### Changwon City Government Uses KVM Over the NET™

**For Effective Data Center Management**

**Customer: Changwon City Government**

Changwon City is located in the Gyeongsangnam-do region of South Korea. With a population of approximately 1.08 million people, Changwon is the 8th largest city in South Korea with a GDP of $21.8 trillion won. Changwon City is an important industrial city in South Korea; with remarkable industrial growth and a high standard of living-transforming it into the actively developing international city it has become.

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<td>• Upgrade systems access to an Over-IP KVM solution for remote server management</td>
<td>• KN2140v 40-port KVM Over the NET™ 1 local and 2 remote user access</td>
<td>• Efficiency with Reduced Management Cost and Time</td>
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<td>• Simultaneous server control locally (Data Center) and remotely (Control Room)</td>
<td>• KA7170 USB KVM Adapter Cables</td>
<td>- The Over-IP function allows administrators to conveniently control remote servers from the Control Room and various administrative computers</td>
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<td>• Include enhanced security for local and remote management</td>
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<td>- Saves the time spent traveling back and forth to the Data Center</td>
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<td>• Defined and controlled server access for different administrators via account login and permissions</td>
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<td>• Simultaneous Access</td>
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<td>Different administrators can access the servers locally and remotely at the same time</td>
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#### Challenges

**Frequent visits into the data center by administrators results in lower efficiency and higher costs**

The Changwon City Government Data Center consists of various rack mounted multi-platform servers; and each server rack is installed with an 8/16 port KVM switch with LCD console. Accordingly all server management must be done at the KVM LCD consoles. Using traditional analog KVM switches required all IT administrators to frequent visit the data center to perform routine server management tasks, which was inefficient and increased management costs.

To increase overall work efficiency, IT administrators needed remote access from their control room and administrative computers to the data center servers. In addition, to ensure security-structured access was required; in that different types of administrators would be given different levels of authority and permissions to perform tasks. The Changwon City Government needed a complete KVM over-IP solution with security to effectively achieve their data center management goals.
ATEN KVM Over the NET™ Solution provides local and remote management of the Data Center Servers with security controlled access

After careful evaluation, to allow IT administrators to perform remote server management securely, the Changwon City Government chose to install ATEN's KVM Over the NET™ Solution. The required installation included the KN2140v – 40-Port KVM Over the NET™ switch and the KA7170 – USB KVM Adapter Cables. The KN2140v supports 1 local and 2 remote users access to 40 servers, allowing remote management from the control room and various administrative computers. By connecting the Data Center servers to the KN2140v KVM Switch via USB KVM Adapter Cables, the Changwon City Government was able to effectively manage all 40 servers in the Data Center and fully satisfy their management requirements.
Benefits

With secure remote access the Changwon City Government established an efficient Data Center management policy

Before the Changwon City Government installed the KVM Over the NET™ solution, IT administrators were only able to access servers from within the Data Center, causing management restrictions. Since installing the KVM Over the NET™ solution, the KN2140v has provided remote Over-IP access on separate buses - allowing 2 administrators simultaneous connections to the servers from remote locations. This saved the time spent traveling back and forth to the Data Center, vastly increasing work efficiency on 40 servers. To enhance security- they setup the IP/MAC filter feature, which allows only specific computers remote access, and then set user and group permissions for advanced control of the access. ATEN's solution helped the Changwon City Government establish a complete and highly efficient Data Center management policy.

In addition, the KN2140v supports panel array mode, which permits simultaneous visual monitoring of all connected servers, helping IT administrators monitor the screen display of up to 40 servers at once. Both local console and remote access operators can utilize the panel array mode simultaneously, vastly increasing effective management.

Future

Compared to the analog KVM product, the Changwon City Government indicated that ATEN’s KVM Over the NET™ solution was not only a breakthrough to their restrictions of server management, but the solution also provided a convenient Korean language GUI. The multi-language GUI effectively reduced the over-all operation and learning curve. As the Data Center gradually expands, ATEN's solutions will continue to be the top selection for the Changwon City Government, as our solutions stay ahead of their needs.

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