DKM KVM MATRIX SWITCH: ACCESSING IP-BASED RESOURCES

OVERVIEW
DKM is a high-performance proprietary direct-connect KVM switch system. Resources, such as servers and workstations, can be accessed instantaneously from a DKM console (aka receiver). Resources are connected via DKM CPU units (aka transmitters) to a central switch. The central switch can scale from a fixed format 8-port unit to a modular 576-port chassis.

Increasingly users want to be able to access resources—physical servers and virtual machines—through their KVM systems over an Ethernet/IP network. IP provides a flexible method for connecting devices.

OPERATION
To access resources over IP, a user is provided a list of targets (or resources) on the on-screen display of a DKM con (console). An IP-based target looks no different than a target connected directly to the DKM switch.

In Figure 1, the screen shows a mix of direct-connected DKM CPU targets and targets connected via the IP network. To the user, they all look the same and can be accessed in the same manner. The IT administrator uses Black Box’s InvisaPC™ KVM product and Boxilla, Black Box’s KVM and AV/IT manager to create and control these IP-based targets for the user.

An InvisaPC receiver is connected via the keyboard, video and USB ports to a DKM CPU unit as shown in Figure 2. Boxilla is used to configure and control the “path” from the DKM through InvisaPC to a target InvisaPC transmitter or to a virtual machine. Many different targets on the IP network can be accessed through this path, all targets that the InvisaPC can access. Targets can be servers connected via InvisaPC transmitters or virtual machines.

Each resource can be setup as a separate target on the DKM. InvisaPC/Boxilla will work out how to map the connection correctly to desired target on the IP network. An InvisaPC receiver/DKM CPU unit pair is needed for each separate parallel path required in a deployment. For example, if a user wants to access up to four targets on the IP network from DKM con units simultaneously, then four InvisaPC receiver/DKM CPU unit pairs are required.

To learn more about accessing IP-based resources with DKM, visit BLACK-BOX.EU/DKM.

FIGURE 1: DKM OSD WITH DKM CONS TARGETS AND IP TARGETS

FIGURE 2: DKM ACCESS TO IP-BASED TARGETS