

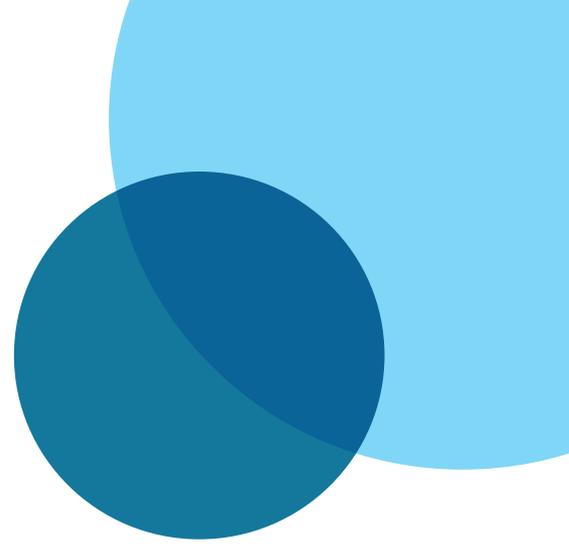


# Data Center / Server Room

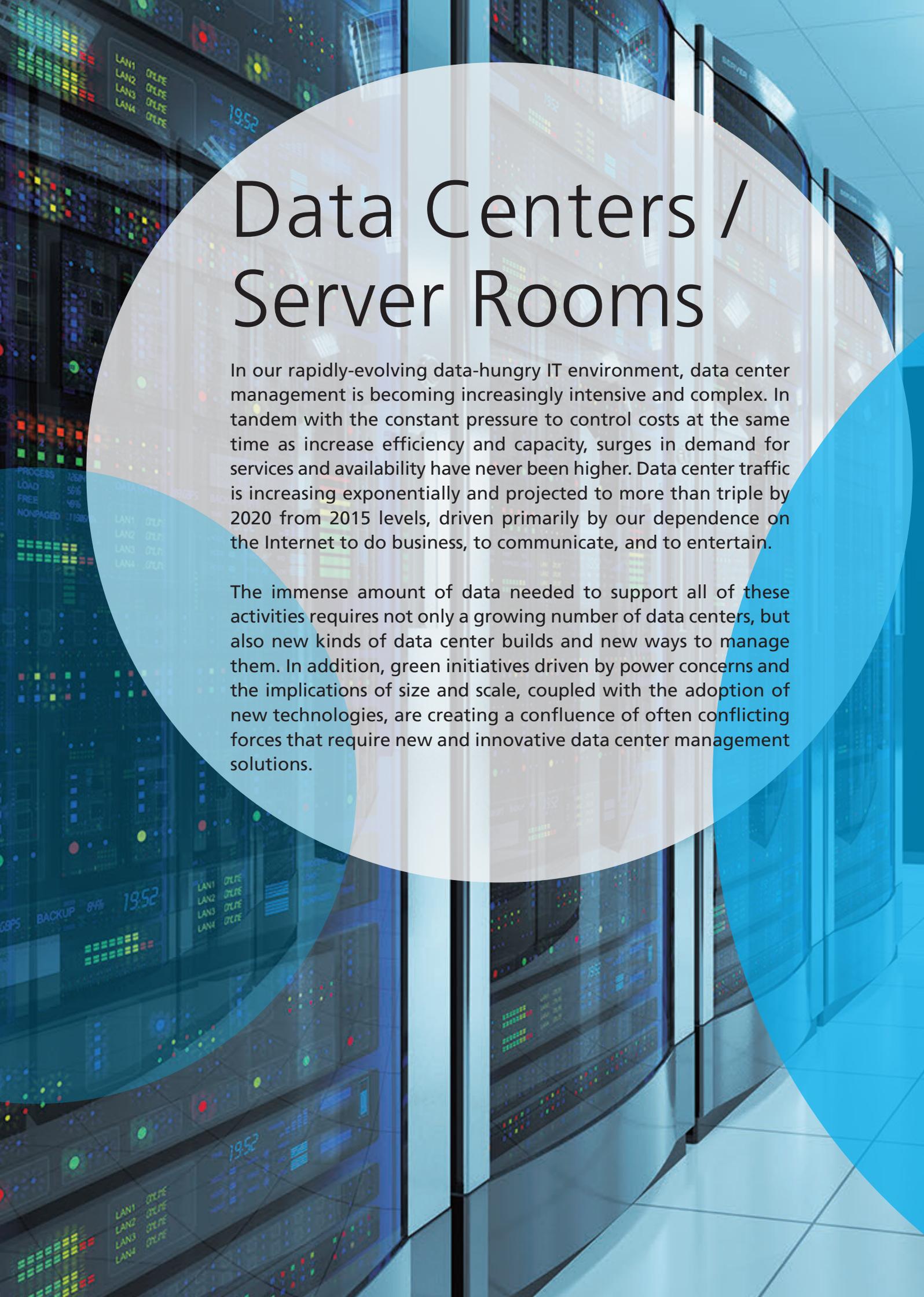
Solutions Guide



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# Data Centers / Server Rooms

In our rapidly-evolving data-hungry IT environment, data center management is becoming increasingly intensive and complex. In tandem with the constant pressure to control costs at the same time as increase efficiency and capacity, surges in demand for services and availability have never been higher. Data center traffic is increasing exponentially and projected to more than triple by 2020 from 2015 levels, driven primarily by our dependence on the Internet to do business, to communicate, and to entertain.

The immense amount of data needed to support all of these activities requires not only a growing number of data centers, but also new kinds of data center builds and new ways to manage them. In addition, green initiatives driven by power concerns and the implications of size and scale, coupled with the adoption of new technologies, are creating a confluence of often conflicting forces that require new and innovative data center management solutions.

# Considerations for Solution Implementers

As the IT infrastructure landscape gears up for a future of technological convergence, increased digitization and computing demands are the key market forces that affect the KVM switch and serial console markets in this area, with data center growth driving sales for high port-count devices across sectors such as financial services, web and social network hosting, government, e-commerce, telecommunications and healthcare, in particular.

With this demand for more servers and more services come new opportunities for solution providers to help businesses to align their data infrastructure with their strategic needs. Because it is almost impossible to know exactly the future needs of an enterprise, it is important that data center management solutions are flexible in terms of scale and new technologies. Already, tech-savvy businesses are demanding colocation providers that are able to evolve with them; no one wants to miss a new opportunity because existing technologies can't support new demand.

In most cases, while computing demand is increasing faster than IT managers can consolidate – and faster than budgets are increasing – an awareness of the evolution of technology applications, and the evolution of the customers using the applications, is essential to grasping how this will also start to redefine IT infrastructure, especially as it fractures into the realms of cloud, data center and managed services.

There is no one-size-fits-all solution, and in this new era of opportunity, enterprise level corporations require innovative and sustainable data center solutions that allow their businesses to grow in an impactful way. ATEN's wide range of data center KVM, serial console and PDU solutions offer just that – convenient, flexible, centralized remote access and management of IT devices in multiple data centers and distributed branch/remote offices.

# Trends in Data Centers / Server Rooms

## Increasing Adoption of Over IP Solutions

Increased growth of colocation facilities is driving growth in the KVM/serial over IP category as enterprise users seek secure access to critical systems and real-time management over the net. For businesses that host their own data or need to manage branch offices or industrial servers, scalable and secure enterprise class KVM/serial over IP solutions are increasingly attractive because remote access means fewer people in critical areas and minimizes both security concerns and the chance of accidents. The remote access provided by over IP solutions is also a driver in regions where manpower costs are high and in applications involving many remote sites or branch offices.

The benefits of over IP solutions in the data center are clear. Corporations want real-time and accurate access to mission-critical systems from any console and they want to be able to handle any mission-critical emergency from any location. In terms of flexibility, over IP solutions are especially suitable for data center environments where different brands of servers are deployed. What's more, the video resolutions provided by over IP solutions have improved immensely and most solutions are available with the quality of display and resolution requirements that today's corporations have come to expect.

## Demand for Increased Security

Whether a large corporation is looking to host its own data at remote locations, or a smaller business is weighing data center provider options, security is one of the first considerations on anyone's mind. And this becomes even more paramount for information storage in high-security industries such as government, finance and healthcare.

Data center security concerns are multi-layered. A facility's infrastructure and location aside, physical security issues are most often focused on access control systems and surveillance, with biometrics playing an increasingly important role in security protocols. Redundancy measures in a data center also amplify security by providing an extra layer of equipment, personnel, or storage in the event of the primary source's failure. And right down to the switch/unit level, demand is increasing for data center equipment that incorporates powerful security features, such as internal and external authentication with security policies that permit user authorization to be tightly configured – even down to a port-by-port basis.

As an advanced functionality in an increasingly data-heavy IT environment, security concerns are expected to become even more vital, so solutions with improved security will continue to drive refreshes of KVM switches and serial consoles in this sector.





## Increasing Impact of the Internet of Things (IoT)

The Internet of Things (IoT) has become ubiquitous as smart phones, homes, cars, and more, are already delivering on the promise of big data and impacting the data center industry by constantly streaming data to enterprises, governments and other agencies all around the world. This comprises a massive amount of data that needs to be processed and analyzed. What's more, there is also a related and much larger scale movement towards an Industrial Internet of Things (IIoT), which, instead of consumer devices, applies IoT concepts to the sensors and chips in industrial systems and processes. While environmental sensors for optimizing energy management have been a fixture in data centers for quite some time, as the biggest drivers of how future data centers will be designed and managed, both consumer IoT and industrial IoT solutions represent a challenge and an opportunity. As more enterprises look to gain a competitive edge from these advanced analytic processes applied to industrial entities, data centers will be forced to transform the way that information is managed. So an appreciation of these ever-increasing IoT-related capacity concerns and security challenges is without a doubt an essential component of any consistent long-term data center management strategy.

## Rise of High Density Data Centers

Currently, most data centers are located in small and medium sized businesses, and about 10 percent of the server market is comprised of larger data centers owned by cloud providers. But that is set to change, and big data and higher-density builds are the future. By 2021, the acceleration of cloud adoption is expected to double the size of the data center industry. And with more data and more network equipment to be managed, this has implications for both the scale of data centers and the power required.

The shift towards constructing high-density data centers is an important one for many reasons. High-density builds require only half the physical space of traditional data centers by increasing the number of servers that can be loaded into a rack. This is inherently more efficient, offers opportunities for improved power usage effectiveness, results in fewer cabinets to manage, and lowers capital and operational costs. High-density data centers are a considerable driver of unit and revenue growth in many IT applications, not only because they lead to additional data center build-outs but also because they drive technological innovation in terms of performance and efficiency.

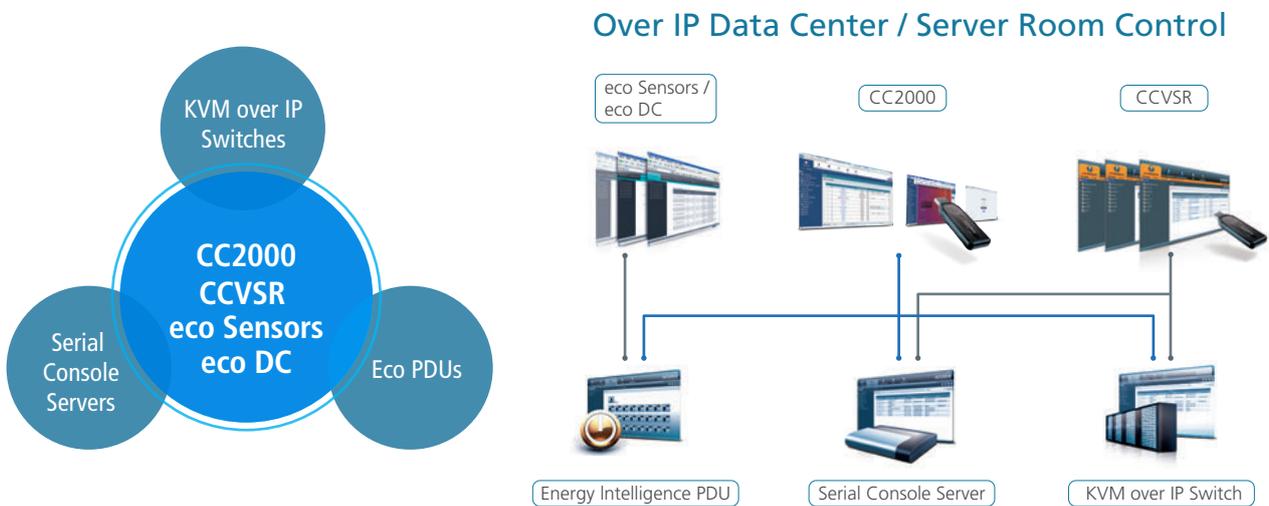
## Desire for Green Data Centers / Server Rooms

There are many advantages to incorporating green options for optimal data center operations, and accordingly, demand for green data centers continues to soar, spurred by developments in analytics and operational efficiencies, as well as government incentives. However, as most regions have limited access to renewable energy sources, the most practical green initiatives for the majority of data centers focus on the smarter use of power. Considering that by 2020, US data centers are expected to require six times the amount of power needed by New York City, the drive towards energy efficiency is one that cannot be ignored.

A major benefit of the push for energy efficiency in data centers is that it drives innovation in cooling techniques and automation, as well as new methods to consolidate IT resources. But while high-density data centers are driving a need for green power solutions versatile enough to consolidate the increased demand for power at the rack level, solutions that provide real-time power analysis for optimizing data center energy management at the outlet level are also extremely vital to achieving energy efficiency and reduce monthly and recurring costs in the data center without harming IT reliability.

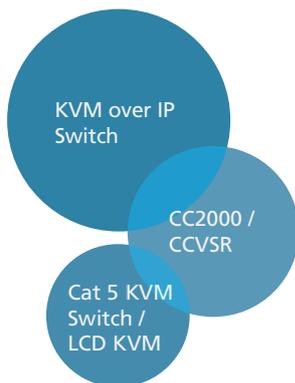
# ATEN Data Center / Server Room Solutions

ATEN provides KVM switch, serial console and PDU solutions for data centers that are comprised of industry-leading hardware and software components that consolidate the management of complex IT environments across a wide range of industries.

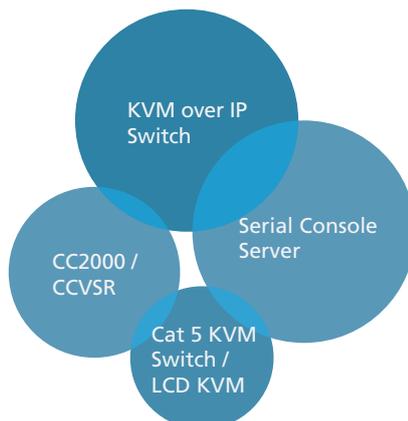


## ATEN's Three Kinds of Data Center / Server Room Solution

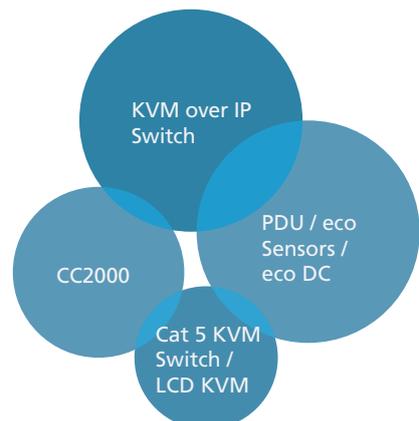
**1** Centralized Server Access and Control Solution



**2** Centralized Server + Switch Access and Control Solution



**3** Centralized Server Access and Control + Power Management Solution



# ATEN Data Center / Server Room Solutions – Key Advantages



## Complete Centralized Access to Critical Systems and Real-time Remote Management

- ATEN data center solutions put IT administrators in complete control of remote data centers and branch offices, no matter where in the world they are deployed.
- With a combination of KVM over IP switches, serial console servers, PDUs, and management software, ATEN provides secure and centralized data center systems management solutions that enable control of all IT equipment connected to over IP devices through a single portal.
- Offering smooth, secure, remote access to the servers, switches and power management devices in your IT infrastructure through a single portal that is accessible from anywhere in the world, at any time, ATEN solutions provide for 24/7 control, eliminating the distance restrictions of data center management, allowing centralized real-time updating and maintenance, and enabling a faster response to mission-critical server room emergencies.



## Peace of Mind from Enhanced Security Features that Lock Down Your Data

- Security measures are a vital component of any solution for any size of data center or server room. ATEN understands the wider concerns about information sensitivity in an ever-increasingly data-heavy world and takes security extremely seriously.
- Our data center KVM solutions provide enhanced security and reduce risk by utilizing the industry's highest security standards and protocols, such as support for RADIUS, LDAP, LDAPS, MS Active Directory for secured authentication TLS 1.2, 2048-bit RSA, 236-bit AES, FIPS 140-2 for data encryption, and network IP/MAC address filter for secured network access.
- In terms of access and control, user and group permissions are configurable, while the ATEN CCVSR software adds yet another layer of security by recording all remote access operations, providing automatic and independent 24/7 monitoring of your data center infrastructure.



## Our Mission is New Standards in Reliability to Minimize Downtime

- At ATEN we know that the data center is a dedicated space where an enterprise's most valuable information is hosted, and we are fully aware of the impact of downtime. This is why ATEN data center KVM solutions are tailored to provide the most comprehensive and robust reliability, from the hardware design right through to the software development.
- For example, on our KVM over IP switches, the integration of dual power supplies and dual network interface controllers (NIC) provides backup redundancy, while on the administration side, CC2000 uses primary-secondary architecture to offer service redundancy with database updating. This feature allows for a secondary server to substitute for the primary, so that functionality, information and management services are not lost.
- This means that you can rely on ATEN data center KVM solutions to keep your information safe and accessible as part of any data management strategy.



## Flexible Deployment to Align Your IT Infrastructure with Your Strategic Needs

- At ATEN, we look beyond creating IT infrastructure management solutions to what those solutions are actually needed for. This is why we are focused on providing flexible solutions that enable our customers to do business and to do business well.
- For any data center or server room scenario, ATEN solutions can be utilized to build an intelligent management system with real-time and accurate access to mission-critical systems. Our extensive line of over IP hardware, including over IP KVM switches, serial consoles and PDUs, coupled with our management software tools, provide flexible solutions that are future-proof, scalable and implementable across the board to help any business align their data center infrastructure with their strategic needs.
- What's more, our solutions actually support the continual re-evaluation of your business requirements; ATEN data center solutions are designed to support change and to expand with you.



## Intuitive, Convenient Control for the Strategic Delivery of IT Services

- ATEN wants your business to grow, and we want to enable you to keep up with the demands of a growing, global enterprise by providing not only the best way to keep your data center or server room operational 24/7, but also the most convenient way to view all required procedures, infrastructure assets, maintenance activities, and operational issues at once, and from a single source.
- Making data center management intuitive and convenient, ATEN's CC2000 Centralized Management Software consolidates the management of all devices – servers, switches, PDUs – through a single, tree-view, easy-to-use interface, with a Panel DynaArray™ function that displays the output of multiple ports in individual panels on the administrator's screen, while our KVM over IP switches support an intuitive Magic Panel™ GUI with multi-language support.
- ATEN data center KVM solutions make it easier for administrators to get the insights they need to achieve maximum efficiency with increased security from all their IT resources.



## Proven Commitment to Smart Energy Solutions for Data Center Power Management

- As a company committed to pursuing sustainable development, allowing humanity and the natural environment to co-exist, ATEN is therefore also dedicated to providing smart energy solutions for data centers. Our wide range of eco PDUs take intelligence to the next level by providing real-time energy management, control and energy-saving efficiency.
- Developed to support ISO 50001, ATEN NRGence™ PDUs allow you to easily upgrade IT resources quickly and effectively. Providing the tools to remotely control the power of any server in a data center and remotely access individual outlets and outlet groups, as well as generate power analysis for optimizing data center management and energy usage, ATEN PDUs allow you to save energy without harming IT reliability.
- Fully integrable with ATEN's KVM over IP switches and serial consoles as part of a total data center and power management solution, ATEN PDUs are the smart choice for deployment in any data center or server room to turn your IT infrastructure into an IT ecosystem.

# ATEN Data Center / Server Room Solutions in Action



## Government

The government sector is important around the world for sales of KVM switches and serial consoles, as security requirements for government institutions' IT systems have developed in tandem with increased digitization. Information and security control are an over-riding consideration in a vertical industry where national security can be compromised by the leakage of confidential information. Currently, the U.S. government is especially important as the largest purchaser of secure KVM switches. However, different government departments do also use other types of KVM switch and serial console products for data center management applications, such as in-rack analog KVM switches and, increasingly, KVM over IP solutions that feature high levels of encryption. Serial console solutions for government use also require the highest security features.

### State Government Secure Data Center

A government IT department with data centers in several states was setting up a central data center requiring flexible, central and remote regional access to up to 48 servers. They were looking for a remote management solution that that would not only operate effectively with their current infrastructure but also provide the means for the efficient consolidation of IT resources. Plus, given the importance of the government data, remote access to the servers in the data center had to be completely secure, while further accommodating two levels of access security (classified and non-classified) by also incorporating non-remote access components.

Challenges:

- A highly secure over IP solution for management and remote control of up to 48 servers
- Save on manpower by having fewer administrators to manage servers from any location
- Offer space saving and efficiency benefits without unnecessary expenses
- Flexibility to work with different platforms and interfaces

### ATEN Solution

**The ATEN solution provided secure and centralized management through a single interface which included remote BIOS-level access and control of any server that enabled a faster response to critical server room emergencies. It also allowed for a high degree of platform and interface integration as well as versatility of access by providing two levels of access security.**

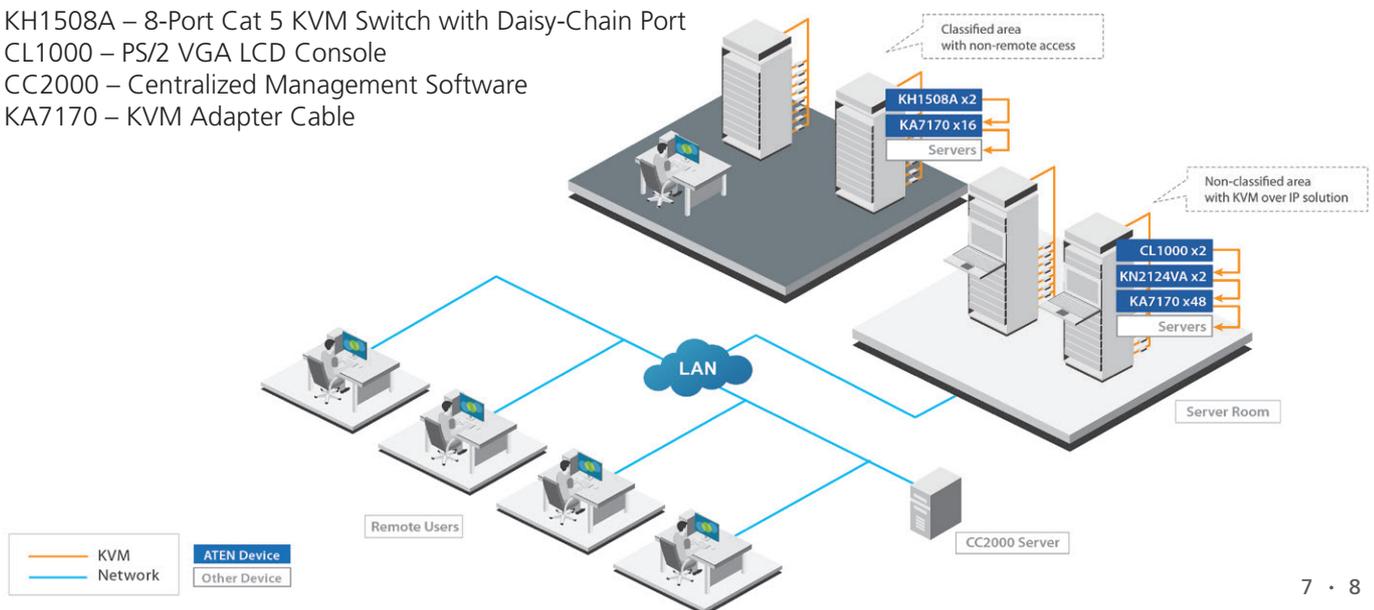
KN2124VA – 24-Port Cat 5 KVM over IP Switch with Virtual Media

KH1508A – 8-Port Cat 5 KVM Switch with Daisy-Chain Port

CL1000 – PS/2 VGA LCD Console

CC2000 – Centralized Management Software

KA7170 – KVM Adapter Cable





# Government Law Enforcement

With the increasing dependency on technology to solve major crimes, information requirements for analysis and strategic decision-making is rapidly transitioning from paper and physical files to a completely digital format. Given the growing need of law enforcement officers to share information across departments and between agencies, log emergency calls and coordinate responses, and other daily police business that creates a huge amount of incoming data traffic, more police districts are setting up larger, more complex information systems deployed by their own in-house IT professionals.

## Police Headquarters Centralized Data Center

To house new advanced application and database servers, a police department's IT division planned to build a new centralized data center to handle the data management requirements of information sharing and day-to-day police business. They wanted an efficient solution that enabled multiple operators to manage up to 300 servers. Since the operation included IT professionals working within the data center and IT administrators working remotely from buildings outside the data center, the solution required that multiple administrators in different locations had easy access to manage the many servers, locally and remotely, at the same time.

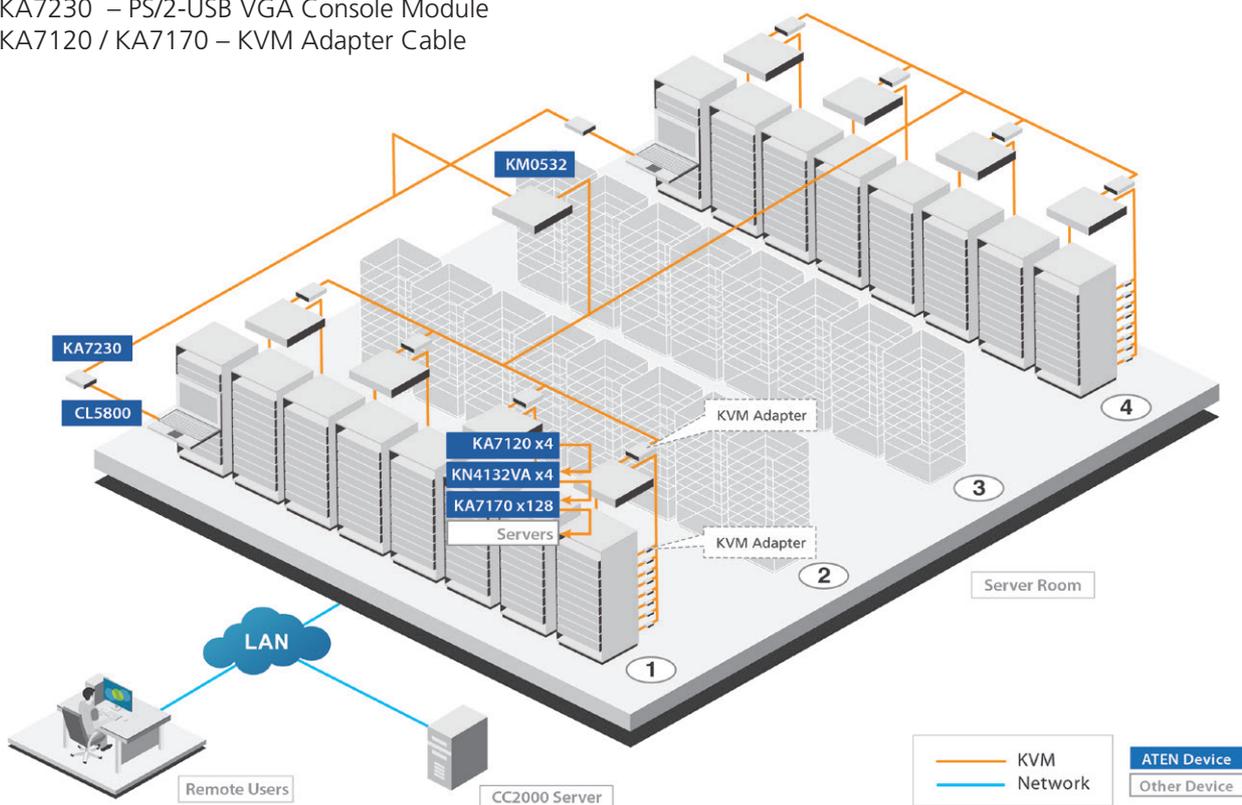
Challenges:

- Enable multiple operators to manage up to 300 servers.
- Provide access to multiple administrators in different locations to manage the many servers; locally and remotely, at the same time.
- Provide authentications and security for multiple users.

### ATEN Solution

**The ATEN solution offered the police department's IT administrators direct effortless access to manage servers with remote desktop control of multiple servers simultaneously from a single login session while providing the means for efficient collaboration between departments to boost productivity. The ability to cascade KVM switches also provided flexible expansion options.**

- KN4132VA – 32-Port Cat 5 KVM over IP Switch with Virtual Media
- KM0532 – 32-Port Cat 5 Matrix KVM Switch with Daisy-Chain Port
- CL5800 – PS/2-USB VGA Dual Rail LCD Console with USB Peripheral Support
- CC2000 – Centralized Management Software
- KA7230 – PS/2-USB VGA Console Module
- KA7120 / KA7170 – KVM Adapter Cable



# Content Delivery / Networks

As numbers of smart phones, tablets and other mobile computing devices are growing exponentially, so are data and telecommunication service providers constantly evolving and having to upgrade their services to end users. Mobile devices and high-speed broadband connectivity are already embedded across vast sectors of our globalized society and they are driving momentum around trends such as Internet of Things (IoT), streaming entertainment and e-commerce. These developments in turn are driving higher demand for data center solutions that need to be equipped to deal with ever-increasingly vast amounts of data required for content delivery in our digital world.

## Telecoms Company New Server Room Build

A leading telecommunications company that provides various mobile services to hundreds of thousands of customers found that its server room space was insufficient for its growing data management needs, and so with an increasing number of servers performing increasingly complex content delivery tasks, a new build out became an absolute necessity. With almost 256 servers that are distributed in different server racks, and a limited number of dedicated IT administrators, the company needed an efficient solution to centralize management of all IT equipment in this new server room.

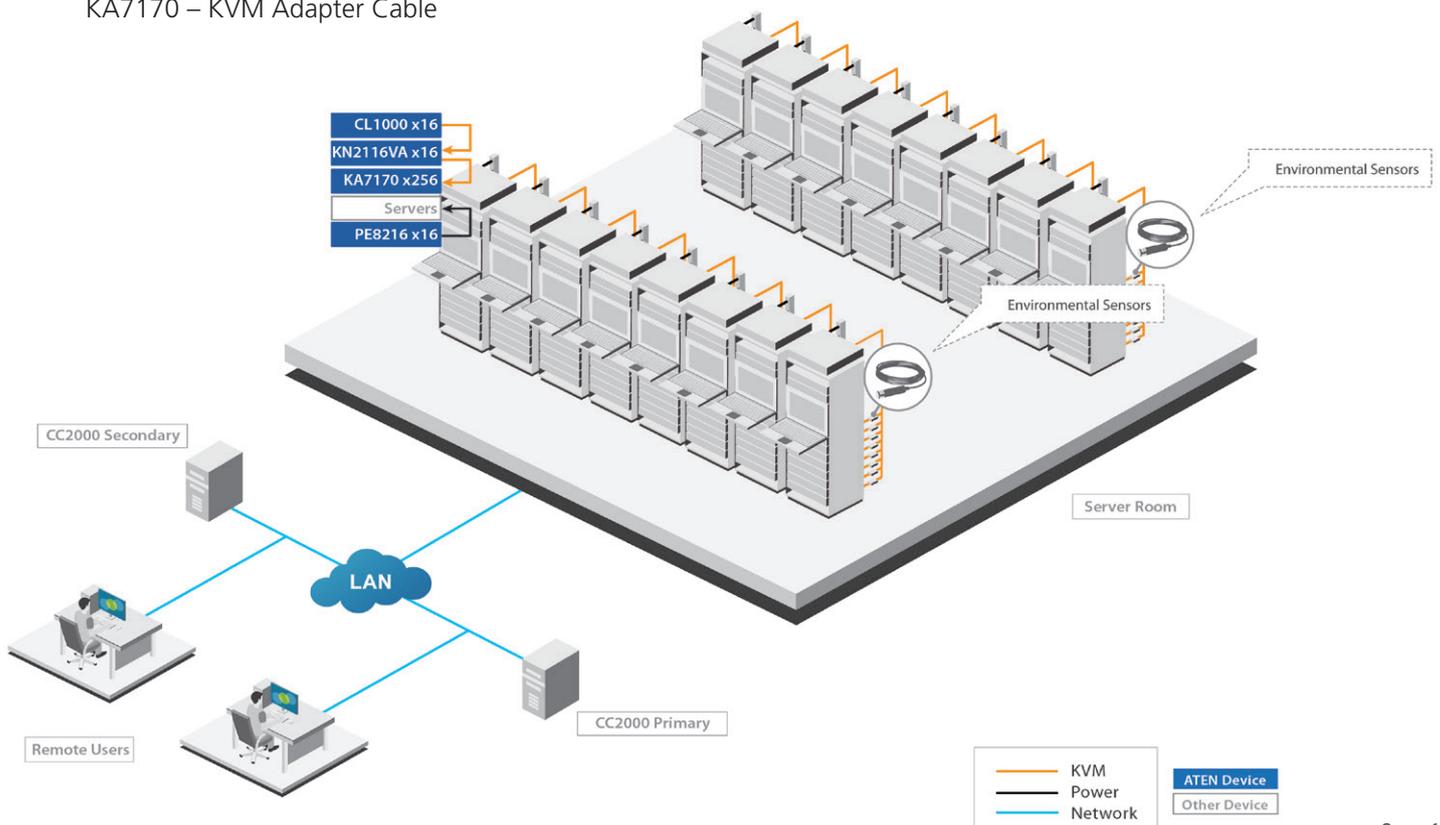
Challenges:

- Allow fewer administrators to manage hundreds of servers from multiple locations
- Offer remote BIOS-level access and power management capabilities for total control of all IT equipment
- Provide secure and centralized management through a single interface
- Allow for a high degree of platform and interface integration

### ATEN Solution

**The ATEN solution offered remote access and secure, centralized management through a single interface that enabled the limited number of IT administrators to respond faster to critical server room emergencies while also providing space saving and energy efficiency benefits.**

- KN2116VA – 16-Port Cat 5 KVM over IP Switch with Virtual Media
- PE8216 – 20A/16A 16-Outlet Outlet-Metered & Switched eco PDU
- CL1000 – PS/2 VGA LCD Console
- CC2000 – Centralized Management Software
- KA7170 – KVM Adapter Cable



# Broadcasting

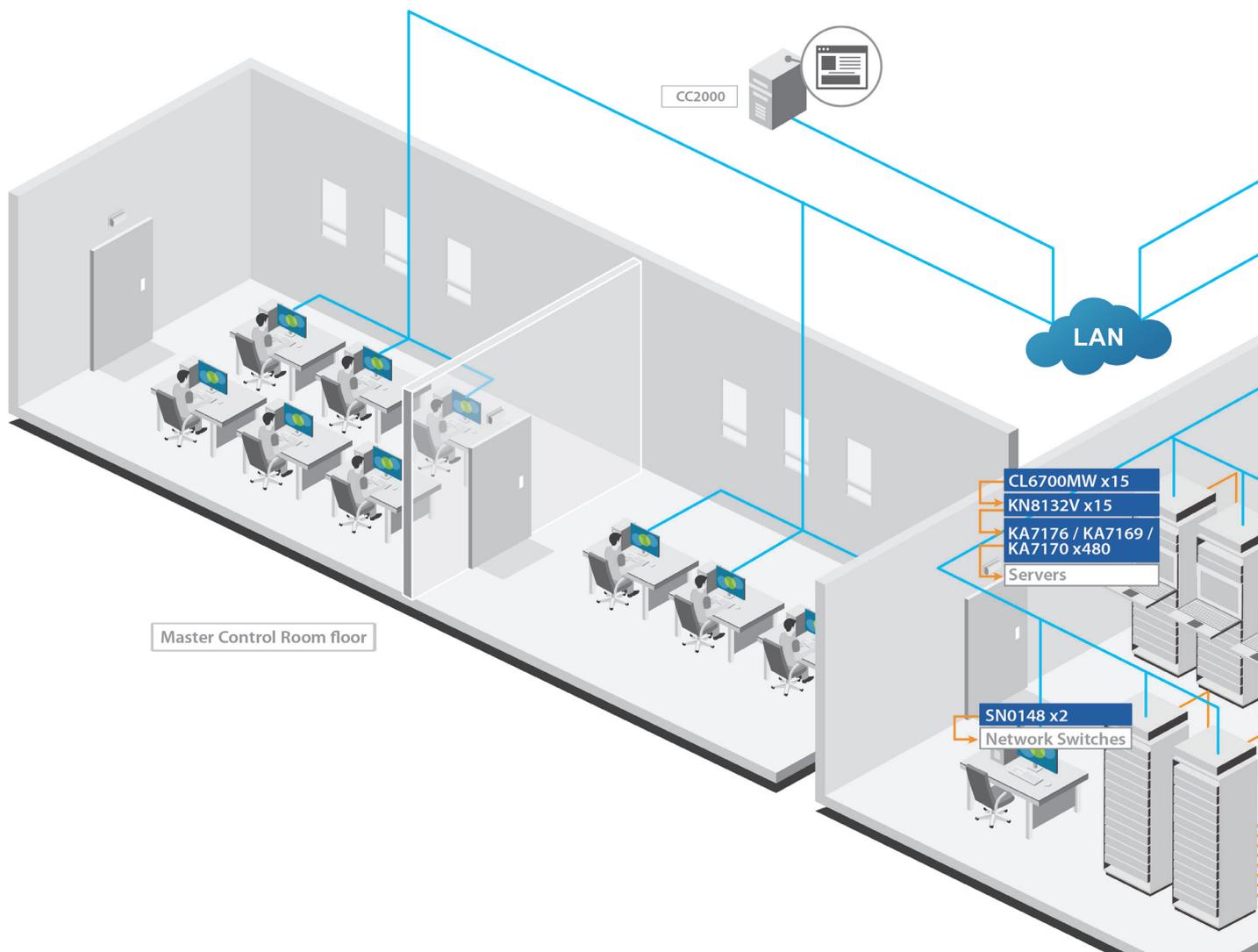
The broadcasting sector is a large one for server management generally and it is also one that drives demand for innovative KVM over IP solutions for control and monitoring applications and for the consolidation of information resources. The user experience of KVM over IP for server management is constantly improving, especially in terms of required video resolutions, and efficient control/management, so while KVM over IP switches have not been commonly used in broadcasting applications, as security, resolutions, and innovative features continue to rise, they are likely to become more popular. Broadcasting video servers handle content ingest, play-out, storage, archiving and transcoding, so just like any industry where companies must integrate and upgrade capacities to meet consumer demand, assurance and reliability are paramount to broadcasting server management solutions. The efficient and seamless provision of services to potentially millions of customers is simply a baseline requirement for business success.

## Remote Control and Monitoring Solution for TV Station Control Room

A multi-channel pay TV company was looking for a remote access and monitoring solution for its TV station control room and video server management. The company was looking to build better services with greater capacity, and so the master control room solution had to leverage the extensive existing network infrastructure to provide reliable remote centralized management with high-definition video and synced audio of hundreds of video servers that formed the core of their broadcasting capabilities. The solution also needed to be able to centrally manage the network switches used by the support team and to support a wide variety of video formats while also providing a comfortable viewing experience in the master control room.

Challenges:

- Provide remote high definition video control/monitoring with synchronized audio to hundreds of servers and network switches
- Compatible with a variety of video server interfaces
- Centralized management with support for redundancy

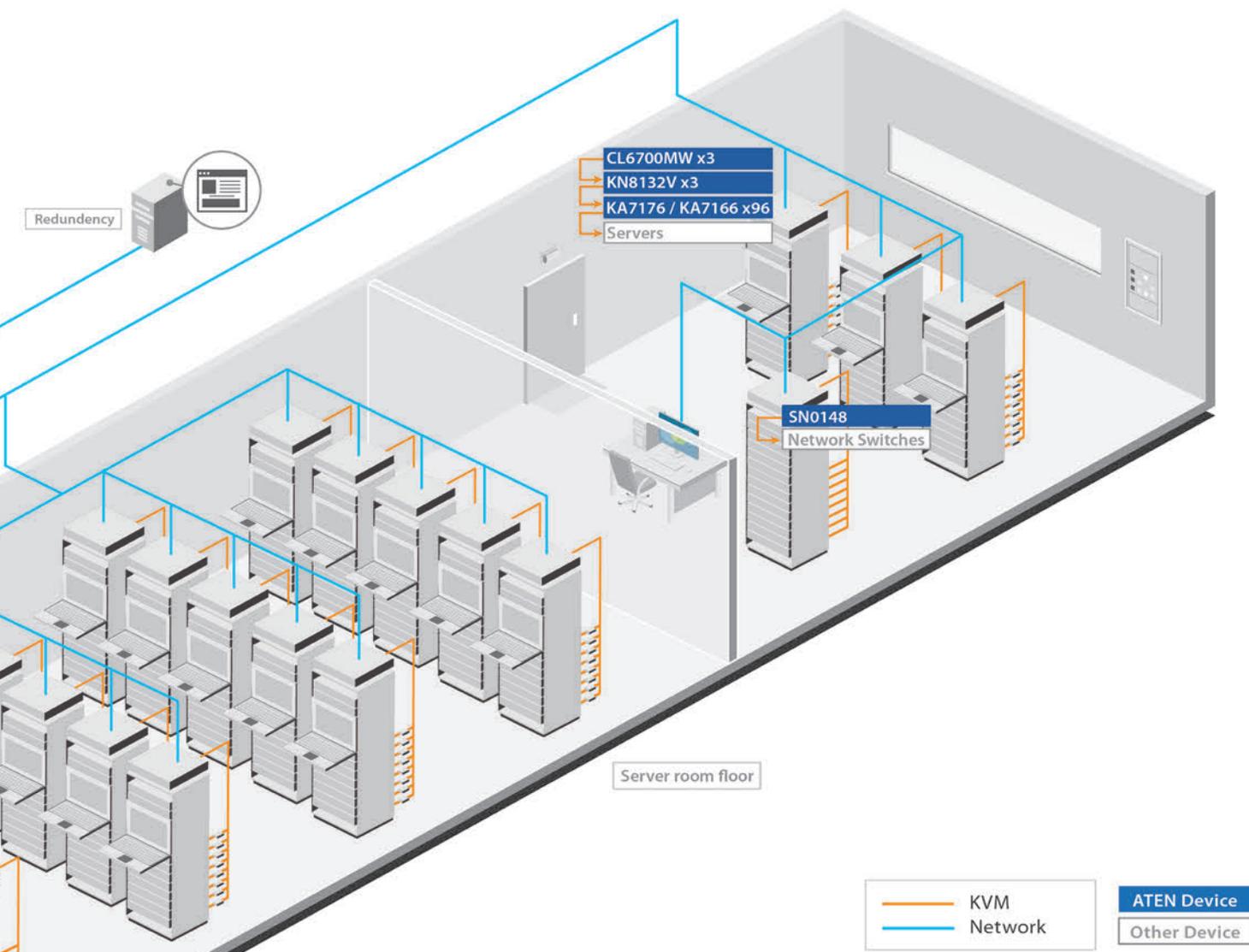




**ATEN Solution**

The ATEN Solution integrated seamlessly into the existing network infrastructure and provided a single portal, single sign-on, single IP address to securely access every device on the installation, including the video servers and the network switches, while also providing the FHD video and audio support required.

- KN8132V – Cat 5 KVM over IP Switch with Virtual Media
- CL6700 – USB DVI WideScreen Full HD LCD Console
- SN0148 – Serial Console Server with Dual Power / LAN
- CC2000 – Centralized Management Software
- KA7176 / KA7166 / KA7170 / KA7169 – KVM Adapter Cable



# Transportation

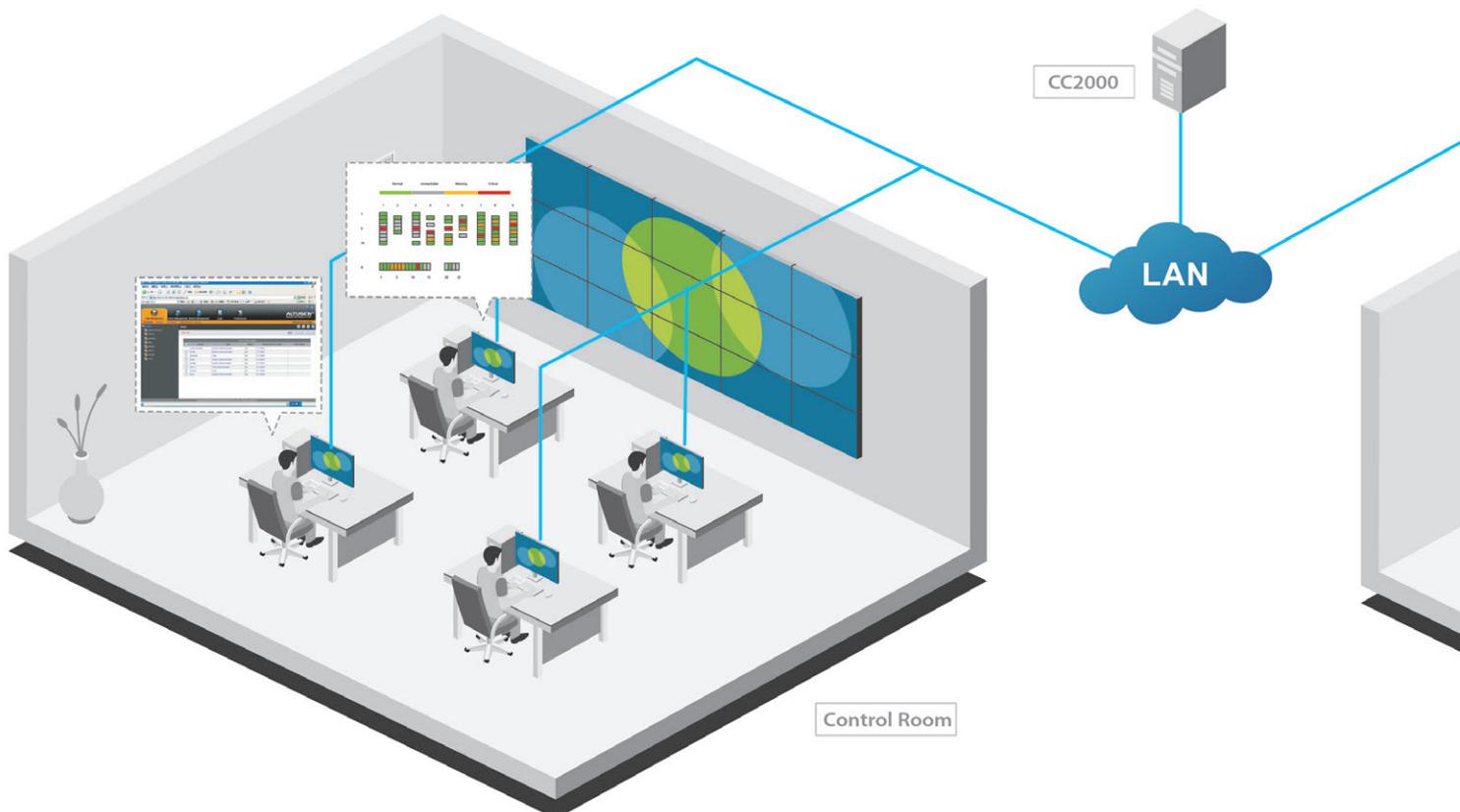
The transportation industry is predicted to be one of the fastest growing verticals, especially for high performance KVM switches and KVM over IP solutions, as network managers in this area need to be able to access and control multiple computer systems that are often geographically dispersed. Public transport systems face unique challenges in relation to passenger safety and security, as well as providing uninterrupted services, so there are a number of data access and management applications in this industry. With network managers usually based in centralized data centers at main transport hubs performing administrative tasks while overseeing the consolidation of servers at different locations throughout the transportation system, data management solutions in this vertical need to be especially stable and secure while offering efficient management and control.

## Subway System Remote Server Room Management

A subway company owns 2 rail lines; one line has 29 stations and the other 31 stations. Each station has its own server room and passenger information system. In order to centralize the control over all the servers in different locations, the subway company was seeking a solution that allows remote management and monitoring of the computers, as well as the ability to remotely control the power to each of the servers for optimum system maintenance and control.

Challenges:

- Provide centralized control of servers located in multiple locations
- Make it easy and efficient for IT administrators to remotely monitor the video output of multiple servers from one computer
- Remotely monitor and manage the power supplied to each server

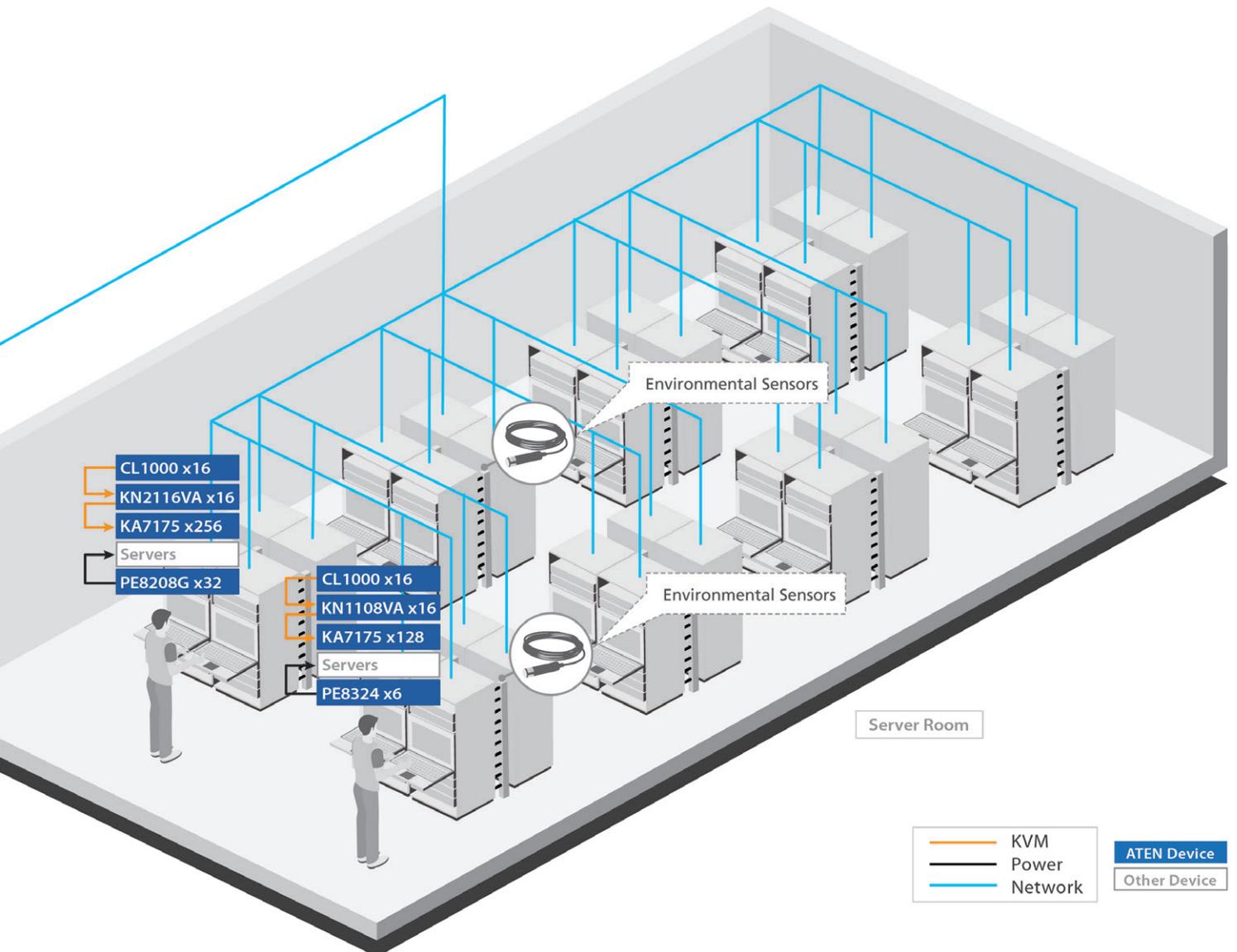




**ATEN Solution**

The ATEN solution can be accessed and managed via CC2000 management software, making it efficient and flexible for operators to control through a single portal at anytime from anywhere, while also permitting simultaneous monitoring of the video output from all servers in addition to providing the means for operators to easily monitor the real-time current, voltage, kWh, power consumption, and circuit breaker status of all connected equipment from a remote console. Virtual Media support also offers convenient, centralized real-time updating and maintenance.

- KN2116VA – 16-Port Cat 5 KVM over IP Switch with Virtual Media
- KN1108VA – 8-Port Cat 5 KVM over IP Switch (1920 x 1200)
- PE8208G – 20A/16A 8-Outlet 1U Outlet-Metered & Switched eco PDU
- PE8324 – 24-Outlet Outlet-Metered & Switched eco PDU
- CL1000 – PS/2 VGA LCD Console
- CC2000 – Centralized Management Software
- eco Sensors / eco DC – Energy & DCIM Management Software / Web GUI
- KA7175 – KVM Adapter Cable



## Education

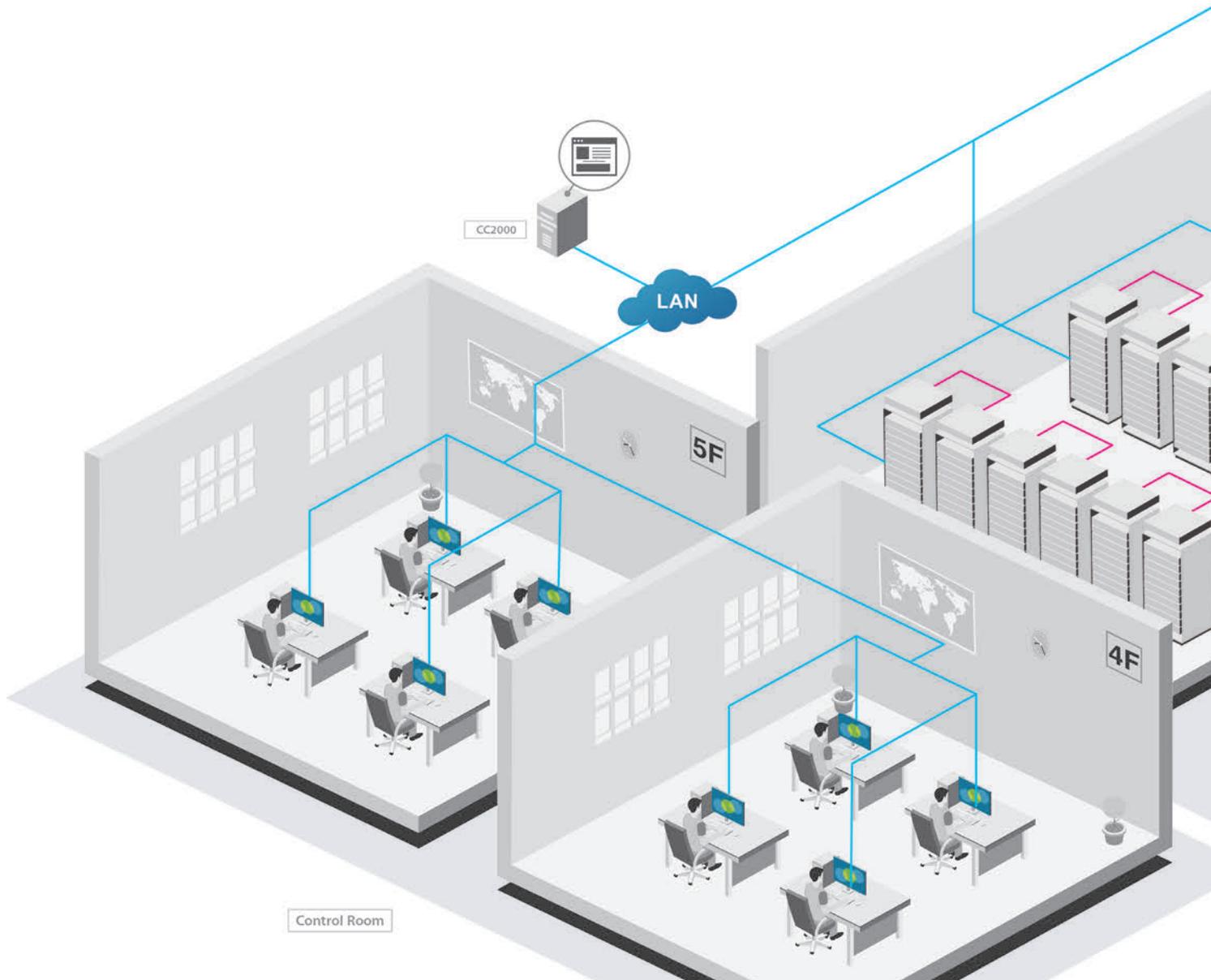
Keeping pace with the changing nature of educational technology is both a challenge and an opportunity. In line with collaborative solutions that are revolutionizing education in the classroom and lecture hall, an increasing movement towards digitizing not only educational records but also learning resources is driving new solutions for data center management across campuses. The education realm is one where KVM over IP solutions are especially useful when dealing with such distributed IT assets. Furthermore, often due to extra resources via state funding or private donations from philanthropists, universities are also leading the way when it comes to initiating green data center solutions, ones that provide real-time visibility into a data center's overall power capacity.

### University Campus High-density Green Server Room

A state-funded university was planning to establish a second campus and needed a new server room to store all the additional student administration details as well as host a huge amount of education and research information for the benefit of lecturers and students. A collocation room was also needed for other departments and students. The university hoped to build a large-scale, high-density green server room that offered effective central monitoring and energy conservation while upgrading their education and research facilities.

Challenges:

- Provide centralized control for every server to enable remote operation and problem solving
- Provide remote control on power outlet switches to enable quick restart of the servers in the event of abnormalities
- Reduce frequency of entry into the server and record operations performed by those staff on servers
- Monitor in real time the environmental data for the server room to effectively save on energy resources

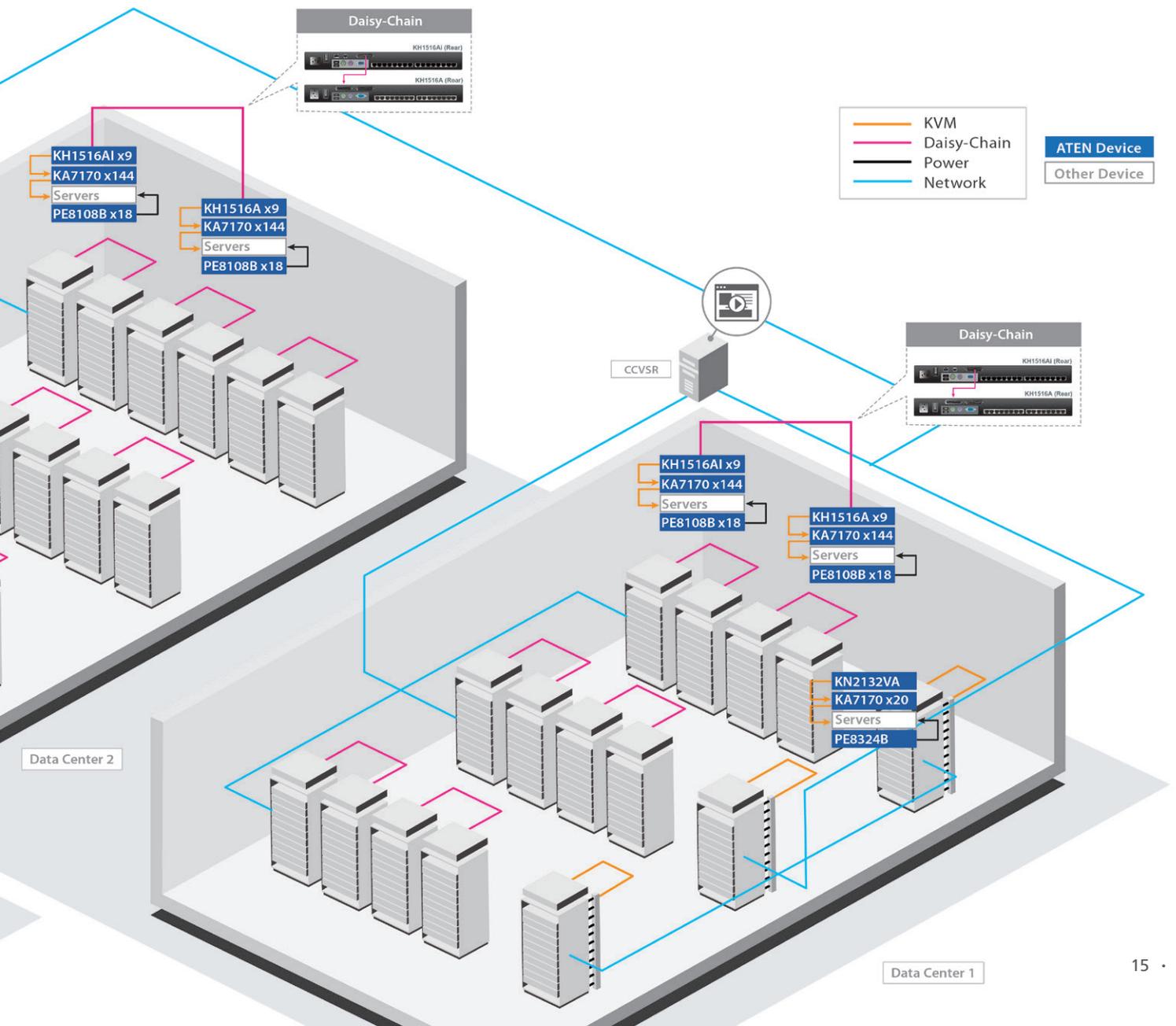




## ATEN Solution

The ATEN solution facilitated the construction of a centrally-controlled green server room that offered safety and energy conservation while assisting administration staff with remote monitoring and management of all IT equipment via centralized control, and achieving effective security by reducing the frequency of administrators entering the server room while recording all operations.

- KN2132VA – 32-Port Cat 5 KVM over IP Switch with Virtual Media
- KH1516AI – 16-Port Cat 5 KVM over IP Switch with Daisy-Chain Port
- KH1516A – 16-Port Cat 5 KVM Switch with Daisy-Chain Port
- PE8108B – 15A/10A 8-Outlet 1U Outlet-Metered & Switched eco PDU
- PE8324B – 30A/32A 24-Outlet Outlet-Metered & Switched eco PDU
- CC2000 – Centralized Management Software
- CCVSR – Video Session Recording Software



# ATEN Featured Products

## KVM over IP Switches

- Cat 5 KVM over IP Switch with Virtual Media (1920 x 1200)  
1 Remote Bus: KN1108VA / KN1108VA / KN1108V / KN1116VA / KN1116V / KN1132V  
2 Remote Bus: KN2116VA / KN2124VA / KN2132VA / KN2140VA  
4 Remote Bus: KN4116VA / KN4124VA / KN4132VA / KN4140VA / KN4164V  
8 Remote Bus: KN8132V / KN8164V



- Cat 5 KVM over IP Switch with Daisy-Chain Port  
KH1508AI / KH1516AI



## Cat 5 KVM Switches

- Cat 5 KVM Switch with Daisy-Chain Port  
KH1508A / KH1516A / KH1532A



## LCD KVM Switches / LCD Console

- LCD KVM Console: CL1000/ CL3800
- LCD KVM Switch: KL1508A / KL1516A
- LCD KVM over IP Switch: KL1108V/KL1116V



## Serial Console Servers

- Serial Console Server with Single Power / LAN  
SN9108 / SN9116



- Serial Console Server with Dual Power / LAN  
SN0108A / SN0116A / SN0132 / SN0148



## eco PDUs

- Intelligent 1U Rack PDU  
PE8208 / PE8108



- Intelligent 0U Rack PDU  
PE8324 / PE8216



## Management Software

- Centralized Management Software  
CC2000



- Video Session Recording Software  
CCVSR



- Energy & DCIM Management Software  
eco Sensors



- Energy & DCIM Management Web GUI  
eco DC





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## About ATEN

ATEN International Co., Ltd., established in 1979, is the leading provider of IT connectivity and management solutions. Offering integrated KVM, Professional Audiovisual, and Intelligent Power solutions, ATEN products connect, manage, and optimize electronics in corporate, government, industrial, educational, and retail environments. ATEN has 500+ issued international patents and a global R&D team that produces a constant stream of innovative solutions, resulting in a comprehensive portfolio of products available worldwide.

