

Technology briefing

Using Multi-Screen Control to provide single keyboard and mouse control of multiple screens



- Efficient single-operator control of several screens
- Saves desk space and reduces confusion
- Manual selection of CPU and monitor by switch, hot-key and mouse with OSD
- Compatible with Draco tera KVM switches and extenders
- NEW Seamless Mouse Switching provides automatic monitor, CPU selection

Introduction

In many applications today, a single operator will require access to a bank of computers either directly or through dedicated point-to-point KVM extenders. In other cases computers may be connected indirectly through a KVM matrix switch to multiple displays, allowing dynamic reconfiguration and switching of the computers and monitors according to the user's needs at the time.

Multi-computer systems with the added flexibility of advanced KVM extenders and switches provide a great deal of versatility and many different ways of configuring systems to suit any business application.

In situations where more than one monitor is being viewed by a single operator there may be several sets of computer interface devices, including keyboards, mice, touch screens and pointing devices, resulting in desk 'clutter' and leading to confusion in relating a set of input devices to a particular screen. It is often more convenient for the operator to have a single set of input devices with which to control several computers, rather than having several sets; each one associated with a specific computer.

Purpose of this document

This Product Briefing describes several typical installation scenarios of multi-computer, multi-display configurations which can be managed by a single operator with just one set of input devices. It describes the devices available to satisfy these installations and the setup procedures and control options available.

Due to the wide range of possibilities and configurations that can be achieved, not all options can be covered in this briefing. However the information and descriptions provided should serve to outline how solutions can be achieved and provide background technical detail for system integrators to build their own systems to suit their specific requirement.

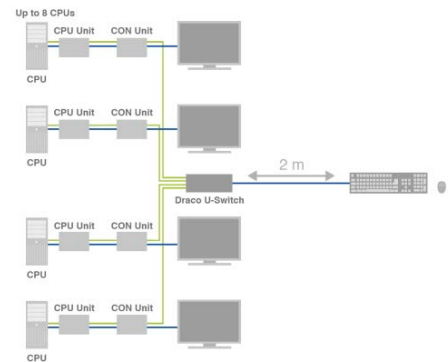
Types of multi-computer configuration

The types of configuration detailed below refer to full or partial systems and operator stations. They can be extended further to multiple operators and configurations.

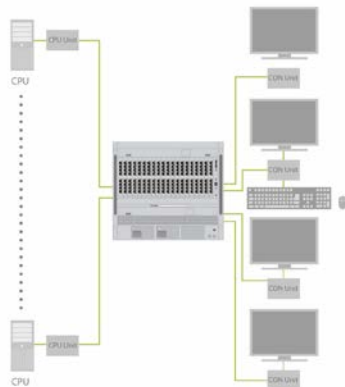
Single operator, fixed computers and screens

A single operator has direct access to a bank of computers, each with its own fixed display device. Input switching is not provided in this installation. The computers may be local to the operator or located remotely using point-to-point KVM extenders. All monitors are local to the operator who is required to monitor and control several computers at the same time.

Typical installations of this type are found in financial trading applications, security observation, remote desktops in education and conference centres.



Single operator, switched computers and screens



In this installation scenario, a single operator monitors several computers simultaneously, each with its own dynamically changeable display. Routing of the computers to the screens is achieved by means of a KVM matrix switch, such as the Draco tera enterprise or compact switch. Normal setup and operational procedures are used to configure the matrix of computers and screens separately.

The KVM matrix switch is used in combination with the input switching device to provide hot-key selection.

A new Multi-Screen Control feature (available as a firmware package) in the Draco tera switch enables seamless switching between screens by mouse movement under control of the operator or by using the Hot-Keys.

Typical installations of this type are found in broadcast studios, advanced process control applications, plant and utility command control rooms, air-traffic control towers, military and homeland security command and incident centres

Multi-Screen Control in the Draco U-Switch, description and outline of operation



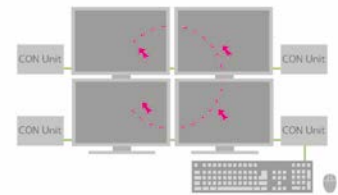
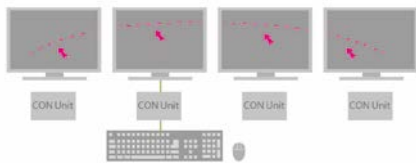
The Draco U-Switch offers the perfect solution whenever several CPUs need to be controlled by a single set of keyboard and mouse. The Draco U-Switch works perfectly with IHSE Draco KVM extenders and Draco tera KVM matrix switches. It provides the ability to instantly switch up to eight computers and monitors to work with just one set of keyboard and mouse or equivalent interfaces.

The Draco U-Switch is a compact, self-contained unit that may be mounted out-of-sight. It supports all USB HID devices, e.g. keyboards and mice, HID compatible devices, such as touch screens, tablets and other pointing or input devices.

Switching of the input devices to individual computers by the operator is achieved manually by means of keyboard command mode and device selection or by the use of individual push button switches on a panel close to the operator. LEDs can be attached to the unit to provide operator indication of which CPU port is currently connected to the keyboard and mouse.

Multi-Screen Control in the Draco tera KVM switch range

Both Draco tera KVM switches and the Draco U-Switch now also offer Multi-Screen Control to provide seamless mouse switching between computers simply by moving the mouse across the monitors, No software or setup procedures are required on the connected CPUs or attached monitors; the mouse simply moves between monitors as desired by the operator. Various configurations are supported, including horizontal and vertical.



Advantages of a single input system for multiple computers

In general, a single set of input devices, such as a keyboard and mouse, replace multiple sets of these devices for a single operator using several computers and screens at once. The ability to instantly reconnect the input devices between the computers and screens removes the need to have several pairs of keyboards and mice, usually taking up valuable desk space alongside each other.

A single set dramatically reduces the total space required at the workstation. Equally as important it means that the operator does not waste time, or become confused selecting the correct set to control an individual computer and screen. Instead they simply switch the input device to the appropriate computer and screen by button press or by moving the mouse from one screen to the other.

The overall benefit is of space saving, ergonomic design of installation and improved efficiency in use. Cost and space savings are also achieved, together with a reduced level of maintenance.

Further information and downloads

Full details of the installation, setup and control of the Draco U-Switch are provided in the user manual.

Please consult individual product brochures for detailed specifications.

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