page, where the user can download, delete, or edit information about their recordings and can view or download public recordings.

User Roles

Streaming Content Manager includes two built-in types of user accounts that cannot be deleted and supports four different user account roles, as described below. In addition to the roles defined for SCM accounts, unauthenticated users may have limited access to the system (by visiting the SCM site or by receiving a link to a recording by e-mail) if the system is configured to allow access. Unauthenticated users are any users who do not have an account in the SCM system.

Action	Role				
	System Administrator	Administrator	User	Guest	Unauthenti-cated User
Account management					
Account is created by:	SCM	System administrator or other administrator	System administrator or other administrator	SCM	
Account may be local	X	X	X	X	
Account may originate from an Active Directory (AD) system		X	X		
Account may be deleted		X	X		
May log into their account	X	X	X		
May add or delete another user	X	X			
May reset a local user's password	X	X			
May reset their own password	X	X (if not added via Active Directory)	X (if not added via Active Directory)		
System settings					
May configure recording package ingest settings	X	X			
May configure general system settings	X	X			
May configure e-mail notification settings	X	X			
May add, delete, or edit AD settings or profiles	X	X			
May view system logs	X	X			
Recordings					
May create recordings	X	X	X	***	
May view public recordings	X	X	X		X*, **
May view unlisted recordings	X	X	X*		X*, **

Action	Role				
	System Administrator	Administrator	User	Guest	Unauthenti-cated User
May view own recordings ("My Recordings")	X	X	X		
May view all recordings ("All Recordings")	X	X			
May edit metadata for public recordings	X	X			
May edit metadata or change settings for own recordings ("My Recordings")	X	X	X		
May edit metadata or change settings for all recordings ("All Recordings")	X	X			

NOTES:

- If the user or administrator is added via LDAP/AD, the username and password cannot be changed within SCM. They must be changed within the AD system.
- The roles of the system administrator and guest account cannot be changed.
- *Users and unauthenticated users can view an unlisted recording only if they have received a link to that recording from another user.
- **Unauthenticated users may view public or unlisted recordings only if the SCM system is configured (`System Settings` > Recording Package Settings) to allow them to do so.
   *** The standard SCM guest account acts as the holding account or "owner" of recordings that are not associated with a validated SCM system user. It allows recordings to be ingested and processed by the SCM system and accessed by an administrator.
- The guest account does not appear in the list of user accounts. It appears only in the recordings lists as the owner of unassigned recordings.

User Roles and Usernames	
Role	**Username is...**
System Administrator	"Admin" (by default) or can be changed to an e-mail address after system configuration
Administrator	• E-mail address, if added locally • LDAP/AD system username, if added via Active Directory
User	• E-mail address, if added locally • LDAP/AD system username, if added via Active Directory
Guest	—
Unauthenticated users (visitors who do not have an account in the SCM system)	—

NOTE: If the user or administrator is added via LDAP/AD, the username and password cannot be changed within SCM.

Comparing User Types Based on Origin (Local or AD Accounts)

The following table illustrates some of the differences in user accounts based on whether they originate locally or are added via an Active Directory (AD) user management system.

	User Account Type or Origin	
	Local (SCM-only)	**Remote (AD)**
Where are credentials added, maintained and validated?	Added, stored, and validated solely within SCM	Added to the SCM database but the name, username, and password are maintained and validated within the AD system.
User profile settings: what can be edited within SCM?	• Name • E-mail address • Password • Local time zone	• Local time zone
User profile settings: what cannot be edited within SCM?	—	• Name • Username • E-mail address • Password (All must be changed within the AD system.)
Username is:	E-mail address	AD system username

How to Find Information About SCM

For support and troubleshooting purposes you may wish to look up the SCM version, part number, and license, view a list of licensed third party technology used within SCM, or access and read the SCM help file. This section shows you how to find that information.

To view the SCM version and part number information, license, and third party licenses:

1. Click the `About` tab at the top of the page. The `About` page opens, showing the version number, build date, part number, and copyright statement.

2. To view the end user license agreement (EULA), click the `End User License Agreement` link to expand it.
    - If you want to print a copy of the license, click the `Printable Version` link directly below the title.
    - When finished reading the EULA, click the `End User License Agreement` link to collapse it.

3. To view a list of licenses for third party technology used within SCM, click the `Third Party License Information` link. A panel showing the name, version, and the URL link for each license opens.
    - Use the scroll bar along the right side to navigate up and down the list as needed.
    - When finished viewing the list, click the `Third Party License Information` link to collapse the list.

To access the SCM help file:

1. In the upper right corner of the screen, click the **down** arrow ▼ adjacent to your e-mail address or username to open the drop-down menu.
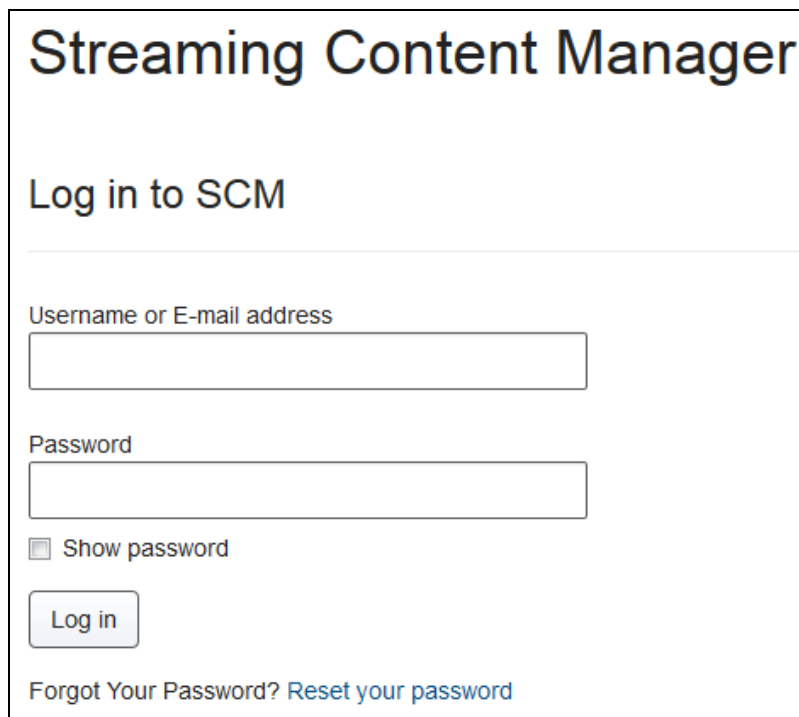
or

👤 JaneAdmin ▼	**👤 exampleuser@domain.com ▼**
My Profile	My Profile
Help	Help
Log out	Log out

2. Click `Help`. The help file opens in a separate tab or window, depending on your browser settings.

Getting Started

Opening Streaming Content Manager

To open Streaming Content Manager:

1. Open a web browser.
2. Enter the IP address or URL of SCM into the address field and navigate to the site. SCM opens to the `Log in` page.

Streaming Content Manager

Log in to SCM

Username or E-mail address

Password

☐ Show password

Log in

Forgot Your Password? Reset your password

3. Enter your username and password (see **Logging In and Logging Out** on the next page).
4. Click **Log In**. SCM opens to the `My Recordings` tab within the `Recordings` page.

Logging In and Logging Out

In order to use the Streaming Content Manager, unless you are an unregistered guest with permission to access public recordings, you must log in to SCM. Also, before you can change roles (from administrator to user or user to administrator) or change user accounts , you must log out of SCM.

To log in:

> **NOTES:**
> - If you are a new user added to SCM with a local account, you will receive an e-mail with a link to the `Log in` page and instructions to set or change your password. Passwords must be at least 10 characters in length and may not start with a space character.
> - If you are a new user added to SCM from an Active Directory® (AD) system, you will receive an e-mail with a link to the `Log in` page, but you cannot change your credentials (username and password) in SCM. Your credentials are maintained in the AD system. Contact an IT system administrator for information on changing credentials.

1. Open a Web browser.
2. Enter the IP address or URL of the Streaming Content Manager into the address field and navigate to the SCM page. The `Log in` page opens.

3. Enter your e-mail address (for local accounts) or username (for a remote [LDAP/AD] account) and password into the corresponding fields.

- To log in to SCM if your account was added locally (rather than via an LDAP/AD system), enter the password you set up upon first access. It must be at least 10 characters in length and may not start with a space character.

- To log in to SCM if it is integrated with an LDAP/AD system, enter the same password you use for other network access within your organization.

- If desired, select the `Show password` check box to display the actual characters in the `Password` field as you enter them instead of displaying bullet characters.

4. Click the `Log in` button. The Streaming Content Manager `Recordings` page opens.

> **NOTE:** When you receive a link to a shared recording and access the recording via that link, once you log in to SCM the detail view page for that recording opens (rather than the `My Recordings` page).

After logging in:

Once you have logged in to the Streaming Content Manager, the `Log in` button in the upper right corner of the screen (shown below, left) is replaced by an icon and button labeled by your username (e-mail address or AD username).

If desired, click on your username or the arrow adjacent to it to open a user options drop-down menu, from which you can access the page to manage your user profile, or you can open the help file or log out.

To log out:

1. From any page within SCM, click on your username or the arrow adjacent to it in the upper right corner of the screen. A drop-down menu opens.
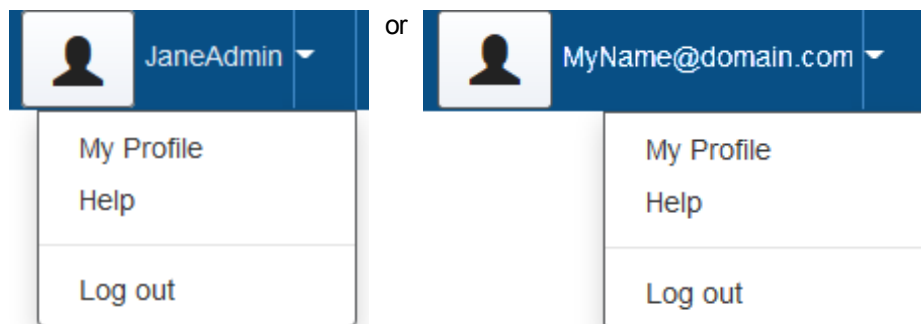
2. Select `Log out` from the drop-down menu. The SCM system logs you out and returns to the `Log in` page.

Overview of the SCM Software Interface

The Streaming Content Manager web pages provide the following features:

- Access to lists of recordings, the ability to edit information about recordings, download recordings, play streamed recordings, and share links to them
- A way to manage your account preferences (see **Editing My Profile**)
- Tools for administrators to configure the SCM system settings once the initial installation and database connection setup have been completed
- Tools for administrators to set up, create, and manage user accounts
- Information about the SCM software and its licenses (see **How to Find Information About SCM**)

Access the Streaming Content Manager by using a web browser on computer or mobile device (see **Opening Streaming Content Manager** and **Logging In and Logging Out** for details).

How the SCM Web Pages Are Organized

The SCM interface contains tabs at the top of the page that provide access to the pages for major functions, subtabs for the Recordings page that allow you to access different sets of recordings within SCM, and a button and drop-down menu for logging in and out and accessing your account settings or the help file. These elements are detailed below.

Tabs

The web pages in SCM are organized by functions grouped within two tabs at the top of the screen:

| **Extron**® | Recordings | About | | 👤 exampleuser@domain.com ▾ |

`Recordings` — The `Recordings` page opens once you log in to the system or if you click this tab. Here you can view a list of all your recordings or reach a list of all publicly available recordings in the system (see **Managing Recordings**). From the recordings lists you can download a recording to view or obtain a link to share a recording with someone else. From each list you can access a detailed view of each recording and its properties. For your own recordings, from the detailed view you can edit information such as the title, location name, and recording time, and set the privacy level. You can also delete your own recordings.

`About` — Version, part number, and copyright information for the SCM software is displayed on this page. The end user license agreement and a list of third party software licensed for use as part of SCM are also available on the `About` page (see **How to Find Information About SCM**).

Pages Within Tabs

The `Recordings` tab includes several pages. To access each page, click the corresponding sub-tabs within the second tier of tabs located below the main tabs near the top of the screen. The `Recordings` tab includes sub-tabs for `My Recordings` and `All Public Recordings`.

Log In/Log Out and User Options Menu

Once you have logged in to the Streaming Content Manager, the **Log in** button in the upper right corner of the screen is replaced by a user options drop-down menu labeled by your e-mail address (if SCM is set up to for local user management) or username (if SCM is set up to use a managed directory). Click on the **down** arrow ( ) adjacent to your username to open the drop-down menu, from which you can access the page to manage your user profile (see **Editing My Profile**), open the help file, or log out.
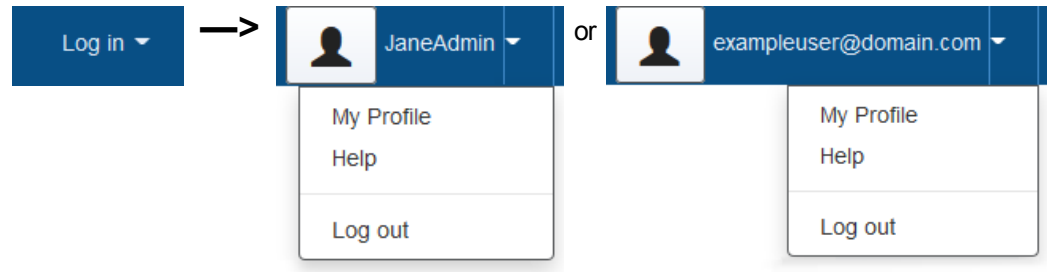
Managing User Accounts

Editing My Profile

Everyone with an account in Streaming Content Manager can view and edit their own profile. Which elements are editable vary depending on your account type and origin (local or remote [AD]).

To change user profile settings (edit a user profile):

1. From any page within SCM, click on your user icon, username, or click on the arrow adjacent to it in the upper right corner of the screen.

2. If you click on the arrow, a drop-down menu opens, as shown below. Select `My Profile` from the drop-down menu.

Whether you clicked on the icon, clicked on your username, or selected `My Profile` from the drop-down menu, the `My Profile` page opens. Examples of pages for an account with an Active Directory origin and an account with a local origin are shown below.

My Profile

	Name	Jane M. Sample
	E-mail Address	jmsample@domain.com
	Role	Administrator
	Local Time Zone	(UTC-08:00) Pacific Time (US & Canada) ▾
Change Password	Created From	AD
	Last Time Recorded	11/10/2014 9:30:00 AM

Recordings	Total	Private	Public	Unlisted
	3	1	1	1

My Profile

	Name	*No Name is Set*
	E-mail Address	exampleuser@domain.com
	Role	User
	Local Time Zone	(UTC-08:00) Pacific Time (US & Canada) ▾
Change Password	Created From	Local
	Last Time Recorded	Timestamp Unavailable

Recordings	Total	Private	Public	Unlisted
	0	0	0	0

Items that can be changed (editable elements):

- For **local users**, the name, e-mail address, local time zone, and password can be changed.
- For **remote (AD) users**, only the local time zone can be changed. The name, e-mail address, and password are all managed by the Active Directory system.
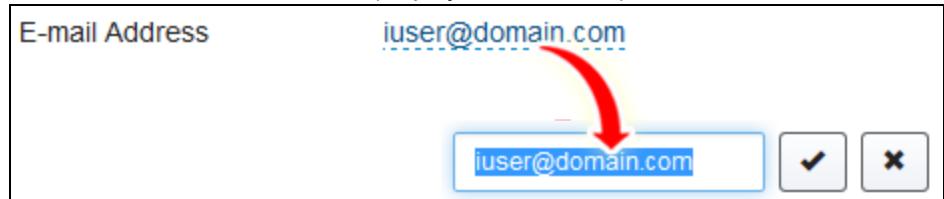
Items for information only (read-only elements):

- **Created From** indicates whether your account was created locally (solely within SCM) or added from an AD management system.
- **Last Time Recorded** indicates the last date and time (displayed in the viewer's local time) when you uploaded a recording into SCM. If you have no recordings, this field displays "`Timestamp Unavailable`"
- The **Recording**s information shows how many recordings of yours are stored in SCM and how many are assigned each privacy setting (private, public, or unlisted).

3. To change the name if you are a local user:

   a. Click on the name link (displayed in blue text) or the words `No Name is Set` or `Empty` (displayed in red text, only if a name has not been added previously). Three fields appear (one for the first name, one for the middle name, one for the last name [surname]), replacing the name link.
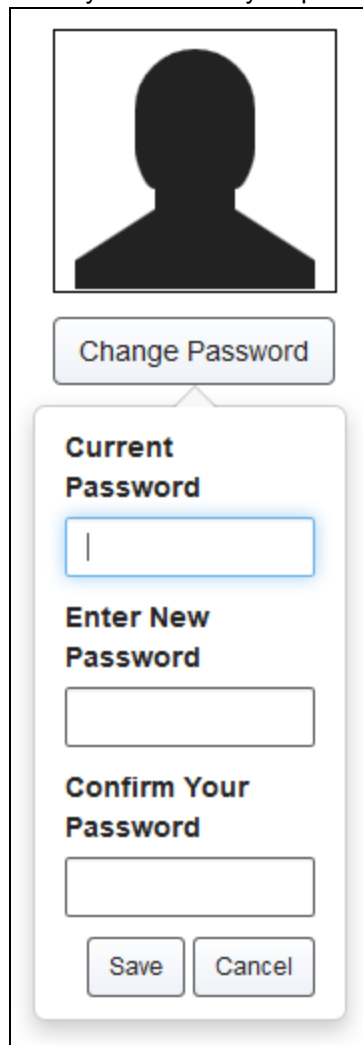

   b. Enter the new or corrected name into each field as desired. Names are optional: any or all of these fields can be left empty.

   c. Click the check mark button to accept the changes or click the **X** button to discard changes.

4. To change the e-mail address if you are a local user:

   a. Click on the e-mail address link (displayed in blue text).

   b. Enter the new or corrected e-mail address into the field as desired.

   c. Click the check mark button to accept the changes or click the **X** button to discard changes.

5. To select a local time zone that is different from the SCM default time zone, click the `Local Time Zone` drop-down list and select an option. This setting controls what time zone is used to display recording and log-in times to you, as well as for information in error messages that are e-mailed to you.

6. To change the password if you are a local user:

   a. Click the **Change Password** button below the user icon. A panel opens with fields where you can reset your password.

   b. Enter your current password into the **Current Password** field.

   c. Enter your new password into the **Enter New Password** and **Confirm Your Password** fields. For the minimum number of characters and details about acceptable characters, see **Guidelines for Passwords**.

   d. Click **Save** to save the new password or click **Cancel** to discard changes and keep your old password.

Resetting or Changing Your Password

If you have a **local** account in SCM and want to change your password or you forgot your password, SCM provides a way to replace your existing password with a new one. This section discusses how to accomplish that.

If you have an account established via an Active Directory (AD) management system, contact your IT department for assistance replacing your password.

For a comparison of local and AD accounts, see **Comparing User Types Based on Origin (Local or AD Accounts)**.

Guidelines for Passwords

For accounts managed through an Active Directory system

Passwords are set through and follow the requirements of the Active Directory system for your organization. The IT department should be able to provide you with guidelines.

For local accounts

- Each password must consist of at least 10 characters.
- Passwords for SCM local accounts can include ASCII characters (hexadecimal 20 to hexadecimal 7E). Those characters include all upper and lower case English letters, numbers, and the special characters found on a standard English keyboard. For your reference, the following table lists the allowed characters. When entering passwords, use ASCII characters, not hex values.

ASCII Characters Allowed for Passwords (Listed According to Their Corresponding Hex Values)											
Hex	**ASCII**	**Hex**	**ASCII**	**Hex**	**ASCII**	**Hex**	**ASCII**	**Hex**	**ASCII**	**Hex**	**ASCII**
20	(space)	30	0	40	@	50	P	60	`	70	p
21	!	31	1	41	A	51	Q	61	a	71	q
22	"	32	2	42	B	52	R	62	b	72	r
23	#	33	3	43	C	53	S	63	c	73	s
24	$	34	4	44	D	54	T	64	d	74	t
25	%	35	5	45	E	55	U	65	e	75	u
26	&	36	6	46	F	56	V	66	f	76	v
27	'	37	7	47	G	57	W	67	g	77	w
28	(	38	8	48	H	58	X	68	h	78	x
29	)	39	9	49	I	59	Y	69	i	79	y
2A	*	3A	:	4A	J	5A	Z	6A	j	7A	z
2B	+	3B	;	4B	K	5B	[	6B	k	7B	{
2C	,	3C	<	4C	L	5C	\	6C	l	7C		
2D	-	3D	+	4D	M	5D	]	6D	m	7D	}

ASCII Characters Allowed for Passwords (Listed According to Their Corresponding Hex Values)											
Hex	ASCII	Hex	ASCII	Hex	ASCII	Hex	ASCII	Hex	ASCII	Hex	ASCII
2E	.	3E	>	4E	N	5E	^	6E	n	7E	~
2F	/	3F	?	4F	O	5F	_	6F	o		

Resetting a Forgotten Password
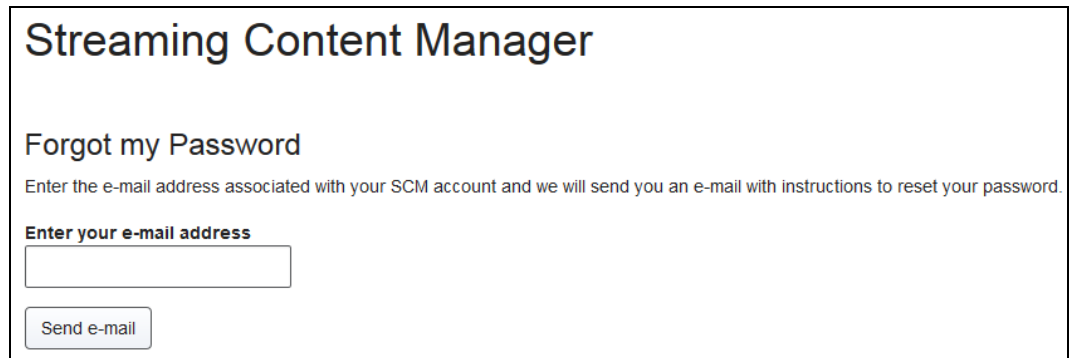
> **NOTE:** This procedure is for users with local SCM accounts. Users with local accounts log in using an e-mail address.
>
> If you log in to SCM using the same username and password that you use for other applications and services in your organization, you probably have an account managed through an Active Directory system. You need to contact your IT department for assistance.

To reset (replace) your password if you forgot it and cannot log in:

1. In the `Log in` page of SCM click the **Reset your password** link.
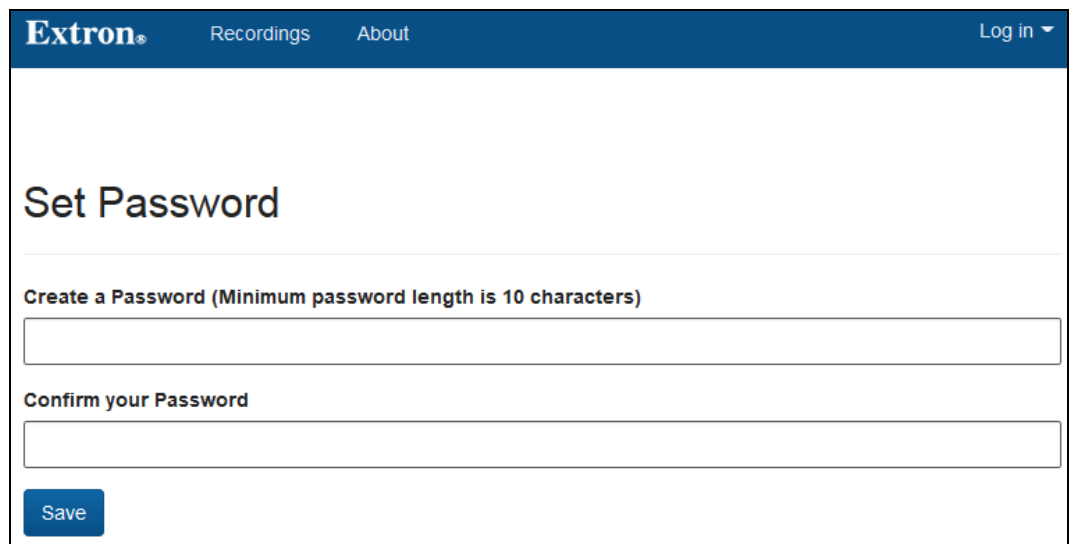
The `Forgot my Password` page opens.

2. Enter the e-mail address you used for your SCM account into the `Enter your e-mail address` field.

3. Click `Send e-mail`. A notification appears briefly at the top of the screen to let you know an e-mail will be sent to you with instructions for resetting your password. SCM sends an e-mail to the address you entered in step 2.

4. Open your e-mail application and check for an e-mail from the SCM system or system administrator.

5. Open the SCM password reset e-mail and click the link for resetting your password. A web page opens in your default browser where you can replace your password.

6. Enter your new password into the `Create a Password` and `Confirm your Password` fields.

7. Click `Save` to save the new password.

Changing an Existing Password

> **NOTE:** This procedure is for users with local SCM accounts. Users with local accounts log in using an e-mail address.
>
> If you log in to SCM using the same username and password that you use for other applications and services in your organization, you probably have an account managed through an Active Directory system. You need to contact your IT department for assistance.

To change your password from within SCM:

1. From any page within SCM, click on your user icon, username, or click on the arrow adjacent to it in the upper right corner of the screen.

2. If you click on the arrow, a drop-down menu opens, as shown below. Select My Profile from the drop-down menu.
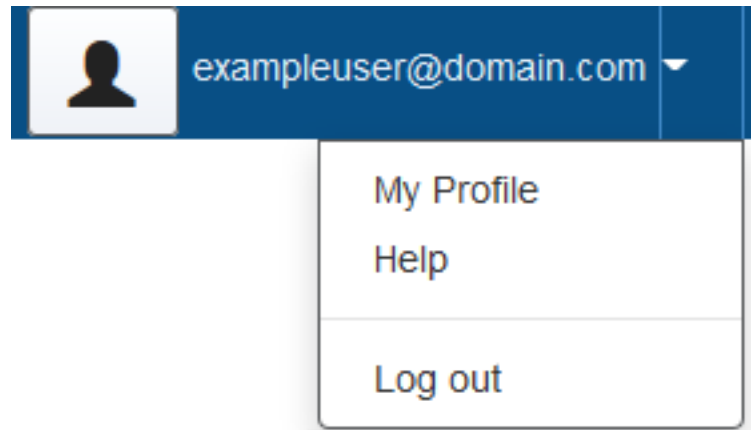
Whether you clicked on the icon, clicked on your username, or selected My Profile from the drop-down menu, the My Profile page opens. An example is shown below.
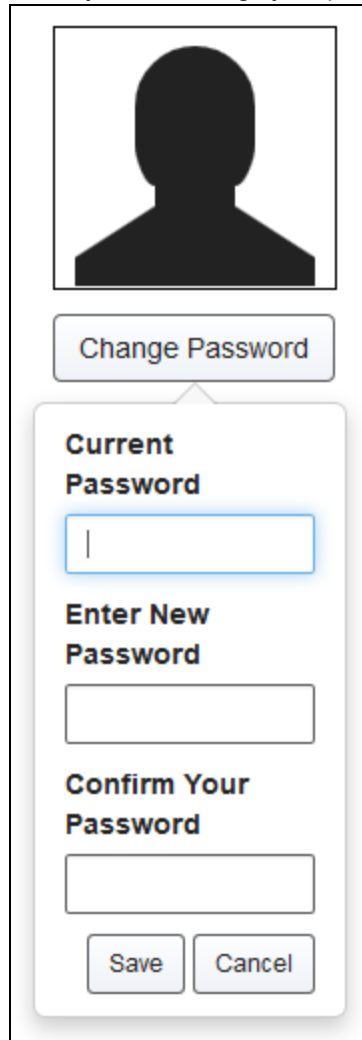
3. Click the **Change Password** button below the user icon. A panel opens with fields where you can change your password.

4. Enter your current password into the **Current Password** field.
5. Enter your new password into the **Enter New Password** and **Confirm Your Password** fields.
6. Click **Save** to save the new password or click **Cancel** to discard changes and keep your old password.

Managing Recordings

Managing Recordings: an Overview

Once Streaming Content Manager (SCM) has uploaded, processed, packaged, and stored recordings, it provides access to the recordings. You can view, download, and edit settings of your own recordings and view and download public recordings and unlisted recordings for which you have received an access invitation. Content owners or administrators can set each recording to allow it to be downloaded, played as streaming video, or both.

If SCM is configured to use e-mail, for each recording that is ingested into SCM with an identifiable owner, SCM sends the recording owner an e-mail to notify them that the recording is now available in the system.

This section on managing recordings covers the following topics:

- **Locating and Accessing Recordings**
- **Elements of Recording Entries**: an explanation, including what time zone is shown, where elements come from (such as recording naming, location name)
- **Recording Privacy Settings**
- **Downloading a Recording Package**
- **Sharing a Recording**
- **Editing Recording Details**
- **Playing a Recording**
- **Deleting a Recording**

> **NOTE:** If you access SCM via a link to a recording (when you have received a link to a shared recording), the player view page for that recording opens (rather than the `My Recordings` page) once you log in to SCM.

Locating and Accessing Recordings

About The Recordings Pages

To access the recordings pages, log in to Streaming Content Manager (SCM), or from any other page click the **Recordings** tab at the top of the screen. The `My Recordings` page opens.

The **Recordings** tab includes several pages. Each page features a different list view of recordings in the SCM system. To access each page, click the corresponding sub-tabs within the second tier of tabs located below the main tabs near the top of the screen. The **Recordings** tab includes sub-tabs for `My Recordings` and `All Public Recordings`.
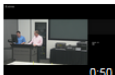
From within any list view page you can click on the thumbnail view of a recording or click on its title to open the player page for that particular recording.

List View Pages and Their Corresponding Tabs: What Content Appears on Which Page

- **My Recordings** — The `My Recordings` page lists only your recordings (recordings that list you as the owner). All of your recordings are listed here, regardless of privacy setting (private, 🚫; unlisted, 👁; public, 🌐) . This page includes buttons (🗑) that allow you to delete your recordings, if desired, and buttons (✏) that let you access a detail view page to edit information and settings for a recording.

- **All Public Recordings** — The `All Public Recordings` page lists recordings made by every SCM account holder as long as each recording has been set to the **Public** (🌐) privacy setting. No recordings can be deleted from this page. An example of an All Public Recordings list is shown below.
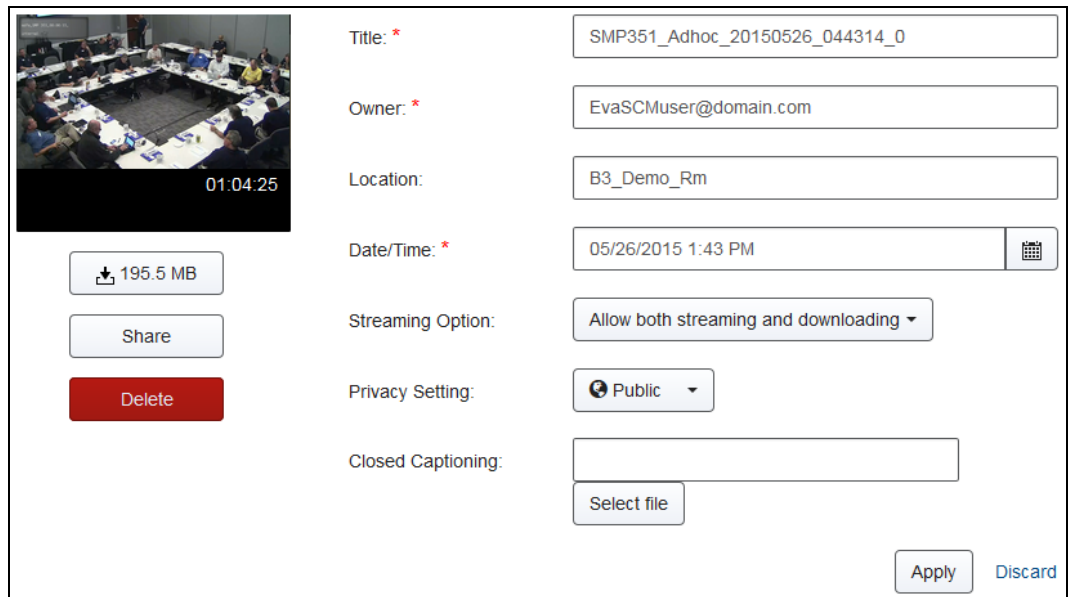
Detail View Pages

If the recording is your own recording, or if you are an administrator or system administrator, you can access the detail view page for a recording. From within the `My Recordings` page, click on the **Edit** button ( ) to open the detail view page, where you can edit information and settings for that recording. The following image is an example excerpt of a detail view page.

- All labels can be edited in this view and ownership can be assigned to another SCM user.
- You can change the streaming and downloading setting.
- You can change the privacy setting.
- You can upload a closed captioning file (in .json format) for the recording.
- You can delete the recording.
- As in the list view pages, you can download the recording (if the streaming option is set to allow downloads) or share a link to it.

Clicking on the thumbnail image opens the player page, where you can play the recording.

Player Pages

From within any list view page you can click on the thumbnail view of a recording or click on its title to open the player page for that particular recording. You can also click on the recording thumbnail in a detail view page to open the player page.

In the player page you can play the recording using video streaming within SCM. The following image is an example of a player page.
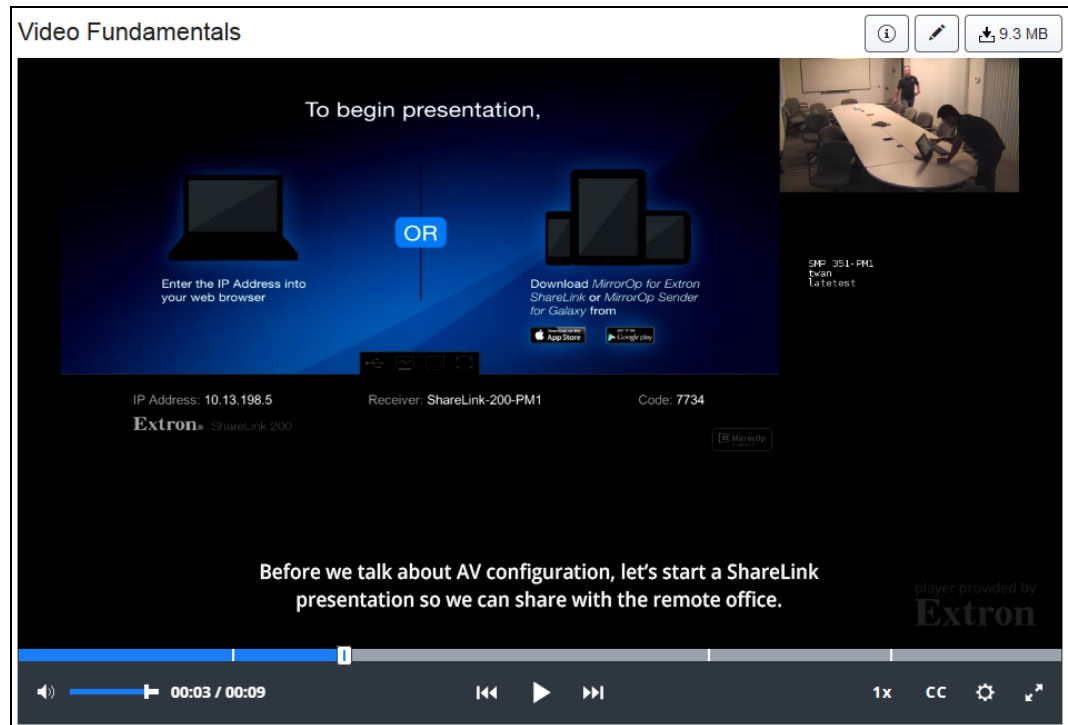
For full details about each element, see **Playing a Recording**.

The **top of the page** features:

- The recording title
- A button to display recording information in a pop-up window
- An `Edit` button link to the detail view page (if you are the recording owner or an administrator)
- A `Download` button.

The **central pane** displays the video, a plain background (if the video does not completely fill the area), any closed captions that have been uploaded with the recording, and an Extron watermark.

The **bottom of the screen** includes:

- A progress indicator bar with thumbnail images, chapter marker lines, and a selectable slider control that allows you to navigate backwards or forwards to any point in the recording
- Time played and total duration for the recording

- Player controls
  - `Previous Chapter`, `Play/Pause`, and `Next Chapter` buttons
  - `Playback speed` adjustment button (which opens a pop-up menu from which you can select speeds from 0.5x to 2x the actual speed of the video)
  - Closed captioning (`CC`) button (to toggle the display of closed captioning text on or off)
  - `Settings` button (to select display options for the font and background of any closed captions that have been uploaded for the recording)
  - A `Mute` button and `Volume` adjustment slider control)

Locating Recordings in a List

Each of the Recordings pages features the same controls for locating recordings:

- A `Search` field at the top of the list where you can enter text to narrow down the recordings list to those entries containing that text. The recordings list is refreshed each time you enter a character in the field.
- A `Sort by:` drop-down menu (shown below) to allow you to sort the list in ascending or descending order by the age of the recording, the recording title, or recording location. Location is usually defined within the recording device and typically indicates a room or facility name.

Sort By: Newest First ▾

Newest First
Oldest First
Title A-to-Z
Title Z-to-A
Location A-to-Z
Location Z-to-A

Maneuvering through the list

- Scroll bars along the side of the list allow you to display items within a page.
- The quantity of recordings shown per page can be changed by selecting a value (`10`, `25`, `50`, `100`, or `All`) from the `Show n recordings per page` drop-down list at the bottom of the page.

- Access additional pages by clicking on the page control buttons along the lower right of the screen.

| « | ‹ | **1** | 2 | 3 | › | » |

The **<<** and **>>** buttons link to the first and last pages in the list, respectively.

The **<** and **>** buttons open the previous or next page in the list.

Numbered buttons link to the like numbered page in the recordings list.

Elements of Recording Entries

The recordings list views and detail views contain many of the same elements, but what you can do in each view differs. This section shows what each element is, which elements are editable, and explains each item.

Elements of a Recording Entry in a List View

In the recordings list views no labels can be changed. The only setting that can be changed in a list view is the privacy setting, which you can change only for your own recordings.

My Recordings list view:
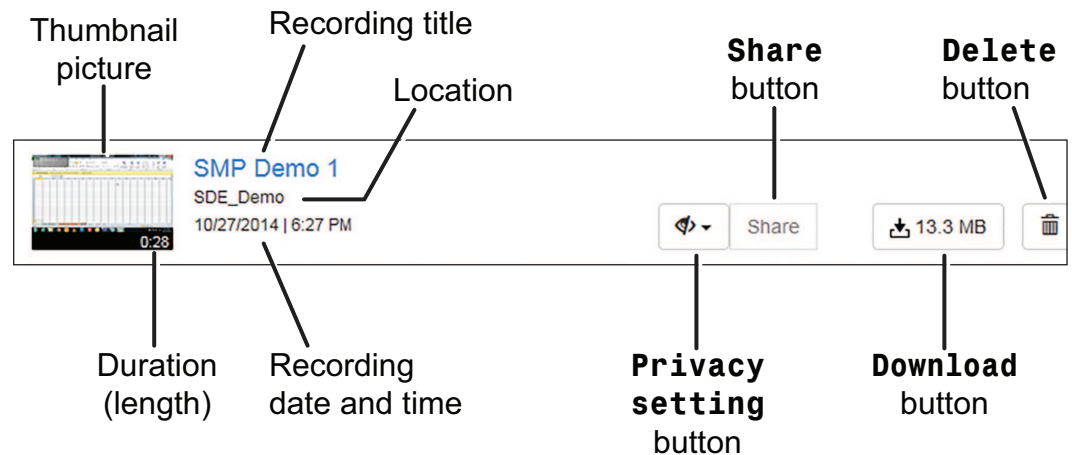
All Public Recordings list view:
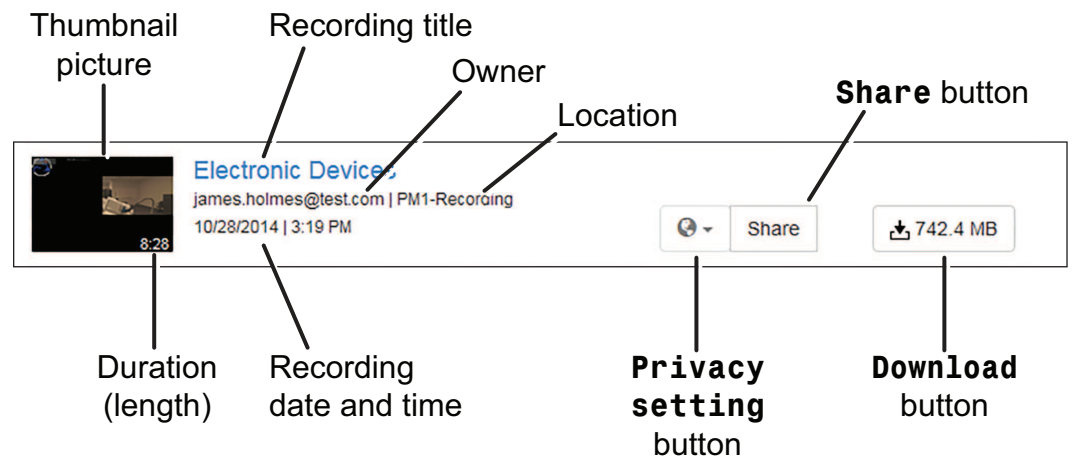
Recording thumbnail picture — This image is a still snapshot representing the recording. If the recording was created by an SMP 351, this image is captured 15 seconds from the beginning of the video.

- Clicking on the thumbnail picture opens the streaming view page for that recording.
- For recordings that fail to be properly ingested into SCM, the picture thumbnail is replaced by a "Failed" thumbnail:
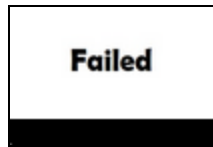
See the **Recordings** section in **Troubleshooting** for more information about what to do if your recording failed to be ingested into SCM.

- For recordings that are in the process of being ingested into SCM and packaged, picture thumbnail is replaced by a "Processing" thumbnail:

Recording title — By default, the title of each recording is set in the scheduling system (such as an Opencast system) or iCal calendar file for a recording, or input at the recorder or touchpanel for an *ad-hoc* recording. Clicking on the title of a recording opens its streaming view page.

Owner name — By default, the owner (in the form of a username or e-mail address) of each recording is set in the scheduling system or iCal calendar file for a recording, or input at the recorder or touchpanel for an *ad-hoc* recording.

Location name — The location name is set in the recording device, itself, as the default location name.

Recording date and time — The time the recording was created in the recording device is displayed in the viewer's time zone. SCM stores the UTC time for each recording as well as the time zone in which it was created, but the time is displayed in the time zone for whoever is viewing the recording. To set the time zone for your account, see **Editing My Profile**.

Edit button — This button appears only for the recording owner or for administrators and only in the My Recordings page. Clicking this button opens the detail view page for the corresponding recording. The detail view page is where labels and settings can be edited for the recording.

Privacy setting button — Indicates the privacy level (private, 🔒; unlisted, 👁; public, 🌐). More information on these options is available in **Recording Privacy Settings**.

Share button — For recordings with a public or unlisted privacy setting, clicking this button opens a pop-up window containing a URL link that you can copy and paste into an e-mail or text message to share the video with another user.

Download button (⬇) — Click this button to download a zipped file of the recording package to your computer. The button indicates the size of the recording package.

Delete button (🗑) — This button appears on the My Recordings page but not on the All Public Recordings page. It allows you to delete the corresponding recording.

Elements of a Recording Entry in a Detail View

Detail view pages are accessible only to the recording owner and to administrators, not to guests or to other viewers. Detail view pages contain all the same elements found in the recordings list views described above, but with the following differences:

- The thumbnail image is larger.
- There is no **Edit** button.
- You can edit the labels for title, owner, location, and date and time (see **Editing Recording Details**).
- You can change streaming and privacy settings.
- You can select and upload a closed caption file (in .json format) for the recording.
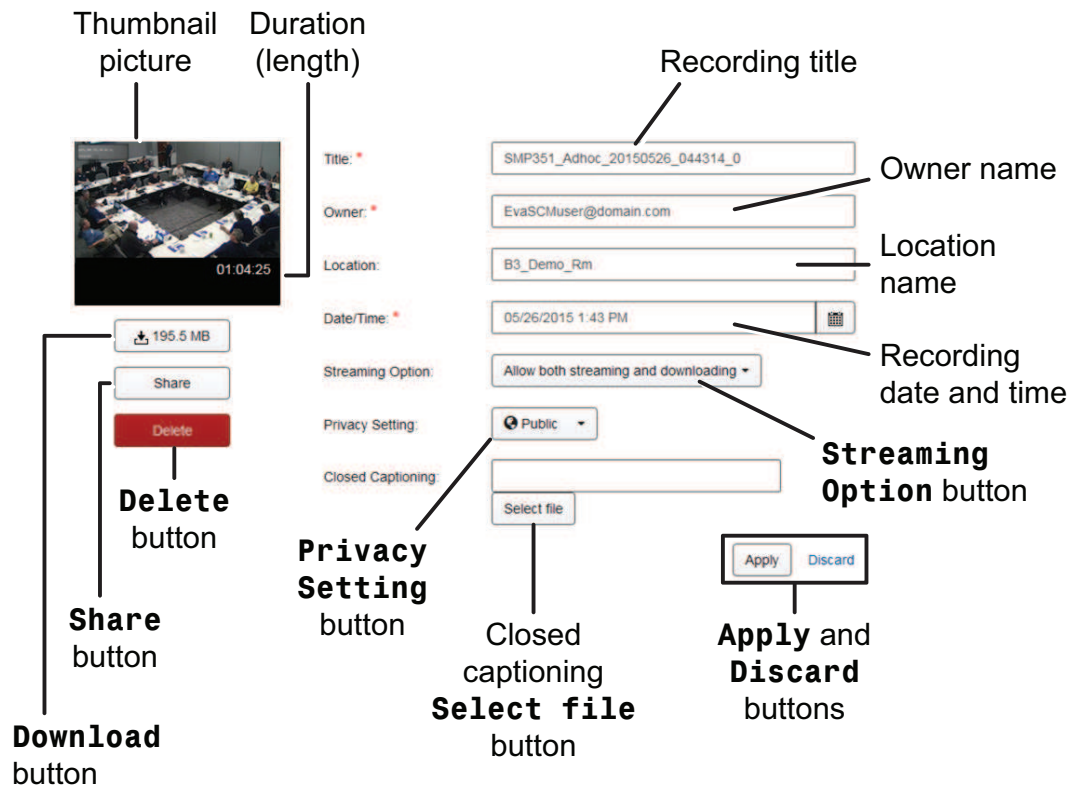
Recording Privacy Settings

Privacy Settings Defined

Each recording in Streaming Content Manager (SCM) can be set to one of three privacy settings:

- **Private** — The owner of the recording, an administrator, or the system administrator can view and edit private recordings. Other non-administrator SCM users and unauthenticated users cannot see recordings that are designated as private.

  - Private recordings do not appear in the All Public Recordings list.

  - Private recordings are indicated on the privacy settings button by the symbol of a stylized eye with a line across it :

- **Unlisted** — The owner of the recording, an administrator, or the system administrator can view and edit unlisted recordings. Other non-administrator SCM users and unauthenticated users (if SCM is configured to allow them access to recordings) can see unlisted recordings. However, because these recordings do not appear in the All Public Recordings list, most users do not know an unlisted recording exists until they are invited to view it. Invitees are sent an e-mail containing a link that opens directly to the unlisted recording.

  - Unlisted recordings do not appear in the All Public Recordings list.

  - Unlisted recordings are indicated by a stylized eye symbol:

- **Public** — All SCM users and administrators can see and download public recordings. If SCM is configured to allow unauthenticated users to access recordings, they may also see and download (if the recording is set to allow downloading) public recordings.

  - Public recordings appear in the All Public Recordings list.

  - Public recordings are indicated by a globe symbol:
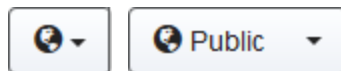
In a detail view page, the Privacy Setting drop-down menu appears as follows:
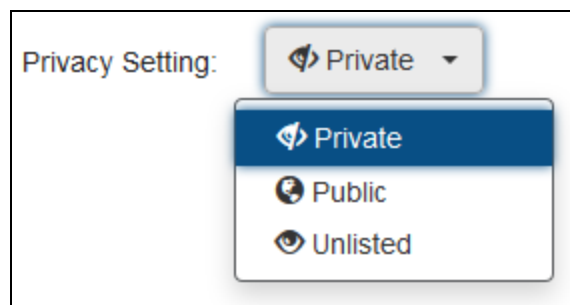
Default Privacy Setting

By default, all recordings are set to `Private` when they are ingested into SCM. Users can change this setting for any of their own recordings, and administrators can change the setting for any recording in the SCM system.

Privacy Settings and Unauthenticated Users

If SCM is set up to allow unauthenticated users to view recordings in SCM, then people who do not have an account in SCM can view any recordings designated as public, and they can view unlisted recordings if they are sent an invitation to do so. The e-mailed invitation contains a link directly to the player view page for that recording.

Downloading a Recording Package

Why Download a Recording?

You may want to download a recording for a variety of reasons, including the following:

- **To watch the recording at a later time or on another device.** — To watch or review a meeting, presentation, or lecture during your commute or at another time when you do not have access to the internet or the SCM system, download the recording package and copy it to your laptop computer.
- **To save an archive copy locally.**
- **To share the recording with someone who does not have an account in SCM** if SCM is not configured to allow unauthenticated users to access recordings.

What Is In The Recording Package?

When you download a recording from SCM, you are downloading the Extron Media Player (EMP) as well as the recording. The EMP package contains more than just an MP4 video file. When you download a recording it includes a folder of compressed (zipped) files that must be "unzipped" before playing the recording.

The package includes:

- An HTML file (`Play_Video.html`) — Open this file to play the recording.
- A `VideoPlayer` folder containing the following files and elements:
  - The `.mp4` file for the video, itself
  - Thumbnail images for the video as captured by the recording device
  - Any chapter markers (images and timing information to sync with the video) created during recording
  - The EMP
  - The themes, graphics, and style sheets used by the EMP
  - Metadata for the recording (including but not limited to the recording title, owner/creator, location, recording date and time)
  - Timing synchronization information for the video, thumbnails, closed captions, and chapter markers
  - A closed caption file, if it was uploaded for use with the recording.

How to Download a Recording

To download a recording package:

1. From any recordings list (such as My Recordings or All Public Recordings) or from a recording detail view page, click on the download button (see the example below) for the desired recording.

   [⬇ 460 kB]

   A dialog box may open in which you can select whether to open the zipped file (and choose a program with which to do that) or save the file.

2. If applicable, choose to save the file to your computer and click **OK**. The zipped file of the recordings package downloads to your computer.

3. Locate the file in the `Downloads` folder of your computer and extract or unzip it to a location of your choice. The recording can be played from that location (by opening the `Play_Video.html` file and using the EMP player controls within the browser window that opens).

Sharing a Recording

If a recording is set as public or as unlisted, a link to its player view page can be copied and shared with others. Sharing can be done from either the recordings lists or from the detail view page for each recording.

The following table details who can share recordings made by whom.

	Role			
Action	**System Administrator**	**Admin-istrator**	**User**	**Unauthenticated User**
May share own public or unlisted recordings	X	X	X	—
May share public recordings made by other users or share unlisted recordings made by other users if those recordings are made accessible to them	X	X	X*	X* **
May share public or unlisted recordings made by any user	X	X	—	—

NOTES:

- *Users and unauthenticated users can view an unlisted recording (other than their own recordings) only if they have received a link to that recording from another user.
- **Unauthenticated users may view public or unlisted recordings only if the SCM system is configured (`System Settings` > `Recording Package Settings`) to allow them to do so.

To share a recording from within a recordings list:

1. Within SCM click the `Recordings` tab. The `My Recordings` page opens.
2. If you want to share a recording made by another user, click the `All Public Recordings` sub-tab. The `All Public Recordings` page opens.
3. Navigate to and locate the desired recording as described in **Locating Recordings in a List**.
4. Click on the `Share` button in the row for that recording. A `Share Link` dialog box pops up, with the hyperlink for the recording selected (highlighted).
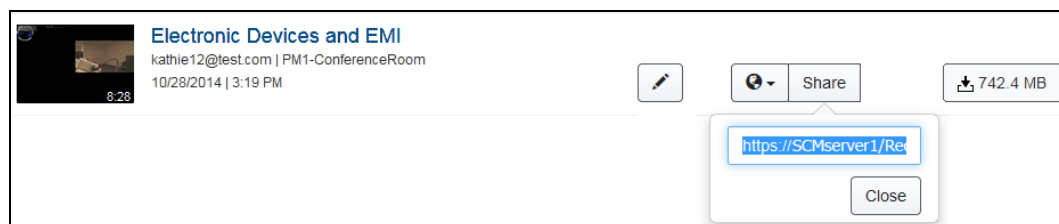
5. Copy the link and paste it into an e-mail or text message.
6. Send the e-mail or text message to the desired recipient.
7. To close the `Share` dialog box, click anywhere outside the box in the SCM web page .

To share a recording from a recording detail view page:

1. Perform steps 1 through 3 in the above instructions for sharing a recording from a list.
2. Click on the `Edit` button for the desired recording. The detail view page for that recording opens.
3. Click on the `Share` button. A `Share` dialog box pops up, with the hyperlink for the recording selected (highlighted).

4. Copy the link and paste it into an e-mail or text message.
5. Send the e-mail or text message to the desired recipient.
6. To close the `Share` dialog box, click anywhere outside the box in the SCM web page .
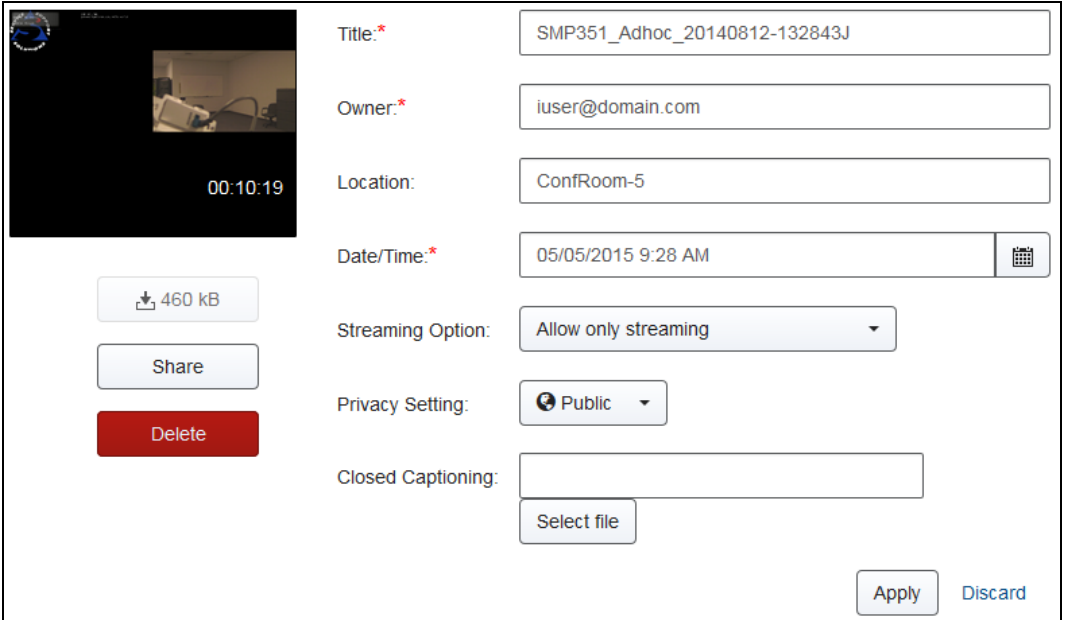
Editing Recording Details

You can edit settings of your own recordings from the detail view page for each recording.

To edit details of a recording:

1. Within SCM click the `Recordings` tab. The `My Recordings` page opens.

2. Navigate to and locate the desired recording as described in **Locating Recordings in a List**.

3. Click on the `Edit` button ( ) for the desired recording. The detail view page for that recording opens (see the example below).

4. Edit labels and settings shown to the right of the thumbnail picture.

- For labels, click in the field (`Title`, `Owner`, `Location`, or `Date/Time`) that you want to edit and use standard keyboard controls to edit or replace text in the field as needed.

> **NOTES:**
> - Required fields (`Title`, `Owner`, and `Date/Time`) are indicated by an asterisk after the name of the field. Those fields cannot be left blank.
> - The owner name must be the name of a user who is part of the SCM system. Names entered here are verified within the SCM accounts list. As you enter characters, the SCM system opens a list of suggested user names below the `Owner` field. Click on a name in that list to select it.
>
> | Owner: * | Eva |
> |---|---|
> | | EvaSCMuser@domain.com |
>
> - When you change the owner name, the ownership of the recording changes once the new owner name is saved. If this is your recording and you change this text to the user name of someone else, the recording will no longer appear in your My Recordings list. You will not be able to edit properties of the recording once it is reassigned to another user, unless you are an administrator. See **Tips on editing specific fields** later in this topic for more details on the `Owner` field.

For the `Date/Time` field you can also click on the calendar icon on the right side of the field to open a date/time tool (shown below) where you can click on a date in the calendar or click the clock icon at the bottom of the tool to shown and use the time selector.

Date/Time:*	05/05/2015 9:28 AM	🗓

	‹		**May 2015**			**›**	
Streaming Option:	Su	Mo	Tu	We	Th	Fr	Sa
Allow both streami	26	27	28	29	30	1	2
Privacy Setting:	3	4	**5**	6	7	8	9
🌐 Public ▾	10	11	12	13	14	15	16
	17	18	19	20	21	22	23
	24	25	26	27	28	29	30
	31	1	2	3	4	5	6
				🕐			

- For settings, click on the button (**Streaming Option** or **Privacy Setting**) for that setting to open a drop-down menu and select an option from the menu.

  Streaming options include:
  - **Allow only downloading** — If only downloading is allowed, no one will be able to view the recording as a streaming video within SCM. In the recording player page, the video streaming area will display a message indicating that streaming is disabled. To view a video, you and all other users or guests must download the recording package and play the video on your local device (computer).
  - **Allow only streaming** — If only streaming is allowed, the only way you and others can view the recording is by streaming it within SCM. Downloads are not allowed, and the download button is disabled for this recording in lists and in detail view pages.
  - **Allow both streaming and downloading** (default) — If this option is selected, the recording can be viewed as streaming video within SCM and it can also be downloaded for offline viewing.

  Privacy settings include: **Private**, **Public** (default), and **Unlisted**. These settings are described in **Recording Privacy Settings**.

5. If closed captioning is available for the recording, select and upload it to the recording package as follows:
   a. Click the **Select file** button. The **File Upload** dialog box opens.
   b. Navigate to and select the desired closed caption file (which must be in .json format).

   > **NOTE:** Information on what is required to create the closed captioning file will be available on the Extron website.

   c. Click **Open**. The dialog box closes, the name of the file appears in the **Closed Captioning** read-only field within SCM, and the **Select file** button is replaced by two buttons: **Change** and **Remove**. The selected closed captioning file is now applied to the recording.
   d. If the correct .json file is listed in the **Closed Captioning** field and if you made changes to other fields and settings in the page, proceed to step 6. If the correct .json file is not shown in the field, click the **Remove** to remove it from the recording or click **Change** to reopen the **File Upload** dialog box to select a different file (see steps 5b and 5c).

   Once uploaded, the closed caption file becomes part of the recording package. The captioning can then be displayed in the streamed or downloaded video if the CC feature is turned on within the recording player.

6. Click the **Apply** button to confirm and save the changes, or click the **Discard** button to discard the changes and cancel editing.

   > **NOTE:** Closed captioning file selection or removal is applied immediately when the file is opened or removed. Those changes are unaffected by the **Apply** and **Discard** buttons.

Tips on editing specific fields

See **Elements of Recording Entries** for an explanation of what each field is and from what or where the information in each field is derived.

Title — The recording title can be edited or changed to a text string containing any ASCII characters.

Owner — You can change the owner in order to reassign a recording to someone else.

- Once the owner of a recording is changed, that recording appears in the My Recordings list for that user and is removed from the My Recordings list of the previous owner.

- As you enter a new e-mail address or username, a pop-up list opens below the field displaying any matching or partially matching e-mail address or username that already exists within the SCM accounts list. Click on the desired entry to select it.

NOTES:

- The owner name must be the name of a user who is part of the SCM system. Names entered here are verified within the SCM accounts list.

- When you change the owner name, the ownership of the recording changes once the new owner name is saved. If this is your recording and you change this text to the user name of someone else, the recording will no longer appear in your My Recordings list. You will not be able to edit properties of the recording once it is reassigned to another user, unless you are an administrator.

Location — The location name is set in the recording device, itself, as the default location name. This can be changed to correct the name or to provide a more descriptive location name.

Date/Time — If the time or date of recording were set incorrectly in the recording device, the resulting recording files list the incorrect date or time.

- You can correct the date, the time, or both.
- You can enter a value into the field (in the form of MM/DD YYYY HH:MM AM or PM) or you can click on the calendar icon and select date and time values from the pop-up tool.

> **NOTE:** The pop-up date and time selector tool is not accessible using keyboard controls. The date and time can be entered or edited by typing directly in the `Date/Time` field.

Within the pop-up tool:

- In calendar mode, click on the **<** and **>** arrows adjacent to the month and year to scroll backward or forward through months, if needed. Click on the desired date in the calendar to select it. Click on the small clock icon at the bottom to change from the calendar to the time selector.
- In clock mode, click on the **up** and **down** arrows to adjust the time settings and click on the **AM** or **PM** button to toggle between those options. If you click on the hour or minutes, the tool changes to a grid of selectable options (seconds incremented by 5-second intervals, for example). Clicking an option returns the pop-up tool to the regular clock view. To return from the clock to the calendar, click the small calendar icon at the top of the tool.
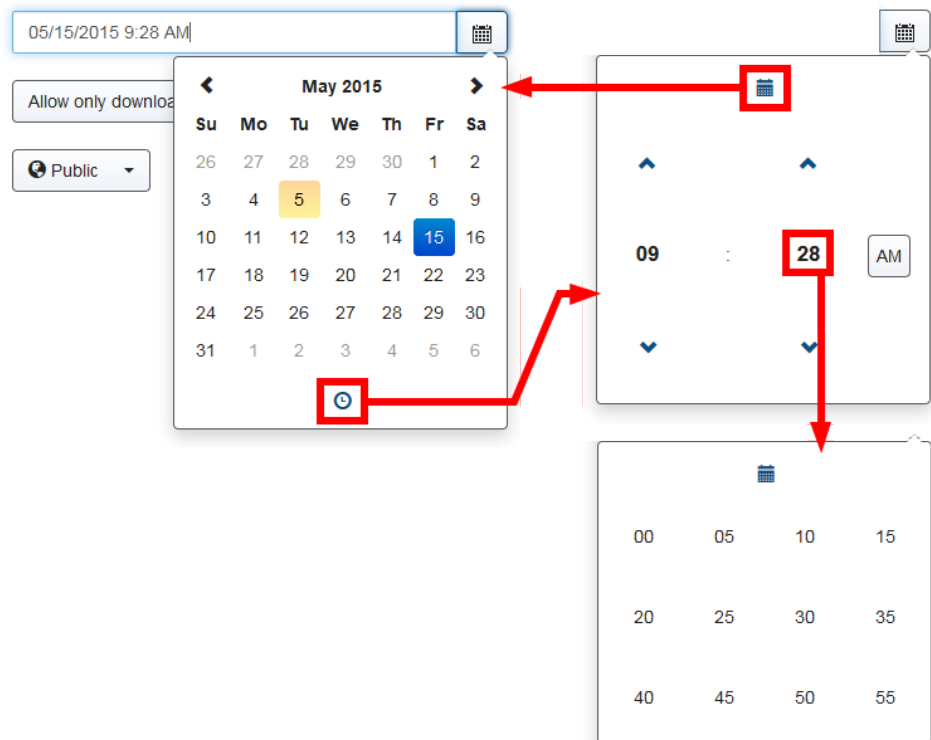
- Click anywhere outside the pop-up tool to exit date and time selection.

Playing a Recording

You can play streaming video of any recording within SCM that you have access to view that is also set to allow streaming or streaming and downloading. For information on streaming and downloading options, see **Editing Recording Details**).

To play a recording in SCM:

1. Locate the desired recording in a recordings list (see **Locating Recordings in a List**). The recording must be set to allow streaming.
2. Open the player page for the desired recording (see **Accessing a Player Page**).
3. Use the player controls at the bottom of the page (see **Playing a Recording**) to change playback settings as desired and click the `Play/Pause` button to start and stop playing the video stream. Alternatively, you can use keyboard controls to control video playback and audio volume (see **Using Keyboard Controls**).

To download a recording from SCM and play it offline using EMP:

1. Locate the desired recording in a recording list (see **Locating Recordings in a List**).
2. If the recording is set to allow downloading, click the `Download` button (⬇) for that recording.
3. If offered the choice between opening the package or saving it, select `Save`. The recording package downloads to your computer or other device in the form of a .zip file.
4. Locate the downloaded file and extract (unzip) the package to a folder of your choice.

   > **NOTE:** This step is important because you cannot play the recording without unzipping the files first. The player cannot read a zipped video file.

5. Open the folder for that recording and open the `Play_Video.html` file. The Extron Media Player (EMP) opens within a browser and loads the recording. The page looks very similar to the `Player` page within SCM (see **Player Page Features and How to Use Them**, below), with a few exceptions. It does not have any SCM tab controls at the top of the page, just a header displaying the logo (either the default Extron logo or the logo of your organization) on the left, the recording title, and an `Information` button. There are no `Edit` or `Download` buttons within the stand-alone EMP player window.
6. Use the player controls at the bottom of the window (see **Playing a Recording**) to change playback settings as desired and click the `Play/Pause` button to start and stop playing the video stream. Alternatively, you can use keyboard controls to control video playback and audio volume (see **Using Keyboard Controls**).

Accessing a Player Page

To open a player page:

- From within any list view page (such as the My Recordings list or All Public Recordings list), click on the thumbnail image of a recording or click on its title to open the player page for that particular recording.
- From a detail view page, click on the recording thumbnail image to open the player page.

Player Page Features and How to Use Them

How the SCM `Player` page is organized

The `Player` page is organized into three main zones:

1. The **header** at the top of the window
2. The **recording playback area** in the center of the window
3. The **playback controls and indicators region** along the bottom of the window
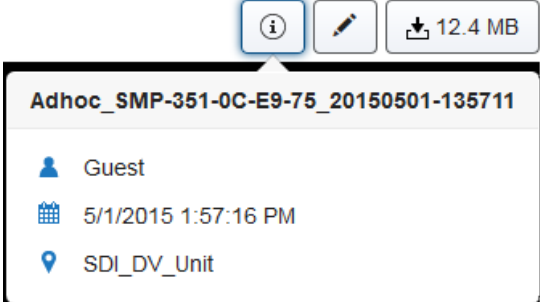
The following image shows an example of a recording player page, showing the regions of the page and the main elements within the header.
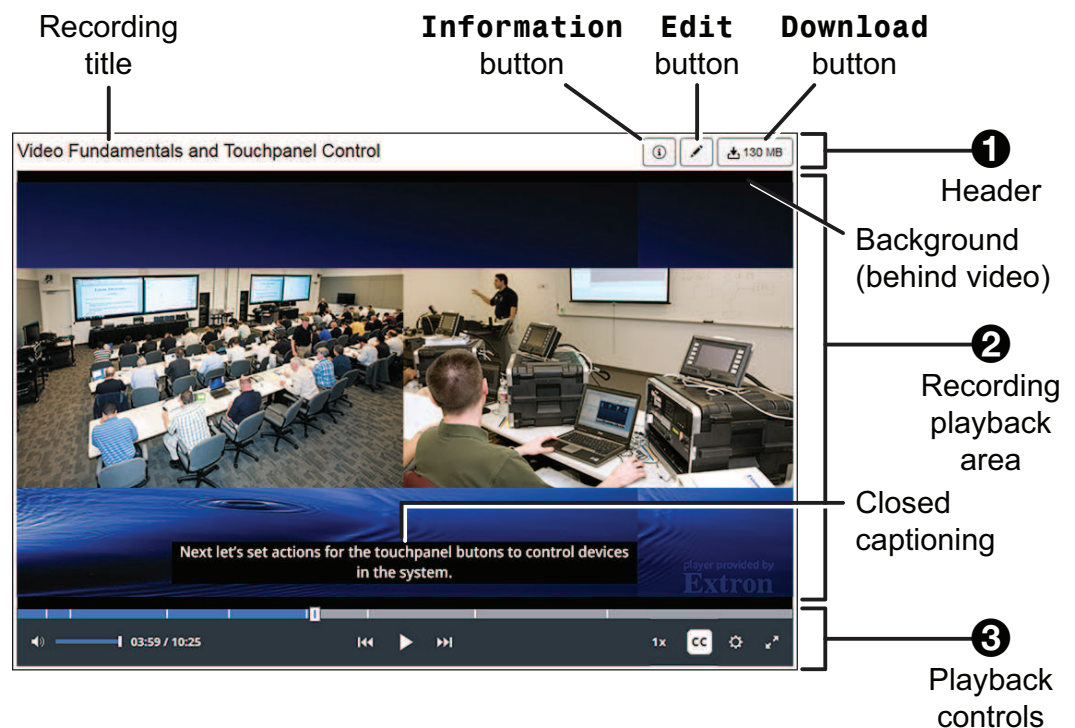
Header features

The header region at the top of the page includes the following features:

- The recording title
- An **Information** button

Button Name	Button Icon	Description
Information	ⓘ within SCM	Click this button to display recording information in a pop-up window. The Information pop-up window overlays the video area and displays the following information: • The title of the recording • The name of the recording owner (or "Guest" if no owner is specified) • The date and time of the recording • The name of the recording location (recording device location name as specified in settings in the recording device, such as an Extron SMP 351) ⓘ ✎ ⬇ 12.4 MB Adhoc_SMP-351-0C-E9-75_20150501-135711 👤 Guest 📅 5/1/2015 1:57:16 PM 📍 SDI_DV_Unit

> **NOTES:**
> - Once it is opened, the Information window remains open until you click the **Information** button again, or until you press the keyboard <Esc> key, or until you click outside the Information window.
> - In SCM, the Information window includes only the recording title, owner name, recording date and time, and location.

- An **Edit** button (if you are the recording owner or an administrator)

Button Name	Button Icon	Description
Edit	✎	This button provides a link to the SCM detail view page for the recording owner or an administrator.

- A **Download** button (⬇) (if downloading is enabled for the recording).

Recording playback area features

The recording playback area (center pane) displays the following:

- The recorded video
- A plain background, if the video does not completely fill the area
- Closed captions, if they have been uploaded in the form of a .json file with the recording. If closed captioning is turned on, captions are displayed in the bottom center of the video viewing area, overlaid over the video.
- An "Extron" watermark in the lower right corner.
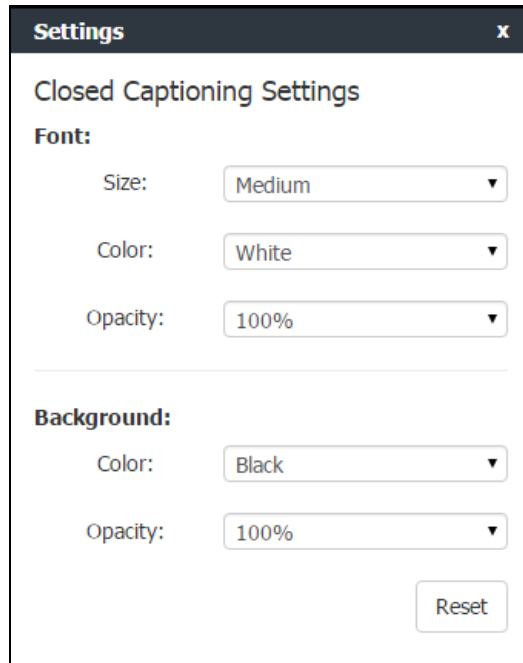
Playback controls region features

The playback control and settings region at the bottom of the page includes:

- A progress indicator bar with thumbnail images, chapter marker indicators, and a selectable slider that allows you to navigate backwards or forwards to any point in the recording
    - The standard **thumbnail images** are miniature images of the picture at a given point in the video. They appear when you hover your mouse or other pointing device over the progress bar. Thumbnails are automatically generated and saved by the recording device.
    - **Chapter markers**, indicated by narrow, vertical white lines within the progress bar, are manually entered by the presenter of the recording when they push a button on the recording device (the `Mark` button on an SMP 351). They are often used to indicate a change of topic. Chapter markers also include a small thumbnail image which appears if you hover a mouse or other pointing device over the marker or progress bar.
    - When you click and drag the **slider**, playback resumes from the newly-selected point in the recording, and the number for the time played changes to match where the new playback point.
- Time played and total duration for the recording
- Player controls

Button or Control Name	Button Icon or Control	Description
Mute button		Click this button to toggle the audio off (mute the audio) or on. When audio is muted, the button shows an "x" next to the speaker icon:
Volume adjustment slider		Click on and drag the volume adjustment slider right or left to raise or lower the audio volume or use the keyboard <Up arrow> and <Down arrow> keys to adjust the volume.
Previous Chapter button		Click **Previous Chapter** to move video playback to the previous chapter marker or to move to the beginning of the recording (if no chapter markers exist in the whole recording or if there are no chapter markers earlier than the current part of the recording).
Play or **Pause** button		Click **Play** to play or resume playback of the recording. While the recording is playing, the button becomes a **Pause** button. Click **Pause** to pause playback. While recording is paused, the button becomes a **Play** button.
Next Chapter button		Click **Next Chapter** to advance the recording to the location of the next chapter marker. If the recording has no chapter markers or there are no chapter markers after the currently selected part of the recording, then clicking the **Forward** button moves the video playback to the end of the recording.
Playback speed button		Selecting this button opens a pop-up menu from which you can select playback speeds from 0.5x to 2x the normal speed.
CC (Closed captioning) button		This button appears only if a closed caption file has been uploaded for the recording. Click the **CC** button to toggle display of closed captioning text on or off.

Button or Control Name	Button Icon or Control	Description
Settings button	⚙	This button appears only if a closed caption file has been uploaded for the recording. Selecting this button opens a panel (shown below) along the right side of the recording area where you can change the appearance of the text and background for closed captioning (CC). If a closed caption file has been uploaded for the recording (via the SCM recording detail page), these settings control how the caption text looks when displayed over the video. **Settings** _____ **x** Closed Captioning Settings Font: Size: Medium ▾ Color: White ▾ Opacity: 100% ▾ Background: Color: Black ▾ Opacity: 100% ▾ Reset Click a drop-down menu to select the following: • Relative font size (small, medium, or large) • Font color or background color (Select one of eight options.) • Opacity percentage (0, 25, 50, 75, or 100%) for the font or for the closed captioning background The default appearance is a combination of medium size white font on a black background, all at 100 percent opacity. You can reset the closed captioning settings to those default values by clicking the **Reset** button within the **Settings** panel.
NOTE: These settings are saved in browser-specific cookies. You must enable cookies in your browser for the streaming player pages within SMP and for the EMP `Play_Video.html` pages, if you download and play the recordings offline. Also, note that Google Chrome does not support cookies for offline applications.		
Full-screen button	⤢	Select this button to expand the player window to fill the screen. Once the screen is expanded, press the keyboard <Esc> key or click this button ⤡ again to restore the screen to the original, smaller size.

Using Keyboard Controls

The Player page supports basic keyboard controls (such as using the <Tab> key to move from one element to another or pressing <Esc> to exit a menu or pop-up window) that are supported by most programs and platforms. In addition, you can control media playback through EMP- and SCM-specific combinations of keyboard keystrokes (keyboard shortcuts, available at all times within the SCM Player page or when playing downloaded recordings using Extron Media Player), detailed in the following table.

> **NOTE:** You may need to press the <F6> key to refresh the page and be able to access the URL field of the browser.

Control Category	Keyboard Shortcut	Command or Control
Recording playback and display	<Space bar>	Play or pause the presentation.
	<Shift+N>	Skip to the next chapter marker.
	<Shift+P>	Skip to the previous chapter marker.
	<Shift+C>	Toggle the closed caption overlay on or off.
	<Shift+left arrow>	Decrease playback speed.
	<Shift+right arrow>	Increase playback speed.
Audio adjustment	<Up arrow>	Increase program audio volume.
	<Down arrow>	Decrease program audio volume.
	<Shift+M>	Mute or unmute program audio.

> **NOTE:** The <Up arrow> and <Down arrow> keys adjust the audio volume from anywhere in the playback window *except* when the control focus is within the Help drop-down menu or in either of the following two pop-up elements.
>
> - Within the Playback speed pop-up control, use the <Up arrow> and <Down arrow> keys to select the playback speed.
> - Within the Settings pop-up window, use the <Up arrow> and <Down arrow> keys to increase and decrease font and background opacity.

Deleting a Recording

A recording can be deleted from within the My Recordings list or from the detail view page for that recording. You must be either the owner of the recording or an administrator to delete a recording.

How to Delete a Recording

To delete a recording from within a recordings list:

1. Within Streaming Content Manager (SCM) click the `Recordings` tab. The `My Recordings` page opens.

2. Navigate to and locate the desired recording as described in **Locating Recordings in a List**.

3. Click on the `Delete` button (🗑) in the row for that recording. A `Confirm?` dialog box pops up to allow you to confirm or cancel the deletion.
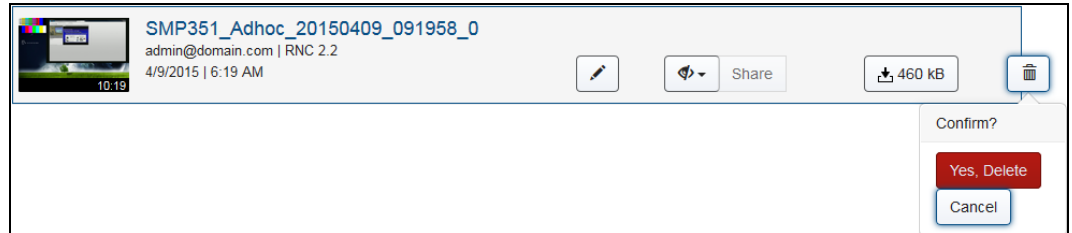
4. Click **Yes, Delete**. The recording package is deleted from the SCM system.

To delete a recording from a recording detail view page:

1. Perform steps 1 through 2 in the above instructions for deleting a recording from a list.

2. Click on the `Edit` button (✏) for the desired recording. The detail view page for that recording opens.

3. Click on the `Delete` button. A dialog box pops up to allow you to confirm or cancel the deletion.

4. Click `Yes, Delete`. The recording package is deleted from the SCM system.

How to Recover an Accidentally Deleted Recording

When a recording is deleted within the SCM web interface, the recording package is deleted from the SCM recording storage server, as well. If a recording is deleted accidentally, you have the following options for file recovery:

- Contact the IT system administrator to see if a copy of the file package is available from a backup archive. How long or whether a backup file exists depends on the storage policy and backup period of your organization.
- If the recording was made recently, check the internal file storage of the recording device, such as an Extron SMP 351. If the original file has not been deleted to make room for new recordings, you may be able to re-upload the recording to the ingest server by using controls in the embedded web pages of the SMP. See the help file for the SMP 351 embedded web pages for instructions.

Working With the Extron Media Player

About the Extron Media Player (EMP)

The EMP is a browser-based media player for recordings that are produced by the Extron Streaming Media Processor (SMP) (for information on the SMP, visit **www.extron.com**). EMP provides an enhanced playback experience, incorporating metadata, time-synchronized thumbnail images, and advanced playback controls into the user interface. The data and controls provide the user with greater ability to efficiently navigate and play back the recorded material. EMP requires no software installation and can be operated from virtually any PC using a variety of browser applications.

How Streaming Content Manager Uses the EMP

- Some elements of EMP, such as logo graphics files, are selected within the Streaming Content Manager system before EMP is packaged with recordings.
- During file ingestion (when files are imported into the SCM system and database) and processing, Streaming Content Manager packages the recording and its thumbnails, chapter markers, logo file, and metadata with EMP. If a closed captioning .json file is available, it can be uploaded from within SCM and packaged with the recording.
- When a user downloads a recording to play using the stand-alone EMP player, everything needed to play and navigate through the recording is in the package.
- When someone plays a recording from within an SCM recording player page, EMP streams the recording from the SCM server. During online playback, the viewer has access to many of the controls available in the stand-alone EMP program.

Which EMP Features Can Be Customized

Features that can be customized within SCM

For recordings that are packaged by SCM, SCM administrators can customize the logo that appears in EMP. Also, closed captioning files in .json format can be uploaded in SCM and packaged with the recording.

> **NOTE:** Information on what is required to create a closed captioning file will be available on the Extron website.

Features that can be customized within the EMP player

Closed captioning font color, size, and opacity and background color and opacity can be selected using controls within the EMP player.

Troubleshooting

This section details various situations you may encounter when working with Streaming Content Manager and suggests possible causes and solutions. Issues are grouped by subject as follows:

- **SCM system access** issues
- **SCM user interface** issues
- **Recordings** issues

SCM System Access

Problem	Cause	Solution
I cannot log in.	I forgot my password.	• If you have a local SCM account, reset your password (see **Resetting or Changing Your Password**). • If you have an account with access managed by an Active Directory (AD) system, contact your IT system administrator for assistance with your password. For a comparison of local and AD accounts, see **Comparing User Types Based on Origin (Local or AD Accounts)**.
	The system fails to authenticate your credentials.	• If you have a local SCM account, ask an SCM administrator to create a link for you to reset your password. • If you have an account with access managed by an Active Directory (AD) system, AD connection may be temporarily disabled. An SCM administrator can enable the AD Connection.

SCM User Interface

Problem	Cause	Solution
Button images (such as the Delete, Edit, and Privacy icons) are not displayed within the SCM site. See the image below.	The current URL is not set as a trusted site.	Add the current (SCM system) URL to the list of trusted sites. In Internet Explorer: 1. Select **Tools** > **Internet options**. The **Internet Options** dialog box opens. 2. Click the **Security** tab. 3. In the security page, click the **Trusted sites** icon. 4. Click the **Sites** button. The **Trusted sites** dialog box opens. The URL is listed in the **Add this website to the zone** field. 5. Click **Add** to add the URL to the trusted sites list. 6. Click **Close**. The **Trusted sites** dialog box closes. 7. In the **Internet Options** dialog box, click **OK**.

Recordings

Problem	Cause	Solution
No audio can be heard when playing a recording using Internet Explorer. However, the audio can be heard if it is played using Chrome or Firefox.	Internet Explorer does not have audio playback enabled.	Enable audio playback as follows: 1. In Internet Explorer, click on the **Tools** menu and select **Internet Options**. The Internet Options window opens. 2. Click the **Advanced** tab. 3. In the Settings panel, scroll down to the Multimedia section and check (select, enable) **Play sounds in webpages**. 4. Click **OK**. 5. Restart Internet Explorer.
I cannot access my recording. (A user cannot access their own recording but the administrator sees that it has been assigned to the SCM guest account.)	Metadata about the owner of the recording may have been lost or damaged during file ingest.	An administrator can edit the recording to change the owner from the guest account to the account of the appropriate user.
A recording is listed for a long time as being "in process" (indicated by a "Processing" thumbnail image). Processing	An error may have occurred while the recording was being ingested to SCM. **NOTE:** Before checking for a solution, reload the web page and recheck the status of the recording to refresh and obtain the current status of the recording. Some recordings may take a long time to ingest depending on server speed and network traffic.	Contact an SCM administrator to determine if the recording ingest process should be restarted.

Problem	Cause	Solution
My recording is shown as "failed" (indicated by a "Failed" thumbnail image). **Failed**	The recording could not be loaded into SCM.	• Contact an SCM administrator to see if they can locate the recording on the ingest server. Or... • Re-upload the recording from the recorder to the ingest server and let SCM attempt to ingest the newly reloaded files.
Recording download fails, yielding a security alert error message stating "Your current security settings do not allow this file to be downloaded."	The current URL is not set as a trusted site.	Add the current URL (of the SCM system) to the list of trusted sites. In Internet Explorer: 1. Select `Tools` > `Internet options`. The `Internet Options` dialog box opens. 2. Click the `Security` tab. The view changes to the security page. 3. Click the `Trusted sites` icon. 4. Click the `Sites` button. The `Trusted sites` dialog box opens. The URL should be listed in the `Add this website to the zone` field. 5. Click **Add** to add the URL to the trusted sites list. 6. Click **Close**. The `Trusted sites` dialog box closes. 7. In the `Internet Options` dialog box, click **OK**.

Problem	Cause	Solution
Playback of an ingested recording fails in Mozilla® Firefox® on a PC with a Windows® operating system if Apple® QuickTime® has been installed.	When Firefox is initially installed, it is configured to be able to play the media files that Extron produces. However, when other programs are installed after Firefox (such as Apple QuickTime or VideoLan™ VLC™ programs), they change the settings for Firefox. The QuickTime installation has changed the settings for MIME (media) types. Firefox no longer recognizes the .m4v files in the recording package as files that can be played by the EMP player.	To fix the settings on the PC to return them to their original state, change a MIME type setting in the Windows registry. See the instructions below.

To change the MIME type setting:

1. Open Notepad or a similar simple text editor. Do not use Microsoft Word or another editor that adds hidden formatting.

2. Enter the following text, exactly as it appears here:

```
Windows Registry Editor Version 5.00
[HKEY_CLASSES_ROOT\.m4v]
"Content Type"="video/mp4"
```

   This is the lowest impact fix that can be made, and it is not changing any program settings. It simply tells the computer to treat all files with an .m4v file extension as though they are an .mp4 file. Programs like QuickTime and VLC have their own settings that override this and provide their own special instructions.

3. Save the file as `moz-m4v-fix.reg`.

   > **NOTE:** Be certain that your text editor is not automatically adding ".txt" for you, causing the file to be called `moz-m4v-fix.reg.txt`.

4. Find the recording file you just created and double-click on it to run the fix. The Registry Editor opens a notification that asks you to confirm the change.

5. Click **Yes** to continue.

6. If needed, restart Firefox to make the changes take effect.

If you have problems with this process, contact your support team to resolve the issue.

General Reference Information

Supported Browsers and File Types

Browsers

See **Web Browser Requirements** in the Prerequisites help topic for supported browsers. See **Turning Off Internet Explorer Compatibility Mode** in the Prerequisites section before using Internet Explorer.

> **NOTE:** SCM is accessible to users with screen readers and those who use keyboard controls for navigation. The interface is accessible, and supports commonly available screen readers.

File Types

- Recordings are .mp4 (.m4v) files.
- Thumbnails are stored as .jpg files.
- Graphics for the EMP player logo are .png files.
- Closed captioning files must be .json files.
- Metadata manifest files for recordings are .json files.

Resources For Accessibility

Many people use screen reader programs to describe the elements and text on a screen. Even more people use keyboard controls (instead of a mouse or other pointing device) to navigate through, select, and interact with elements within software and on Web pages. The choice of a Web browser and adjustments to settings within browsers can make using screen readers and keyboard controls much easier. This section provides some recommendations that can help make SCM more accessible.

Choosing a Browser

- Chrome is the preferred browser for sighted users.
- Firefox is the preferred browser for screen reader users. SCM has been tested to work with Firefox and the NVDA (NonVisual Desktop Access) screen reader, which is available for free at **http://www.nvaccess.org/**.

For a list of browsers and file types supported by SCM, see **General Reference Information**.

Tips for Browser Configuration and Use

Mozilla Firefox

Some settings can be applied globally to facilitate keyboard use and prevent page redirection and reloading.

1. Open Firefox.
2. Click the `Menu` button (in the upper right corner of the currently open tab).
3. Click the `Options` button. The preferences window opens showing the `General` tab or button and `General` settings page.
4. Click the `Advanced` tab or button. The `Advanced` settings page opens.
5. If it is not already selected, click the `General` tab within the `Advanced` settings page.
6. Check (enable) or uncheck (disable) any of the following accessibility options as desired:
   - `Always use the cursor keys to navigate within pages` — When this option is enabled, Firefox displays a movable cursor in web pages, allowing you to select text with the keyboard. This mode is known as "caret browsing." You can toggle this mode by pressing <F7>.
   - `Search for text when I start typing` — When this option is enabled, Firefox finds within the current Web page what you type as you type it. While you are finding typed text in the page, the Find Toolbar automatically displays at the bottom of the window to show information about what you found.
   - `Warn me when websites try to redirect or reload the page` — When this option is enabled, Firefox prevents websites from redirecting you to another page or automatically reloading.

Additional tips for using Firefox (such as how to use page zoom controls, change font settings, browse with caret browsing, and more) are available at **http://www.accessfirefox.org/Firefox_Accessibility_Features.php** and at **https://support.mozilla.org/en-US/kb/accessibility-features-firefox-make-firefox-and-we**.

Google Chrome

Google provides information and instructions on how to change settings within Chrome and on how to use the accessibility features of Chrome. A few websites that may be helpful include the following:

- The low-vision accessibility support page at **https://sites.google.com/a/chromium.org/dev/user-experience/low-vision-support**.

- The keyboard access accessibility support page at **https://sites.google.com/a/chromium.org/dev/user-experience/keyboard-access**, which details several keyboard shortcuts and how to use them.
- The assistive technology accessibility support page at **https://sites.google.com/a/chromium.org/dev/user-experience/assistive-technology-support**. This page includes links to websites for five popular assistive technology or screen reader programs that have been tested to work with Chrome and two that do not work with Chrome.

Microsoft Internet Explorer

According to Microsoft, some Internet Explorer features can cause screen readers to give confusing or incorrect information. The Microsoft website (**http://windows.microsoft.com/en-US/internet-explorer/ie-accessibilty-options?ocid=IE10_ignore_fonts#ie=ie-10-win-7**) provides the following instructions on how to make Internet Explorer work better with screen readers.

To configure Internet Explorer version 10 to work with a screen reader or voice recognition software:

1. Open Internet Explorer.
2. Click the `Tools` button, and then tap or click `Internet options`.
3. Click the **Advanced** tab.
4. Make one or more of the following changes:
   - Set the cursor to determine where to read or magnify. Under Accessibility, select the `Move system caret with focus/selection changes` check box.
   - Display text in place of pictures. Under Accessibility, select the `Always expand Alt text for images` check box. Under Multimedia, clear the `Show pictures` check box.
   - Stop page transitions from causing problems with your screen reader or voice recognition software. Under Browsing, clear the `Use smooth scrolling` check box. Under Multimedia, clear the `Show pictures and Play animations in webpages` check boxes.
   - Help prevent webpage sounds from interfering with your screen reader. Under Multimedia, clear the `Play sounds in webpages` check box.
5. Click **OK**.

Licensed Software

The following software is licensed for use within Extron Streaming Content Manager.

Name	Version	License URL
Antlr	3.5.0	http://www.antlr3.org/license.html
Autofac	3.3.0	http://www.opensource.org/licenses/mit-license.php
Autofac.Mvc5	3.1.0	http://www.opensource.org/licenses/mit-license.php
AutoMapper	3.2.1	https://github.com/AutoMapper/AutoMapper/blob/master/LICENSE.txt
bootstrap	3.1.1	https://github.com/twbs/bootstrap/blob/master/LICENSE
bootstrap-accessibility	3.1.1	https://github.com/paypal/bootstrap-accessibility-plugin/blob/master/LICENSE.md
bootstrap-datetimepicker	4.0.0	https://github.com/Eonasdan/bootstrap-datetimepicker/blob/master/LICENSE
bootstrap-fileupload	N/A	http://www.apache.org/licenses/LICENSE-2.0.txt
bootstrap-table	1.3.0	https://github.com/Eonasdan/bootstrap-datetimepicker/blob/master/LICENSE
DotNetOpenAuth.AspNet	4.3.4	http://www.opensource.org/licenses/ms-pl.html
DotNetOpenAuth.Core	4.3.4	http://www.opensource.org/licenses/ms-pl.html
DotNetOpenAuth.OAuth.Consumer	4.3.4	http://www.opensource.org/licenses/ms-pl.html
DotNetOpenAuth.OAuth.Core	4.3.4	http://www.opensource.org/licenses/ms-pl.html
DotNetOpenAuth.OpenId.Core	4.3.4	http://www.opensource.org/licenses/ms-pl.html
DotNetOpenAuth.OpenId.Relying Party	4.3.4	http://www.opensource.org/licenses/ms-pl.html
EntityFramework	6.1.0	http://go.microsoft.com/fwlink/?LinkID=320539
Erlang	R16B01	http://www.erlang.org/EPLICENSE
EWS-Api-2.1	1.0.0	http://www.microsoft.com/en-us/download/details.aspx?id=42022
FakeItEasy	1.17.0	https://github.com/FakeItEasy/FakeItEasy/blob/master/License.txt

Name	Version	License URL
FluentValidation	5.4.0	http://fluentvalidation.codeplex.com/license
Glimpse	1.8.5	http://www.opensource.org/licenses/apache2.0
Glimpse.Ado	1.7.1	http://www.opensource.org/licenses/apache2.0
Glimpse.AspNet	1.9.0	http://www.opensource.org/licenses/apache2.0
Glimpse.EF6	1.6.2	http://www.opensource.org/licenses/apache2.0
Glimpse.Mvc5	1.5.3	http://www.opensource.org/licenses/apache2.0
HtmlAgilityPack	1.4.6	http://htmlagilitypack.codeplex.com/license
jQuery	2.1.0	http://jquery.org/license
jQuery-cookie	1.4.1	https://github.com/carhartl/jquery-cookie
jQuery-form	1.4.1	https://github.com/carhartl/jquery-cookie
jQuery.UI.Combined	1.10.4	http://jquery.org/license
jQuery-validate	1.10.0	https://github.com/jzaefferer/jquery-validation
jQuery-zclip	1.1.1	http://www.opensource.org/licenses/mit-license.php
knockoutjs	3.0.0	http://www.opensource.org/licenses/mit-license.php
log4net	2.0.3	http://logging.apache.org/log4net/license.html
Magnum	2.1.2	https://github.com/phatboyg/Magnum/blob/master/LICENSE
MassTransit	2.9.5	http://www.apache.org/licenses/LICENSE-2.0
MassTransit.Autofac	2.9.5	http://www.apache.org/licenses/LICENSE-2.0
MassTransit.RabbitMQ	2.9.5	http://www.apache.org/licenses/LICENSE-2.0
Microsoft.AspNet.Identity.Core	2.0.1	http://www.microsoft.com/web/webpi/eula/aspnetcomponent_rtw_enu.htm
Microsoft.AspNet.Identity.EntityFramework	2.0.1	http://www.microsoft.com/web/webpi/eula/aspnetcomponent_rtw_enu.htm
Microsoft.AspNet.Identity.Owin	2.0.1	http://www.microsoft.com/web/webpi/eula/aspnetcomponent_rtw_enu.htm

Name	Version	License URL
Microsoft.AspNet.Mvc	5.1.0	http://aspnetwebstack.codeplex.com/license
Microsoft.AspNet.Mvc.FixedDisplayModes	5.0.0	http://www.microsoft.com/web/webpi/eula/aspnetcomponent_rtw_enu.htm
Microsoft.AspNet.Razor	3.1.0	http://aspnetwebstack.codeplex.com/license
Microsoft.AspNet.Razor	3.1.1	http://www.microsoft.com/web/webpi/eula/aspnetcomponent_rtw_enu.htm
Microsoft.AspNet.SignalIR	2.0.2	http://www.microsoft.com/web/webpi/eula/aspnetcomponent_rtw_enu.htm
Microsoft.AspNet.SignalIR.Core	2.0.2	http://www.microsoft.com/web/webpi/eula/aspnetcomponent_rtw_enu.htm
Microsoft.AspNet.SignalIR.JS	2.0.2	http://www.microsoft.com/web/webpi/eula/signalr_client_ENU.htm
Microsoft.AspNet.SignalIR.SystemWeb	2.0.2	http://www.microsoft.com/web/webpi/eula/aspnetcomponent_rtw_enu.htm
Microsoft.AspNet.Web.Optimization	1.1.2	http://www.microsoft.com/web/webpi/eula/aspnetcomponent_rtw_enu.htm
Microsoft.AspNet.WebApi	5.1.0	http://aspnetwebstack.codeplex.com/license
Microsoft.AspNet.WebApi.Client	5.1.0	http://aspnetwebstack.codeplex.com/license
Microsoft.AspNet.WebApi.Core	5.1.0	http://aspnetwebstack.codeplex.com/license
Microsoft.AspNet.WebApi.OData	5.1.0	http://aspnetwebstack.codeplex.com/license
Microsoft.AspNet.WebApi.WebHost	5.1.0	http://aspnetwebstack.codeplex.com/license
Microsoft.AspNet.WebApi.WebPages	3.1.0	http://aspnetwebstack.codeplex.com/license
Microsoft.AspNet.WebApi.WebPages	3.1.1	http://www.microsoft.com/web/webpi/eula/aspnetcomponent_rtw_ENU.htm
Microsoft.AspNet.WebApi.WebPages.Data	3.1.0	http://aspnetwebstack.codeplex.com/license
Microsoft.AspNet.WebApi.WebPages.OAuth	3.1.0	http://aspnetwebstack.codeplex.com/license
Microsoft.AspNet.WebApi.WebPages.WebData	3.1.0	http://aspnetwebstack.codeplex.com/license

Name	Version	License URL
Microsoft.Bcl	1.1.6	http://go.microsoft.com/fwlink/ ?LinkId=329770
Microsoft.Bcl.Build	1.0.13	http://go.microsoft.com/fwlink/ ?LinkId=329770
Microsoft.Data.Edm	5.6.0	http://go.microsoft.com/?linkid= 9809688
Microsoft.Data.OData	5.6.0	http://go.microsoft.com/?linkid= 9809688
Microsoft.jQuery.Unobtrusive.Ajax	3.1.0	http://aspnetwebstack.codeplex. com/license
Microsoft.jQuery.Unobtrusive. Validation	3.1.0	http://aspnetwebstack.codeplex. com/license
Microsoft.Net.Http	2.2.18	http://go.microsoft.com/fwlink/ ?LinkId=329770
Microsoft.Owin	2.0.2	http://www.microsoft.com/web/ webpi/eula/ aspnetcomponent_rtw_ENU.htm
Microsoft.Owin	2.1.0	http://www.microsoft.com/web/ webpi/eula/ aspnetcomponent_rtw_ENU.htm
Microsoft.Owin.Host.SystemWeb	2.0.2	http://www.microsoft.com/web/ webpi/eula/ aspnetcomponent_rtw_ENU.htm
Microsoft.Owin.Security	2.0.2	http://www.microsoft.com/web/ webpi/eula/ aspnetcomponent_rtw_enu.htm
Microsoft.Owin.Security	2.1.0	http://www.microsoft.com/web/ webpi/eula/ aspnetcomponent_rtw_ENU.htm
Microsoft.Owin.Security.Cookies	2.1.0	http://www.microsoft.com/web/ webpi/eula/ aspnetcomponent_rtw_ENU.htm
Microsoft.Owin.Security.OAuth	2.1.0	http://www.microsoft.com/web/ webpi/eula/ aspnetcomponent_rtw_ENU.htm
Microsoft.Web.Infrastructure	1.0.0	http://go.microsoft.com/fwlink/ ?LinkID=214339
Modernizr	2.7.1	http://www.modernizr.com/license/
Moq	4.2.1409.1722	https://code.google.com/p/moq/ source/browse/trunk/License.txt
Newtonsoft.Json	5.0.6	http://json.codeplex.com/license
Newtonsoft.Json	5.0.8	https://raw.github.com/JamesNK/ Newtonsoft.Json/master/ LICENSE.md
Owin	1.0.0	https://github.com/owin-contrib/ owin-hosting/blob/master/ LICENSE.txt

Name	Version	License URL
RabbitMQ	3.1.3	https://www.rabbitmq.com/mpl.html
RabbitMQ.Client	3.2.1	http://www.rabbitmq.com/dotnet.html
System.IdentityModel.Tokens.Jwt	3.0.1	http://www.microsoft.com/web/webpi/eula/aspnetcomponent_rtw_enu.htm
System.Spatial	5.6.0	http://go.microsoft.com/?linkid=9809688
ThinkTecture.IdentityModel	3.6.1.0	https://github.com/IdentityModel/Thinktecture.IdentityModel/blob/master/LICENSE
twbs-pagination	1.2.3	https://github.com/esimakin/twbs-pagination/ blob/master/LICENSE
Twitter.Bootstrap.MVC	2.1.6	http://www.apache.org/licenses/LICENSE-2.0
WebActivatorEx	2.0.4	http://www.opensource.org/licenses/ms-pl
WebGrease	1.6.0	http://www.microsoft.com/web/webpi/eula/msn_webgrease_eula.htm
WebMatrix.Data	3.0.0.0	http://www.microsoft.com/web/webpi/eula/aspnetcomponent_rtw_ENU.htm
WebMatrix.WebData	3.0.0.0	http://www.microsoft.com/web/webpi/eula/aspnetcomponent_rtw_ENU.htm
X-Editable	1.5.1	https://github.com/vitalets/x-editable/blob/master/LICENSE-MIT

Glossary

Active Directory® (AD) Microsoft® Active Directory® (AD) is a directory service for WIndows-based networks that includes a hierarchical database along with services and processes that make use of LDAP protocol. Domain controllers running AD authenticate users and control user access to network services.

DNS Domain Name System (DNS): a database system that translates domain names (such as www.extron.com) into IP addresses.

Event ID Event ID is the database identification number of a scheduled recording event. The number may appear in the event details within the `Scheduled Events` page of an Extron SMP 351 streaming media recording processor.

Host name This is a unique name by which a device is known on a network. It identifies a particular host in electronic communication.

LDAP Lightweight Directory Access Protocol (LDAP) is an open source, standard application protocol for accessing and maintaining distributed directory information services over IP. It is a vendor-independent protocol that makes it possible to provide controlled access to a database of records, such as a structured list of users and their passwords. It allows for each user to use the same username and password for a variety of network services available throughout an organization. By default, LDAP uses network port 389.

LDAPS Lightweight Directory Access Protocol over Secure Sockets Layer (SSL). This is a variation of LDAP that uses encrypted communication between the client and server. By default, LDAPS uses network port 636.

SMTP Simple Mail Transfer Protocol. Internet standard for e-mail exchange across systems/networks on the Internet.

SSL Secure Sockets Layer (SSL) is a protocol used by Web servers and Web browsers that creates a uniquely encrypted channel for private communications over the public Internet.

Variable bit rate (VBR) This scheme adjusts the output bit rate around the specified target bit rate depending on image complexity. More bandwidth is used when the video frame is more complex and less bandwidth is used when the video frame is simple. Recordings containing more complexity and more motion content require more storage space than simpler recordings with more static content.

About Extron Media Player

About Extron Media Player (EMP)

The EMP is a browser-based media player for recordings that are produced by the Extron Streaming Media Processor (SMP) (for information on the SMP, visit **www.extron.com**). EMP provides an enhanced playback experience, incorporating metadata, time-synchronized thumbnail images, and advanced playback controls into the user interface. The data and controls provide the user with greater ability to efficiently navigate and play back the recorded material. EMP requires no software installation and can be operated from virtually any PC using a variety of browser applications.

> **NOTE:** EMP is accessible to users with screen readers and those who use keyboard controls for navigation. The interface is accessible, and supports commonly available screen readers. For a list of EMP-specific keyboard controls, see **Using Keyboard Shortcuts**.

Extron Streaming Content Manager (SCM) is server-based software that processes the recording files from an SMP, packages them with the EMP player, and readies the recordings either for viewing via online streaming or for downloading to a device for later playback. For more information, visit the SCM product page on **www.extron.com** or see **About Streaming Content Manager** within this help file.

How Streaming Content Manager Uses the EMP

- Some elements of EMP, such as logo graphics files, are selected within the Streaming Content Manager system before EMP is packaged with recordings.

- During file ingestion and processing, Streaming Content Manager packages the recording and its thumbnails, chapter markers, logo file, and metadata with EMP. If a closed captioning .json file is available, it can be uploaded from within SCM and packaged with the recording.

- When a user downloads a recording to play using the stand-alone EMP player, everything needed to play and navigate through the recording is in the package.

- When a user plays a recording from within an SCM recording player page, EMP streams the recording from the SCM server. During online playback, the viewer has access to many of the controls available in the stand-alone EMP program.

Customization

Features that can be customized within SCM

For recordings that are packaged by SCM, SCM administrators can customize the logo that appears in EMP. Also, closed captioning files in .json format can be uploaded in SCM and packaged with the recording.

> **NOTE:** Information on what is required to create a closed captioning file will be available on the Extron website.

Features that can be customized within the EMP player

Closed captioning font color, size, and opacity and background color and opacity can be selected using controls within the EMP player.

How to Find Information About EMP

For support and troubleshooting purposes you may wish to look up information about the Extron Media Player. This section provides instructions on how to find the following:

- EMP version, part number, and license
- A list of licensed third party technology used within EMP
- The EMP help file

To view the EMP version and part number information, license, and third party licenses:

1. Click the **Help** button in the upper right corner of the EMP screen. A menu

   opens, overlaying the video window. It displays the following information:
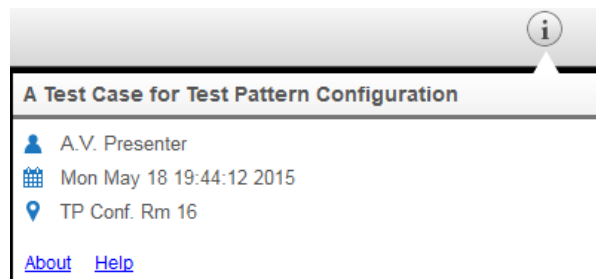
   - An **About** link to open the version and license information for EMP in a separate window or tab
   - A **Help** link to open the EMP help file in a separate window or tab.

2. Click the **About** link. The About page opens in a new browser window or tab (depending on your browser settings), displaying the following information:

- The name of the software (Extron Media Player), its version number, build date, part number, and copyright statement.
- The end user license agreement (EULA), which includes a link to a printable version of the agreement.
- A table listing the licenses for third party technology used within EMP. The table includes the name, version, and the URL link for each license. You can click any link to open the website for information on the corresponding license.

To access the EMP help file:

1. Click the **Help** button in the upper right corner of the EMP screen. The Information pop-up window opens, overlaying the video window.

2. Click the **Help** link. The EMP help file opens in a separate tab or window, depending on your browser settings.

Using Extron Media Player

Playing a Recording

To play a recording offline (not streamed within Streaming Content Manager [SCM]), you must first download it from the SCM system and extract (unzip) the files. If you stream a recording from the SCM server, you can skip the downloading instructions.

To play a recording by streaming it in SCM:

> **NOTE:** The recording must be set to allow streaming in SCM (see the SCM streaming options settings in **Editing Recording Details**).

1. Locate the desired recording in a recordings list (see **Locating Recordings in a List**).
2. Open the player page for the desired recording (see **Accessing a Player Page**).
3. Use the player controls at the bottom of the SCM player page (see **Player Page Features and How to Use Them**) to change playback settings as desired and click the `Play/Pause` button to start and stop playing the video stream. Alternatively, you can use keyboard controls to control video playback and audio volume (see **Using Keyboard Controls**).

To download a recording from SCM and play it offline using EMP:

> **NOTE:** The recording must be set to allow downloading in SCM (see the SCM streaming and downloading options settings in **Editing Recording Details**).

1. In SCM, locate the desired recording in a recording list.
2. If the recording is set to allow downloading, click the `Download` button ( ) for that recording.
3. Select `Save` if offered the choice to `Open` or to `Save` the package. The recording package downloads to your computer or other device in the form of a `.zip` file. This is typically saved to the default download location used by your browser.
4. Locate the downloaded file and extract the package to a folder of your choice.

   > **NOTE:** This step is important because you cannot play the recording without unzipping the files first. The player cannot read a zipped video file.

5. Open the folder for that recording and open the `Play_Video.html` file by double-clicking the file or right-clicking on the file and selecting `Open` from the pop-up menu. The Extron Media Player opens within a browser and loads the recording.

6. Use the player controls at the bottom of the window (see **Overview of the Extron Media Player Interface**) to change playback settings as desired and click the `Play/Pause` button to start and stop playing the video stream. Alternatively, you can use keyboard controls to control video playback and audio volume (see **Using Keyboard Shortcuts**).

Overview of the Extron Media Player Interface

How the Extron Media Player is Organized

The Extron Media Player is organized into three main zones:

1. The **header** at the top of the window
2. The **recording playback area** in the center of the window
3. The **playback controls and indicators region** along the bottom of the window

The following image shows an example of an EMP window, showing the regions of the window and the main elements within the header.

EMP Features

Header features

The header region at the top of the window includes the following features (from left to right):

- A **logo** or other graphic — By default this is the Extron EMP icon , but it can be replaced by something else by replacing a file in the folders containing the Extron Streaming Content Manager server software.
- The **recording title**
- The **owner name, location, date and time** of the recording
- The `Help` button — When this is clicked, a menu opens, overlaying the video, providing the following options:
  - A `Help` link to open the EMP help file in a separate window or tab.
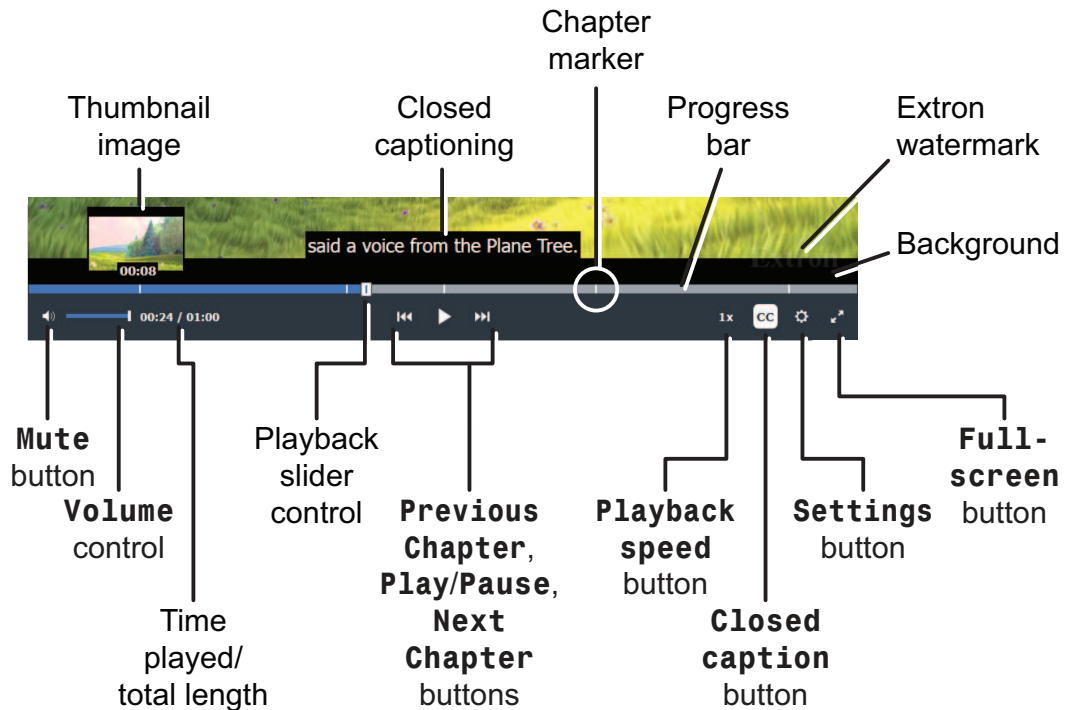 - An `About` link to open the version and license information for EMP in a separate window or tab

Recording playback area features

The recording playback area (center pane) displays the following:

- The recorded video
- A plain background, if the video does not completely fill the recording area
- Closed captions, if they have been uploaded in the form of a `.json` file with the recording. If closed captioning is turned on, captions are displayed in the bottom center of the video viewing area, overlaying the video.
- An "Extron" watermark in the lower right corner.
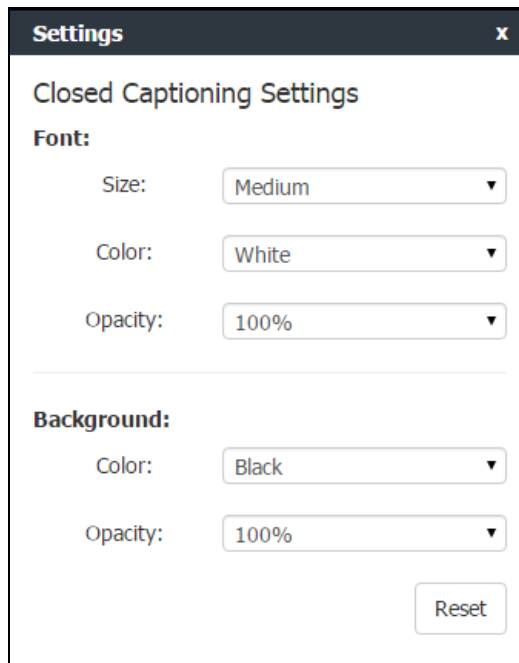
Playback controls region features

The playback control and settings region at the bottom of the window includes:

- A progress indicator bar with thumbnail images, chapter marker indicators, and a selectable slider that allows you to navigate backwards or forwards to any point in the recording
  - The standard **thumbnail images** are miniature images of the picture at a given point in the video. They appear when you hover your mouse or other pointing device over the progress bar. Thumbnails are automatically generated and saved by the recording device.
 - **Chapter markers**, indicated by narrow, vertical white lines within the progress bar, are manually entered by the presenter of the recording when they push a button on the recording device (the `Mark` button on an SMP 351). They are often used to indicate a change of topic. Chapter markers also include a small thumbnail image which appears if you hover a mouse or other pointing device over the marker or progress bar.
  - When you click and drag the **slider**, playback resumes from the newly-selected point in the recording, and the number for the time played changes to match the new playback point.
- Time played and total duration for the recording
- Player controls

Button or Control Name	Button Icon or Control	Description
Mute button		Click this button to toggle the audio off (mute the audio) or on. When audio is muted, the button shows an "x" next to the speaker icon:
Volume adjustment slider		Click on and drag the volume adjustment slider right or left to raise or lower the audio volume or use the keyboard <Up arrow> and <Down arrow> keys to adjust the volume.
Previous Chapter button		Click **Previous Chapter** to move video playback to the previous chapter marker or to move to the beginning of the recording (if no chapter markers exist in the whole recording or if there are no chapter markers earlier than the current part of the recording).
Play or **Pause** button		Click **Play** to play or resume playback of the recording. While the recording is playing, the button becomes a **Pause** button. Click **Pause** to pause playback. While recording is paused, the button becomes a **Play** button.
Next Chapter button		Click **Next Chapter** to advance the recording to the location of the next chapter marker. If the recording has no chapter markers or there are no chapter markers after the currently selected part of the recording, then clicking the **Forward** button moves the video playback to the end of the recording.
Playback speed button		Selecting this button opens a pop-up menu from which you can select playback speeds from 0.5x to 2x the normal speed.
CC (Closed captioning) button		This button appears only if a closed caption file has been uploaded for the recording. Click the **CC** button to toggle display of closed captioning text on or off.

Button or Control Name	Button Icon or Control	Description
Settings button	⚙	This button appears only if a closed caption file has been uploaded for the recording. Selecting this button opens a panel (shown below) along the right side of the recording area where you can change the appearance of the text and background for closed captioning (CC). If a closed caption file has been uploaded for the recording (via the SCM recording detail page), these settings control how the caption text looks when displayed over the video.

Click a drop-down menu to select the following:

- Relative font size (small, medium, or large)
- Font color or background color (Select one of eight options.)
- Opacity percentage (0, 25, 50, 75, or 100%) for the font or for the closed captioning background

The default appearance is a combination of medium size white font on a black background, all at 100 percent opacity. You can reset the closed captioning settings to those default values by clicking the **Reset** button within the **Settings** panel.

> **NOTE:** These settings are saved in browser-specific cookies. You must enable cookies in your browser for the streaming player pages within SMP and for the EMP `Play_Video.html` pages, if you download and play the recordings offline. Also, note that Google Chrome does not support cookies for offline applications.

Button or Control Name	Button Icon or Control	Description
Full-screen button	⤢	Select this button to expand the player window to fill the screen. Once the screen is expanded, press the keyboard <Esc> key or click this button ⤡ again to restore the screen to the original, smaller size.

Using Keyboard Shortcuts

Extron Media Player supports basic keyboard controls (such as using the <Tab> key to move from one element to another or pressing <Esc> to exit a menu or pop-up window) that are supported by most programs and platforms. In addition, you can control media playback through EMP-specific combinations of keyboard keystrokes(keyboard shortcuts), detailed in the following table.

NOTE: You may need to press the <F6> key to refresh the page and access the URL field of the browser.

Control Category	Keyboard Shortcut	Command or Control
Recording playback and display	<Space bar>	Play or pause the presentation.
	<Shift+N>	Skip to the next chapter marker.
	<Shift+P>	Skip to the previous chapter marker.
	<Shift+C>	Toggle the closed caption overlay on or off.
	<Shift+left arrow>	Decrease playback speed.
	<Shift+right arrow>	Increase playback speed.
Audio adjustment	<Up arrow>	Increase program audio volume.
	<Down arrow>	Decrease program audio volume.
	<Shift+M>	Mute or unmute program audio.

NOTE: The <Up arrow> and <Down arrow> keys adjust the audio volume from anywhere in the playback window *except* when the control focus is within the `Help` drop-down menu or in either of the following two pop-up elements.

- Within the `Playback speed` pop-up control, use the <Up arrow> and <Down arrow> keys to select the playback speed.
- Within the `Settings` pop-up window, use the <Up arrow> and <Down arrow> keys to increase and decrease font and background opacity.

Troubleshooting for EMP

Working with Mozilla® Firefox®

When Firefox is initially installed, it is configured to be able to play the media files that Extron produces. However, when other programs (such as Apple® Quicktime® or VideoLan VLC) are installed after Firefox, they change the settings within Firefox.

To return the settings to their original state and make it possible to play the video files within Firefox, you must change a MIME type setting in the Windows registry. This method does not change any program settings. It tells the computer to treat all files with an .m4v file extension as though they are .mp4 files. Programs like Quicktime and VLC have their own settings that override this and provide their own special instructions.

To change the MIME type:

1. Open Notepad or a similar simple text editor. Do not use Microsoft Word® or another editor that will add hidden formatting.

2. Enter the following text, exactly as it appears here:

   ```
   Windows Registry Editor Version 5.00
   [HKEY_CLASSES_ROOT\.m4v]
   "Content Type"="video/mp4"
   ```

3. Save the file as `moz-m4v-fix.reg`.

   > **NOTE:** Verify that your text editor does not automatically add ".txt" to the file name, causing the file to be called `moz-m4v-fix.reg.txt`.

4. Find the file you just created, and double-click it to run the fix. The Registry Editor opens a dialog box asking you to confirm the change.

5. Click **Yes** to continue.

6. Restart Firefox, if needed, to make the changes take effect.

General Reference Information for EMP

Supported Browsers and File Types

Browsers

In order to use Extron Media Player, use one of the supported web browsers (and versions) listed in **Web Browser Requirements** in the SCM Prerequisites help topic. See **Turning Off Internet Explorer Compatibility Mode** in the Prerequisites section before using Internet Explorer.

> **NOTE:** The EMP interface is accessible to users with commonly available screen readers and those who use keyboard controls for navigation. See **Using Keyboard Shortcuts** for a table of keyboard controls that are specific to the Extron Media Player.

File Types

- Recordings are .mp4 (.m4v) files.
- Thumbnails are stored as .jpg files.
- Graphics for the EMP player logo are .png files.
- Closed captioning files must be .json files.
- Metadata manifest files are also .json files.

Licensed Software and Credits for EMP

Licensed Software

The following software is licensed for use within Extron Media Player.

Name	Version	License URL
Ext JS	4.1	**http://www.sencha.com/legal/sencha-sdk-software-license-agreemen**t
Video.js	4.1.0	**http://www.apache.org/licenses/LICENSE-2.0**
Video.js-thumbnail	4.1.0	**http://www.apache.org/licenses/LICENSE-2.0**
Video.js-watermark	4.1.0	**http://www.apache.org/licenses/LICENSE-2.0**

Credits

Some screenshots of the EMP player include views from *Big Buck Bunny*, a short film © copyright 2008, Blender Foundation, **www.bigbuckbunny.org**.

Extron Headquarters	Extron Europe	Extron Asia	Extron Japan	Extron China	Extron Middle East	Extron Korea	Extron India
+1.800.633.9876 (Inside USA/Canada Only)	+800.3987.6673 (Inside Europe Only)	+65.6383.4400 +65.6383.4664 FAX	+81.3.3511.7655 +81.3.3511.7656 FAX	+86.21.3760.1568 +86.21.3760.1566 FAX	+971.4.299.1800 +971.4.299.1880 FAX	+82.2.3444.1571 +82.2.3444.1575 FAX	1800.3070.3777 (Inside India Only)
Extron USA - West +1.714.491.1500 +1.714.491.1517 FAX	**Extron USA - East** +1.919.850.1000 +1.919.850.1001 FAX	+31.33.453.4040 +31.33.453.4050 FAX						+91.80.3055.3777 +91.80.3055.3737 FAX