levira
Network Operations Center

Estonia

Broadcasting & Media
Levira, Network Operations Center

About Levira
Headquartered in Tallinn, Estonia, Levira is one of the largest TV playout service providers in northern Europe and the main TV and radio broadcast transmission provider in Estonia. The company also operates one of the biggest data centers in the Baltic countries. Levira is developing a state-of-the-art Network Operations Center (NOC) to manage its key media services, playout and transmission of TV channels to cable TV, data center and cloud services. Once complete, the new NOC will monitor outgoing video signals, environment, equipment health, and the network traffic status of all Levira operations.

“ATEN’s remote access solution has not only been reliable and easy to use but has also helped us provide a low noise, comfortable and more productive environment for our employees.”

Dmitri Skakalin
Monitoring Systems Engineer at Levira
The Tallinn TV Tower: Estonia’s tallest building

Purpose-built for broadcasting at 314 meters, the Tallinn TV Tower is owned and administered by the telecommunication service provider Levira. Furthermore, the tower is marketed as an international attraction with quality cultural and recreational services on offer for tourists.

The Tallinn TV Tower also houses Levira’s Network Operations Center which performs 24/7 monitoring of multiple servers that run critical systems for:

- A playout operations center where the health of video transmissions is monitored
- A security room that oversees the entire installation
- A server room where the surveillance and NOC equipment is installed
- A data center that provides different server hosting services.
Key Customer Requirements

- They require a solution which, aside from monitoring, allows them to control servers when necessary.
- The solution has to ensure an advanced level of security and efficiency that includes remote, yet secure management.
- An expandable solution that allows them to install certain equipment in a separate room away utilizing the existing Ethernet infrastructure.
- Technicians and security personnel need reliable access to dual head DVI microservers, workstations, and NVRs with FullHD 1080p video quality.

To protect employees from high noise levels and uncomfortable temperatures, Levira also wants an expandable solution that allows them to install certain equipment in a separate room away from the NOC, security room, and the support team that is available for remote troubleshooting.

Lastly, technicians and security personnel also need reliable access to dual head DVI microservers, workstations, and NVRs with FullHD 1080p video quality.

To ensure equipment health and non-stop operation, they require a solution which, aside from monitoring, allows them to control these servers when necessary. The center will comply with the highest security and reliability standards, offering rooms and suites, racks and rack units for the servers of private companies and public agencies. The solution has to ensure an advanced level of security and efficiency that includes remote, yet secure management. Also, this easy-to-use centralized management system needs to operate via the existing Ethernet infrastructure.
The ATEN Solution

- Simple, centralized access control
- Future-proof, expandable solution
- DVI dual-display in Full HD resolution
- Secure, long distance data transmission

ATEN provided the perfect solution with the new Altusen™ Series of KVM over IP extenders and Matrix Manager software. By integrating twenty pairs of KE6940 with the CCKM Matrix Manager software, the ATEN solution allows a secure and reliable connection to any server or workstation from the distant NOC and security room where critical equipment health information and network traffic status are monitored real-time over multiple displays and troubleshooting tasks performed.
Simple, centralized access control
ATEN’s CCKM Matrix Manager software provides the tools to centralize the control and management of KE6900 / 6940 devices. Levira's administrators can set different permissions to meet users’ requirements.

Future-proof, expandable solution
One of the many advantages of ATEN’s KVM over IP solution is that it provides the management team with the scalability to add additional users and workstations in the future, if needed, utilizing the same IT infrastructure.

DVI dual-display in Full HD resolution
The KE6940 Series IP-based DVI KVM Extender supports two DVI displays at each end, allowing the Network Operations Center and the security room to view critical, real-time information delivered in high-quality 1080p across multiple displays.

Secure, long distance data transmission
The KE6900 Series utilizes AES-128 bit encryption to secure all data before it is transmitted over a long distance network and decrypts the data on the receiver unit. This ensures Levira’s critical information cannot be hijacked by unauthorized users. The support for long distance transmissions also ensures that access to the server room can be restricted.
Solution Architecture Diagram (Video / Audio Connection)
Solution Architecture Diagram (Control / Network Connection)

Security Room
- Keyboard Mouse
- KVM over IP Receiver KE6940R
- Ethernet Switch Juniper EX3300
- KVM over IP Transmitter KE6940T

Network Operations Center
- Keyboard Mouse
- KVM over IP Receiver KE6940R
- Ethernet Switch Juniper EX3300
- KVM over IP Transmitter KE6940T

Support Team
- Keyboard Mouse
- KVM over IP Receiver KE6940R
- Matrix Manager Server CCKM

Server Room
- Surveillance Server

Network Monitoring Server

Data Center

ATEN Device
- Video
- Audio
- Control
- Power
- Network

Other Device
Product

KE6940
DVI-I Dual Display KVM over IP Extender
- Remotely access computers securely on your KVM installation via intranet
- Supports two DVI displays at each end
- Superior video quality – up to 1920 x 1200 @ 60 HZ

CCKM
Matrix Manager
- Centralized control of all your KE6900 / 6940 devices
- User account authentication and management
- Profiles can save reserved connections for broadcasting