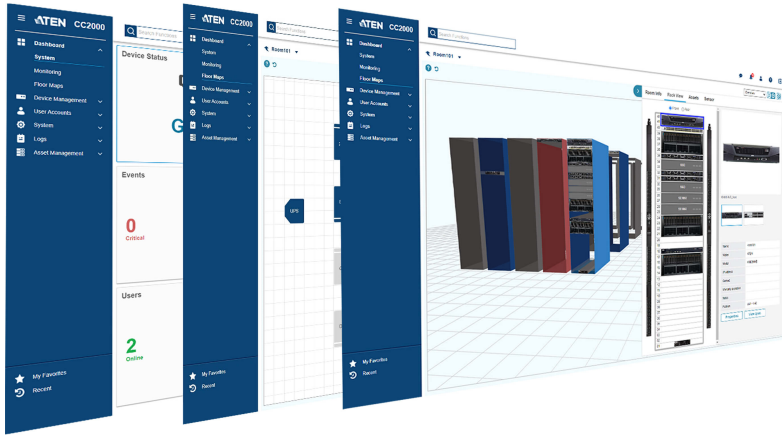
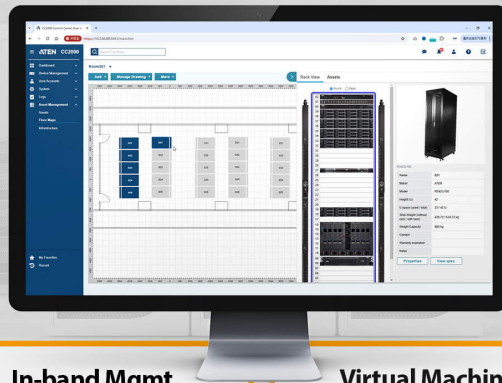


CC2000 4.0

Centralized Management Software

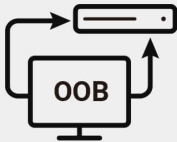


Optimize IT Planning, Productivity and Visualization



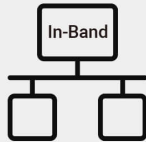
Out-of-band Mgmt.

- KVM over IP Switch
- Serial Console Server



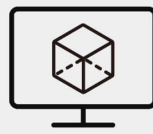
In-band Mgmt.

- IP Tool
- Service Processor



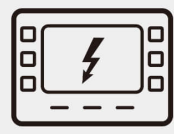
Virtual Machines

- VMWare vSphere
- Microsoft Hyper-V
- Citrix XenServer



Power & Environmental Monitoring

- Intelligent PDU
- UPS

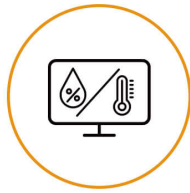


ATEN's [CC2000](#) Centralized Management Software offers IT teams across industries a comprehensive solution for the centralized management of IT infrastructure, both locally and globally, through a secure, unified portal. This software consolidates the management of ATEN KVM over IP switches, serial console servers, PDUs, UPS units, and third-party devices, including embedded service processors, blade servers, and both physical and virtual servers, for both in-band and out-of-band management. It also features an intuitive yet robust interface, enhancing system management efficiency and productivity.

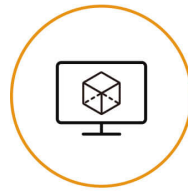
In addition, the [CC2000](#) provides advanced capabilities such as asset management, environmental monitoring, and capacity management, including visualized floor maps. It enables users to assess, optimize, and allocate resources effectively, ensuring the efficient utilization of infrastructure in alignment with organizational goals and requirements.



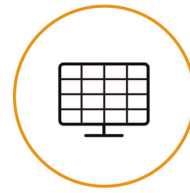
Centralized Management



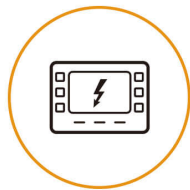
Environmental Monitoring



Virtual Machine



Panel Array



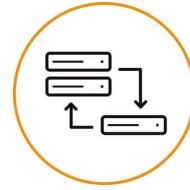
Power Control/Monitoring



Asset Management



Floor Maps

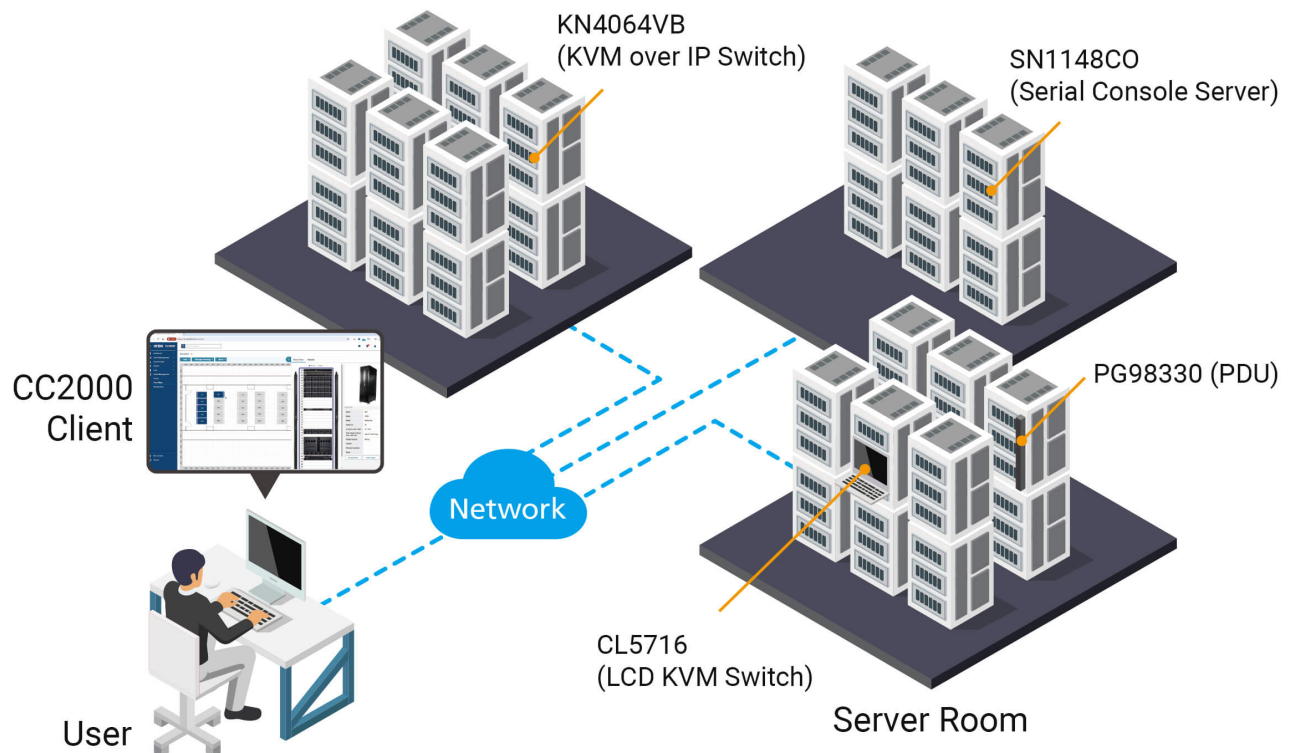


Service Redundancy

Centralized Management for IT Equipment

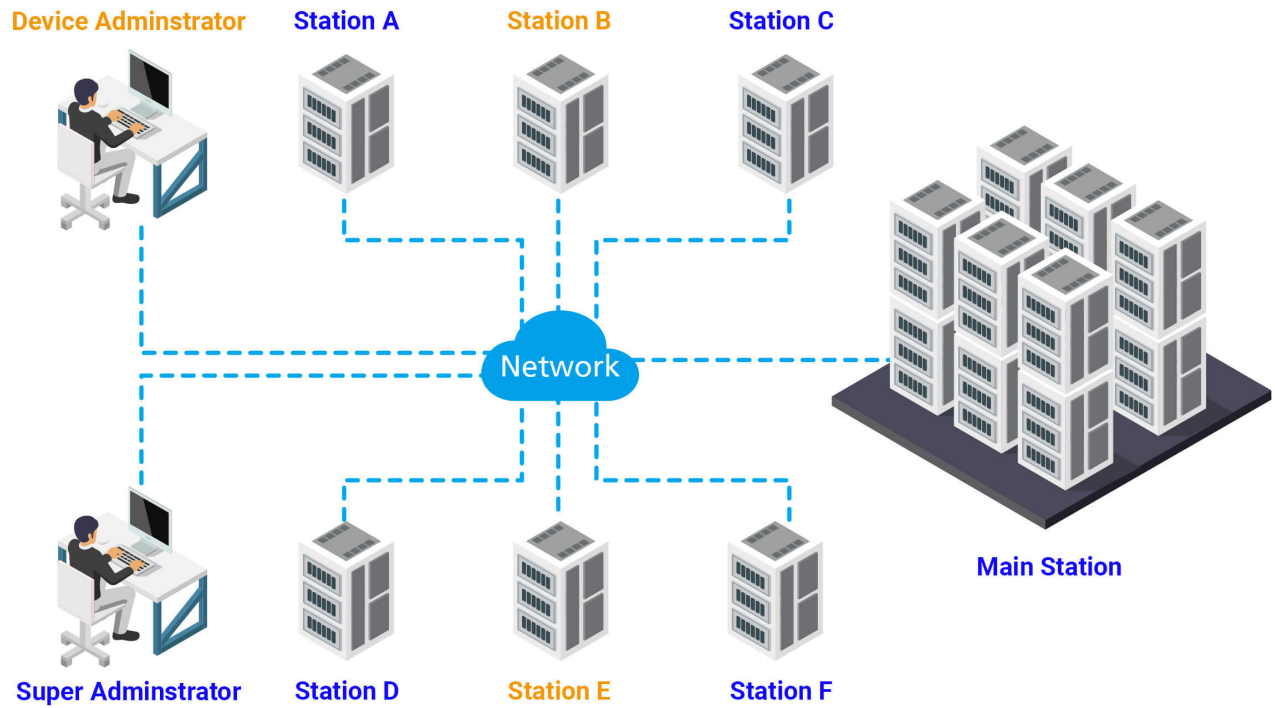
The [CC2000](#) enables centralized management of IT equipment through a single platform, including ATEN KVM over IP switches, serial console servers, intelligent PDUs, UPSs, service processors, blade chassis, virtual servers and more. Its Dashboard acts as a consolidated portal, offering a comprehensive view of essential information and monitoring tasks, such as device status, events, task results, online users, licensed node usage, and logs. It also features a notification function to alert administrators to promptly respond to critical issues efficiently.

Note: Servers connected to KVM over IP switches can also be managed via BIOS level with the HTML-5 WebClient viewer.



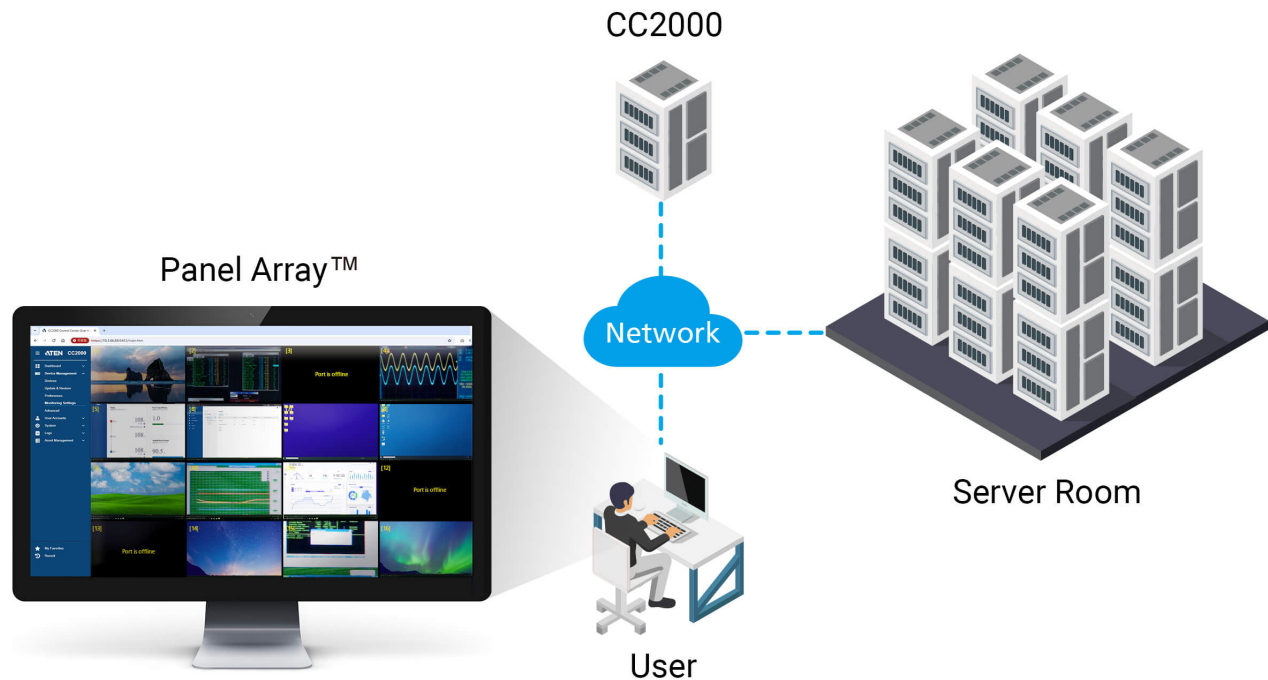
Centralized Authentication & Flexible Role-based Access Control

The [CC2000](#) centralizes login credentials and supports authentication through external protocols such as Windows AD, LDAP, Kerberos, RADIUS, and TACACS+. Additionally, user account management is also flexible as role-based access control can be implemented with predefined roles, including Super Administrator, User Administrator, Asset Administrator, User, Auditor, Dashboard Viewer, and others.



Multi-View Monitoring via Panel Array™ Mode

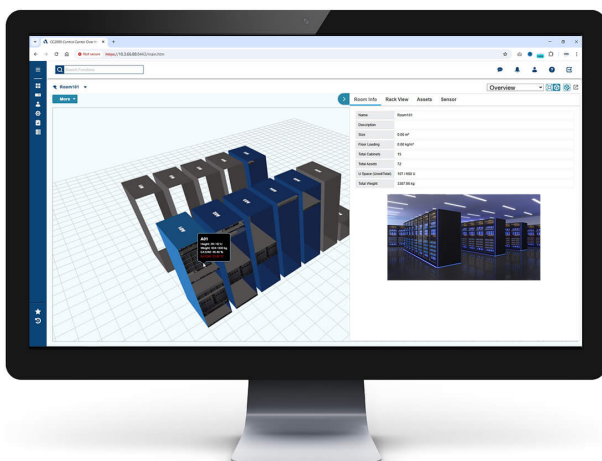
The video output from up to 64 port connections can be remotely monitored simultaneously on a single screen via the Panel Array™ Mode (available with only JavaClient / WinClient viewers) in a configurable Array-view layout, while each port's video can be further displayed in Port view for detailed viewing when it's double clicked. This feature enhances monitoring efficiency and provides administrators with improved situational awareness and troubleshooting capabilities.



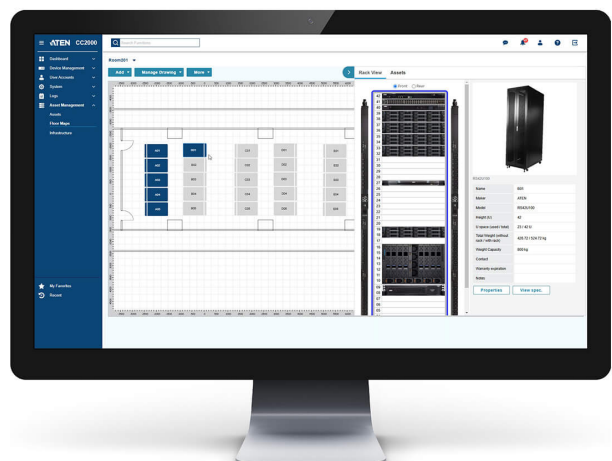
Asset Management via Floor Maps

Information such as specifications, appearance, configurations, and location (e.g., rack space, floor space) of each managed asset can be added and organized under Asset Management, and can later be used to create location maps by room in 2D or 3D images (e.g., ".dxf", ".svg") under Floor Maps, facilitating server room or data center operations through visualization for optimized efficiency.

Room A

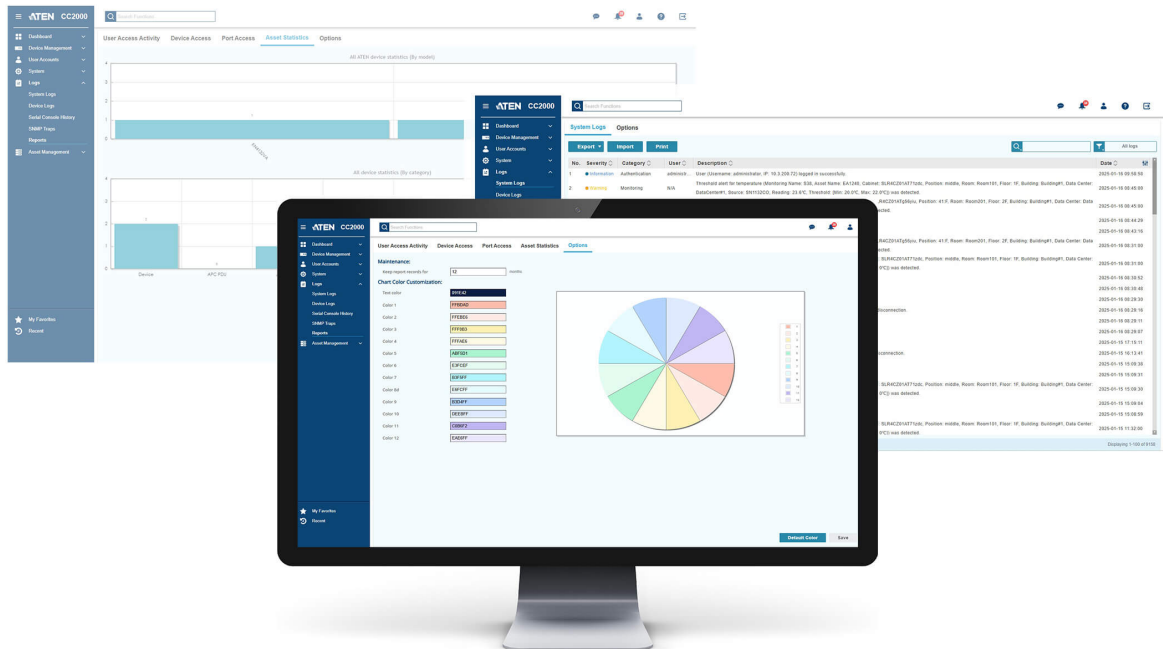


Room B



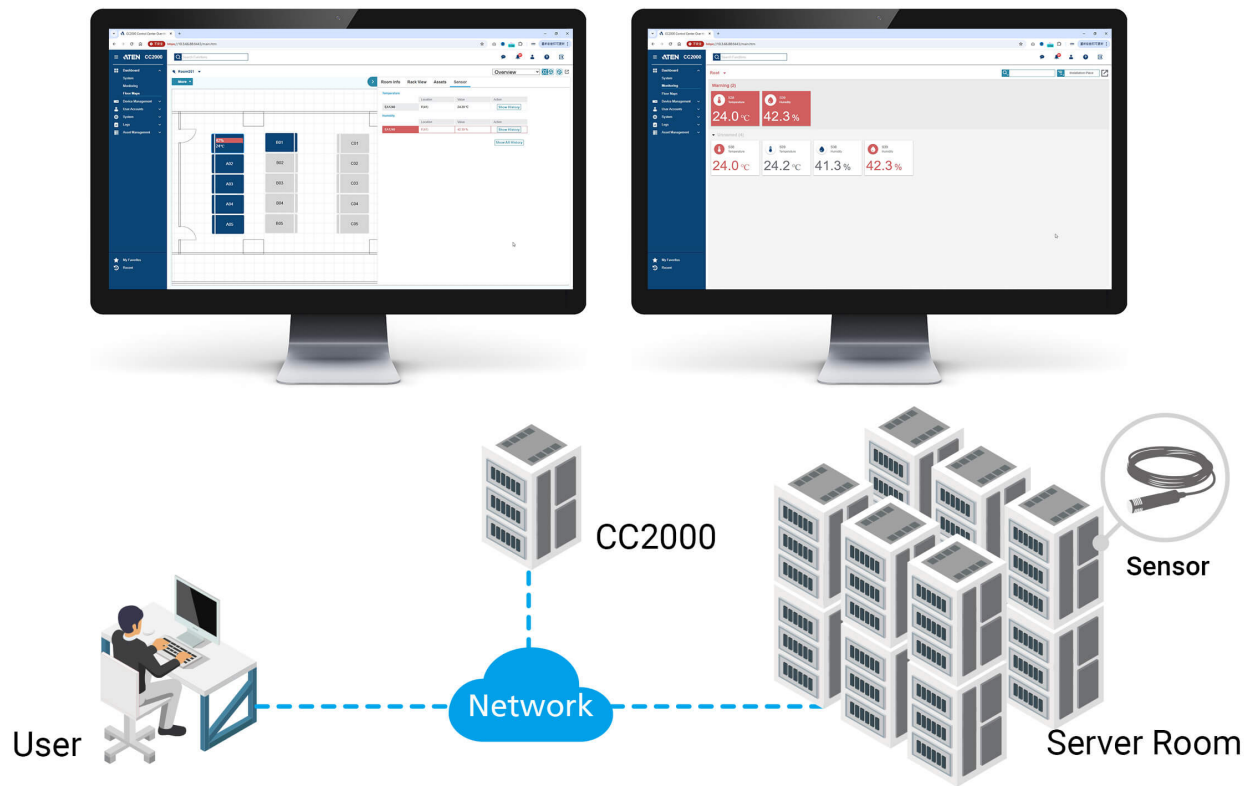
Centralized Logging & Audit Trail Reporting

In addition to system logs, all logs from ATEN KVM over IP switches, serial console servers, PDUs, network equipment (e.g., routers, NAS, switches – all via SNMP) are consolidated for security debugging purposes, and can be provided as audit trails through the syslog protocol. Moreover, activity reports on user access, device access, port access, and asset statistics can also be generated for further analysis.



Environmental Monitoring and Energy Management

Environmental and power conditions – such as temperature, humidity, intrusion, air pressure, voltage, current, dissipation, power on/off, etc. – can be remotely monitored in real time through sensor deployment, and connections to PDUs and SN11 series serial console servers, providing a comprehensive overview of the health of a server room or data center through trend charts, offering further insights to facilitate strategic decision-making.



Robust Security to Bolster IT Administration

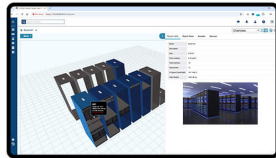
The [CC2000](#) bolsters account logins with 2FA (2-Factor Authentication) and enables AES 256-bit encryption for secure end-to-end node access, validated with TLS v1.3 and RSA 2048-bit certificates. It also supports third-party Certification Authorities (CAs), strong user password authentication, and other security mechanisms such as IP/MAC address filtering for virtual media access, configurable failed login attempts, and lockouts.



Service Redundancy to Sustain Optimum Uptime

The [CC2000](#) enables a primary-secondary network architecture that supports the deployment of up to 31 secondary servers for service redundancy. Configurations are synchronized between the primary and secondary servers on a periodic basis to ensure optimal system availability and minimize the impact of unexpected downtime.

CC2000



Network

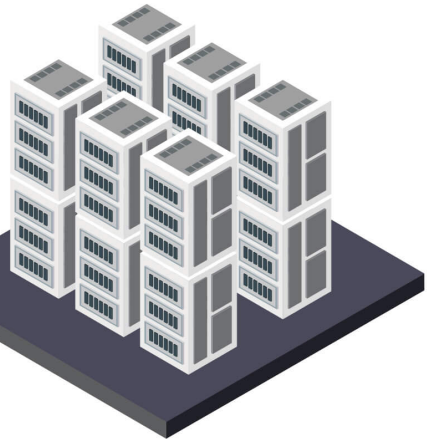


CC2000
Primary



CC2000 Secondary

x up to 31

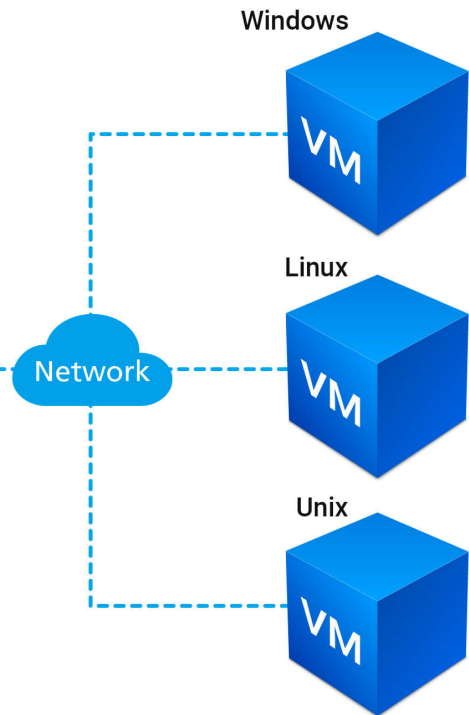
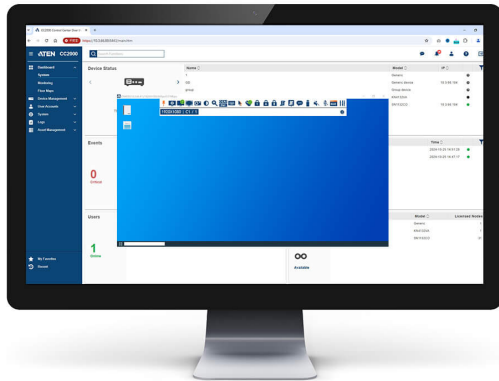


Server Room

Seamless IT Deployment via Virtualization

Access and control of a virtualized environment can also be managed via the [CC2000](#) by adding a virtual host over VMware platforms, such as vSphere v6.0/6.5/6.7/7.0/8.0, Windows Server 2008/2012/2016, or Citrix XenServer v6.5. Software deployment – including mounting ISO images, booting and upgrading devices, running diagnostics, and more – can be executed remotely via the [CC2000](#) platform, as if it were done locally.

CC2000



Applications

The [CC2000](#) serves as centralized management software for IT equipment, functioning as a DCIM solution to streamline server room and data center management across diverse sectors, including government, corporate, manufacturing, telecom, finance, education, healthcare, utilities, and so on.



Talk to Our Experts

If you prefer to have ATEN contact you, please complete the form and a representative will be in touch with you shortly

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Features

ATEN's [CC2000](#) Centralized Management Software provides IT Teams in every industry with a comprehensive solution that enables central management of their IT infrastructure locally and worldwide through a single portal. The software consolidates the management of all ATEN KVM over IP switches, serial console servers, ATEN PDUs, UPSs, and third party devices such as embedded service processors, blade servers, and physical and virtual servers for in-band and out-of-band management. The brand new [CC2000](#) provides an easy-to-use yet robust interface – making system management more efficient and productive.

Featuring concise and intuitive HTML5-based (remove space) web interface, the [CC2000](#) delivers a better user experience and advanced usability. By utilizing consolidated data, task-based navigation, and simplified menus, administrators can access, configure, and manage all of the IT equipment with ease.

The [CC2000](#) also features a consolidated portal, the Dashboard, to help IT staff quickly attain a full grasp of all the important information and to complete monitoring tasks with minimal effort and time. The Dashboard displays an at-a-glance overview of device status, device events, task results, online users, and licensed nodes usage. With the device status and device events sections, administrators can be immediately notified about the condition of the connected devices, as well as quickly receiving the generated critical logs. The task results section delivers vital messages about operation success or failure. Administrators can also view details of currently logged-in users and terminate suspicious user sessions. The Dashboard's enhanced notification functionality helps users to promptly handle issues and fix problems efficiently.

With the asset management functions, [CC2000](#) enables users to quickly gain access to the specifications, appearance, installed location of the managed assets, providing complete control over floor space, rack space, IT equipment, power, and connectivity. Users can easily find assets with previously created tags and export all equipment details, simplifying the asset verification process. Featuring a floor map, [CC2000](#) provides users the flexibility to observe the status of installed equipment from a location level down to the device level in both 2D and 3D images, facilitating comprehensive capacity planning and meticulous capacity management. It empowers users to assess, optimize, and allocate resource, ensuring efficient utilization of infrastructure resources in alignment with organizational goals and requirements.

By integrating ATEN SN11XX series, PDU series and Energy Box, the [CC2000](#) supports real-time environment and power monitoring. This allows users to recognize potential hot spots in racks, monitor power status of connected PDUs, and inspect other important info through the system dashboard, ensuring 24/7 availability of IP equipment.

The [CC2000](#)'s patented Panel Array mode lets administrators view the output of multiple ports in individual panels on the same screen. The panel configuration can combine the ports from different over-IP KVM devices and give administrators a flexible choice to select which devices they wish to monitor and how the ports appear on the screen. Ports can be accessed and managed simply by clicking on the panel it is displayed in.

The [CC2000](#) Centralized Management Software uses Primary-Secondary architecture to offer service redundancy. When the Primary [CC2000](#) server goes down, the [CC2000](#) management system will keep functioning since one of Secondary units can provide the required management services until the Primary unit is back online. This feature ensures that you are able to access all your devices whenever required.

With the help of the [CC2000](#), users can promptly handle issues and fix problems efficiently. As a secure and centralized system management solution, the [CC2000](#) software meets the requirements of IT administrators in centralized management and easy monitoring, putting them in complete control of their data centers, server rooms and branch offices wherever they are deployed.

Note: Please note that a maintenance license is required for all existing [CC2000](#) v3.0 users to proceed with an upgrade to [CC2000](#) v4.0 from an earlier version, and it is strongly recommended that you consider this upgrade to sustain your system operations and take advantage of the latest advanced features and improvements. Following the launch of [CC2000](#) v4.0, ATEN will no longer release any new features or new product support for previous [CC2000](#) v3.x versions. However, we will continue to offer major bug fixes and security updates until the end of Q1 2024. ([Maintenance License FAQ](#)).

- Asset management – effortlessly view the specifications, appearance, location, and configuration of every asset in the data center, enabling users to improve the efficiency and reliability of data center operations
- Visualized floor map – allows users to view the layout of server rooms and the configuration of server racks in 2D or 3D floor maps, providing insights on the overall the capacity and status of the infrastructure
- Environment and power monitoring – incorporate floor maps and sensors (e.g. temperature, humidity etc.) to easily get a glance status of environmental health about your data center
- Real-time notification – for ensuring 24/7 availability of critical alerts, [CC2000](#) notifies users when monitoring data exceed a user-configured threshold
- Trend charts and auditing – allow users to gain insight, analyze findings, and take strategic actions
- Single sign-on to consolidate the management of ATEN's KVM over IP switches, serial console servers, intelligent PDUs, and third party devices such as embedded service processors, and physical and virtual servers
- Intuitive user interface with HTML5 to deliver friendly user experience
- At-a-glance Dashboard portal to display an overview of the device status, device events, task results, online users, and licensed nodes usage
- Flexible remote access to service processors including Redfish (iDRAC8/iLO5), Dell iDRAC5/6/8, HP iLO2/3/5,IBM RSA II, Dell CMC, IBM AMM, HP OA, IPMI, IMM, or to IT equipment using RDP, VNC, SSH, or Telnet IP tools
- Supports access and control to virtualized environment over VMware vSphere 6.0/6.5/6.7/7.0/8.0, Windows Server 2008, 2012 & 2016, or Citrix XenServer 6.5
- Supports management of APC PDUs (AP79xx, AP89xx, and AP86xx)
- Supports LDAP, AD, Kerberos, RADIUS and TACACS+ for centralized authentication and authorization
- Centralized role-based policy for user access privilege control
- Military level encryption (AES 256-bit) for secure end-to-end node access
- Access control to grant or restrict user access by IP or MAC address, and SAS 70 compliance for configurable failed login attempts and lockout
- Supports certificates signed from third-party authorities (CA)
- TLS v1.3 data encryption and RSA 2048-bit certificates to secure user logins from browser
- Supports strong user password policy to enhance the security of user accounts
- Consolidates logs from ATEN's KVM over IP switches, serial console servers, and other devices through syslog protocol for audit trail
- Universal virtual media support for easy software deployment (mount ISO image, boot, or upgrade the device remotely)
- Event notification support through Dashboard, message center, email, SNMP trap (v1, v2c, v3), and Syslog
- Task scheduling for backing up [CC2000](#) database and configuration, exporting logs, and controlling power on/off on PDU devices
- Message Box – shows internal system messages or critical logs that can be viewed in full detail with just one simple click
- Panel Array Mode – allows administrators to monitor multiple video outputs of remote servers in one screen
- Mouse DynaSync – automatically synchronizes the local and remote mouse cursors
- Delivers server redundancy through primary / secondary architecture for service availability
- Quick device access and management – Recent and My Favorite for a list of recently visited devices and for a list of bookmarked devices, respectively
- Online Chat – instant communication and collaboration between users (e.g. for quick problem troubleshoot)
- Supports MOTP (Mobile One Time Password) and 2FA (Two-Factor Authentication) to provide an additional security layer of protection against account hijacks

Specification

Compatible Appliances	
KVM over IP switches	KL1108V, KL1116V, KL1508Ai, KL1516Ai, KH1508Ai, KH1516Ai, KN1000, KN1000A, KN1108v, KN1116v, KN1108VA, KN1116VA, KN2124VA, KN2140VA, KN4124VA, KN4140VA, KN1132V, KN2116VA, KN2132VA, KN4116VA, KN4132VA, KN4164V, KN8132V, KN8164V, KN2116A, KN2132, KN2116VB, KN4016VB, KN2124VB, KN4024VB, KN1132VB, KN2132VB, KN4032VB, KN8032VB, KN4064VB, KN8064VB, CN8000A, CN8000, CN8600, CN9000, CN9600, CN9950, CN800, CS1708i, CS1716i, CL5708i, CL5716i, IP8000
Serial console servers	SN1148CO, SN1132CO, SN1116CO, SN0148CO, SN0132CO, SN0116CO, SN0108CO, SN9116CO, SN9108CO, SN0148, SN0132, SN0116A, SN0108A, SN9116, SN9108, SN3001, SN3002, SN3001P, SN3002P, SN3401, SN3402, SN3401P, SN3402P, SN3101
PDUs	ATEN: PE8324, PE8216, PE8208, PE8108, PE73xx, PE7208, PE7108, PE6324, PE6216, PE6208, PE6108, PE53xx, PE5208, PE5108, PE4104G, PG9xxxx, EC2004, EC1000. APC: AP79xx, AP89xx, and AP86xx.
UPSs	OLxxxxLV, OLxxxxHV
Service processor	Dell iDRAC5/6/8, HP iLO2/3/5, Redfish, IBM RSA II, Dell CMC, IBM AMM, HP OA, IPMI, IMM.
Virtual Infrastructure	VMware vSphere 6.0/6.5/6.7/7.0/8.0 Windows Server 2008/2012/2016, and Citrix XenServer 6.5.
Authentication & Authorization	Supports local user accounts, LDAP, AD, Kerberos, RADIUS and TACACS+. Role-based (Super Administrator, System Administrator, Device Administrator, User Administrator, User, Auditor) policy for access privilege control. Import user list (*.csv) to create multiple users at once.
Security	AES 256-bit encryption for secure end-to-end node access. IP or MAC addresses blocking. Virtual media security blocking. Configurable failed login attempts and lockout. Support certificate signed from third-party authorities (CA). Secure web connection with TLS v1.3 and RSA 2048-bit certificates. Strong user password authentication. Configurable user session timeout.
Network Protocol & IP Tools	IPv4/IPv6, RDP, VNC, SSH, and Telnet.

Viewer	JavaClient (JNLP). WinClient (ActiveX). WebClient (HTML5)*. Mouse DynaSync. Panel array mode (up to 64 KVM ports). Virtual media. Exit macro support.
Notification	SMTP. SNMP (v1, v2c, v3). Syslog. System message.
Task scheduling	CC2000 database backup. CC2000 configuration backup. Device firmware upgrade. Export system logs. Export device logs. Export serial console server logs. Power on/off control on ATEN PDU.
Logs	System logs. Device logs. Serial console server logs. SNMP traps. Activity report.
Server Redundancy	Primary/secondary architecture. 1 primary with maximum 31 secondary servers.
Supported OS	- Supported OS with JAVA Runtime Environment (JRE) 8 Windows: 8, 10, server 2008, server 2012, server 2016, server 2019, server 2022 Linux: Redhat Enterprise v7, SUSE Enterprise 9 & 10, Ubuntu 15.10, Debian 8.2, Fedora 23, OpenSUSE 13.1, CentOS 7 - Supported OS with Zulu OpenJDK 8 Windows: 10, server 2016, or server 2019 Linux: Redhat Enterprise v8.1, Ubuntu 16/20, Fedora 32, CentOS 8.1
Supported Browsers	Internet Explorer (11), Microsoft Edge (42 or later), Chrome (56 or later), Firefox (60 or later).
Multilingual Support	English, 繁體中文, 简体中文, 日本語, 한국어, Française, Español, Português, Deutsch, Русский.
Others	Dashboard Environmental monitoring Online user management. NTP (Network Time Protocol) MOTP (Mobile One Time Password) 2FA (2 Factor Authentication) Asset Management 2D/3D Floor Maps Contacts
Note	* Please check CC2000 release note for the supported models of WebClient
License	
Basic (free)	1 Primary/16 Nodes.
USB License Options	CC2000TN (Tiny Pack: 1 Primary/32 Nodes). CC2000XL (Extra Lite Pack: 1 Primary, 64 Nodes). CC2000LE (Lite Pack: 1 Primary, 128 Nodes). CC2000LS (Lite Plus Pack: 1 Primary, 256 Nodes). CC2000SD (Standard Pack: 1 Primary/1 Secondary, 512 Nodes). CC2000PS (Plus Pack: 1 Primary/5 Secondary, 2048 Nodes). CC2000PM (Premium Pack: 1 Primary/9 Secondary, 5120 Nodes). CC2000PL (Platinum Pack: 1 Primary/15 Secondary, Unlimited Nodes). CC2000MX (Maximum Pack: 1 Primary/31 Secondary, Unlimited Nodes).
System Add-ons	CCS1 (Add-on 1 Secondary Server License). CCN1 (Add-on 1 Node License). CCN10 (Add-on 10 Nodes License). CCN50 (Add-on 50 Nodes License). CCN100 (Add-on 100 Nodes License). CCN500 (Add-on 500 Nodes License). CCN1000 (Add-on 1000 Nodes License). CCN10000 (Add-on 10000 Nodes License). CCNU (Add-on unlimited Nodes License).
Maintenance	CCMA64 (1 YR SUP FOR 64 NODES) CCMA128 (1 YR SUP FOR 128 NODES) CCMA256 (1 YR SUP FOR 256 NODES) CCMA512 (1 YR SUP FOR 512 NODES) CCMA1024 (1 YR SUP FOR 1024 NODES) CCMA2048 (1 YR SUP FOR 2048 NODES) CCMA5120 (1 YR SUP FOR 5120 NODES) CCMAU (1 YR SUP FOR UNLIMITED NODES)
Minimum Hardware Requirements	CPU: Pentium 4, 2.60 GHz or higher Memory: 1GB Hard drive: 500MB or more free space Ethernet: Giga LAN
Package Contents	1x CC2000 USB License Key 1x Software CD

Diagram

