

ATEN Altusen™

# **CCVSR**

Video Session Recording Software User Manual

#### **User Information**

#### **Online Registration**

Be sure to register your product at our online support center:

International	http://eservice.aten.com

#### **Telephone Support**

For telephone support, call this number:

International	886-2-8692-6959
China	86-400-810-0-810
Japan	81-3-5615-5811
Korea	82-2-467-6789
North America	1-888-999-ATEN ext 4988
	1-949-428-1111

#### **User Notice**

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#### **Product Information**

For information about all Altusen products and how they can help you connect without limits, visit Altusen on the Web or contact an Altusen Authorized Reseller. Visit Altusen on the Web for a list of locations and telephone numbers:

International	http://www.aten.com
North America	http://www.aten-usa.com

#### **Package Contents**

Check to make sure that all components are in working order. If you encounter any problem, please contact your dealer.

The CCKM Video Session Recording Software package consists of:

- 1 CCKM USB License Key
- 1 software CD
- 1 user instructions\*

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#### About This Manual

This manual is provided to help you get the most out of your CCVSR system. It covers all aspects of the software, including installation, configuration, and operation.

An overview of the information found in the manual is provided below.

**Chapter 1**, *Introduction*, introduces you to the Video Session Recording Software, with its purpose, features, benefits, and requirements presented.

**Chapter 2**, *CCVSR Installation*, provides step-by-step instructions for installing the Video Session Recording Software software.

**Chapter 3**, *The User Interface*, explains how to log in to the Video Session Recording Software using a web browser.

**Chapter 4**, *Playback*, explains how to use the functions of the Playback page for searching for and playing back video log files.

**Chapter 5**, *Liveview*, explains the centralized live view, which includes the favorite devices / ports, more playback options, single port mode, etc..

**Chapter 6**, *Device Management*, elaborates on how KVM devices can be added and their ports configured, using Video Session Recording Software.

**Chapter 7**, *User Accounts*, explains how to create additional user accounts, modify and delete users and/or user groups, assigning attributes to them, as well as authentication settings.

**Chapter 8**, *System*, explains how to use the System Management page to redefine the *Server Info* and configure *Notification*, *Security*, *License*, *Backup & Restore*, and *Recording* settings.

**Chapter 9**, *Logs*, shows how to use the log file utilities to view the events that has occurred and been recorded on the Video Session Recording Software.

**Chapter 10**, *CCVSR Archive Server*, describes how to use the CCVSR Archive Server, and explains its features and function.

**Appendix A**, provides technical and troubleshooting information at the end of the manual.

**Appendix B, Authentication Key Utility,** describes how to access and update the information contained in the CCVSR Authentication Key.

#### Note:

- Read this manual thoroughly and follow the installation and operation procedures carefully to prevent any damage to the unit or connected devices.
- ATEN regularly updates its product documentation for new features and fixes. For an up-to-date CCVSR documentation, visit

http://www.aten.com/global/en/

#### **Conventions**

This manual uses the following conventions:

- Monospaced Indicates text that you should key in.
  - [] Indicates keys you should press. For example, [Enter] means to press the **Enter** key. If keys need to be chorded, they appear together in the same bracket with a plus sign between them: [Ctrl+Alt].
  - 1. Numbered lists represent procedures with sequential steps.
  - Bullet lists provide information, but do not involve sequential steps.
  - Indicates selecting consecutive option (such as on a menu or dialog box). For example, Start > Run means to open the *Start* menu, and then select *Run*.



Indicates critical information.

## Chapter 1 Introduction

#### Overview

ATEN's Control Center Video Session Recording (CCVSR) software is an innovative and effective solution designed for live monitoring and operation backtracking. Administrators can view live feed of operators currently operating on their systems and thus quickly resolve operational flaws, process discrepancies, etc. On the other hand, IT managers can go back to recorded operation videos to trace changes made for compliance control improvement and auditing efficiency.

Featuring the LiveView function, CCVSR provides live-video surveillance to allow administrators to monitor multiple KVM ports in real time. Various layout combinations and customizable layouts are available for selection by users to monitor multiple channels simultaneously. The LiveView function is especially suitable for industrial environments, such as production lines, which require real-time monitoring of continuous operations and system performance to facilitate timely responses to abnormalities or emergencies for administrators. Moreover, the LiveView page also implements the Playback function to allow users to quickly view older videos of the same channel for troubleshooting or problem solving.

The CCVSR automatically starts recording user sessions when users start accessing target servers locally or remotely through KVM over IP switch and/ or serial console servers. Whatever the target server's operating status is, whether it is booting up the operating system, logging in, logging out, or in preboot BIOS mode, all activities and operations, such as video display, key strokes and mouse clicks are recorded. The CCVSR can also record continuously without keeping the WinClient and JavaClient running.

Without requiring agent software installation on target computers, the CCVSR is installed and operated independently as a server. It therefore does not require resource allocations from all target computers, including CPU, disk space, memory, and network bandwidth. Moreover, no agent software installation means that the CCVSR provides a non-intrusive method for user session recording. In IT-related environments, such as server rooms, data centers, and industrial settings like manufacturing plants, security is one of the first considerations on any administrator's mind. As a non-intrusive solution to

provide reliable live-video surveillance and video session recording, implementing CCVSR minimizes both security concerns and accidents.

The CCVSR is enhanced with an HTML5 user interface, aiming to deliver a better user experience and advanced usability via its clear and concise interface, simplified structure, improved text readability, increased icon visibility, as well as ancillary functions such as system notifications. The UI's minimalist flat design aesthetic and two levels of typographic hierarchy, with the features grouped into self-explanatory handy sidebar, enable users to smoothly navigate and complete tasks intuitively.

The CCVSR system is scalable, supporting a single server and up to 3 secondary servers (to expand recording storage) setups. The system uses Primary-Secondary architecture to offer service redundancy. During standard operation, a Secondary server (max. 3 servers) acts as a storage server to store recorded videos. Moreover, if the Primary server fails, one of the Secondary servers can provide the required management and recording services for KVM over-IP Switches until the Primary server is back online. This feature ensures that the recording service is always on and uninterruptible. The CCVSR manages video recordings and allows all administrative activity to be controlled from a central CCVSR server (Primary server) through a single IP port, giving administrators access to all CCVSR data from one computer.

By integrating the CCVSR into your KVM installation, you can automate the security of your server room and make auditing an effective tool.

#### Features

- Automatically create complete recordings of a computer's operations when remote users access a KVM port – which are saved to an indexed database for advanced searches
- Supports high quality video recordings with a video resolution up to 1920 x 1200 with 24 bit color depth
- Supports recording on multiple KVM over IP Switches
- Simultaneously records and plays the operation of multiple KVM ports\*
- Search functions with keyword filters for video recordings
- Special video player tools with format, video record exporting, and password protection for enhanced security
- IP Filter for enhanced protection
- System event notification via SMTP email; SNMP trap and Syslog support
- Configurable user and group permissions for search, play, system management, record management, and save management
- Port level permissions users can only view ports they have been authorized on
- Supports device level event logs
- Archive Server Support
- Multilanguage GUI Supports: English, Traditional Chinese, Simplified Chinese, Japanese, and Korean
- Automatically runs software as daemon service in the background
- Multi-browser support: Internet Explorer, Chrome, Firefox, Safari
- Supports TLS 1.2 data encryption and RSA 2048-bit certificates for secure web browser logins
- 3rd party remote authentication supports: RADIUS, LDAP, LDAPS, and MS AD Directory
- **Note:** 1. Up to 20 KVM sessions (Resolution = 1920x1080, Text Mode = On, Bandwidth = 1G, Scenario = Surveillance) can be recorded and streamed at any time when the recommended hardware requirements of the CCVSR server are met.
  - 2. Up to 64 KVM devices can be supported by one CCVSR server.

#### Requirements

#### Computer

Systems that the CCVSR will be installed on should meet the following requirements:

- Server Hardware Requirements
  - CPU: Intel Xeon D-1527 4 cores 2.2 GHz or equivalent
  - Memory: 8 GB or above
  - Hard drive (for CCVSR): 4 GB or above
  - Network: 1 Gbps
- Client Hardware Requirements
  - CPU: Intel Core i5-7600 4 cores 3.5 GHz or equivalent
  - Memory: 6 GB or above
  - Network: 1 Gbps
- Operating System Requirements:
  - Windows: 10, 8, 7 or the following versions of Linux

OS	Version	Туре	Kernel
Ubuntu	16.04	X86	4.10.0-28
Ubuntu	16.04	X64	4.8.0-36
Ubuntu	18.04	X64	4.19
Red Hat Enterprise Linux	7	X64	3.10.0
CentOS	7.4	X64	3.10.0-693
CentOS	7.5	X64	4.18.11-1
Debian	8.8	X64	3.16.0.4
Fedora	24	X32	4.5.5-200
Fedora	24	X64	4.5.5-200
OpenSUSE	13.2	X32	3.16.6
OpenSUSE	13.2	X64	3.16.6

- VSR Viewer (Java-based application for video playback on a client computer) Requirements:
  - JRE 8 or Zulu OpenJDK 8 FX (Windows only)

#### KVM over IP Switch

Computers to be recorded by the Video Session Recorder must be connected to a port on a KVM over IP Switch\* (refer to the *Specification* section on the CCVSR product page).

Note: Computers connected to cascaded KVM switches are not supported.

#### **Browsers**

Supported browsers for users that log into the CCVSR include the following:

Browser	Version
Microsoft Edge	44.18362.449 or later
Internet Explorer	11.0.9600 or later
Chrome	69.0.3497.100 or later
Firefox	62.0.3 or later

#### **Bandwidth Requirement**

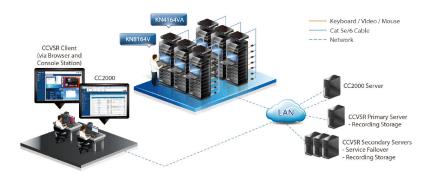
1920 x 1080, Text Mode = On, 1G Bandwidth

General Operations (e.g. settings configuration, file editing, etc.) Surveillance (e.g. NVR, playing video		Surveillance (e.g. NVR, playing videos, etc.)
KN8164V	3.37 Mbps / Channel 1 hour video size: 296 MB	44.6 Mbps / Channel 1 hour video size: 4 GB
CN8000A	12.40 Mbps/Channel 1 hour video size: 599 MB	32.4 Mbps / Channel 1 hour video size: 1.7 GB
CN9950 (4K)	17.2 Mbps / Channel 1 hour video size: 1.56 GB	189 Mbps / Channel 1 hour video size: 17.2 GB
CN9950 (1080P)	11.1 Mbps / Channel 1 hour video size: 0.93 GB	208 Mbps / Channel 1 hour video size: 17.5 GB

**Note:** 1. Numbers above are for reference only, actual bandwidth requirement may vary (e.g. resolution, KVM model, KVM settings, Operations from a remote server, etc.).

- 2. All videos recorded on the CCVSR are compressed prior to being stored.
- 3. Your computer's CPU resource is used when the system compresses the recorded videos. The CPU resource is released as soon as the compression is complete.
- 4. For CN9950, 4K's required bandwidth is lower than that of 1080P under surveillance scenario because its FPS is lowered when reaching the upper bound of its performance.

#### An Example of CCVSR Deployment



#### **Primary Servers**

**Management** - A Primary Server is the central management software used to record, view, and manage all aspects of a CCVSR installation. All Secondary Servers, Archive Servers, and Nodes work through the Primary Server.

#### Secondary Servers

**Storage** - Secondary Servers reduce the work load and provide extended storage for the Primary Server - with limited configuration functionality.

**Redundancy** - When the primary server fails to work, one of the secondary servers will work as primary server temporarily for service availability.

Functions	Primary	Secondary (Storage)	Secondary (Redundancy)	Archive
System management	~		view-only	
Device management	~		view-only	
User management	~		view-only	
Local management	~	✓	~	
Video & keystroke recording	~	✓	~	
Video search & playback	~		~	$\checkmark$
Backup video & keystrokes				$\checkmark$

Refer to the following table for supported functions of primary, secondary, and archive servers.

#### **Archive Servers**

**Archive** - The Archive Server automatically archives all video log files created on the Primary Server into a separate organized database for extended backup and viewing. The Archive Server allow you to import, export, and allocate large databases separate from the CCVSR system.

#### Nodes

**KVM Ports** - A node is a physical port on a KVM over IP Switch. Each node you want to record video logs on requires a license.

#### Licenses

The CCVSR license controls the number of Primary Servers, Secondary Servers, Archive Servers, and nodes permitted on the CCVSR installation. License information is contained on the USB License Key that came with your CCVSR purchase. For a deployment example, see *Node Options*, page 9, for details.

Upon completion of the CCVSR software installation, the number of licenses that you purchased is automatically added. To add more, you must upgrade the license. See *License*, page 71, for more information.

License	Nodes	Primary Servers
CCVSR8	8	1
CCVSR16	16	1
CCVSR32	32	1
CCVSR64	64	1
CCVSR128	128	1
CCVSR256	256	1
CCVSR512	512	1
CCVSR1024	1024	1
CCVSR2048	2048	1

#### License Options

#### Node Options

License	Nodes
CCVSRN1	1
CCVSRN8	8
CCVSRN16	16
CCVSRN32	32
CCVSRN64	64
CCVSRN128	128
CCVSRN256	256
CCVSRN512	512
CCVSRN1024	1024
CCVSRN2048	2048

#### Archive Server Options

License	Servers
CCVSRAS1	1

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## Chapter 2 CCVSR Installation

#### Overview

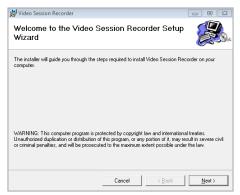
This chapter describes how to install the Video Session Recording Software (CCVSR) on a computer. The CCVSR application runs background services for the Video Session Recording Software to operate and is used to set basic server configurations. The CCVSR application must be running for the Video Session Recording Software's web browser features to work. To install the CCVSR software on a Linux server, see *Linux Installation*, page 100.

#### Installing the CCVSR Software

#### Starting the Installation

To install the CCVSR application on a Windows system, do the following:

- 1. Put the CD that came with your package into the computer's CD drive.
- 2. Go to the folder where the *setup.exe* file is located, and execute it. A screen, similar to the one below, appears:



Click Next to continue.

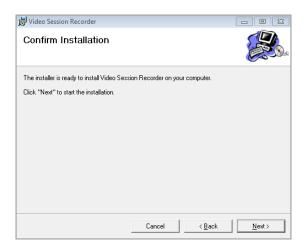
3. On the *Select Installation Folder* page, specify the installation folder, or click **Browse** to choose the location where you want to install it. Then choose if you want to install it for yourself (**Just me**), or for anyone who

uses this computer (Everyone). Click **Disk Cost** to view available drives and disk space.

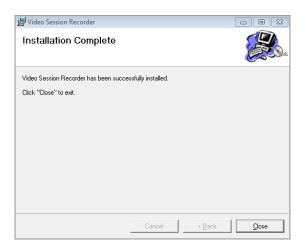
😸 Video Session Recorder	
Select Installation Folder	
The installer will install Video Session Recorder to the following folder.	
To install in this folder, click "Next". To install to a different folder, enter i	t below or click "Browse".
Eolder:	
C:WSRWideoSessionRecorder\	Browse
	Disk Cost
Install Video Session Recorder for yourself, or for anyone who uses thi Everyone O Just me	s computer:
Cancel < Ba	nck Next >

Click Next to continue.

4. The Confirm Installation window appears, click Next to continue:



5. When the installation is complete the following message will appear:



#### **Licenses**

Upon completion of the CCVSR software installation, a default license for one server is automatically provided. To add more Video Session Recording Softwares, you must upgrade the license. To upgrade the license, See *License*, page 71, for details. For License options See *Node Options*, page 9, for details.

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## Chapter 3 The User Interface

#### Overview

The Video Session Recording Software's user interface is accessed via web browser and contains the main features and functions. This chapter explains how to login to the Video Session Recording Software and highlights the browser components.

#### **Browser Login**

The Video Session Recording Software is accessed via an Internet browser running on any platform. To access the Video Session Recording Software's browser interface, the CCVSR application must be started.

To access the Video Session Recording Software, do the following:

1. Open the browser and specify the IP address and service port of the Video Session Recording Software you want to access in the browser's location bar.

For example: https://192.168.0.100:9443

If you wish to log in locally, enter https://127.0.0.1:9443 instead.

 When a Security *Alert* dialog box appears, accept the certificate – it can be trusted. If a second certificate appears, accept it as well (see *Trusted Certificates*, page 101).

Once you accept the certificate(s), the login page appears:

	Welcome
+	username
â	password
	SIGN IN

3. Provide your username and password, then click **Login** to bring up the Web Main Page.

**Note:** Since this is the first time you are logging in, use the default Username: *administrator*; and the default Password: *password*.

4. If you are logging in for the first time, the system will prompt you to change the password.

#### The Web Browser Main Page

Once users login and are authenticated, the *Web Browser Main Page* comes up, with the *Playback* page displayed:

									456
1—	_=		devices	parts *	use T		art≊me 019/02/08 00:00:00 →	end time 2019/02/22 23:59:59	
ſ	•	Playback		PLAY Z OPTION					
2-		Liveview Device Management		Name	Quality	User	Device	Start Time	End Time
-		User Accounts		[01] [06]KA-7168	1024*768	administrator(C) administrator.administrator(C)	KN8164V KN8164V	2019-02-22 23:17:12	2019-02-22 23:17:25
L	8	Log ^		[01]	1024*768	administrator(C)	KN8164V	2019-02-22 23:16:56	2019-02-22 23:17:03
3-				[05]KA7170 [01]	720*400	administrator(C) administrator(C)	KN8164V KN8164V	2019-02-22 22:38:11 2019-02-22 22:38:03	2019-02-22 22:38:13
				[05]KA7170	720*400	administrator(C)	KN8164V	2019-02-22 22:33:04	2019-02-22 22:33:06
				[01] [05]KA7170	1024*768 720*400	administrator(C) administrator(C)	KN8164V KN8164V	2019-02-22 22:32:56	2019-02-22 22:32:59 2019-02-22 22:26:00
				[05]KA7170	720*400	administrator(C)	KN8164V	2019-02-22 22:25:46	2019-02-22 22:25:52
				Insbc&7170	790+400 ATEN internat	artministrator(P) ional Co. Ltd. All rights reserved.	KNR164V	9019-02-22 22 22 17	2019-02-22 22 22 26

**Note:** The screen depicts a Super Administrator's page. Depending on a user's type and permissions, not all of these elements appear.

#### Page Components

The web page screen components are described in the table, below:

No.	Item	Description
1	Expand / Collapse Main Menu	Click this icon to expand or collapse main menu. The sub-menu can be accessed by clicking on their main operation categories.
2	Main Menu	Main Menu contains the Video Session Recording Software's main operation categories. The items that appear here are determined by the user's type, and the authorization options that were selected when the user's account was created.

No.	Item	Description
3	Expand / Collapse Sub-Menu	The up/down arrow indicates that the operation categories can be expanded or collapsed into sub menus. Click the operation categories to expand/collapse into sub menus, which contains operational sub- categories of the Main Menu. The items that appear here are determined by the user's type, and the authorization options that were selected when the user's account was created.
4	Notification / Message Center (Super Administrator only)	Click this icon for the notifications / messages of the system. Up to 50 notifications can be displayed here (use the scroll bar to scroll through the notifications). If there are unread notifications, a number will be shown above the notification icon. e.g.
		Click <b>VIEW LOGS</b> to go to the system logs page.
5	Personal	<ul> <li>Click this button for personal information and configurations.</li> <li>Displayed information include the user's username and when the user last logged into the system.</li> </ul>
		<ul> <li>Preferences: Click this to configure personal preference settings.</li> <li>Change password: Click this to change the password.</li> </ul>
		<ul> <li>Log out: Click this log out of the current session of this user.</li> <li>Refer to <i>Personal Configuration</i> on page 19 for more information.</li> </ul>
6	Help	Click this button for <b>Online help</b> or <b>About</b> . Clicking <b>Online help</b> brings you to the online user manual. Clicking <b>About</b> displays the current firmware version.
7	Interactive Display Panel	This is your main work area. The screens that appears reflects your menu choices.

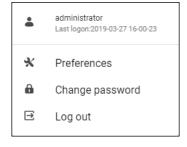
#### <u>Main Menu</u>

Main Menu is displayed differently for different user types (Super Administrator, Administrator, User) and permissions (assigned when the user account was created). The functions are explained in the table below:

Operation Item	Function
Playback	The Playback page is used to search and playback available video logs, and to monitor current browser sessions. Playback is discussed on page 21.
Liveview	The Liveview page allows the users to view live KVM ports feed. Liveview is discussed on page 31.
Device Management	The Device Management page is used to add KVM devices and configure the ports for recording video logs. This page is available to the Super Administrator, as well as administrators and users who have been given Device Management permission. The item does not appear for other administrators and users. The Device Management is discussed on page 37.
User Accounts	The User Accounts page is used to create and manage Users and Groups. It can also be used to assign devices to them. This item is available to the Super Administrator, as well as administrators and users who have been given User Management permission. The item doesn't appear for other administrators and users. User Accounts is discussed on page 43.
System	The Systems page is used to configure the Video Session Recording Software's system settings and to add secondary servers from the network. System is discussed on page 55.
Log	The Log page displays the contents of the log file. The Log page is discussed on page 81.

#### Personal Info / Configuration

On the top right-hand corner of the page, you can click the *Personal* icon (**2**) for personal information and configurations:



- The top section displays information including the user's username and when the user last logged into the system.
- Preferences: Click this to configure personal preference settings.
- Change password: Click this to change the password.
- Log out: Click this log out of the current session of this user.

#### **Personal Configuration**

#### Preference

Click *Preference* for the pop-up window shown below:

PREFERENCES	CHANGE PASSWORD		
language		English	
Session Timeout		30	minute

Language: Click the drop-down menu to select your preferred language.

**Session Timeout**: Enter a value for how long a user can stay logged into the system. Enter **0** if you wish to stay logged into the system until you manually log out.

Click *Save* to save the changes.

#### **Change Password**

Click Change Password for the pop-up window shown below:

Personal			×
PREFERENCES	CHANGE PASSWORD		
Old password			
New password			
Confirm password			
		SA	CANCEL

Enter the old password, new password and the new password again.

Click *Save* to save the changes.

#### Logout

Click *Log out* to logout of the system.

### Chapter 4 Playback

#### Overview

The *Playback* page is used to search and play video log files. Before using the Playback function, you must first add a KVM device, see *Recording KVM Ports*, page 38 for details.

When you log into the Video Session Recording Software, you are automatically brought to this page.

On top of the page is a Search section, where it acts as a filter to help you quickly search for video logs.

Below the search section is the Video List section that shows the ports having recorded video logs.

								* ± (
		devices	ports •	- user		srt time 019/02/08 00:00:00 👻	end time 2019/02/22 23:59:59	Search Section
۰	Playback		► PLAY 😤 OPTIO	N				
	Liveview							
	Device Management		Nome Name	Quality	User	Device	Start Time	End Time
÷	User Accounts		[01]	1024*768	administrator(C)	KN8164V	2019-02-22 23:17:12	2019-02-22 23:17:25
٥	System ^		06]KA-7168	1024*768	administrator,administrator(C)	KN8164V	2019-02-22 21:28:48	2019-02-22 23:17:25
			[01]	1024*768	administrator(C)	KN8164V	2019-02-22 23:16:56	2019-02-22 23:17:03
			05]KA7170	720*400	administrator(C)	KN8164V	2019-02-22 22:38:11	2019-02-22 22:38:13
			[01]	1024*768	administrator(C)	KN8164V	2019-02-22 22:38:03	2019-02-22 22:38:05
			05]KA7170	720*400	administrator(C)	KN8164V	2019-02-22 22:33:04	2019-02-22 22:33:06
			[01]	1024*768	administrator(C)	KN8164V	2019-02-22 22:32:56	2019-02-22 22:32:59
			05]KA7170	720*400	administrator(C)	KN8164V	2019-02-22 22:25:57	2019-02-22 22:26:00
			05 KA7170	720*400	administrator(C)	KN8164V	2019-02-22 22:25:46	2019-02-22 22:25:52
			In9867170	720+400	administration/C)	KNR164V	2010.02.22 22:23:17	menVideo List

Scroll through the list to find the desired video logs. You can also click the headings (port) name, (video) quality, user, device and time to sort the list into alphabetical order, quality from best to worst, etc. to help you find the desired video logs.

#### Search

On top of the page, a search section is displayed.

NTEN CCVSF ayback veview svice Management	, 4 -	tevices	PLAY C TOPTION			2/08 00:00:00 👻	end time 2019/02/22 23:59:59 -	Q SEARCH
veview								
wice Management			Name	Quality	User	Device	Start Time	End Time
er Accounts	^		[01]	1024*768	administrator(C)	KN8164V	2019-02-22 23:17:12	2019-02-22 23:17:25
stem	^		[06]KA-7168	1024*768	administrator,administrator(C)	KN8164V	2019-02-22 21:28:48	2019-02-22 23:17:25
e e	^		[01]	1024*768	administrator(C)	KN8164V	2019-02-22 23:16:56	2019-02-22 23:17:03
			[05]KA7170	720*400	administrator(C)	KN8164V	2019 02:22 22:38:11	2019-02-22 22:38:13
			[01]	1024*768	administrator(C)	KN8164V	2019-02-22 22:38:03	2019-02-22 22:38:05
			[05]KA7170	720*400	administrator(C)	KN8164V	2019-02-22 22:33:04	2019-02-22 22:33:06
			[01]	1024*768	administrator(C)	KN8164V	2019-02-22 22:32:56	2019-02-22 22:32:59
			[05]KA7170	720*400	administrator(C)	KN8164V	2019-02-22 22:25:57	2019-02-22 22:26:00
			[05]KA7170	720*400	administrator(C)	KN8164V	2019-02-22 22:25:46	2019-02-22 22:25:52
			Intlica7170	7201400	administrator/C)	KNR164V	2010.02.22 22 23 17	2010.02.22 22:23:36
-	tem	tem 🔺			<ul> <li>Norman</li> <li>Palya-7148</li> <li>Palya-7148</li> <li>Palya-7148</li> <li>Palya-7148</li> <li>Palya-7148</li> <li>Palya-7170</li> <li>Palya-7170</li></ul>	Image: Section of the sectio	Image: Section of the sectio	Image: Control of the second

The Search function is used to find video logs by filtering the categories Device Name, Port Name, User, Begin Time, or End Time, Port Name. The Begin Time and End Time refers to when the recording took place.

To filter the *Video List*, fill in the categories by either 1) typing to enter the information, or 2) clicking the drop-down menu and check the item(s), followed by clicking *Search*. An example of checking an item in the drop-down menu is shown:

		-								P 🕹
		devices 01_SN010	IBA		01_SN0108A	Â		tart time 1019/02/11 00:00:00	end time 2019/02/25 23:59:59	Q SEARCH
•	Playback				99_KN2140V					
	Liveview		▶ PLAY		99_KN4140V	- 1				
-	Device Management		Name		CN8000A CN8000A_Eric		User	Device	Start Time	End Time
-	User Accounts 🗸 🗸		[04]KA71		CN8600	- 1	administrator	KN8164V	2019-02-23 17:59:49	2019-02-24 03:15:37
	User		[02]KA-7		CN8600_Eric		administrator	KN8164V	2019-02-23 17:59:30	2019-02-24 03:15:37
	Group		[01]KA71		CN8600_Eric!		administrator	KN8164V	2019-02-23 17:59:11	2019-02-24 03:15:37
\$	Authentication System V		[06]KA71		CN8600_Eric2		administrator	KN8164V	2019-02-23 09:50:47	2019-02-24 03:15:37
Č	Server Info		[07]KA71		CN8600_Eric*		administrator	KN8164V	2019-02-23 09:50:47	2019-02-24 03:15:37
	Notification		[08[000		CN8600_EricA		administrator	KN8164V	2019-02-23 09:50:47	2019-02-24 03:15:37
	Security		[04]KA71	78		920*1080	administrator	KN4140VA	2019-02-23 13:07:01	2019-02-24 03:15:30
	License		[03[KA71]	78-01		024*768	administrator	KN4140VA	2019-02-23 13:06:43	2019-02-24 03:15:30
	Backup & Restore Recording	0	[01]Dell P	owerEd	ge R710	920*1080	administratocadministrator(C)	KN4140VA	2019-02-23 13:05:44	2019-02-24 03:15:30
			Inel			140	artministrator	KNR1160	2010-02-23 18:01-64	2010-02-24 03-15-20

To remove the filters, uncheck the selected item and click Search again.

#### **Play Video Log**

To play a video log, select it from the *Video List*, then click the button *Play*. The video will open in a new window with the Video Log Viewer application. For information on the Video Log Viewer, see *VSR Viewer*, page 24.

#### **Time Gap Option**

Click Option for time gap setting.

Option			
If the time gap between videos is le	ess than the following val	ue, they will be merged into one search resu	lt
Time gap between videos	5	second(s)	
		SAVE CANCEL	]

This setting helps narrow down the scope of video search results by merging video clips if the time interval between two videos is less than the configured value.

For example, if you have the following video clips, and the time interval is 2 minutes:

Video #1: 15:59:06 - 15:59:35

Video #2: 16:00:12 - 16:10:12

Video #3: 16:18:29 - 16:19:25

The search result will be:

Video #1: 15:59:06 - 16:10:12

Video #2: 16:18:29 - 16:19:25

Enter a value between 0 and 3600 seconds. The default is 5 seconds.

#### **VSR Viewer**

The VSR Viewer is a built-in video player that pops-up when executing video log files (.vls) for playback\*. The VSR Viewer is automatically used to view video logs from the Video Session Recording Software's web sessions or directly from the directory where it was saved. The VSR Viewer's playback tools are described below.

When you playback a video log, the *VSR Viewer* pops-up, and a screen similar to the one below appears:



- Note: The VSR Viewer is a Java-based application that requires JRE 8 or Zulu OpenJDK 8 FX (Windows only) to run.
  - For 32-bit Java VM, the maximum viewer size support for fullscreen mode is 3300\*2048.
  - For 64-bit Java VM, the maximum viewer size support for fullscreen mode is 5130\*2160.

#### <u>Toolbar</u>

The toolbar appears below the video and allows you to view information about the video and control playback features. The toolbar hides when no mouse movement is made for 3 seconds. To bring the toolbar into view simply move the mouse. The toolbar functions are described here:

lcon	Function
	<b>Play:</b> The <i>Play</i> button is used to resume playback of a video log that has been paused.
11	<b>Pause:</b> The <i>Pause</i> button is used to stop playback of a video log that is being played.
₩	<b>Faster:</b> The <i>Faster</i> button is used to increase the playback speed of a video log. You can increase the speed X2, X4, or X8 of the normal playback rate.
•	<b>Slower:</b> The <i>Slower</i> button is used to decrease the playback speed of a video log. You can decrease the speed 1/2, 1/4, or 1/8 of the normal playback rate.
•	<b>Volume:</b> Use the volume bar to adjust the volume. Click the speaker icon to mute/unmute the video.
	<b>Progress Bar:</b> The <i>Progress bar</i> shows how far along you are while viewing video logs. When viewing multiple video logs using the <i>Play All</i> feature, a solid red line on the progress bar represents the end of one video log, and the start of the next.
•	Placing your mouse over any part of the Progress bar will produce a pop-up display of the time and date when the video log was captured, allowing you to quickly locate and go to reference points.
	You can click and drag the progress button forward or back to advance to any point of the video, or click anywhere on the progress bar to advance to a particular point.
	<b>Resize Window:</b> Mouse over the edges of the viewer's window to see the resize mouse icon. Click and drag to resize the window. After doing so if the video doesn't fit within the resized window, you can scale the video using the <i>Scale Mode</i> feature ( <i>see Scale Mode below</i> ). <b>Note:</b> The entire window can be moved around the screen by holding a left click anywhere on the top window title bar.

lcon	Function							
	<u>Settings</u>							
		Scale Mode	•					
		Caption						
		Repeat Play						
		Language	•					
		Encoding	•					
	displays size in the Scale Mode icon, th	<i>cale Mode</i> icon allows y Video Log Viewer's wind ree choices appear:	low. When you click the					
Ø	<ul> <li>Keep Video Size: default size.</li> </ul>	Keeps the video display	scaled at the original					
	<ul> <li>Keep Video Ration the resized windom</li> </ul>		y ratio scaled to fit within					
	• Scale Video to Window: Scales the video display to the size of the entire window.							
	<b>Caption:</b> Allows you to edit the captions settings. Refer to <i>Caption</i> on page 27 for more information.							
	<b>Repeat Play:</b> Click to enable/disable playing this video log repeatedly. When the checkbox is checked, repeat play is enabled.							
	Language: Allows you to select the preferred language.							
	<b>Encoding:</b> Allows you to select the encoding method should there be any garbled content.							
	<b>Save Video:</b> The <i>Save Video</i> icon allows you to save the current video log to a directory and encrypt it with a password.							
B	To save the video log, click <b>Save Video</b> , choose a directory, name the file, then click <b>Save</b> . After clicking <i>Save</i> the <i>Set Password</i> window will appear, enter a password for the video log file, or leave it blank for no password, then click <b>OK</b> .							
_	The video is saved as the .vls format. To open the video, please refer to <i>Open Video Log Files</i> on page 28.							
	<b>Note:</b> Clicking <i>Cancel</i> at the <i>Set Password</i> prompt causes the save process to end and the file is not saved.							
P.		con is used to open prev se a video log file, then e						
ত	<b>Control Panel:</b> When playing videos, in addition to the video image, the <i>Control Panel</i> shows the operations (mouse clicks and keystrokes), username, and IP address of the person logged into the computer, arranged in order of execution time. If multiple people are logged into the KVM port, the <i>Control Panel</i> will display the users, and who conducts each operation.							
-		ng up the <i>Control Panel</i> o op left corner to hold/rele	window, and use the Pin ease the open window.					
	The User List displays the users logged into the KVM port at the time the video log was recorded.							

lcon	Function
- 30	<b>Full Screen:</b> This icon expands the Video Log Viewer window to fit the the entire screen. To exit <i>Full Screen</i> mode, click the <i>Full Screen</i> icon again.

## Caption

A settings menu will pop-up clicking this option as shown:

Caption Setting		
Font		
Font Monospaced 👻		<b>—</b> •—
User Key Strokes		
Text		<b></b>
c	Caption	
User Mouse Clicks		
Text		<b></b>
C	Caption	
Position		
	Caption	
Default	ОК	Cancel

Settings	Description
Caption Setting	Click the on/off switch (top-right of menu window) to turn on/off the caption function
Font	
Font	Choose the font of the caption.
Size	Drag the slider to adjust the size of the caption.
User Key Stroke	
Text	Click the drop-down menu to choose the font color for key strokes.
Outline	Click the drop-down menu to choose the color of the font outline for key strokes.
User Mouse Clicks	
Text	Click the drop-down menu to choose the font color for mouse clicks.
Outline	Click the drop-down menu to choose the color of the font outline for mouse clicks.

Settings	Description
Position	Select where you would like to have the captions positioned by clicking one of the six position boxes.
Default	Click this button to reset to the default settings.

#### **Open Video Log Files**

Follow the steps below if you wish to play video log files on a computer without CCVSR access:

- 1. Save the video log file.
- 2. Save JavaVLS.jar from a computer with CCVSR (usually in the C:\VSR\VideoSessionRecorder\webroot rls folder).
- 3. Provide the video log file and JavaVLS.jar to the computer without CCVSR access.
- 4. On that computer, open JavaVLS.jar for the VSR Viewer.
- 5. Click the open video icon 🗎 and select the video log file to play the video.

## **Import Video**

The VSR allows you to import video log files from different VSR servers. Recorded videos are typically saved in a directory named "vls\_data" as \*.dat files. This directory can be in a local drive or a network folder in your configurations in System > Recording (*Recording*, page 75).

A few examples are listed below:

*C:\vls\_data* (local drive C:\)

*D:\vls\_data* (local drive D:\)

||10.0.8.168\sharerecording\vls\_data (network folder)

.				- 0 X
File Home Share View Pin to Quick Copy Paste si Clipboard	Move Conv Delete Pename	New item • Teasy access • New folder	Properties	Select all
$\leftarrow$ $\rightarrow$ $\checkmark$ $\uparrow$ $\square$ $\rightarrow$ This PC $\rightarrow$ Let	ocal Disk (D:) > vls_data > 20200630		< 5 ∨	Search 20200630
A Name	^	Date modified	Туре	Size
Desktop 🖈 😽 VSF	R(001074AB6032)2020-06-30_10-07-25.dat R(001074AB6032)2020-06-30_10-20-23.dat	6/30/2020 10:20 AM 6/30/2020 10:21 AM	KMP - MPEG Mov. KMP - MPEG Mov.	
USF Downloads	R(001074AB6032)2020-06-30_10-21-25.dat	6/30/2020 10:23 AM	KMP - MPEG Mov.	. 99,626 KB
	R(001074AB6032)2020-06-30_10-23-13.dat	6/30/2020 10:37 AM	KMP - MPEG Mov.	
	R(001074AB6032)2020-06-30_15-37-01.dat	6/30/2020 3:44 PM	KMP - MPEG Mov.	
	R(001074AB6032)2020-06-30_15-44-33.dat R(001074AB6032)2020-06-30_15-45-08.dat	6/30/2020 3:45 PM 6/30/2020 3:45 PM	KMP - MPEG Mov. KMP - MPEG Mov.	
	R(001074AB6032)2020-06-30 15-45-42.dat	6/30/2020 3:45 PM	KMP - MPEG Mov.	
sharefolder	R(001074AB6032)2020-06-30 15-46-16.dat	6/30/2020 3:46 PM	KMP - MPEG Mov.	
src SF	R(001074AB6032)2020-06-30_15-46-44.dat	6/30/2020 3:47 PM	KMP - MPEG Mov.	. 98,865 KB
📥 OneDrive 🛛 🔛 VSF	R(001074AB6032)2020-06-30_15-47-19.dat	6/30/2020 3:47 PM	KMP - MPEG Mov.	. 99,542 KB
This PC	R(001074AB6032)2020-06-30_15-47-52.dat	6/30/2020 3:48 PM	KMP - MPEG Mov.	. 98,759 KB
SP Objects	R(001074AB6032)2020-06-30_15-48-26.dat	6/30/2020 3:48 PM	KMP - MPEG Mov.	
	R(001074AB6032)2020-06-30_15-48-54.dat	6/30/2020 3:49 PM	KMP - MPEG Mov.	
	R(001074AB6032)2020-06-30_15-49-29.dat R(001074AB6032)2020-06-30_15-50-02.dat	6/30/2020 3:50 PM 6/30/2020 3:50 PM	KMP - MPEG Mov. KMP - MPEG Mov.	
Documents WSH	(001074AB0032)2020-06-30_15-50-02.dat	0/30/2020 3:50 PM	KIVIP - MPEG Mov.	. 03,048 KB
Downloads Music				
16 items				

To import saved files from any computer running as a VSR server, open a command prompt by clicking the Start Menu – Run, type *CMD* and click **OK**.

Use the following command line formula to import the video log files (.dat):

vsrImport <Destination DB file> <Source Path for VSR Data file> 0 <Destination path>

#### Examples:

#### Windows:

C:\VSR\VideoSessionRecorder>vsrImport VSR80.db d:\vls\_data 0 c:\

#### Linux:

sudo /usr/local/bin/ccvsr/vsrImport /usr/local/bin/ccvsr/VSR.db /home/user1/ vls\_data 0 /var

After importing the files, the video logs will appear in the **Search Results** window on the *Playback* tab.

# Chapter 5 Liveview

## Overview

The *Liveview* page allows the user to have a centralized liveview of a specific group of ports or select a particular port for liveview display.

# **Centralized Liveview**



Clicking the *Liveview* brings you to the page shown below:

The page provides a centralized liveview of the available ports.

If you have setup a favorite, you may choose to only display the ports within the favorite. You may also choose to only display *Recording Only* ports. Refer to the sections below for more details.

# **Display List**

Clicking the display list drop-down menu will show the available lists. Initially, *AllPorts* is the only available option as all the ports will be shown in the centralized liveview.

If you have created favorite(s), the name of the favorite will also be shown in the drop-down menu.

## Favorite Setting

Clicking the *icon* will bring you to *Favorite Settings*:

Favorite list	+	Name KN8	$\otimes$		
AllPorts     New Favorite     CN8600     KN8		Filter           >         KN4140VA           >         RCM101D           >         CN8600           >         KN8116v           >         CN8000A           >         SN9116C0           >         SN0148C0           >         O1_SN0108A	×	[01]Dell PowerEdge R	710 =

#### **Create Favorite**

- 1. To create a favorite, click the + icon.
- 2. The system will ask you to change the name of the favorite:

Favo	rite list	+	Name New Favorite	8		
0	AllPorts		Filter			
0	New Favorite					
0	CN8600		▶ □ KN4140VA	-		
0	KN8		▶ □ RCM101D		••	
0			▶ □ CN8600			
۲	New Favorite		▶		•	
			▶ □ CN8000A			
			▶ □ SN9116C0			
			▶ □ SN0148C0			
			▶ □ 01_SN0108A	-		

3. In the left panel, check the device checkbox that you wish to add to the favorite and click the <u>button</u>. The device will be shifted to the right panel.

Click ▶ for a device's ports if you wish to select the ports individually.

Filter		KN8116v [02]	=
KN4140VA     [01]Dell PowerEdge R710	*	KN8116v [03]KA7166-DVI	=
[02] [03]KA7178-01 [04]KA7178		KN8116v [05]VLS	≡
[04]KA7778 [05] [06]		KN8116v [06]	=
[07]Espa		KN8116v	= .

To remove a device or a port from the list, check the checkbox in the right panel and click the  $\boxed{}$  button.

You may use the filter to refine your search.

On the right panel, you may also click and drag the devices/ports to rearrange the order of the added devices/ports.

4. When completed, click the *Save* button. Click the *Cancel* button to cancel the modification. The added favorite will be displayed in the *Favorite List* panel.

#### **Modify Favorite**

To modify the favorite, click the name of the favorite and modify as described in *Create Favorite* above.

#### **Delete Favorite**

To delete a favorite, click the **i** icon and click the *Save* button:

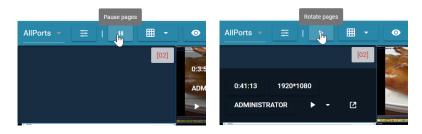
Favorite list	ıt	+	Name KN8	8			
AllPe     New	orts v Favorite	ī	Filter			KN4140VA [01]Dell PowerEdge R710	≡
<ul> <li>O New</li> <li>O CN8</li> </ul>		1	► □ KN4140VA ► □ RCM101D	<u>^</u>			
KN8	3	Delete	► CN8600				
⊖ write	e test	Ţ	<ul> <li>KN8116v</li> <li>CN8000A</li> <li>SN9116C0</li> <li>SN0148C0</li> <li>O1_SN0108A</li> </ul>	·	**		

After setting up your favorite, clicking the display list drop-down menu will show the favorites in the list.

Select a favorite to only view ports in the favorite on the centralized view.

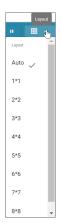
## **Rotate / Pause Pages**

If the source ports exceed the number of display for a layout, CCVSR will automatically rotate through the displayed ports page by page. Click the rotation or cons to respectively begin or pause the rotation.



# Layout

You can change the layout of the centralized view by clicking the layout button and select a desired layout choice.



By default, Auto is selected. A range of options can be selected as shown in the diagram above.

## Status

The status button is another filter that allows you to select whether to view all the ports or only the ports that are recording on the centralized view.

Click or for a drop-down menu and select between *All* or *Recording Only*:

⊞ - ⊘ -
Status
All
Recording Only 🧹

# Port Info / Playback / Liveview Function

Port information, playback and liveview function will appear when moving your mouse cursor over a port on the centralized view.



The labeled components are explained in the table below:

No.	Item	Description
1	Recorded time	This displays how long the port has been recorded for.
2	Resolution	This displays the resolution of the liveview.
3	Logged in Username	This displays the username of the user accessing the port. "Local console" is displayed when local console is accessed.

No.	Item	Description
4	Playback from	Click this for a drop-down menu. The option allows you to choose when you wish to play the video log from.
5	Open in new window	Click this if you wish to view this port in a new window. Refer to <i>Single Port Mode</i> on page 36.
6	Port No.	This displays the port number of the liveview.

## Single Port Mode

Click the Open in new window icon to enter Single Port Mode.



The window also displays the *Recorded Time*, *Resolution*, *Logged in Username*.

Click 🔀 for full-screen mode. Press Esc to quit full-screen mode.

Click **X** to exit *Single Port Mode*.

# Chapter 6 Device Management

## Overview

The purpose of the *Device Management* page is to add KVM devices and configure ports through which the Video Session Recording Software can record video logs. The Device Management page opens the main page showing a list of KVM devices that have been added:

							٠	± (	0
=		Device N	lanagement( Availabl	e nodes: 27 )					
•	Playback		+ ADD 🖌	EDIT 🔋 DELETE			Display 🤟		
	Liveview		Name	Model	IP	Status			
-	Device Management		KN4140VA	KVM	10.3.167.210	Online			
*	User Accounts		RCM101D	KVM	10.3.167.218	Online			
٥	System ^		CN8600	KVM	10.3.167.219	Online			
	Log ^		KN8116v	KVM	10.3.166.135	4 x Recordings			
			CN8000A	KVM	10.3.167.217	Online			
			SN9116C0	KVM	10.3.167.204	Online			
			EDIT				Display	Ţ	
			_						
			Name	Port		Status			
				ATEN International Co. Ltd. All rights res	erved.				

#### Port List

A port list is available on the lower half of the *Device Management* page. Checking a KVM device will display all the device's ports in the port list as shown:

							* ±	0
=		Device Ma	anagement( Available nodes: :	27)				
	Playback	+	ADD 🖍 EDIT	DELETE			Display ~	
•	Liveview		Name	Model	P	Status		
	Device Management		KN4140VA	KVM	10.3.167.210	Online		
	User Accounts		RCM101D	KVM	10.3.167.218	Online		
	System ^		CN8600	KVM	10.3.167.219	Online		
			KN8116v	KVM	10.3.166.135	4 x Recordings		
			CN8000A	KVM	10.3.167.217	Online		
			SN9116C0	KVM	10.3.167.204	Online		
		_						
			EDIT				Display 👻	
			Name		Port	Status		
			[01]Dell PowerEdge R710		[01]	not recording		
			[02]	ATEN International Co. Ltd. All rights	[02]	not recording		

**Note:** The port list will only display the ports of the highlighted checked device. From the example above, the port list will only display the ports of KN4140VA.

You can drag the window splitter up or down to show more ports in the list or you can use the scroll bar on the right.

+	ADD 🖌 EDIT	👕 DELETE		Display 👻
	Name	Model	IP	Status
	KN4140VA	KVM	10.3.167.210	Online
	RCM101D	KVM	10.3.167.218	1 x Recordings
0	CN8600	KVM	10.3.167.219	Online
		*		Diselar
1	' EDIT	÷		Display 👻
/	P EDIT	¥.	Port	Display 👻 Status
		¥	Port [01]	
<b>Z</b>	Name	¥		Status
	Name [01]Dell PowerEdge R710	•	[01]	Status not recording

#### **Recording KVM Ports**

To record video logs you must add a KVM switch and configure its recording settings (in the *Recording* tab). Enabled ports are recorded by the Video Session Recording Software every time they are accessed through the KVM switch, and are saved as a video log file. Logs can be viewed from the *Playback* tab. As long as you are licensed (see *Licenses* on page 8) to do so, there is no limit to the number of KVM devices that you can add or ports you can enable. The Video Session Recording Software can simultaneously record a maximum of 20 ports at one time, across multiple KVM devices.

#### Display

Click *Display* (top right-hand corner) to select what information is shown in the list.

## Adding KVM Devices

To add a KVM device to the KVM Device list, do the following:

 On the KVM device, go to *Device Management* to enable Log Server and enter the MAC Address and Service Port of the computer running the Video Session Recording Software, as shown below:

C Log Server	
MAC Address:	DC5360FE6AC8
Service Port:	9001

2. On the *Device Management* page, click the + ADD button.

A pop-up window appears:

GENERAL	RECORDING						
IP address							
Service Port		9001					
Note: Please	make sure that	the Log Server of the	e device ("Device	Management	>"ANMS") is e	nabled in adva	nce.

- 3. Fill in the IP address and Service Port number of the KVM device you are adding, and click **Next**. The system will bring you to the *Recording* tab.
- If you wish to enable recording of a port on the KVM device, click the drop-down menu and select "Enable (Video + Audio)" or "Enable (Video)". For more information, please refer to *Enabling Video/Audio Recording* on page 41.
- 5. If you wish to enable recording on local console, check the checkbox and enter a time delay value in seconds (0-999) in the entry field.
- 6. Click Add to add the KVM device.
- 7. The KVM device will appear in the device list, and on the *Device Management* main page.

- **Note:** 1. After adding a KVM device, check the *Status* column. If *Online* is shown, you have successfully added the device.
  - 2. An *Offline* status indicates the KVM device can't be reached over the network. Check that the KVM device's IP address and Service Port numbers are correct, the KVM device is online and its Log Server has been enabled and configured with the correct MAC Address.
  - 3. If you wish to receive logs of an added serial console server, make sure you have enabled notification settings on the serial console server's own notification page. An example (SN0148CO device interface) is shown below:

Port Access User Management Notification Settings	Device Management Log N	laintenance			Welcome to the SN0148
	Notification Settings				THERE AN OLD SHOLL A
= [01]COM1	Event	Aten Log	Syslog	Email	<u> </u>
To 500108 Port 2 to 500108 Port	▼ Enable all system events				
4	Issue CSR				
🐾 [03]СОМЗ	Import certificate				
	Export log				
<b>%</b> [05]СОМ5	System configuration backup				
🚡 [06]СОМ6	System configuration restore success				
🐾 [07]СОМ7	System configuration restore fail			0	
T [08]COM8	LAN port is down				
T [09]COM9	Power supply fail				
(10)COM10	Device F/W upgrade success				
[11]COM11	Log delete			0	
	NFS server mount				
5 [12]COM12	NFS server unmount				
🚡 [13]СОМ13	NTP success				
%[14]COM14	NTP fail				
% [15]COM15	CC server connection fail				
📲 [16]СОМ16	IP change				
To [17]COM17	Remove power device				
T [18]COM18	Attach power device				*
S [19]COM19					

- 4. For sessions recorded via the ports of KE6900AiT, KE6940AiT, please note the following:
  - 1. Audio is not supported.
  - 2. Users must *Enable recording on local console port* to record sessions that are accessed by their local console ports or KE Receivers, see page 41 for details.
  - 3. Keystroke & mouse click recording is only supported for remote sessions captured from the ports of KE6900AiT, KE6940AiT.

## **Edit KVM Devices**

To edit the name, description, IP address, service port and recording options, check the checkbox of the KVM device and click the vertex button:

Edit		
GENERAL	RECORDING	
Name	KN4140VA	
Description	b	
IP address	10.3.167.210	
Service Port	9001	
	SAVE	EL

Edit the options and click Save to save.

#### **Recording**

dit		×
GENERAL RECORDING		
Name	Recording	*
[01]Dell PowerEdge R710	Enable (Video + Audio) 👻	
[02]	Enable (Video + Audio) 👻	
[03]KA7170S123	Enable (Video + Audio) 👻	-
Note: To edit recording locations, pleas	e go to "System" > "Recording"	
Enable recording on local console po	rt	
Timeout Delay	0	second(s)
		SAVE CANCEL

Click the *Recording* tab to edit recording options:

#### **Enabling Video/Audio Recording**

To enable the ports of a KVM device to record video + audio or video only sessions, do the following:

1. Check the KVM device's checkbox.

- 2. Click the button for the edit pop-up menu.
- 3. Click the *Recording* tab.
- 4. Click the drop-down menu under the *Recording* column.
- 5. Select "Enable (Video + Audio)", "Enable (Video)" or "Disable".
- 6. Click Save to save.
- 7. The enabled ports will now record anytime they are accessed.

#### Enable Recording on Local Console Port

Devices added to the CCVSR may be access via local console ports. Check the checkbox to enable recording on the local console whenever they are accessed.

For CN8000A, CN8600, CN9000, CN9600, CN9950, RCM101A, RCM101D, RCMVGA101, RCMDVI101, and RCMDP101U, enter a Timeout Delay value in seconds (0 - 180) in the entry field. CCVSR will stop recording if there are no key stroke or mouse movement after the set time. If **'0**' is entered, CCVSR will record indefinitely.

## **Delete KVM Devices**

To delete a KVM device, check the checkbox of the KVM device and click the **verte** button.

# Chapter 7 User Accounts

## Overview

The User Account in the main menu expands into 3 sub-menus.



## User

Below is the User sub-menu:

									* ±	0
		R	USER	ONLINE USERS	LOGIN & PASSWORD POLICY					
۰	Playback		+	ADD 🖌 E	DIT 🔹 💼 UNLOCK 🔋 DELETE					î.
	Liveview		_							
-	Device Management			Name	Туре	Group	Description	Status		
4	User Accounts	*		administrator	Super Administrator		Super Admin	Normal		
				333	Super Administrator			Normal		
	Group			test	Super Administrator			Normal		
	Authentication			95	Super Administrator			Normal		
•	System	^		17	User			Normal		
8	Log	^		user	User			Normal		
				admin	Administrator			Normal		
				rr	Super Administrator			Normal		
			-		Consta Astronomications			Manual		*
		_			ATDN International Co. Ltd. All rights reserve	d.				

The main panel provides a more detailed user information at-a-glance.

The sort order of the information displayed can be changed by clicking the column headings.

The buttons on top of the main panel are used to manage users.

#### <u>User Type</u>

The Video Session Recording Software supports three types of users, as shown in the table, below:

User Type	Role
Super Administrator	Access and manage ports and devices. Manage Users, and Groups. Configure the overall installation. Configure personal working environment.
Administrator	Access and manage authorized ports and devices. Manage Users and Groups. Configure personal working environment.
User	Access authorized ports and devices. Manage authorized ports and devices; configure personal working environment.
	<b>Note:</b> Users who have been given permission to do so, may also manage other users.

#### Adding Users

To add a user, and assign user permissions, do the following:

1. Click the + ADD button for the pop-up window below:

Add							
GENERAL	GROUP MEMBERS	SETTING PAGES	DEVICE	RECORDING			
Username							
Password							
Confirm passv	word						
Description							
User Type			Super admir	nistrator	Ŧ		
🗌 User cann	ot change account passw	vord					
User must	t change password at nex	t logon					
Password	expires on		2019/02/22		T		
Disable th							
🔿 After	r		2019/02/22	17:06:04	T		
View keys	troke & mouse click inforr	mation during playback					
					PREVIOUS	NEXT	CANCEL

2. Enter the required information in the appropriate fields. A description of each of the fields is given in the table below:

Field	Description
Username	1 to16 characters are allowed depending on the Account Policy settings. see <i>For security purposes, we recommend</i> <i>that you change this string occasionally.</i> , page 67.
Password	0 to 16 characters are allowed depending on the Account Policy settings (see <i>Login &amp; Password Policy</i> on page 49).
Confirm Password	To make sure there is no mistake in the password. The two entries must match.
Description	Additional information about the user that you may wish to include.
User Type	There are three categories: Super Administrator, Administrator and User. There is no limitation on the number of accounts that can be created in each category.
	<ul> <li>The Super Administrator are granted the highest permissions, where you can view/configure Liveview, Playback, Device Management, User Accounts, System and Log. The Super Administrator's permissions (see page 46) are automatically assigned by the system and cannot be altered.</li> </ul>
	<ul> <li>The default permissions for Administrators include everything except User Accounts, but the permissions can be altered for each Administrator by checking or unchecking any of the permissions checkboxes.</li> </ul>
	<ul> <li>The default permissions for Users include Playback, but the permissions can be altered for each User by checking or unchecking any of the permissions checkboxes.</li> </ul>
	<b>Note:</b> Users who have been given User Account privileges cannot access or configure Groups.

Field	Description
Account Condition	Condition allows you to control the user's account and access to the system. Check the checkbox to add the conditions described below:
	<ul> <li>User cannot change account password: To make a password permanent, so that the user cannot change it to something else. Checking this will disable the next two conditions.</li> </ul>
	<ul> <li>User must change password at next logon: Checking this will disable the above condition. When this user changes the password, this option will be unchecked.</li> </ul>
	<ul> <li>Password expires on: Select a date for the condition.</li> </ul>
	<ul> <li>Disable the Account: lets you suspend a user's account without actually deleting it, so that it can be easily reinstated in the future.</li> </ul>
	<ul> <li>Immediately</li> </ul>
	<ul> <li>After: Select a date and time to disable the account.</li> </ul>
	<ul> <li>View Keystroke &amp; mouse click information during playback.</li> </ul>

3. If you selected the user to be a Super administrator, click add to add the user.

If you selected the user to be an Administrator or a User, the tabs *Group Member*, *Setting Pages*, *Device* and *Recording* may light up for you to configure. Continue configuring the user by clicking the lit tabs or *Next*.

4. **Group Members:** You can assign the new user to a group by selecting the *Group Members* tab, check the group you wish the user to be in and click *Next.* 

**Note:** If the group you wish to assign to has not been created, refer to *Creating Groups* on page 50 to create a new group.

5. Setting Pages: You can assign permissions in this tab by checking the options and click *Next*.

**Note:**For ordinary users, in addition to enabling Device Management, the user must also be given those rights for each device that he will be allowed to manage.

• Enabling *Liveview* allows a user to use the liveview function (see *Liveview*, page 31).

- Enabling *Playback* allows a user to use the playback function (see *Playback*, page 21).
- Enabling *Device Management* allows a user to view the settings and devices on the Device Management tab (see *Device Management*, page 37).
- Enabling *User Accounts* allows a user to create, modify, and delete user and group accounts.
- Enabling *Log* allows a user to access the system log (see *Logs*, page 81 for details)
- Enabling *System* allows a user to access and configure settings in the System tab.
- 6. **Device:** You can assign the user's device access rights by selecting the *Device* tab, check the devices you wish to have access rights to and click *Next*.
- 7. **Recording:** You can assign CCVSR configuration rights by selecting the *Recording* tab, check the CCVSR you wish the user to be able to configure and click Next.
- 8. When your selections have been made click Add.

#### Modifying User

To modify a user account, do the following:

- 1. Check the checkbox of the user.
- 2. Click the zerr button and choose *Properties* or *Access right*.
- 3. **Properties:** Choosing Properties allows you to configure the general tab and group members tab.

Access right: Choosing Access right allows you to configure the setting pages tab, device tab and recording tab.

Refer to Adding Users on page 44 for more information.

4. Click Save when the modification is complete.

#### **Deleting User**

To delete a user account, do the following:

- 1. Check the checkbox of the user.
- 2. Click I DELETE .

**Note:** If all users are deleted, the system will automatically generate the original administrator account and password (name: administrator, password: password).

## **Online Users**

The *Online Users* tab lets super administrators see at a glance which super users are currently logged into the Video Session Recording Software, and provides information about each of their sessions.

USER	ONLINE USERS	LOGIN & PASSWORD POLICY			
8	DISCONNECT C F	REFRESH			
	Username	IP	Login time	Client	Category
	administrator	16.0 (17.02)	2019/02/22 12:24:18	Web Browser	SA
	administrator	16.0 (17.02)	2019/02/22 15:25:48	Web Browser	SA
	administrator	10.0 17.000	2019/02/22 15:25:56	Web Browser	SA
	administrator	16.5 (17.55)	2019/02/22 15:26:23	Web Browser	SA
	administrator	165 (1756)	2019/02/22 15:26:29	Web Browser	SA
	administrator	165 (175)	2019/02/22 15:26:50	Web Browser	SA
	writetest1	16.5 (17.5)	2019/02/22 16:15:51	Web Browser	Normal User

- **Note:** 1. The Online User page is not available for Administrator or User user types.
  - 2. The *Category* heading lists the type of user who has logged in: SA (Super Administrator); Admin (Administrator); Normal user (User).

The meanings of the headings at the top of the page are fairly straightforward. The *IP* heading refers to the IP address that the user has logged in from; the *Login Time* refers to the time the user logged into the Video Session Recording Software, and the *Client* heading refers to the client the user used to access the system.

- This page also gives the super administrator the option to disconnect a user from the system by selecting the user and clicking *DISCONNECT*.
- Click *Refresh* to refresh the list.

The sort order of the information displayed can be changed by clicking the column headings.

## Login & Password Policy

In the Login & Password Policy tab, system administrators can set policies governing login, usernames and passwords.

ISER	ONLINE USERS	LOGIN & PASSWORD POLICY	
.ogin Policy	□ Only at an	one user may log into the same accou y given time.	int
assword P	-	length for username	6
	Minimun	length for password	6
	Passwor	d must contain at least	
			One upper case
			One lower case
			One number
			One special character (1)
	Enfo	rce password history	3

#### Login Policy

Entry	Explanation
Only one user may log into the same account at any given time	Check this to prevent users from logging in with the same account at the same time.

#### **Password Policy**

Entry	Explanation
Minimum Username Length	Sets the minimum number of characters required for a username. Acceptable values are from 1–16. The default is 6.
Minimum Password Length	Sets the minimum number of characters required for a password. Acceptable values are from 0–16. A setting of 0 means that no password is required. The default is 6.
Password Must Contain At Least	Checking any of these items requires users to include at least one uppercase letter, one lowercase letter, one number in their password, or one special character.
	<b>Note:</b> This policy only affects user accounts created after this policy has been enabled, and password changes to existing user accounts. Users accounts created before this policy was enabled, with no change to the existing password, are not affected.
Enforce password history	When checked, you cannot use the same password when attempting to change the password.
	The number entered here is how many password changes the system will remember. The system will not let you change to the passwords it remembers.

# Group

Groups allow administrators to easily and efficiently manage users and devices. Since device access rights apply to anyone who is a member of the group, administrators need only set them once for the group, instead of having to set them for each user individually. Multiple groups can be defined to allow some users access to specific devices, while restricting other users from accessing them.

## Creating Groups

To create a group, do the following:

1. Click the + ADD button for the pop-up window below:

dd					×
GENERAL	USER MEMBERS	SETTING PAGES	DEVICE	RECORDING	
Name					
Description					
					PREVIOUS NEXT CANCEL

2. Enter the required information in the appropriate fields. A description of each of the fields is given in the table below:

Field	Description	
Name	A maximum of 16 characters is allowed.	
Description	Additional information about the user that you may wish to include. A maximum of 63 characters is allowed.	

Click Next for the User Members tab.

- 3. User Members: You can assign users to the group by checking the members, check the members you wish the group to include and click *Next*.
- 4. Setting Pages: You can assign permissions in this tab by checking the options and click *Next*.
  - Enabling *Liveview* allows a user to use the liveview function (see *Liveview*, page 31).

- Enabling *Playback* allows users in the group to use the playback function (see *Playback*, page 21).
- Enabling *Device Management* allows users in the group to view the settings and devices on the Device Management tab (see *Device Management*, page 37).
- Enabling *User Accounts* allows users in the group to create, modify, and delete user and group accounts.
- Enabling *Log* allows users in the group to access the system log (see *Logs*, page 81 for details).
- Enabling *System* allows users in the group to access and configure settings in the System tab.
- 5. **Device:** You can assign the group's device access rights by selecting the *Device* tab, check the devices you wish to have access rights to and click *Next*.
- 6. **Recording:** You can assign CCVSR configuration rights by selecting the *Recording* tab, check the CCVSR you wish the group to be able to configure and click Next.
- 7. When your selections have been made click Add.

#### **Modifying Groups**

To modify a group, do the following:

- 1. Check the checkbox of the group.
- 2. Click the zerr button and choose *Properties* or *Access right*.
- 3. **Properties:** Choosing Properties allows you to configure the general tab and group members tab.

Access right: Choosing Access right allows you to configure the setting pages tab, device tab and recording tab.

Refer to Creating Groups on page 50 for more information.

4. Click *Save* when the modification is complete.

#### **Deleting Groups**

To delete a group, do the following:

- 1. Check the checkbox of the group.
- 2. Click DELETE .

## Authentication

The Authentication sub-menu includes settings of AD/LDAP and RADIUS.

#### AD / LDAP Settings

						٠	÷	0
≡	ATEN ccvs	R	AD/LDAP RADIUS					
0	Playback		Enable					
	Liveview		LDAP	Preferred LDAP +				
-	Device Management		Server IP					
*	User Accounts	~	Port	389				
	User		<ul> <li>Same as preferred settings</li> <li>Server requires secure connection(SSL)</li> </ul>					
	Group		Timeout	3	second(s)			
			Admin DN					
۲	System	^	Admin Name					
	Log	~	Password					
			Search DN					
							✓ s/	AVE
			ATEN internationa	Co. Ltd. All rights reserved.				

To allow authentication and authorization for the Video Log Server via AD / LDAP, refer to the information in the table, below:

ltem	Action
Enable	Check the Enable checkbox to allow AD / LDAP authentication and authorization.
LDAP Type	Click the drop-down menu to select Preferred or Alternate LDAP.
Server IP	Fill in the IP address, you can use the IPv4 address, the IPv6 address or the domain name in the LDAP Server field.
Port	Fill in the port number.
	Checking <i>Server requires secure connection</i> ( <i>SSL</i> ), the default port number is 636.
	Otherwise, the default port number is 389.
Timeout	Set the time in seconds that the Video Log Server waits for a reply before it times out.
Admin DN	Consult the AD / LDAP administrator to ascertain the appropriate entry for this field. For example, the entry might look like this: ou=kn4132,dc=aten,dc=com
Admin Name	Key in the LDAP administrator's username.
Password	Key in the LDAP administrator's password.
Search DN	Set the distinguished name of the search base. This is the domain name where the search starts for user names.

Click *Save* on the bottom right-hand corner of the window to save the configuration.

On the AD / LDAP server, users can be authenticated with any of the following methods:

- With MS Active Directory Schema.
  - To allow authentication via LDAP, the AD LDAP Schema must be extended with an attribute name for the CCVSR — *iVlog-userProfile* — as an optional attribute to the person class.
- Without Schema Only the Usernames used on the Video Log Server are matched to the names on the LDAP / LDAPS server. User privileges are the same as the ones configured on the switch.
- Without Schema Only Groups in AD are matched. User privileges are the ones configured for the groups he belongs to on the switch.
- Without Schema Usernames and Groups in AD are matched. User privileges are the ones configured for the User and the Groups he belongs to on the switch.

## **RADIUS Settings**

					A ± 0
≡		AD/LDAP RADIUS			
0	Playback	Senable			
	Liveview	Radius	Preferred RADIUS +		
-	Device Management	Server IP			
-	User Accounts 🔷		1645		
	User	Same as preferred settings			₿.
	Group	Authentication Type	PAP ~		
	Authentication	Timeout Retries	3 3	second(s)	
٥	System 🖍				
8	Log A				
					✓ SAVE
			descentioned for 14d All sides second		

To allow authentication and authorization for the Video Log Server through a RADIUS server, do the following:

- 1. Check Enable.
- 2. Select *Preferred RADIUS* or *Alternate RADIUS* from the drop-down menu.

- 3. Fill in the IP addresses and service port numbers. You can use the IPv4 address, the IPv6 address or the domain name in the IP fields.
- 4. Select *PAP* or *CHAP* from the drop-down menu for Authentication Type.
- 5. In the *Timeout* field, set the time in seconds that the Video Log Server waits for a RADIUS server reply before it times out.
- 6. In the Retries field, set the number of allowed RADIUS retries.
- 7. In the *Shared Secret* field, key in the character string that you want to use for authentication between the Video Log Server and the RADIUS Server. A minimum of 6 characters is required.
- 8. Click *Save* on the bottom right-hand corner of the window to save the configuration.

On the RADIUS server, Users can be authenticated with any of the following methods:

- Set the entry for the user as **su/xxxx**
- Where *xxxx* represents the Username given to the user when the account was created on the Video Log Server.
- Use the same Username on both the RADIUS server and the Video Log Server.
- Use the same Group name on both the RADIUS server and the Video Log Server.
- Use the same Username/Group name on both the RADIUS server and the Video Log Server.

In each case, the user's access rights are the ones assigned that were assigned when the User of Group was created on the Video Log Server. (See *Adding Users*, page 44.)

# Chapter 8 System

## Overview

The System page is used to view and manage the CCVSR's system settings. Clicking *System* will expand/collapse its sub-menu:



# Server Info

Clicking Server Info sub-menu will bring you to the page below:

SERVER INFO		
Server Information		
Name		
Description		
Role	Primary	
IPv4 address		
IPv6 address		
MAC address		
Server Port Settings		
нттр	80	
HTTPS	443	
CCVSR	9002	0
Archive Server Settings		
Address		
Port		
Server Type 🛛 🛛		
Role	Primary	~
Misc.		
☑ Disable keystroke recording		

#### **Server Information**

Item	Meaning
Name	Displays the computer name of the server hosting the CCVSR application.
Description	Displays the description of the server. You may modify the information here.
Role	Displays the role of the server.
IPv4 Address	Displays the CCVSR's IPv4 address.
IPV6 Address	Displays the CCVSR's IPV6 address.
Server MAC	Displays the MAC address of the computer hosting the CCVSR application.

#### **Server Port Settings**

Item	Meaning
HTTP	The port number for a browser login. The default is 9080.
HTTPS	The port number for a secure browser login. The default is 9443.
CCVSR	This is the port number for communication between a CCVSR Primary Server and Secondary Servers. The default is 9002.

This is used to specify the service ports used to access the CCVSR:

As a security measure, if a firewall is being used, the Administrator can specify the port numbers that the firewall will allow. If a port other than the default is used, users must specify the port number as part of the IP address when they log in. If an invalid port number (or no port number) is specified, the CCVSR will not be found.

**For Example:** To access the CCVSR with an IP address of 192.168.0.100, using a secure browser login (https), enter:

https://192.168.0.100:9443

Note: 1. Valid entries for all of the Service Ports are from 1-65535.

- 2. Service ports cannot have the same value. You must set a different value for each one.
- 3. If there is no firewall (on an Intranet, for example), it does not matter what these numbers are set to since they have no effect.

#### **Archive Server Settings**

If you have installed a CCVSR Archive Server, input the IP Address and Port number of the computer hosting the software. For more information on configuring the Archive Server see *CCVSR Archive Server*, page 87, for details.

#### Server Type

You can change the role of the server here. Select *Primary* or *Secondary* using the drop-down menu.Primary Server

Select *Primary Server* for a computer that is running as the main Video Session Recording Software. This computer will host and manage all aspects of the Video Session Recording Software, and can add computers running as *Secondary Servers* for extended storage of video log files.

#### Secondary Server

Select *Secondary Server* if the computer is being used as a storage for video log files from the *Primary Server* and they do not support any system management functions such as settings configuration, device management, and user management.

As a *Secondary Server*, one of its functions is to store video log files for the *Primary Server*. If you choose this option, provide the following information:

*Sever Address:* enter the IP address of a computer running the *Primary* Video Session Recording Software.

Service Ports: in the Server Port Settings above, enter the CCVSR / HTTP / HTTPS service port numbers of the *Primary Server*. The default service ports are 9002 / 9080 / 9443. Additional information about service ports is provided in *Server Port Settings* on page 57.

*The Secondary Server* must be added to the *Primary Server* in order to work. *See Recording*, page 75, for details.

When you log in locally (httsp://127.0.0.1:9443) after changing the server to a secondary server, only the *Server Info* sub-menu is shown.

When the primary server fails, one of the secondary servers will act as a redundant server to make sure that the service is always available. In this case, this secondary server will have access to viewing the management settings. The other secondary servers in your setup will still act as storages. Once the primary server is back online, the redundant server will resume to its original role as a storage server. If the primary server is broken down permanently, administrators can change a secondary server to a primary server from the local management webpage (https://127.0.0.1:9443).

# **Note:** If you try to enter the secondary server using its IP address (e.g. https://192.168.0.100:9443), the system will automatically direct you to the primary server.

## Misc

Check the checkbox to disable keystroke recording.

## Notification

The notification page allows you to setup notification methods.

#### <u>SMTP</u>

≡			P + 0
•	Playback	SMTP SNMP SYSLOG ADVANCED	
	Liveview		
	Device Management	To receive event notifications through email, please set up the following SMTP service and go to the "Advanced" tab to configure notification events.	
	User Accounts 🗸	Enable SMTP service	
	User	Server Address 10.3.16.245	
	Group	Port 465	
	Authentication	Email test@test.tw	
		My server requires authentication	
٥	System 🗸	Username test	
	Server Info	Password	
	Notification	Secure connection(SSL)	
	Security	Recipients test@test.tw	
	License	SEND A TEST EMAIL	
	Backup & Restore		
	Recording		
茵	Log ^		
-			✓ SAVE

To have the CCVSR email reports from the SMTP server to you, do the following:

- 1. Enable the *Enable SMTP service*, and key in either the IPv4 address, IPv6 address, or domain name of the SMTP server.
- 2. Key in the SMTP port.
- 3. Key in the email address of where the report is being sent from in the *Email* field.

#### Note:

- 1. Only one email address is allowed in the *Email* field, and it cannot exceed 64 Bytes.
- 2. 1 Byte = 1 English alphanumeric character.
- 4. If your server requires authentication, check the *My server requires authentication* checkbox, and key in the appropriate account information in the *Username* and *Password* fields.
- 5. If your server requires a secure SSL connection, check the *Secure connection* (*SSL*) checkbox.

6. Key in the email address of where the report is being sent to in the *Recipients* field.

**Note:** If you are sending the report to more than one email address, separate the addresses with a semicolon ";". The total cannot exceed 256 Bytes

7. Click *Save* on the bottom right-hand corner of the window to save the configuration.

#### **SNMP Server**

			₽ ± 0
0	Playback	SMTP SNMP SYSLOG ADVANCED	
	Liveview		
••	Device Management	SNMP traps are event notifications. You can set CCVSR to push SNMP traps to an existing SNMP manager on the network and go to the 'Advanced' tab to configuration notification events.	
-	User Accounts 🗸	Send SNMP traps	
	User	IP/Address 10.3.167.245	
	Group	Port 162	
	Authentication	Enable SNMP Agent	
ð	System 🗸	SNMP version v1 ~	
	Server Info	Community	
	Notification	NMS IP/Host Name	
	Security	Access Type None +	
	License		
	Backup & Restore		
	Recording		
ä	Log ^		
<u> </u>	×	ATEN International Co. Ltd. All rights reserved.	✓ SAVE

To be notified of SNMP trap events, do the following:

- 1. Check Send SNMP traps.
- 2. Key in either the IPv4 address, IPv6 address, or domain name of the computer to be notified of SNMP trap events.
- 3. Key in the port number. The valid port range is 1–65535.

**Note:** The logs that are notified of SNMP trap events are configured on the Notification Settings page under the *Log* tab. See *Advanced* (*Notification*), page 63 for details.

- 4. Check Enable SNMP Agent.
- 5. Select SNMP version by clicking the drop-down menu.
- 6. Key in the community value(s) if required for the SNMP version.

- 7. Enter the NMS IP/Host Name.
- 8. Select Access Type by clicking the drop-down menu.
- 9. Click *Save* on the bottom right-hand corner of the window to save the configuration.

#### Syslog Server

≡			₽ ± 0	
0	Playback	SMTP SNMP SYSLOG ADVANCED		
	Liveview			
	Device Management	To send event logs to a Syslog server, please set up the following Syslog service and then go to the 'Advanced' tab to configure notification events.		
-	User Accounts 🗸	Enable Syslog service		
	User	Server address 10.3.167.245		
	Group	Port 514		
	Authentication			
٥	System 🗸			
	Server Info			
	Notification			
	Security			
	License			
	Backup & Restore			
	Recording			
ē	Log ^ -		✓ SAVE	
	×	ATEN International Co. 114. All rights reserved	V SAVE	

To record all the events that take place on the CCVSR and write them to a Syslog server, do the following:

- 1. Check Enable Syslog service.
- 2. Key in either the IPv4 address, IPv6 address, or domain name of the Syslog server.
- 3. Key in the port number. The valid port range is 1-65535.
- 4. Click *Save* on the bottom right-hand corner of the window to save the configuration.

### **Advanced (Notification)**

The *Advanced (Notification)* page lets you decide which events trigger a notification, and how the notifications are sent out:

=						Ҏ ±
0	Playback	SMTP SNMP	SYSLOG ADVANCED			
	Liveview	You can customize the follow	ing notification events.			
••	Device Management	Event	SMTP	SNMP	Syslog	
3	User Accounts 🗸	<ul> <li>Auth Events</li> </ul>				
	User	Login	$\checkmark$	$\checkmark$	$\checkmark$	
		Login fail	$\checkmark$	$\checkmark$	$\checkmark$	
	Group	User locked	✓	$\checkmark$	$\checkmark$	
	Authentication	IP address locked	✓	~	$\checkmark$	
5	System 🗸	Logout	✓	<b>~</b>	$\checkmark$	
		Viewer started	✓	<b>~</b>	$\checkmark$	
	Server Info	Viewer ended	✓	<b>Z</b>	~	
	Notification	End session	✓	<b>~</b>	~	
	Security	<ul> <li>CCVSR events</li> </ul>				
	· · ·	Add user	✓	~	✓	
	License	Modify user	✓	<b>Z</b>	$\checkmark$	
	Backup & Restore	Delete user	<b>✓</b>		$\checkmark$	
	Recording	Add group	✓		<b>Z</b>	-
1	Log ^					✓ SAVE
Γ.			ATEN International Co. Ltd. All rights r			✓ SAVE

Notifications can be sent via SNMP trap, SMTP email, written to the SysLog file, or any combination of the three. A check mark indicates that notification of the event is permitted for the method specified in the column heading. An empty box indicates that notification is not restricted.

# Security

The Security sub-menu includes 2 tabs.

		A	±	
=		ACCESS PROTECTION CERTIFICATE		
0	Playback	Security Filters		
	Liveview	Enable IP filter		
	Device Management	Exclude the following IP address 🗸		
4	User Accounts	+ ADD 🖌 EDIT 🕒 DELETE		
ø	System 🗸	222 222 222 222 223 223 223 223		
	Server Info			
	Notification			
	Security	Enable MAC filter		
	License	Include the following MAC address		
	Backup & Restore	+ ADD / EDIT B DELETE		
	Recording			
۵	Log 🗸	0 50 <del>55</del> - 19 A9 26 - 48		
	System Logs			
	Device Logs			
			~ s	ű

## Access Protection

### **IP / MAC Filtering**

IP / MAC filters control access to the Video Session Recording Software based on the IP / MAC addresses of the client computers attempting to connect. A maximum of 100 IP or MAC filters are allowed. If any filters have been configured, they appear in the IP Filter list box.

To enable and add IP / MAC filtering,

- 1. Check the Enable IP Filter or Enable MAC Filter checkbox.
- 2. Select between *Exclude the following IP/MAC address* or *Include the following IP/MAC address* from the drop-down menu.
- 3. Click the + ADD button.

A pop-up window appears:

Add			Add	
Please enter a specific IP a Specific IP 0.0.0.0	ddress or IP range		Please enter a specific MAC address 00-00-00-00-00-00	
	SAVE	-	SAVE	CANCEL

- For IP filter, select between *Specific IP* and *IP range*. For MAC filter, enter the MAC address.
- 5. For specific IP, enter the IP. For IP range, enter the first IP of the IP range in the first field and the second IP in the second field.
- 6. Repeat these steps for any additional IP / MAC addresses you want to filter.
- 7. Click Save.

To delete IP / MAC filtering, check an IP / IP range / MAC address and click the **Genere** button..

• IP Filter / MAC Filter Conflict

If there is a conflict between an IP filter and a MAC filter – in other words, if a computer's address is allowed by one filter but blocked by the other – then the blocking filter takes precedence (the computer's access is blocked).

#### **Lockout Policy**

For increased security, the lockout policy section allows administrators to set policies governing what happens when a user fails to log in successfully.

Lockout Policy	
Lockout users after invalid login attem	pts
Maximum login failures	2
Timeout	5
Lock client PC	
Lock User Account	

To set the lockout policy, check *Lockout users after invalid login attempts* (the default is for Login Failures to be enabled). The meanings of the entries are explained below.

Entry	Explanation
Maximum login failures	Sets the number of consecutive failed login attempts that are permitted from a remote computer. The default is 5 times.
Timeout	Sets the amount of time a remote computer must wait before attempting to login again after it has exceeded the number of allowed failures. The default is 3 minutes.

Entry	Explanation
Lock Client PC	If this is enabled (checked), after the allowed number of failures have been exceeded, the computer attempting to log in is automatically locked out. No logins from that computer will be accepted. The default is enabled.
	<b>Note:</b> This function relates to the client computer's IP. If the IP is changed, the computer will no longer be locked out.
Lock Account	If this is enabled (checked), after the allowed number of failures have been exceeded, the user attempting to log in is automatically locked out. No logins from the username and password that have failed will be accepted. The default is enabled.

**Note:** If lockout policy is not enabled, users can attempt to log in an unlimited number of times with no restrictions. For security purposes, we recommend that you enable this function and enable the lockout policies.

**Block List:** Clicking this button will bring out a window. The window includes the locked accounts.

Block List	×
The following IP addresses are blocked because of invalid login attemps	
0.3.64.100	
CLOS	E

To unlock the accounts, check the IP address and click the Unlock button.

### Login String

The *Login String* entry field lets the administrator specify a login string (in addition to the IP address) that users must add to the IP address when they access the Video Session Recorder with a browser.

For example, if 192.168.0.126 were the IP address, and *atencevsr* were the login string, then the user would have to key in:

192.168.0.126:9443/atenccvsr

- **Note:** 1. Users must place a forward slash between the IP address and the string.
  - 2. If no login string is specified here, anyone will be able to access the Video Session Recorder login page using the IP address alone. This makes your installation less secure.

The following characters are allowed in the string:

0–9 a–z A–Z ~ ! @ \$ & \* ( ) \_ - = + [ ] .

The following characters are not allowed:

% ^ ": / ? # \ ' { } ; ' <> [Space]

Compound characters (É Ç ñ ... etc.)

For security purposes, we recommend that you change this string occasionally.

Click *Save* on the bottom right-hand corner of the window to save the configuration.

### **Certificate**

You can import a private	certificate or signed certificates from a third-party certificate a	hority for secure SSL service such as a web connection (https) cert	ificate.
Subject: Issuer: Validity period: Serial number: SHA-1 thumbprint:	C=TW_ST=New Taipei City_L=Sijhi DistrictO=TEN INTERNATIONAL CO_LTD_OU=R&D_CN=ATEN INTERNATIONAL CO_LTD_email/Address=eservice@aten.com.tw C=TW_ST=New Taipei City_L=Sijhi DistrictO=ATEN INTERNATIONAL CO_LTD_OU=R&D_CN=ATEN INTERNATIONAL CO_LTD_email/Address=eservice@aten.com.tw Apr 10 (05:55) 2019 (MT 10 apr 10 06:55) 22:95 (DistrictO=ATEN INTERNATIONAL CO_LTD_CN=ATEN INTERNATIONAL CO_LTD 4547592932337 102140		
Private Certifica	te		
Private Key			
0 (0.0 B)		+	
Certificate			
0 (0.0 B)		+	
UPLOAD     Certificate Signi	RESTORE DEFAULT ng Request		
Certificate			
0 (0.0 B)		+	
CREATE CSR	✓ GET CSR 🛕 UPLOAD 👕 REMOVE		

### **Private Certificate**

When logging in over a secure (SSL) connection, a signed certificate is used to verify that the user is logging into the intended site. For enhanced security, the *Certificate* section allows you to use your own private encryption key and signed certificate, rather than the default ATEN certificate.

There are two methods for establishing your private certificate: generating a self-signed certificate; and importing a third-party certificate authority (CA) signed certificate.

• Generating a Self-Signed Certificate

If you wish to create your own self-signed certificate, a free utility – openssl.exe – is available for download over the web. See *Self-Signed Private Certificates*, page 102 for details about using OpenSSL to generate your own private key and SSL certificate.

• Obtaining a CA Signed SSL Server Certificate

For the greatest security, we recommend using a third party certificate authority (CA) signed certificate. To obtain a third party signed certificate, go to a CA (Certificate Authority) website to apply for an SSL certificate. After the CA sends you the certificate and private encryption key, save them to a convenient location on your computer.

- Importing the Private Certificate To import the private certificate, do the following:
- 1. Click + to the right of *Private Key*; browse to where your private encryption key file is located; and select it.
- 2. Click + to the right of *Certificate*; browse to where your certificate file is located; and select it.
- 3. Click Upload to complete the procedure.

**Note:** 1. Clicking **Restore Default** returns the device to using the default ATEN certificate.

2. Both the private encryption key and the signed certificate must be imported at the same time.

#### **Certificate Signing Request**

The Certificate Signing Request (CSR) section provides an automated way of obtaining and installing a CA signed SSL server certificate.

To perform this operation do the following:

1. Click Create CSR. The following dialog box appears:

Certificate Signing Request	
Country Name (2 letter code) State or Province Name Locality Name Organization Name Unit Name Common Name	
Email Address	CREATE CLOSE

2. Fill in the form – with entries that are valid for your site – according to the example information in the following table:

Information	Example
Country (2 letter code)	TW
State or Province	Taiwan
Locality	Таіреі
Organization	Your Company, Ltd.
Unit	Tech Department
Common Name	mycompany.com <b>Note:</b> This must be the exact domain name of the site that you want the certificate to be valid for. If the site's domain name is <i>www.mycompany.com</i> , and you only specify <i>mycompany.com</i> , the certificate will not be valid.
Email Address	administrator@yourcompany.com

- After filling in the form (all fields are required), click Create. A self-signed certificate based on the information you just provided is now stored on the CCVSR.
- 4. Click Get CSR, and save the certificate file (*csr.cer*) to a convenient location on your computer.

This is the file that you give to the third party CA to apply for their signed SSL certificate.

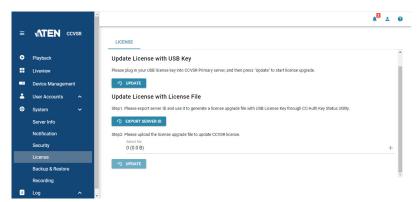
- 5. After the CA sends you the certificate, save it to a convenient location on your computer. Click + to locate the file; then click **Upload** to store it on the CCVSR.
- **Note:** When you upload the file, the CCVSR checks the file to make sure the specified information still matches. If it does, the file is accepted; if not, it is rejected.

If you want to remove the certificate (to replace it with a new one because of a domain name change, for example), simply click **Remove**.

# License

The CCVSR license controls the total number of secondary servers and nodes permitted, including used and available, on your CCVSR installation.

Upon completion of the CCVSR software installation, a default license for one primary server is automatically provided. To add more CCVSR nodes and/or secondary servers, you must upgrade the license.



To upgrade the license, contact your dealer to purchase a license key for the number of nodes and secondary servers desired.

After receiving your purchased USB license key, you can upgrade your CCVSR license using one of the two following methods:

- Upgrade by directing inserting the USB license key into the primary server.
- Upgrade without directly inserting the USB license key.

### **Upgrade License with USB Key**

- 1. Insert the license key into a USB port on your CCVSR server.
- 2. Log into the CCVSR application, go to License, and click Update under *Update License with USB Key.*

**Note:** 1. Once the upgrade has completed, it is no longer necessary to keep the license key plugged into the USB port. Remove the key and place it somewhere safe, since you will need it for future upgrades.

2. If you lose the USB license key, contact your dealer to obtain another one. If you supply the key's serial number the new key will contain all of the information that was stored on the lost key.

### Upgrade License with License File

This method is useful when it is inconvenient to directly insert the USB license key into your CCVSR primary server, such as in a restricted area where USB connection is prohibited.

- 1. On the CCVSR primary server, go to **License**, and click **Export Server ID** to generate a \*.*sid* server ID file, containing information about the server and its installation details. Export and save the file onto a separate PC.
- 2. On the separate PC, insert the USB license key.
- Open CC-Auth Key Status Utility and click Export License, as illustrated below. You're asked to locate and select the server ID file generate from step 1. Once finished, a \*.lic license upgrade file is generated.

CC-Auth Key Status Utility	
Key status: Key found: Activated.	
Key Information	
F/W version: Ver. 2.6.252 S/N:	TestKey@ETD_CCVSR-01
,	,
License Information	License Upgrade
Nodes: 4096 Archive: Yes	Save Upgrade
FAW Upgrade Export License	About Exit

- 4. Import and save the \*.*lic* file into the CCVSR primary server, and click + under *Update License with License File* to locate it.
- 5. Click Update to initiate the license upgrade.

**Note:** The license upgrade file can only be used to upgrade the license of the CCVSR server from which the server id file was generated.

Once the license has been upgraded, you can install and use additional CCVSRs and/or nodes (per the number of licenses purchased), which will communicate and work in conjunction over a network.

# **Backup & Restore**

The *Backup & Restore* page is used to *Backup* and *Restore* system configuration settings and user account information to/from a file or system created *Checkpoint*. There are two sections:

BA	CKUP & RESTORE	
Bac	skup	
	BACKUP	
Res	store	
	Restore from a backed-up file	$\overline{}$
	Select file	
	0 (0.0 B)	+
	9 RESTORE	

### Backup

To create a backup file, click *Backup* to save the file. A window will pop-up to ask you to enter a password.

Password		
Please set a password for system restoration.		
	ОК	CANCEL

Leave the *Password* field blank if you do not want to use a password. Press *OK* to backup the system configuration. The saved data file contains the current system configuration and all user account information.

### Restore

To restore data,

- 1. Select where you are restoring the configurations from by selecting from the drop-down menu. Select between *Restore from a backed-up file* or *Restore from a checkpoint*.
- 2. For back-up file, click + and select a file.

For checkpoint, select the checkpoint from the checkpoint list.

3. Click Restore.

# Recording

This page allows you to select the destinations (Primary Server, Secondary Servers, or shared network folder) and you wish to store the video log files. *Secondary CCVSR Servers* are also used to save video log files on alternative computers in order to consolidate disk space across different computers. To configure a secondary computer to work as a *Secondary CCVSR Server*, see *Server Type*, page 58 for details. When you select *Recording*, the following screen appears:

							* ±
		/SR	RECORDING				
0	Playback		The recorded vi be reserved and	deos are saved in the following loc: I its recording enabled.	ations.Please note that for proper system operations, at le	ast one partition with more than 4GB recording quot	a in the primary and secondary servers shoul
	Liveview		+ AD	) 🔹 🥒 EDIT 🛛 1	DELETE 茾 OPTION		
••	Device Management		+ ADD	CONT 1			
•	User Accounts	^		Location	Capacity (Free / Total )	Recording Quota	Status
0	System	~	<b>•</b> •	3700T-13814			Online
	Server Info						
	Notification						
	Security						
	License						
	Backup & Restore						
	Recording						
2		~					
	System Logs						
	Device Logs						

From the *Recording* menu page you can:

- Add or Delete CCVSR Servers
- Add or Delete Network shared folder
- Enable or Disable recording locations
- Set retention policy for video log files

### Adding Secondary CCVSR Servers

The Secondary CCVSR Server you are adding must be on a computer available over the network. To add a CCVSR Server, do the following:

- 1. Click Add.
- 2. A pop-up screen appears to bring you to the General tab:

٨dd		×
GENERAL RE	CORDING	
	Name	P
	8220N	10.3.41.127
		SAVE

3. Select a CCVSR Server from the list (in the same LAN as the primary server) and click **Next** for the *Recording* tab:

Capacity		Recording Quota	Enable Recording
(89GB/146GB)	0		
(131GB/136GB)	5		
	(89GB/146GB)	(89GB/146GB)	(89G8/14608) <u>0</u>

- 4. Select the recording location by checking the checkbox of the *Enable Recording* column. Enter a value in the corresponding field of the *Recording Quota* column.
- 5. Click *Save* to save the configuration and the CCVSR Server will now appear on the Recording main page.

### Adding Shared Network Folder

To add a Shared Network Folder, do the following

- 1. Click Add.
- 2. A pop-up screen appears to bring you to the General tab:

Add	×
GENERAL RECORDING	
IP/Name	10.3.41.127
Username	will
Password	
	↔ CONNECT
Recording Path:	\CC2000 ~
	► CC2000
	▶ Users
Description	
	NEXT CANCEL

3. Fill in the information of the top three entries that are valid for your network folder location using the following table:

Item	Description
IP/Name	Enter the IP address of the server sharing the network folder.
Username	Enter a username with permission to access the shared network folder.
Password	Enter a password.

4. Click *Connect* to retrieve path information automatically. If retrieved correctly, you can select the recording path from the drop-down menu. You may also enter a description in the description entry.

Note: Please make sure that SMBv2 & v3 are supported.

Alternatively, you can enter the rest of the information using the table below:

Item	Description
Recording Path	Enter the folder location of the server where you want to save the video log files. Example: Share\Department2\Security\VideoLogs
Description	Enter a description for the network folder.

5. Click Next for the Recording tab:

d			>
GENERAL RECORDING			
Location	Capacity	Recording Quota	Enable Recording
<b>^</b> 10.3.41.127			
\CC2000	(90GB/146GB)	5	$\checkmark$
			SAVE CANCEL

- 6. Select the recording location by checking the checkbox of the *Enable Recording* column. Enter a value in the corresponding field of the *Recording Quota* column.
- 7. Click *Save* to save the configuration and the Shared Network Folder will now appear on the Recording main page.

#### **Editing Secondary CCVSR Servers**

To edit a CCVSR server, do the following:

- 1. On the *Recording* page, check the checkbox of the CCVSR server.
- 2. Click *Edit* for the pop-up page below:

Edit	
GENERAL RECORDING	
Name	8220N
Description	
Role	Primary
IP	10.3.41.127
Save recorded videos in network folders first	
	SAVE CANCEL

- 3. You can edit the name and description of the CCVSR server and enable (check)/disable (uncheck) *Save recorded videos in network folders first* here. Click the *Recording* tab to edit the options there (e.g. disable recording).
- 4. After making the changes, click *Save* to save the configuration.

#### **Editing Shared Network Folder**

To edit a Shared network folder, do the following:

- 1. On the *Recording* page, check the checkbox of the Shared network folder.
- 2. Click *Edit* for the pop-up page below:

IP/Name	10.3.41.127	
Username	will	
Password		é
Recording Path:	\CC2000	
	No nodes available	
Description		

- 3. You can edit the username and password and click *Connect* again to retrieve path information and re-select the recording path from the drop-down menu. Click the *Recording* tab to edit the options there (e.g. disable recording).
- 4. After making the changes, click *Save* to save the configuration.

### Deleting Secondary CCVSR Servers/Shared Network Folder

To delete a CCVSR server/Shared network folder, do the following:

- 1. On the *Recording* page, check the checkbox of the entry you wish to delete.
- 2. Click Delete.

### **Option - Retention Policy**

If *Continue recording without overwriting any video* is selected, CCVSR will continue recording until the recording quota is reached.

If *Keep the videos within (days)* and a number (1-365) is entered, the videos older than the entered number will be deleted.

For example, if you entered 7 days, the Video Session Recording Software will delete recordings that are older than 7 days and leaves all video files created in the past 7 days untouched.

The retention policy is refreshed at 00:00 everyday.

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# Chapter 9 Logs

# Overview

The Video Session Recording Software logs all the events that take place on it. To view the contents of the log, click *Log* to expand the Log main menu and click to select the type of log you wish to see. The System Logs and Device Logs are respectively shown below:

						A 2	-
		SYSTEM LOGS					
	Playback	± EXPORT	- 👼 PRIN	лт 🛫 орті	0N Q - Se	arch description Q SEARCH	
	Liveview	E ENFORT					
	Device Management	Severity	User		Description	Date	
	User Accounts	Information	System	n	Create check point.	2019/02/23 11:56:47	
	System ^	<ul> <li>Information</li> </ul>	admini	istrator	User administrator modified user administrator account.	2019/02/23 11:55:46	
_	Log 🗸	Information	admini	istrator	User administrator modified user administrator account.	2019/02/23 11:55:44	
	System Logs	<ul> <li>Information</li> </ul>	admini	istrator	User administrator logged in	2019/02/23 11:48:44	
	Device Logs	<ul> <li>Information</li> </ul>	admini	istrator	User administrator (IP=10.3.41.138) attempting to login	2019/02/23 11:48:44	
		Information	admini	istrator	User administrator logged out	2019/02/23 11:30:48	
		Information	admini	istrator	User administrator logged in	2019/02/23 11:29:21	
		<ul> <li>Information</li> </ul>	admini	istrator	User administrator (IP=10.3.41.138) attempting to login	2019/02/23 11:29:21	
		Information	admini	istrator	User administrator logged in	2019/02/23 11:27:00	
		Information	admini		User administrator (IP-10.3.41.138) attempting to login	2019/02/23 11:27:00	
		Information      DEVICE LOGS	admini				2
		DEVICE LOGS		ATEN int	endand Co. Life di Tafat non-met	 	1
	Pisyback Liveview		admini	ATEN int	endand Co. Life di Tafat non-met		•
	Playback	DEVICE LOGS		ATEN int	endand Co. Life di Tafat non-met	 	<b>L</b>
	Playback Liveview		- 🖶 PRIM	ATDV int	natural foi Li Li Al Alfabia normat. DM	arch description Q. SLARCH	•
	Playback Liveview Device Management	DEVICE LOGS	- DRIM	ATDV int	DA Q = So Description	arch description Q SLARCH Date	•
	Playback Liveview Device Management User Accounts	DEVICE LOGS	- Pata Severity Information	ATDV ind T Device IP 10.3.167.204	enventued Cis List di Inforta nonventi City Ci, e o o Personifician NTP sarrer Connection was successful (Sinver: 10.3.16/2465).	unch description         Q. 102A007           Desc         2014/02/23 11.59-02           2014/02/23 11.59-02         2014/02/23 11.59-02	•
	Playback Liveview Device Management User Accounts A System Accounts System Accounts System Logs	DEVICE LOGS	Severity Information Information	ATDV int WT C OPTI Device IP 10.3.166.135	Of Lefe Afriques reserved.      Of Lefe Afriques reserved	andh description Q. 1524001 2019402/23 11 99 (2 2019402/23 11 99 (2 2019402/23 11 92 72 76. 2019402/23 11 52 76	
	Playback Liveview Device Management User Accounts ^ System ^ Log v	DEVICE LOGS	Coverly Information Infor	ATDN 64 NT C OPT Device IP 10.3.167.204 10.3.167.210	Di	auch description Q. 1924/001 Desc 2019/02/2011 59:02 2019/02/2011 59:02 2019/02/2011 59:02 2019/02/2011 59:05 00 00:02/2011 59:05	
	Playback Liveview Device Management User Accounts A System Accounts System Accounts System Logs	DEVICE LOGS	Prevention     Information     Information	ATDE 64 47 0 001 0 0167 204 10.3.167.200 10.3.167.210	M     CQ     e     So     Description     OP Variant connection was successful (Server 10.3.16/245),     OP Variant connection was successful (Server 1	Control         Control         Control           2019/02/2011 59/02         2019/02/2011 59/02         2019/02/2011 59/02           2019/02/2011 59/02         2019/02/2011 59/02         2019/02/2011 59/02           7/0         2019/02/2011 59/02         2019/02/2011 59/02           7/0         2019/02/2011 59/02         2019/02/2011 59/02           7/0         2019/02/2011 59/02         2019/02/2011 59/02           7/0         2019/02/2011 59/02         2019/02/2011 59/02	
	Playback Liveview Device Management User Accounts A System Accounts System Accounts System Logs	DEVICE LOGS	Severity Information Information Information Information	ATDExe 417 2 2011 Device 19 10.3.167.204 10.3.167.210 10.3.167.210 10.3.167.210	Constraints and a constraint of the second spiniting and anticle to [21] Coll Proverdings IG     Constraints and spiniting and full access privilege, and anticle to [21] Coll Proverdings IG     Coll base administrator gain full access privilege, and anticle to [21] Coll Proverdings IG     Coll base administrator gain full access privilege, and anticle to [21] Coll Proverdings IG     Coll base administrator gain full access privilege, and anticle to [21] Coll Proverdings IG     Coll base administrator gain full access privilege, and anticle to [21] Coll Proverdings IG     Coll base administrator gain full access privilege, and anticle to [21] Coll Proverdings IG     Coll base administrator gain full access privilege, and anticle to [21] Coll Proverdings IG	Control         Control         Control           2019/02/2011 59/02         2019/02/2011 59/02         2019/02/2011 59/02           2019/02/2011 59/02         2019/02/2011 59/02         2019/02/2011 59/02           7/0         2019/02/2011 59/02         2019/02/2011 59/02           7/0         2019/02/2011 59/02         2019/02/2011 59/02           7/0         2019/02/2011 59/02         2019/02/2011 59/02           7/0         2019/02/2011 59/02         2019/02/2011 59/02	
	Playback Liveview Device Management User Accounts A System Accounts System Accounts System Logs	DEVICE LOGS           ▲ Exercit           Senter hame           Sentation           Nation           Nation           Nation           Nation           Nation           Nation           Nation	Provention     Information     Information     Information     Information     Information	xT ← OPT Deside IP 10.3.167.204 10.3.167.210 10.3.167.210 10.3.167.210 10.3.167.210	terrenterie Co. U.S. Al Angels reserved.	Q         IMAGE         Q           areth description         Q         IMAGE           bite         2019/02/20 11.57/05         2019/02/20 11.57/05           70.         2019/02/20 11.57/05         2019/02/20 11.57/05           70.         2019/02/20 11.57/05         2019/02/20 11.57/05           70.         2019/02/20 11.57/05         2019/02/20 11.57/05           70.         2019/02/20 11.57/05         2019/02/20 11.57/05           70.         2019/02/20 11.57/05         2019/02/20 11.56/05	
•	Playback Liveview Device Management User Accounts A System Accounts System Accounts System Logs	DEVICE LOGS	Para     Para	xTD ++ xTT ← CPTT Detect #9 10.3167,204 10.3167,210 10.3167,210 10.3167,210 10.3167,210 10.3167,210	cost         Cost Del Al Ingels reasoned.         Cost         Cost Del Al Ingels reasoned.         Cost Del Ingels reasoned.         Cost	Q         IMAGE         Q           areth description         Q         IMAGE           bite         2019/02/20 11.57/05         2019/02/20 11.57/05           70.         2019/02/20 11.57/05         2019/02/20 11.57/05           70.         2019/02/20 11.57/05         2019/02/20 11.57/05           70.         2019/02/20 11.57/05         2019/02/20 11.57/05           70.         2019/02/20 11.57/05         2019/02/20 11.57/05           70.         2019/02/20 11.57/05         2019/02/20 11.56/05	

**Note:** If you wish to receive logs of an added serial console server, make sure you have enabled notification settings on the serial console server's own notification page. An example (SN0148CO device interface) is shown below:

Port Access User Management Notification Settings	Device Management Log	Maintenance			Welcome to the SN0148C
					The come of the onothe
0148CO11	Notification Settings				
= [01]COM1	Event	Aten Log	Syslog	Email	<u>^</u>
To SN0108 Port 2to SN0108 Port	▼ Enable all system events				
4	Issue CSR	2			
🚡 [03]СОМЗ	Import certificate	2	0	0	
	Export log	<b>2</b>			
🚡 [05] СОМ5	System configuration backup	<b>2</b>			
📲 [06]СОМ6	System configuration restore success	2			
📲 [07]СОМ7	System configuration restore fail	2	0	0	
T [08]COM8	LAN port is down	<b>2</b>			
T [09]COM9	Power supply fail	<b>2</b>			
T [10]COM10	Device F/W upgrade success	2			
- [11]COM11	Log delete	2	0		
	NFS server mount	<b>2</b>			
T [12]COM12	NFS server unmount	2			
🚡 [13]СОМ13	NTP success	2			
8 [14]COM14	NTP fail	<b>2</b>	0	0	
To [15]COM15	CC server connection fail	<b>2</b>			
<b>Т</b> [16]COM16	IP change	2			
T [17]COM17	Remove power device	2			
T [18]COM18	Attach power device	<b>2</b>			-
. [19]COM19					

## Log Information

The System and Device log tables display events that take place on the Video Session Recording Software, and provide sorting columns with headings of time, severity, user, and a description. Click any of the headings to sort the order of the events.

At the bottom right-hand corner of the tables, you can select the number of displayed entries (rows), and go to previous/next page of entries.

To select the number of displayed entries, click the drop-down menu and select from the menu.

Click the < or > to go to previous or next page of entries.

# **Export Logs**

You can export *Logs in current page* or *All logs* using the export button. Click for a drop-down menu and select either of the options. The log file is saved in the .dat format.

# **Print Logs**

You can print logs using the *Print* button. When clicked, the system will bring you to a printable log page as shown:

			System Logs	
PRIN	TT CLOSE			
No.	Severity	User	Description	Date
0	Information	administrator	User administrator logged in	2019/03/27 14:03:47
1	Information	administrator	User administrator (IP=10.3.41.138) attempting to login	2019/03/27 14:03:47
2	Information	administrator	User administrator logged out	2019/03/27 14:02:49
3	Information	administrator	User administrator logged in	2019/03/27 13:07:33
4	Information	administrator	User administrator (IP=10.3.41.138) attempting to login	2019/03/27 13:07:33
5	Information	administrator	User administrator logged out	2019/03/27 11:51:49
6	Information	administrator	User administrator logged in	2019/03/27 11:21:49
7	Information	administrator	User administrator (IP=10.3.41.138) attempting to login	2019/03/27 11:21:49
8	Information	System	System start.	2019/03/27 11:21:34
9	Information	System	Create check point.	2019/03/27 11:21:07

Click Print for the print setup of your system or Close to leave this page.

# Option

You can set the retention policy of the logs by clicking the *Option* button:

Option			×
Retention policy:	Maximum number of logs	10000	
	<ul> <li>Delete logs older than</li> </ul>	7	day(
		SAVE	CANCEL

The system is set to keep a maximum of 10,000 log events by default. The system will overwrite the oldest entries. You can enter a different number here.

If you wish to keep the log events within a number of days, select *Delete logs older than* and enter a value (in days). Log entries older than the entered value will be discarded automatically.

# Search Logs

The *Search* function allows you to do a general search or an advanced search. and *Advanced Search*.

### **General Search**

For a general search, you can search according to the Description or User:

- 1. Click the <u>•</u> button for a drop-down menu.
- 2. Select Description or User. The search field will display the selection.



### Advanced Search

For an advanced search:

- 1. Click the <u>•</u> button for a drop-down menu.
- 2. Select *Advanced Search* for the pop-up window below:

Advanced Search		
Keyword		
,	Match all	*
Severity	All	~
User	All	<b>.</b>
Date	All	~
Start Date	2019/03/27 16:29:41	~
End Date	2019/03/27 16:29:41	~
	SEARCH	CANCEL

Field	Explanation
Keyword	Searches for a particular word or string. Key the word or string into the entry. Only events containing that word or string are displayed. Wildcards (? for single characters; * for multiple characters) and the keyword <b>or</b> are supported.
	E.g., h*ds would return hands and hoods; h?nd would return hand and hind, but not hard; h*ds or h*ks would return hands and hooks.
Match all / Match any	Click the drop-down menu to select between <i>Match all</i> and <i>Match any</i> . <b>Match all</b> : The search has to meet all specified
	information.
	<b>Match any</b> : The search only has to meet any of the specified information.
Severity	Click the drop-down menu to search by the severity level. Available entries include <i>Information</i> , <i>Warning</i> and <i>Critical</i> .
User	Click the drop-down menu to search according to the user type. Available entries include <i>All</i> , <i>System</i> and <i>administrator</i> .
Date	Click the drop-down menu to search according to the date range. Available entries include <i>All</i> and <i>Range</i> . If <i>Range</i> is selected, the next two entries ( <i>Start Date</i> and <i>End Date</i> ) will light up and can be used. <b>Start Date</b> : From the drop-down menu, select a specific date and time. Clicking the drop-down menu will bring up date and time selection as shown:
Search	Click to search according to the filter choices.
Cancel	Click this to cancel advanced search.

# Chapter 10 CCVSR Archive Server

# Overview

The CCVSR Archive Server allows you to store, playback, import, and export data created on CCVSR servers. The software automatically transfers a copy of the video log files from the Primary CCVSR server into an organized archive separate from the main system. This gives you the ability to purge older files from the main system but keep a safe archive of all videos for future use. The Archive Server runs in the background and updates the archive automatically every 15 minutes. To purchase this software, please see *Licenses*, page 8, for details.

# Installing the CCVSR Archive Server

### **Starting the Installation**

To install the Archive Server on a Windows system, insert the USB License Key into your computer, and do the following:

- 1. Put the software CD that came with your package into the computer's CD drive, or open the folder with the installation file.
- 2. Go to the folder where the *setup.exe* is located and double click it. A screen similar, to the one below, appears:



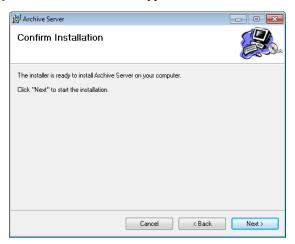
Click Next to continue.

3. On the *Select Installation Folder* page, specify the installation folder, or click **Browse** to choose the location where you want to install it. Then choose if you want to install it for yourself (**Just me**), or for anyone who uses this computer (**Everyone**). Click **Disk Cost** to view available drives and disk space.



Click Next to continue.

4. The Confirm Installation window appears, click Next to continue:



5. If a message appears to insert the License Key, re-plug the USB License Key into your computer or try a different USB port, then click **Retry**.

Message			×
	Please insert	t License Key.	
	Retry	Ignore	
L			

Clicking **Ignore** will install the software but you will not be able to use it until the USB License Key has been made available.

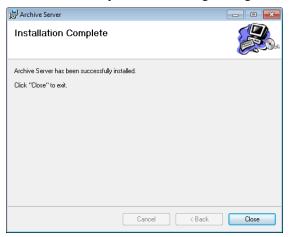
6. The **Config** dialog box appears, select the options and click **OK**:

Config	83
VSR Service	
Register VSR Servi	ice
Start VSR Service	
ОК	

**Register CCVSR Service**: This option registers the CCVSR Service with the Windows operating system so that it can run the software in the background.

**Start CCVSR Service**: This option will start the CCVSR Service automatically after the installation is complete. It is recommend to select both options.

7. When the installation is complete the following message will appear:



# **Archive Server GUI**

The Archive Server's interface has 5 tabs: *Playback, Export/Import, Storage, Settings*, and *License*; all described below. Once the software has been installed, double click the *Archive GUI* icon located on the desktop, and the *Playback* page appears:

\Lambda VSR Archive				- • ×
Playback Export/Import Storage	Settings License			
BeginTime 2013/ 3/27	Search Filter			•
00:00:00	Port name:			•
End Time 2013/ 4/10	Port number:			
23:59:59 *	Search	Play Selected		
Begin Time	End Time	Device Name	Port Name	
			Exit	Hide

Use the **Exit** button to shutdown the Archive Server, or **Hide** button to minimize the window to the task bar.

# <u>Setup</u>

There are two steps to setup the Archive Server- set the Archive Server's IP address on the Primary CCVSR server, and add a storage location from the Archive Server's **Storage** tab.

First, configure the Archive Server's IP Address on the Primary CCVSR Server (see *Archive Server Settings*, page 57). Next, add a storage location from the **Storage** tab (see *Storage*, page 96). The storage location is where the archived video log files are saved.

After the IP address is configured and a storage location is added, the Archive Server will begin to automatically archive all video log files created after the installation. The archive is updated every 15 minutes. To check for new video log files, go to the **Playback** tab and click *Search*. All new video log files will appear in the search window.

### <u>Playback</u>

The *Playback* tab is used to search and playback video log files which have been archived or manually imported. To see a list of all video log files that have been archived, simply click the *Search* button.

SR Archive				- • ×
Playback Export/Import Storage	Settings License			
BeginTime 2013/ 3/27	Search Filter			•
00:00:00	Port name:			•
End Time 2013/ 4/10	Port number:			
23:59:59 -	Search	Play Selected		
Begin Time	End Time	Device Name	Port Name	
			Exit	Hide

The *Playback* tab has 3 sections used to search and playback archived video log files.

#### **Begin Time/End Time**

This section allows you to filter the search results by the begin and end time. The *Begin Time* and *End Time* refers to the time when the actual video log recording took place on the KVM switch.

#### Search Filter

The *Search Filter* is used to search for archived video log files by the *Port Name, Device Name*, or *Port Number* of the KVM switch they were recorded on. After inputting the search data, click **Search**. Your search results\* will appear at the bottom of the page, and you can sort your results using the columns provided. If you would like to view all archived video logs, simply leave the fields blank and click **Search**.

#### **Play Selected**

To playback video logs, click **Search\*** for a list of the archived video log to appear:

Begin Time	Search Filter			
2013/ 4/15 💌	Device name:			•
00:00:00	Port name:			•
End Time	íl			
2013/ 4/29 💌	Port number:			
23:59:59	Search	Play Selected		
Begin Time	End Time	Device Name	Port Name	
2013-04-26 10:10:25	2013-04-26 10:10:36	Windows_Sec_01a	[02]2008_SAP_Dev	
2013-04-26 10:14:33	2013-04-26 10:15:16	Windows_Sec_01a	[02]2008_SAP_Dev	
2013-04-26 10:39:09	2013-04-26 10:40:34	Windows_Sec_01a	[02]2008_SAP_Dev	
2013-04-26 10:40:45	2013-04-26 10:41:55	Windows_Sec_01a	[02]2008_SAP_Dev	
2013-04-26 10:48:21	2013-04-26 10:49:45	Windows_Sec_01a	[02]2008_SAP_Dev	
2013-04-26 11:39:39	2013-04-26 11:42:21	Windows_Sec_01a	[02]2008_SAP_Dev	
2013-04-26 11:46:41	2013-04-26 11:47:14	Windows_Sec_01a	[02]2008_SAP_Dev	
2013-04-26 11:47:23	2013-04-26 11:49:50	Windows_Sec_01a	[02]2008_SAP_Dev	
2013-04-26 11:51:50	2013-04-26 11:54:37	Windows_Sec_01a	[02]2008_SAP_Dev	
2013-04-26 11:54:48	2013-04-26 11:55:41	Windows_Sec_01a	[02]2008_SAP_Dev	
2013-04-26 11:56:49	2013-04-26 11:58:08	Windows_Sec_01a	[02]2008_SAP_Dev	
2013-04-26 14:34:22	2013-04-26 14:34:41	Windows_Sec_01a	[02]2008_SAP_Dev	

Select the checkboxes of the video(s) you want to playback, then click **Play Selected**. The video will open in a new window with the Video Log Viewer application. For information on the Video Log Viewer, see *VSR Viewer*, page 24.

- **Note:** 1. If no video log files appear after clicking *Search*, either the archive hasn't updated, in which case you should wait 15 minutes; or a storage location needs to be added on the **Storage** tab (see *Storage*, page 96).
  - 2. Only video logs created after the Archive Server was installed are automatically archived from the Primary CCVSR server. Video logs created before the installation must be manually imported from the **Export/Import** tab (see *Export/Import*, page 94).

### Export/Import

The *Export/Import* tab is used to export and import video log files in a single database (.vse) file format. The database (.vse) files can combine a large number of individual video logs into a single compressed file to reduce disk space, which can be exported for storage and imported for use. The Export/ Import tab also allows you to import individual video log files (.dat) created on the CCVSR Primary Server.

VSR Archive	1	term bur b						
ayback Export/Impor	t  Storage	Settings   License						
BeginTime		Device Name		MAC		IP		
2013/ 3/27	-							
00:00:00	-							
End Time								
2013/ 4/10	-							
23:59:59	•	Search File	Expor	t File	Export & Delete	Delete File	Import	File
Device Name	Be	ain Time	E	ind Time		File Size		
Device Name	Be	gin Time	E	End Time		File Size		
Device Name	Be	egin Time	E	End Time		File Size		
Device Name	Be	-gin Time	E	End Time		File Size		
Device Name	Be	gin Time	E	End Time		File Size		
Device Name	Be	-gin Time	E	End Time		File Size		
Device Name	Be	egin Time	E	End Time		File Size		
Device Name	Be	sgin Time	E	End Time		File Size		
Device Name	Be	- ; gin Time	E	ind Time		File Size		
Device Name	Be	gin Time		End Time		File Size		

You can search for files to export (which are already archived) by selecting a **Device Name** and clicking **Search File**; or manually import .vse or .dat files into the Archive Server by clicking **Import File**. For more information on imported files see *Import File* below.

#### **Begin Time/End Time**

This section allows you to filter the search results by the begin and end time. The *Begin Time* and *End Time* refers to the time when the actual video recording took place on the KVM switch.

#### **Device Name**

This section lists the name(s) of the KVM switches which have been added to the Primary CCVSR server. You can select a device(s) and click Search for a list of individual video log files which have been archived from that KVM switch. After doing so you can select video logs to export into a .vse database file.

#### Search File

The *Search File* button is used to search for video log files on the **Device Name** you have selected. The results will appear in the lower section of the window, as shown below. After doing so you can select video logs to export into a .vse database file.

Begin Time	Device Name	MAC	IP	
2013/ 4/16 🔹	Windows_Sec_01a	001074980118	172.17.17.23	
00:00:00				
End Time				
2013/ 4/30 🔹				
23:59:59	1			
23:59:59	Search File Export File Ex	cport & Delete   Delete File   Import	File	
	Search File Export File E:	xport & Delete File Import	File Size	
Device Name				
Device Name Windows_Sec_01a	Begin Time	End Time	File Size	
Device Name Windows_Sec_01a Windows_Sec_01a	Begin Time 2013-04-29 14:57:45	End Time 2013-04-29 15:01:15	File Size 48 MB	
Device Name Windows_Sec_01a Windows_Sec_01a Windows_Sec_01a Windows_Sec_01a	Begin Time 2013-04-29 14:57:45 2013-04-29 15:01:15	End Time 2013-04-29 15:01:15 2013-04-29 15:02:59	File Size 48 MB 48 MB	
Device Name Windows_Sec_01a Windows_Sec_01a Windows_Sec_01a Windows_Sec_01a Windows_Sec_01a Windows_Sec_01a	Begin Time 2013-04-29 14:57:45 2013-04-29 15:01:15 2013-04-29 15:02:59	End Time 2013-04-29 15:01:15 2013-04-29 15:02:59 2013-04-29 15:04:18	File Size 48 MB 48 MB 48 MB 48 MB	

### Export File

When you export logs they are saved in a single compressed .vse database file. Select the video log file(s) displayed in the lower window that you want to export, click **Export File** and provide a name to save the .vse file as.

### Export & Delete

The *Export & Delete* button exports the selected files into a .vse database file and deletes the individual video log files that you are exporting from the Archive Server. This is a fast way to purge the individual files you are archiving into a single database.

#### **Delete File**

The *Delete File* button deletes the selected video log file from the Archive Server.

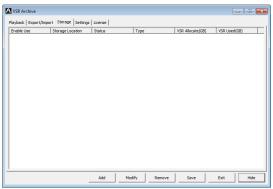
#### Import File

The *Import File* button is used to import database files (.vse) and individual video log files for viewing, archiving, or creating a new database- for export.

Click **Import File**, to browse and select the (.dat or .vse) file(s) to import, click **Open**. If you open a .vse database file: select the files from the list and click **Import**. Importing files will copy them into the Archive Server, therefore before you can import files, a storage location needs to be added from the **Storage** tab (see *Storage*, page 96). The storage location is where the archived files are saved, by the date they were created.

### **Storage**

The *Storage* tab is used to add storage locations, locally or in a shared network folder. This is where archived video logs are saved. You can add multiple storage locations for video logs. When the first location becomes full, the second will be used, and so on. Video logs are archived into folders according to the date they were created. The Archive Server cannot archive video logs until a storage location is **added** and **enabled**.



To add and enable a storage location, do the following:

1. Click Add and select Local Disk or Shared Network Folder for their respective settings, as shown below:

Local Disk		-
Space(GB): 10		
Browse		
	Save	Cancel
		×
Shared Network Folde	,	<b>_</b>
pace(Gb):		
	Browse	Save Save

2. For *Local Disk*, type in the *Path* or click **Browse** to select a storage location. For *Shared Network Folder*, fill in the required fields *IP/Name*, *Username*, *Password*, and *Path*.

- **Note:** Before a shared network folder can be used, users must first add a local disk with at least 10 GB of space, for saving temporary transfer files, to prevent video loss in the event of unstable network.
- 3. In the *Pre-Allocate Space(GB)* field enter the maximum amount of disk space to use, then click **Save**. The storage location appears in the lower window.
- 4. Next, check the Enable Use box and click Save.

Select a Storage Location and click **Modify** to modify it, or **Remove** to remove it. Click **Save** to save the changes.

### **Settings**

The Settings tab is used to set the Server Settings:

VSR Archive				- • ×
Playback Export/Import Storage Setting	gs License			
	Server Setting			
	Service Port:	9006	_	
	Service Port:	19000		
	Language:	English	-	
			Save Exi	t Hide
			EXI	

On this tab you can set the *Service Port* and *Language*. The default Service Port is **9006**.

### <u>License</u>

Use the License tab to upgrade your license key. Insert the USB License Key into your computer, then click **Upgrade**.

S VSR Archive	- • •
Playback Export/Import Storage Settings License	
Key Serial Number: TestKey@GC68PF4JF1IW	
Upgrade	
	Exit Hide

If the upgrade fails, re-insert the USB License Key, or try a different USB port on your computer.

# Appendix A

# **Technical Support**

### **International**

- For online technical support including troubleshooting, documentation, and software updates: http://support.aten.com
- For telephone support, see *Telephone Support*, page ii.

#### North America

Email Support		support@aten-usa.com	
Online Technical Support	Troubleshooting Documentation Software Updates	http://support.aten.com	
Telephone Support		1-888-999-ATEN ext 4988	

When you contact us, please have the following information ready beforehand:

- Product model number, serial number, and date of purchase.
- Your computer configuration, including operating system, revision level, expansion cards, and software.
- Any error messages displayed at the time the error occurred.
- The sequence of operations that led up to the error.
- Any other information you feel may be of help.

## **USB** Authentication Key Specifications

Function		Key
Environment	Operating Temp.	0–40° C
	Storage Temp.	-20–60° C
	Humidity	0–80% RH, Non-condensing
Physical	Composition	Metal and Plastic
Properties	Weight	14 g
	Dimensions	8.36 x 2.77 x 1.37cm

### **Compatible Products**

For a list of compatible products, refer to the "Specification" tab of the CCVSR page on the ATEN website.

# **Linux Installation**

When installing or uninstalling the CCVSR software on a computer running Linux, use the following commands:

Linux installcommand:> sudo ./vlsman.run

Linux uninstall command:> sudo /usr/local/bin/ccvsr/uninstallvlsmon

### **Trusted Certificates**

### **Overview**

When you try to log in to the device from your browser, a Security Alert message appears to inform you that the device's certificate is not trusted, and asks if you want to proceed.

8	There is a problem with this website's security certificate.
	The security certificate presented by this website was not issued by a trusted certificate authority. The security certificate presented by this website was issued for a different website's address.
	Security certificate problems may indicate an attempt to fool you or intercept any data you send to the server.
	We recommend that you close this webpage and do not continue to this website.
	Olick here to close this webpage.
	Solution Continue to this website (not recommended).
	More information
	<ul> <li>If you arrived at this page by dicking a link, check the website address in the address bar to be sure that it is the address you were expecting.</li> </ul>
	<ul> <li>When going to a website with an address such as https://example.com, try adding the 'www' to the</li> </ul>
	address, https://www.example.com. <ul> <li>If you choose to ignore this error and continue, do not enter private information into the website.</li> </ul>
	For more information, see "Certificate Errors" in Internet Explorer Help.

The certificate can be trusted, but the alert is triggered because the certificate's name is not found on the Microsoft list of Trusted Authorities. You can ignore the warning and click:

😵 Continue to this website (not recommended).

## Self-Signed Private Certificates

If you wish to create your own self-signed encryption key and certificate, a free utility – openssl.exe – is available for download over the web at www.openssl.org. To create your private key and certificate do the following:

- 1. Go to the directory where you downloaded and extracted openssl.exe to.
- 2. Run openssl.exe with the following parameters:

```
openssl req -new -newkey rsa:1024 -days 3653 -nodes -x509 -keyout CA.key -out CA.cer -config openssl.cnf.
```

- Note: 1. The command should be entered all on one line (i.e., do not press [Enter] until all the parameters have been keyed in).
  - 2. If there are spaces in the input, surround the entry in quotes (e.g. "ATEN International").

To avoid having to input information during key generation the following additional parameters can be used:

/C /ST /L /O /OU /CN /emailAddress.

#### **Examples**

```
openssl req -new -newkey rsa:1024 -days 3653 -nodes -x509
-keyout CA.key -out CA.cer -config openssl.cnf -subj
/C=yourcountry/ST=yourstateorprovince/L=yourlocationor
city/O=yourorganiztion/OU=yourorganizationalunit/
CN=yourcommonname/emailAddress=name@yourcompany.com
```

```
openssl req -new -newkey rsa:1024 -days 3653 -nodes -x509
-keyout CA.key -out CA.cer -config openssl.cnf -subj
/C=CA/ST=BC/L=Richmond/O="ATEN International"/OU=ATEN
/CN=ATEN/emailAddress=eservice@aten.com.tw
```

#### Importing the Files

After the openssl.exe program completes, two files – CA.key (the private key) and CA.cer (the self-signed SSL certificate) – are created in the directory that you ran the program from. These are the files that you upload in the *Private Certificate* panel of the Security page (See *Security*, page 64, and *Certificate*, page 67).

# Appendix B Authentication Key Utility

### Overview

The Authentication Key Utility (*CCAuthKeyStatus.exe*), is a Windows-based utility for accessing and updating the information and data contained in the CCVSR Authentication Key. *CCAuthKeyStatus.exe*, can be found on the CCVSR website.

When you run the program, a screen similar to the one below appears:

🔕 CC-Auth Key Status Utility
Key status: Key found: Activated.
Key Information           F/W version:         Ver. 2.6.252         S/N:         TestKey@ETD_CCVSR-01
License Information     License Upgrade       Nodes:     4096       Archive:     Yes
FAW Upgrade Export License About Exit

### Key Status Information

The layout of the dialog box is described in the table below:

Section	Purpose	
Key Status	Indicates whether the key has been recognized and accepted as valid or not.	
Key Information	Displays the key's current firmware version and serial number.	
License Information	Displays the number of servers (Primary and Secondaries), and the number of nodes the key is licensed for.	
License Upgrade	These buttons are used when performing an Offline license upgrade.	
F/W Upgrade	This button is used to upgrade the authentication key's firmware.	

### Key Utilities

The License Upgrade and F/W Upgrade sections offer utilities that allow you to upgrade the key's firmware (F/W Upgrade), and to upgrade the number of servers and nodes authorized by the license (License Upgrade).

## Key Firmware Upgrade

The CCVSR Authentication Key's firmware is upgradable. As new revisions of the firmware become released, upgrade file are posted on our web site. Check the web site regularly to find the latest files and information relating to them.

#### Starting the Upgrade

To upgrade your firmware, do the following:

- 1. Go to our website and download the new firmware file to a convenient location on your computer.
- 2. With the authentication key plugged in, run the *Key Status Utility* (CCAuthKeyStatus.exe).

**Note:** *CCAuthKeyStatus.exe* only runs under Windows and can be found on the CCVSR website.

3. In the screen that appears, click F/W Upgrade...

🝳 CC-Auth Key Status Utility	
Key status: Key found: Activated.	Q
Key Information	
F/W version: Ver. 2.1.201 S/N	l: DemoKey-02-00512
License Information Nodes: 200 Archive: Yes	License Upgrade
F/W Upgrade	About

4. In the *File Open* dialog box that appears, select the firmware upgrade file, then click **Open**.

Open						<u>?</u> ×
Look jn:	🞯 Desktop		•	+ 🗎	➡ 💷 •	
My Recent Documents Desktop My Documents	My Documents My Computer My Network Pie My Network Pie DepenOffice.org Security Config Shaqut 7 Shaqut 7 InDesign KeyStatus.exe Manuals My Computer Services	3.0 uration Wizard	당 Shortcut to Cc 왜 UltraVNC Serv 왜 UltraVNC View	er		
My Network Places	File <u>n</u> ame: Files of <u>type</u> :	CC-AuthKey-FW F/W Upgrade F Open as read	ile (*.exe)		•	<u>O</u> pen Cancel

5. Read and *Agree* to the License Agreement (enable the *I Agree* radio button).

Welcome to the Firmware Upgrade Utility.
Put your device into Firmware Upgrade Mode. Use the Firmware Upgrade Cable to connect its Firmware Upgrade Port to your computer (or connect via Ethernet). Agree to the License Agreement; Then Click Next.
LICENSE GRANT
ATEN International Co., Ltd. ("Licensor") grants to you a non-exclusive, non-transferable license to access and use FIRMWARE UPGRADE UTILITY (the "Froduct") during the "Term" set forth below. You may install the Product on a hard disk or other storage device; install and use the Product on a file server for use on a network for the purposes of (i) permanent installation onto hard disks or other storage devices or (ii) use of the Product over such network, and make backup copies of the Product.
RESTRICTIONS
You agree not to modify, adapt, translate, reverse engineer, recompile, disassemble or otherwise attempt to discover the source code of the Product, or create derivative works based on the Product, or remove any proprietary notices or tables on the Product, including copyinght, trademark or patent pending notices. You may not sublicense the Product or otherwise allow others to use the Product licensed to you.
⊙ IAgree C I Don'tAgree
Help About <back next=""> Cancel</back>

6. The utility searches your installation. When it finds your device, it lists it in the *Device List* panel.

📽 Firmware Upgrade Utili	ty	×
	checked, the utility compares the device's firmware level with the upgrade newer, the utility lets you decide whether to continue or not. If it is not the upgrade directly.	
Device List:	Status Messages:	
CC-Auth-Key: 000	> Loading & testing files > Loading & testing files: UK > Seatching for devices	
Device Description		
🔽 Check Firmware Version	Progress	_
Help View Lo	g KBack Next> Cancel	

**Note:** If you enable *Check Firmware Version*, the Utility compares the device's firmware level with that of the upgrade files. If it finds that the device's version is higher than the upgrade version, it brings up a dialog box informing you of the situation and gives you the option to Continue or Cancel.

If you don't enable *Check Firmware Version*, the Utility installs the upgrade files without checking if they are a higher level.

Click Next to continue.

### Upgrade Succeeded

After the upgrade has completed, a screen appears to inform you that the procedure was successful:

Firmware Upgrade Ul	ility
The Firmware upgrade wa	
Device List:	Status Messages:
DC:Auth-Key : 000	<ul> <li>Loading &amp; testing files</li> <li>Loading &amp; testing files</li> <li>Searching for devices</li> <li>Pireparing filmware upgrade</li> <li>Filmware (the second second</li></ul>
Device Description Device F/W: Ver 2.1.201 Upgrade F/W: Ver 1.0.05 MID: 000	2
Check Firmware Versio	
Help View	Log Kack Finish Cancel

Click **Finish** to close the Firmware Upgrade Utility.

# Key License Upgrade

### <u>Overview</u>

The CC series has a feature that allows end users (clients) to update their authentication keys to reflect an increase to their number of licenses. The key license upgrade can be performed either by the clients or by the dealers/ distributors, and can take place either in a browser session over the Internet (an Online upgrade), or via a stand-alone utility program (an Offline upgrade).

Clients first inform their dealers/distributors of the number of licenses to be upgraded. The dealers/distributors then place an order with an Altusen sales representative, specifying the number of licenses to be added. After processing the order, Altusen then sends a confirmation and authorization email to the dealer/distributor with the necessary details for performing the upgrade.

Note: A separate order must be processed for each key.

There are two ways to upgrade the key:

- On Line: To perform the upgrade the key is inserted in the computer's USB port and a browser session is opened to directly upgrade the key. If the client performs the upgrade, the dealer/distributor provides him with the email authorization details; if the dealer/distributor performs the upgrade, the client provides him with the Authentication Key.
- Off Line: A Windows-based *Key Status Utility* is used to extract the key's information and write it to a Key Information Data File. The key information data file is then used in a a browser session to generate a license upgrade file. After the license upgrade file has been generated, the Key Status Utility is used again to write the upgrade file's information to the license key.
  - If the client is the one who updates the CC license database, the dealer/ distributor provides him with the email authorization details – allowing the client to generate his key license upgrade file. The client then uses the Key Status Utility and the key license upgrade file to upgrade the Authentication Key's license information.
  - If the dealer/distributor is the one who updates the CC license database, the client provides him with the key information data file (extracted with the Key Status Utility) which the dealer/distributor uses to generate the client's key license upgrade file. The dealer/distributor then returns the key license upgrade file to the client which the client uses with the Key Status Utility to upgrade the Authentication Key's license information.

### **Online Upgrade**

Clients contact their dealers/distributors to place their upgrade order(s). A separate order must be processed for each key. After the dealers/distributors place the upgrade orders with an Altusen sales representative, they receive a confirmation and authorization email, similar to the example below:

Your order is ready to be processed. Please go to http://xxx.xxx.x.xxx to upgrade your key's license.

Login Information:

- Username: myname2
- Password: mypassword5678

Order Information:

 Order ID: 1017000700 (authorized number: 2068919892). This order requests 1 more node(s)

Either the client or the dealers/distributors can perform the upgrade. If the dealer does it, the client provides the dealer with his license key; if the client does it, the dealer forwards the confirmation email to him.

Follow the steps below to perform online upgrade.

- 1. Plug the authentication key into a USB port on your computer.
- 2. Open a browser, go to the website CC Authentication Key License Upgrade page:

https://cc.aten.com.tw/

3. When the upgrade Login screen comes up, log in with the Username and Password provided in the authorization email.

	CC Authentication Key License Upgrade
> Login	
Login:     Username: myname2     Password:	
	Submit
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4. In the screen that comes up, key in the Order ID number and Order Authorization number that applies to the upgrade, then click **Continue**.

<b>ATEN</b>		CC Authentication Key License Upgra
• User Information		
• User Information		
	- Login Name: myname2	
	- Phone: 111-5678-1234	
	- FAX: 111-5678-1235	
	- E-mail: myname2@mycompany2.com	
Order Information		
	Order ID:	1017000700
	Order Authorized Number:	2068919892
	Contir	IUE

5. In the License Upgrade Order Information screen, key in the current number of licenses in the From fields (the To fields are automatically filled in), and select **Online upgrade**.

	CC Authentication Key License Upgrade
> License Upgrade Order Information for CCVSR	
Order Information:	
Order ID: 1017000700     This order asks for 1 more CCVSR node(s).	
Inis order asks for 1 more CCVSR node(s).     Upgrade number of CCVSR nodes: From 512	το 513
• Upgrade Options:	
Online upgrade (Key must be inserted for the upg	arada, ) :
Offline upgrade	
Cor	ttinue
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**Note:** You can use the Key status utility (e.g. ccauthkeystatus\_utility.exe) to see the current number of licenses.

- 6. Click Continue.
- 7. When the Authentication Key License Upgrade by Distributor screen comes up, click **Download**.
- 8. When the browser asks what to do with the file (KeyUpgrade.exe), select *Save to disk.*
- 9. Leave the browser open, exactly as it is; go to where you downloaded the file and execute it.

**Note:** This step must be done in the same web session that you downloaded the KeyUpgrade.exe file in. Otherwise the upgrade will not succeed.

The upgrade utility comes up and starts the upgrade. The actions it performs are reported in the main panel:

CC-Auth Key License Upgrade Utility	_ 🗆 🗙
Key status: Key found: Activated.	
Key Information           F/W version:         Ver. 2.1.204         S/N:         10504460	
License Information Nodes: 512 Archive: Ves Node: from 512 to 513	
Events: 001: CCAuth key found 002: Connecting to server 003: Connected to the server. 004: Starting to upgrade CCAuth key license. 005: Upgrading the CC-Auth key license 006: The CC-Auth key license was successfully upgraded.	-
F/W/Upgrade	Exit

10. When the upgrade is finished, a window pops up to inform you that the upgrade was successful. Click **OK** to close the popup. The browser screen provides a summary of the upgrade:

	CC Authentication Key License Upgrade
> Order is Complete	
Order summary :	
- Order ID: 1017000700	
- Nodes changed from 512 to 513	
- Key serial number: 10504460	
- Key version number: V2.1.204	
	Logout
	N International Co. Ltd., Taiwan. All rights reserved.

#### 11. Click Logout to exit.

You can use the Key status utility (CCAuthKeyStatus.exe) to confirm that the number of licenses on the key has been changed to reflect the successful upgrade:

🝳 CC-Auth Key Status Utility	
Key status: Key found: Activated.	<b>(</b> )
F/W version: Ver. 2.1.204	S/N: 10504460
,	,
License Information Nodes: 513 Archive: Yes	License Upgrade Save Upgrade
F/W Upgrade	About Exit

#### Upgrade Succeeded

After the upgrade has succeeded, the dealer/distributor receives an email from Altusen informing him that the upgrade has been completed online. For example:

Your order (Order ID: 1017000700) has been completed successfully by the online utility.

The key (PSN: 10504460) server number has been upgraded from 512 to 513.

### **Offline Upgrade**

An Offline upgrade can be performed either by the dealer/distributor, or the end user client. The advantage of this type of upgrade is that the client doesn't give up the use of his key. All he needs to do is email a key information data file to the dealer/distributor and receive a key upgrade file in return.

#### **Preliminary Steps**

To perform the upgrade, the first step that the client must perform is to create a *Key Information Data File*, as follows:

- 1. With the authentication key plugged in, run the *Key Status Utility* (CCAuthKeyStatus.exe).
- 2. In the *License Upgrade* panel of the dialog box that comes up, click **Save** to create a *Key Information Data File* (KeyUpload.dat).

🔕 CC-Auth Key Status Utility	_ 🗆 X
Key status: Key found: Activated.	1
Key Information           F/W version:         Ver. 2.1.204         S/N:         10504460	
F7W Version: jver. 2.1.204 57N: j10504460	
License Information	
Nodes: 513 Archive: Yes Save Upg	prade
F/W Upgrade	Exit

**Note:** The Key Information Data File is created in the same directory that the Key Status Utility resides in.

After the Key Information Data File is created, the client sends it to the dealer/distributor.

#### Performing the Upgrade

After the dealers/distributors place the upgrade orders with an Altusen sales representative, they receive a confirmation and authorization email from ALTUSEN, for example:

Your order is ready to be processed. Please go to http://xxx.xxx.x.xxx to upgrade your key's license.

Login Information:

- Username: myname3
- Password: mypassword3

Order Information:

 Order ID: 1017000750 (authorized number: 1605991978). This order requests 1 more node(s)

To perform the upgrade, do the following:

- 1. Follow steps 1 3 given for the Online Upgrade (see page 109).
- 2. When the upgrade Login screen comes up, log in with the Username and Password provided in the authorization email.

	CC Authentication Key License Upgrade
> Login	
_	ubmit

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3. In the screen that comes up, key in the Order ID number and Order Authorization number that applies to the upgrade, then click **Continue**.

		CC Authentication Key License Upgrad
User Information		
User Information		
	- Login Name: myname3	
	• Phone: 111-123-456788	
	• FAX: 111-123-458789	
	<ul> <li>E-mail: myname3@mycompany3.com</li> </ul>	
Order Information		
	Order ID:	1017000750
	Order Authorized Number:	1605991978
	Contin	ue

4. When the License Upgrade Order Information screen comes up, key in the number of current licenses in the *From* fields. The *To* fields are automatically filled in.

**Note:** If necessary, you can use the Key Status Utility (CCAuthKeyStatus.exe) to see the number of current licenses.

5. Select that this is to be an Offline upgrade, then click **Continue**.

STERN Single Refer Convertions	CC Authentication Key License Upgrade
> License Upgrade Order Information for CCVSR	
Order Information:	
Order ID: 1017000700     This order asks for 1 more CCVSR node(s).     Upgrade number of CCVSR nodes: From 512	Te 513
Upgrade Options:     Online upgrade     () [Offline upgrade]	
Com	tinue
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6. When the Upload Key Information screen comes up, click **Browse**; load the **KeyUpload.dat** file that was generated in the *Preliminary Steps* section; then click **Continue**.



7. The next screen that comes up summarizes the transaction up to this point.

	CC Authentication Key License Upgrade
> Key Upgrade Information	
Key Information :     Key Serial Number: 0917280288     Current Node Number: 64     Key F/W Version: V2.1.204	
Upgrade Information:     Key node number will be upgraded from <b>512</b> to	513
C	Continue

Click Continue to move on.

8. In the screen that appears next, click **Download** to download the key license upgrade data file (KeyUpgrade.dat).

	CC Authentication Key License Upgrade
> CC Authentication Key License Upgrade by Dist	ributor
Query Information:	
* Please keep the following reference number for fu	uture use.
* Reference Number: 1123091022112900	
File Download     Download     Download the CC authentication key license upgrade     Download	: data file :
"Note: - Make sure the key upgrade file has been downloaded - The upgrade data file will be emailed to you by the en-	
	ontinue

- 9. When the browser asks what to do with the key upgrade file, select *Save to disk*. After the file is saved to disk, click **Continue** to go on.
- 10. In the confirmation popup that appears click **Yes**. A summary page confirming the order appears.
- 11. Click Logout to exit.

**Note:** 1. If you are upgrading more than one key, you can rename the KeyUpgrade.dat files to separately recognizable names (keeping the *dat* extension).

- 2. If the client is performing the upgrade, the dealer/distributor provides the KeyUpgrade.dat file to the client.
- 12. Run the Key Status Utility again.

13. In the License Upgrade panel, click Upgrade.

🝳 CC-Auth Key Status Utility	
Key status: Key found: Activated.	
Key Information	
F/W version: Ver. 2.1.204 S/N:	0917280288
License Information	License Upgrade
Nodes: 513 Archive: Yes	Save
F/W Upgrade	About Exit

- 14. In the dialog box that comes up, navigate to the upgrade file (KeyUpgrade.dat) and select it.
  - Once you click **Open**, a window pops up stating that the upgrade was successful.
  - The figure for the number of licenses in the License Information panel changes to reflect the upgrade.

🝳 CC-Auth Key Status Utility		<
Key status: Key found: Activated.	Q	
- Key Information F/W version: Ver. 2.1.204	S/N: 0917280288	
Prive version. Tvel. 2.1.204	3/N. 10317280288	
License Information	License Upgrade	
Nodes: 513 Archive: Yes	Save Upgrade	
F/W Upgrade	About Exit	

### **Offline Upgrade Failure**

If the offline upgrade fails, it may be due to the key upgrade file (KeyUpgrade.dat), having become corrupted during the file transfer process. There are two ways to proceed:

 When the key upgrade file is downloaded, an email is sent to the dealer/ distributor containing the particulars, along with a copy of the upgrade file in case there was a problem with the original file transfer – as shown in the example below:

```
Offline upgrade email response:
Your CC-Authentication key's upgrade data file is
attached. Please upgrade your CC-Auth key with the
attached file.
Key Info:
* F/W Version: 2.1.204
* Serial number: 0917280288
License Upgrade Info:
* From 512 to 513 concurrent nodes
Confirmation Info:
* Username: newname
* Password: 1123091022112900
If you have any problem with upgrading your CC-
Authentication key's license, please confirm it online
at http://xxx.xxx.x.xxx using the username and
password above.
```

You can repeat steps 11 (Run the Key Status Utility) and 12 (Click Upgrade) – this time using the copy of the key upgrade file (KeyUpgrade.dat) that was attached in the dealer/distributor email.

• If the above fails to resolve the problem, information contained in the *Offline email upgrade response* can be used to try an online upgrade. Either the dealer/distributor can provide the end user with the authorization details, or the end user can give his key to the dealer/distributor.

## **Order Expiration**

Once Altusen sends the dealer/distributor the confirmation/authorization email informing him that the order is ready to be processed, he has a total of two weeks to process the order. If during that time the order is not processed, two more emails reminding him that order has not been processed are sent:

- 1. Your order will expire in one week...
- 2. Your order will expire in one day ...

If the order still has not been processed by the end of the deadline, a final email is sent, informing the dealer/distributor that the order has expired, as follows:

Your order has expired and has been canceled... If you still wish to add licenses, you must place a new order.

### **Limited Warranty**

ATEN warrants its hardware in the country of purchase against flaws in materials and workmanship for a Warranty Period of two [2] years (warranty period may vary in certain regions/countries) commencing on the date of original purchase. This warranty period includes the LCD panel of ATEN LCD KVM switches. Select products are warranted for an additional year (see A+ *Warranty* for further details). Cables and accessories are not covered by the Standard Warranty.

#### What is covered by the Limited Hardware Warranty

ATEN will provide a repair service, without charge, during the Warranty Period. If a product is detective, ATEN will, at its discretion, have the option to (1) repair said product with new or repaired components, or (2) replace the entire product with an identical product or with a similar product which fulfills the same function as the defective product. Replaced products assume the warranty of the original product for the remaining period or a period of 90 days, whichever is longer. When the products or components are replaced, the replacing articles shall become customer property and the replaced articles shall become the property of ATEN.

To learn more about our warranty policies, please visit our website:

http://www.aten.com/global/en/legal/policies/warranty-policy/

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