KVM TRIVIA Vol.2
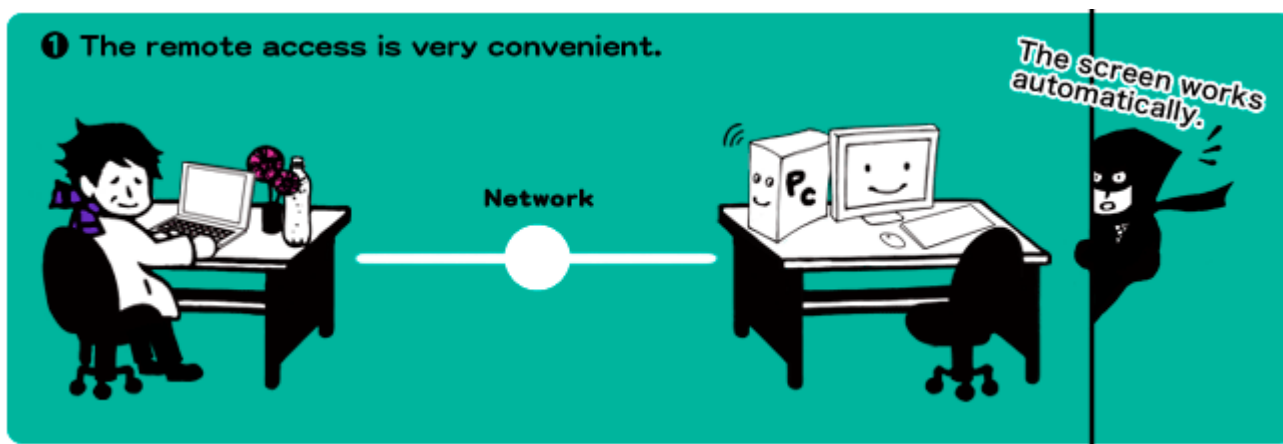
Newsletter from the S Laboratory Vol.2
The Inside Story of the Remote KVM Switch (Vol.1)

[The Inside Story of the Remote KVM Switch (Vol.1)]

This column named "Newsletter from the S Laboratory" presents the inside story of the mechanism of KVM switches and Over-IP products.
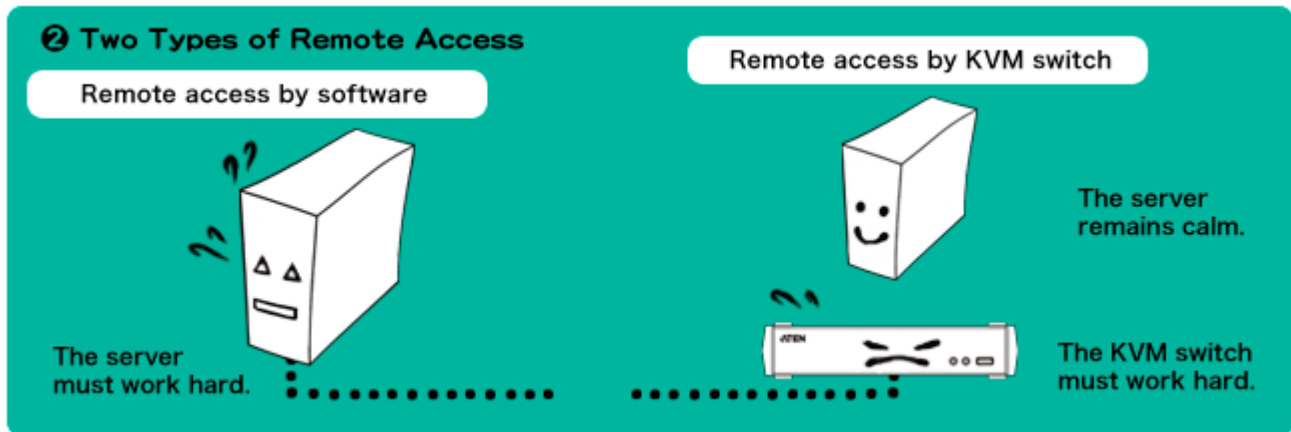
What do readers do if they want to operate a server that is located in a remote place? I guess many of them operate it remotely from their own seat in some way. One way, is using a device called "Remote KVM Switch."

Before I explain what a "Remote KVM Switch" is, I would like to talk briefly about "Remote Control Software".

❶ The remote access is very convenient.

Network

The screen works automatically.

Generally speaking, if you want to access a server remotely by software, you need to install the software on each remote server to operate it all times. Of course, it is supposed that each OS and network function are working normally. Therefore, the only possible problem when operating a server remotely is when you want to check the computer's BIOS screen or open it in safe mode.

So, how about using a remote KVM switch? In this way, you don't need to install any software on the server. The remote KVM switch has an RJ-45 connector to which a LAN cable can connect, and it communicates by using the TCP/IP protocol. The other party with whom the user is exchanging data is not the software that operates in the server, but the KVM switch. This is the big difference.

When using a keyboard, key codes are sent to the KVM switch through the TCP/IP network. Then, the KVM switch that accepts the key codes sends them to the USB port (or PS/2 port) of the server. The server processes data based on these codes. The KVM switch captures the display of the server and compresses and encrypts the differences, then sends them back to the monitor on the user's side through the network. An important point is that it will not influence the CPU and memory of the server connected to the KVM switch because this process is completed within the KVM switch.

In this way, remote access using a remote KVM switch has an advantage wherein it is not only you who can operate the server's BIOS screen remotely, but also the server can fully utilize the resources for an original business application because it does not rely on the OS or software on the server side.