

# Video Session Recording Software

## CCVSR

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 and remotely through KVM over IP switch and / or serial console servers. Whatever the target server's operating status is, whether it'd be booting up the operating system, logging in, logging out, or in pre-boot 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 CPU resources, disk space, memory and network bandwidth of all target computers. 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 a brand new 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 uninterrupted. 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

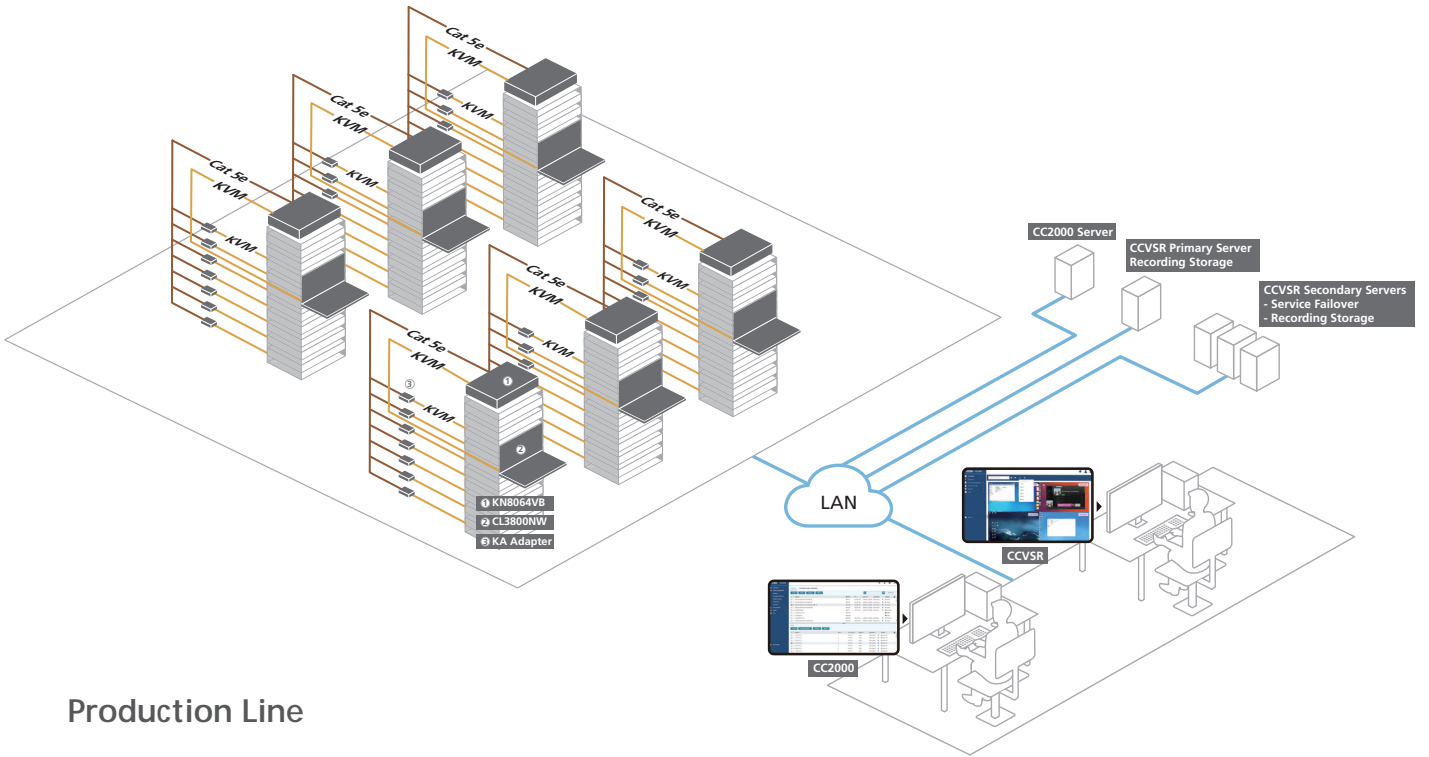
- Records user sessions from BIOS-level when users access ATEN KVM over IP switches and serial console servers locally<sup>1</sup> or remotely
- Simultaneously records, streams and plays the operation of multiple KVM over IP Switches
- Supports high quality video recording — with video resolutions up to 4096 x 2160<sup>2</sup>
- Logs keystrokes, mouse clicks, and audio operations during video recording sessions
- Proprietary video player with format and password-protected video export function for enhanced security
- LiveView function to provide live-video surveillance for direct monitoring the operations and changes made on servers or connected devices<sup>3</sup>
- Intuitive HTML5 user interface
- Continuous recording even without opening WinClient / JavaClient<sup>4</sup>
- Access control to grant or restrict user access with IP & MAC address filter, and configurable failed login attempts and lockout
- Configurable user and group permissions
- TLS v1.2 data encryption (AES-256 bit supported) and RSA 2048-bit certificates to secure user logins from browser
- Port level permissions — users can only view ports they have been authorized to access
- Easily search through captured sessions for incident investigation
- Advanced search by time, port name, and username for precise results
- Flexibility in saving recorded videos in local hard drives, secondary CCVSR servers, network attached storage (NAS) devices, or archive in Archive server
- Supports up to 3 secondary CCVSR servers for storage expansion, load balance, and service failover
- Supports self-signed certificates and certificates signed from third-party authorities (CA)
- Third-party remote authentication supports: RADIUS, LDAP, LDAPS and Active Directory
- Centralized role-based (super administrator & user) policy for user access privilege control
- System event notification via SMTP email, SNMP trap and Syslog support
- Supports device level event logs

**Note:**

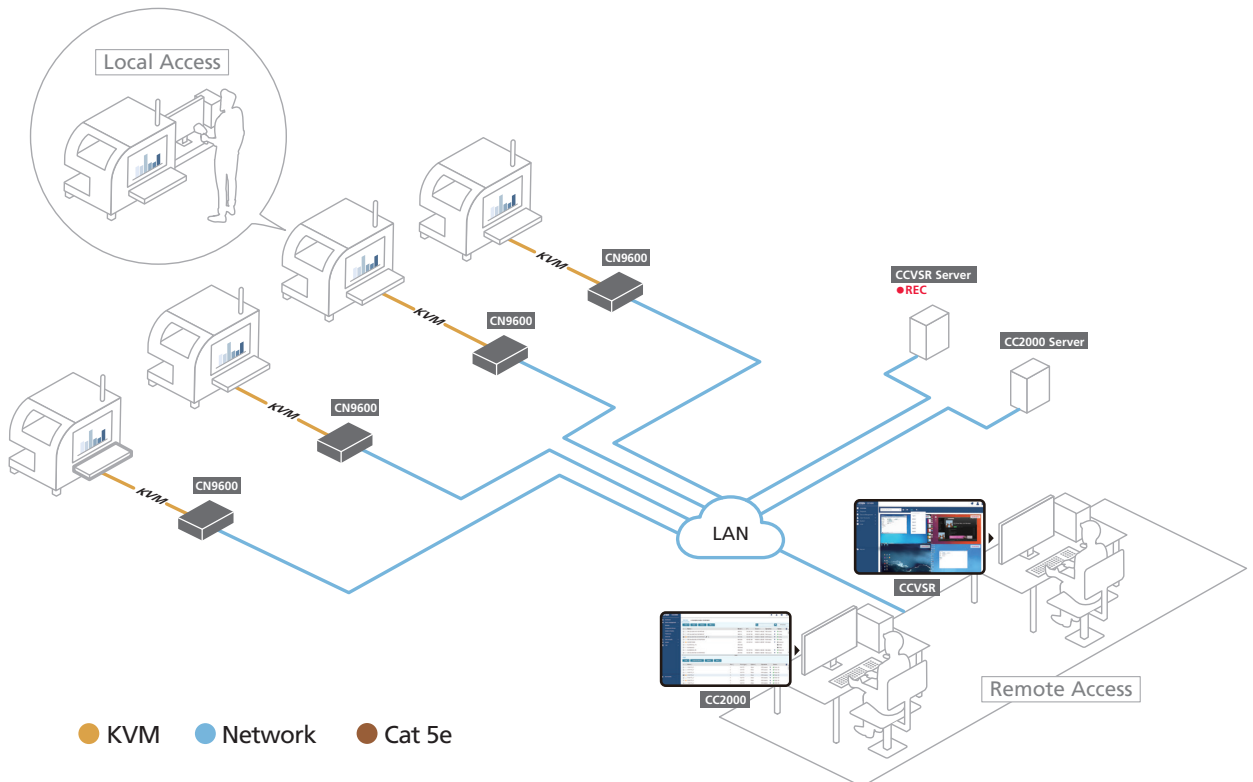
1. Available on specific models only, please check specification.
2. Compatible KVM with 4K support is required
3. Up to 20 KVM sessions with resolution 1920x1080 or 4 KVM sessions with resolution 4096 x 2160 (Text Mode = On, Bandwidth = 1G, Scenario = Surveillance) can be recorded / streamed simultaneously when the hardware requirements are met (see the table below). Up to 64 KVM devices can be supported by one CCVSR.
4. CN9950, CN9600, CN9000, CN8600, CN8000A, RCMDP101U, RCMDV101, RCMVGA101, RCM101D, and RCM101A only

| Server Hardware Requirements  | Client Hardware Requirements   |
|---|--|
| CPU: Intel Xeon D-1527 4 cores 2.2 GHz or equivalent<br>Memory: 8GB or more<br>HDD: 4GB or more<br>Network: 1Gbps | CPU: Intel Core i5-7600 4 cores 3.5 GHz or equivalent<br>Memory: 6GB or more<br>Network: 1Gbps |

## Data Center / Server Room



## Production Line



## Specifications

| CCVSR                                     |  |
|---|--|
| <b>Compatible Appliances</b>              |  |
| KVM over IP Switches                      | <p>Recordable via remote sessions or through the local console:<br/>           KN2116VA, KN2124VA, KN2132VA, KN2140VA, KN4124VA, KN4116VA, KN4132VA, KN4140VA, KN4164V, KN8132V, KN8164V, CN8600, CN8000A, CN9000, CN9600, CN9950, RCM101A, RCM101D, RCM464V, RCM816, RCM416, RCMDVI101, RCMVGA101, RCMDP101U, RCMDVI00AT, RCMDVI40AT, RCMDVI50T, RCMHD101U, RCMDVI00BT, RCMDVI40BT, KE6900AiT*, KE6940AiT*.<br/>           *Please check CCVSR user manual for the limitation.</p> <p>Recordable via remote sessions:<br/>           KL1108V, KL1116V, KN1108v, KN1116v, KN1132V, KN1108VA, KN1116VA, KN2116v, KN2124v, KN2132v, KN2116A, KN2132, KN2140v, KN4116, KN4116v, KN4124v, KN4132, KN4132v.</p> |
| Serial Console Servers                    | SN0108CO, SN0116CO, SN0132CO, SN0148CO, SN9108CO, SN9116CO, SN0108A, SN0116A, SN0132, SN0148, SN9108, SN9116.  |
| <b>Authentication &amp; Authorization</b> | <p>Supports local user accounts, LDAP, and RADIUS.<br/>           Role-based (Super Administrator, Administrator, User) policy for access privilege control.</p>   |
| <b>Security</b>                           | <p>IP and MAC address blocking.<br/>           Configurable failed login attempts and lockout.<br/>           Support certificate self-signed or signed from third-party authorities (CA).<br/>           Secure web connection with TLS v1.2 and RSA 2048-bit certificates.<br/>           Strong user password authentication.<br/>           Configurable user session timeout.<br/>           Configurable login page URL</p>  |
| <b>Video</b>                              |  |
| Supported Resolutions                     | <p>Up to 4096 x 2160<br/>           Proprietary video format</p>   |
| <b>Recording Storage</b>                  | <p>Recorded videos can be saved in:</p> <ul style="list-style-type: none"> <li>- Local storage</li> <li>- Secondary CCVSR server</li> <li>- Network shared folder</li> </ul> <p>Recorded videos can be archived to:</p> <ul style="list-style-type: none"> <li>- Archive server</li> </ul>   |
| <b>Playback</b>                           | <p>Java player:</p> <ul style="list-style-type: none"> <li>- Password protected videos</li> <li>- Video export</li> <li>- Display recorded keystrokes and mouse clicks</li> </ul> <p>Advanced search with a variety of criteria</p>  |
| <b>Notification</b>                       | <p>SMTP<br/>           SNMP Trap (v1, v2c)<br/>           Syslog</p>   |
| <b>Logs</b>                               | <p>System logs<br/>           Device logs</p>  |
| <b>Service Failover</b>                   | <p>Primary / Secondary architecture<br/>           1 primary with maximum 3 secondary servers</p>  |

|                                      | CCVSR  |
|--------------------------------------|--|
| <b>Supported OS</b>                  | Windows: 7, 8, 10, server 2012, or server 2016<br>Linux: Ubuntu 16.04, Red Hat Enterprise 7, CentOS 7, Fedora 24, Debian 8.8<br>*JAVA Runtime Environment (JRE) 1.7 Update 6 or later is required in above OS.   |
| <b>Supported Browsers</b>            | Chrome, Firefox, Microsoft Edge  |
| <b>Multilingual Support</b>          | English, 繁體中文, 简体中文, 日本語, 한국어  |
| <b>Others</b>                        | Online user management   |
| <b>License</b>                       |  |
| Basic (free)                         | 1 Primary / 1 Nodes  |
| CCVSR USB License Options            | CCVSR8 (8 Nodes)<br>CCVSR16 (16 Nodes)<br>CCVSR32 (32 Nodes)<br>CCVSR64 (64 Nodes)<br>CCVSR128 (128 Nodes)<br>CCVSR256 (256 Nodes)<br>CCVSR512 (512 Nodes)<br>CCVSR1024 (1024 Nodes)<br>CCVSR2048 (2048 Nodes)   |
| System Add-ons                       | CCVSRN1 (Add-on 1 Node)<br>CCVSRN8 (Add-on 8 Nodes)<br>CCVSRN16 (Add-on 16 Nodes)<br>CCVSRN32 (Add-on 32 Nodes)<br>CCVSRN64 (Add-on 64 Nodes)<br>CCVSRN128 (Add-on 128 Nodes)<br>CCVSRN256 (Add-on 256 Nodes)<br>CCVSRN512 (Add-on 512 Nodes)<br>CCVSRN1024 (Add-on 1024 Nodes)<br>CCVSRN2048 (Add-on 2048 Nodes)<br>CCVSRAS1 (Archive Server License)   |
| <b>Minimum Hardware Requirements</b> | To record & stream 20 video sessions:<br>Server Hardware Requirements:<br>- CPU: Intel Xeon D-1527 4 cores 2.2 GHz or equivalent<br>- Memory: 8GB or more<br>- HDD (for CCVSR): 4GB or more<br>- Network: 1Gbps<br>Client Hardware Requirements:<br>- CPU: Intel Core i5-7600 4 cores 3.5 GHz or equivalent<br>- Memory: 6GB or more<br>- Network: 1Gbps |
| <b>Package Contents</b>              | 1x CCVSR USB License Key<br>1x Software CD<br>1x User Instructions   |

