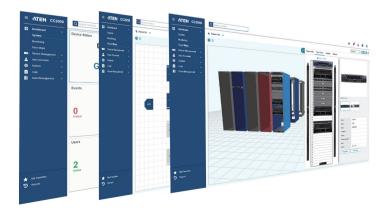# Centralized Management Software
CC2000 4.0

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, 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 HTML 5-based 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 equipments 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 PDU series and Energy Box, the CC2000 supports real-time environment and power monitoring. This allows users to recognize potential hot spots in racks, ensures 24/7 availability of IP equipment, monitors power status of connected PDUs, and inspects other important info through the CC2000 Dashboard.

When monitored figures exceed their configured thresholds, users will get real-time alerts through Dashboard, message center, email, SNMP trap, and Syslog. IT administrators can get actionable insights about server room's temperature, humidity, air pressure, voltage, current, and power dissipation from the trend chart.

The CC2000's patented Panel DynaArray™ 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.
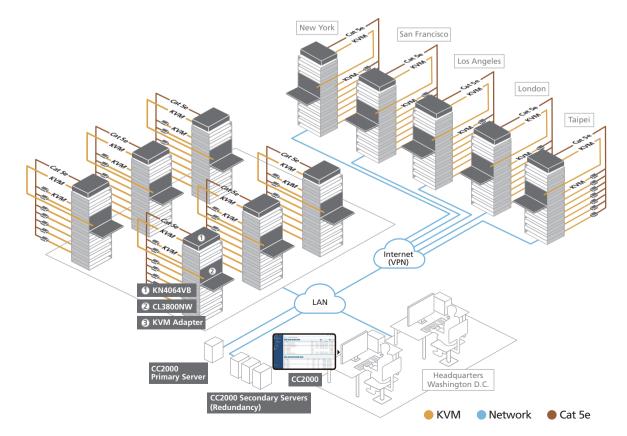
With the help of the CC2000, users can promptly handle issues and fix problems efficiently. As a secure and centralized system management solution, the CC2000 software meets the requirements of IT administrators in centralized management and easy monitoring, putting them in complete control of their data centers, server rooms and branch offices wherever they are deployed.

Features

- 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 5.5/6.0/6.5/6.7, 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) authentication

Specifications

	CC2000
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, KN4132, KN2116VB, KN4016VB, KN2124VB, KN4024VB, KN1132VB, KN2132VB, KN4032VB, KN8032VB, KN4064VB, KN8064VB, CN8000A, CN8000, CN8600, CN9000, CN9600, CN9950, CS1708i, CS1716i, CL5708I, CL5716I, IP8000
Serial console servers	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
Service processor	Redfish, Dell iDRAC5/6/8, HP iLO2/3/5, IBM RSA II, Dell CMC, IBM AMM, HP OA, IPMI, IMM
Virtual Infrastructure	VMware vSphere 5.5/6.0/6.5/6.7, 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

	CC2000
Server Redundancy	Primary/secondary architecture 1 primary with maximum 31 secondary servers

Supported OS	• Supports OS with JAVA Runtime Environment (JRE) 8
	  Windows: 8, 10, server 2008, server 2012, server 2016, or server 2019
	  Linux: Redhat Enterprise v7, SUSE Enterprise 9 & 10, Ubuntu 15.10, Debian 8.2, Fedora 23,
	  OpenSUSE 13.1, CentOS 7
	• Supports 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) Asset management 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

Product information is subject to change without prior notice.