

**Subject:** SecureLinux Spider™ Frequently Asked Questions (FAQ)

**Author:** John Vallely / Product Manager, Data Center Management Products

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**Q:** What is the SecureLinux Spider?

**A:** Spider is the latest addition to the SecureLinux product family and provides secure, remote KVM (keyboard, video, and mouse) over-IP access to a host server or computer. The Spider is an evolution of the traditional remote KVM switch into a compact package that is server-powered, and is light enough to be cable-supported from the back of a server, freeing up valuable rack space. The Spider is browser-driven, and requires no special software to operate, and allows full BIOS level control of the host system.



SecureLinux Spider –  
PS2 Version

**Q:** What models of the Spider are available?

**A:** The Spider is available in two configurations:

- 1 port remote KVM-over-IP with USB connectors
- 1 port remote KVM-over-IP with USB and PS/2 connectors (shown above).

**Q:** What video resolutions are supported?

**A:**

- 800x600 @ 56/60/72/75/85 Hz
- 1024x768 @ 60/70/75/85 Hz
- 1280x1024 @ 60 Hz

**Q:** Is there any special client software required to use a Spider?

**A:** No. The Spider is browser-based. The only client software needed consists of the Java applets served up by Spider over the network. Client systems accessing the device must have a JRE 1.1 or higher, with Sun JVM 1.4 or higher “highly recommended”.

**Q:** Which remote (client) platforms are supported?

**A:** The Spider is platform independent, and can be accessed from any Windows, Unix, Linux, MAC, or other operating system, provided that a Java-enabled web browser is available.

**Q:** Is there a limit to the number of remote users that can access a Spider?

**A:** No, since the Spider is non-blocking (it has an access ratio of 1 x 1), remote access is guaranteed to the attached host system.

**Q:** How many simultaneous remote users can be supported with “shared” access to a single server?

**A:** Up to eight simultaneous users.

**Q:** Can the Spider be field upgraded?

**A:** Yes. As firmware updates become available, they can be downloaded from the Lantronix support web site.

**Q:** How do you set IP addresses for the Spider?

**A:** By default the Spider acquires an IP address through DHCP. A fixed IP address may be set via the serial port during configuration setup.

**Q:** What is the Serial (RS-232) Port used for?

**A:** The Serial (RS-232) port has a number of uses:

- Administrative: Setup the Spider using the included serial (DB9F to RJ45) cable and terminal emulation program (e.g., HyperTerminal). The default data rate is 115200 bps.
- Out-of-Band: attach an external modem a dial-up access.
- Pass-through access to the serial port via a Telnet or SSH session.

**Q:** How is Spider powered?

**A:** Spider is a relatively low power design, and consumes approximately 4.0W. Unlike any other product available, Spider does not require an external power supply. The Spider's unique design draws power from the PS2 and USB ports on the server to which it is attached. This design allows for a significantly simple installation, cleaner and more structured cabling.

- Spider USB unit: Two USB connections are required. DC power for the USB keyboard/mouse unit comes from the USB connections (the USB spec provides for a maximum of 2.5W per connection).
- Spider PS2 unit: A single PS/2 connection and one USB connection is required.
- There is also a “backup power” option: a mini-USB Type B fused power jack is provided for a 5VDC@1A regulated external AC/DC power source. When power is available from this input, power from the USB and/or PS/2 interface is disabled.

**Q:** Is Virtual Media supported?

**A:** The Spider can act as a virtual floppy (a floppy image file can be copied to the Spider) or a CD-ROM drive by mapping ISO images from a Windows shared folder (Samba) to the Spider. The host server can then see the Spider as an external USB floppy or CD-ROM drive.

**Q:** What does the second Ethernet (Cascade) port do for me?

**A:** A key feature of the Spider which differentiates it from other digital KVM devices on the market is an embedded Ethernet switch.

- Multiple Spiders may be daisy-chained together in a string, improving cable management and reducing the required number of switch ports on the administrative network. A typical configuration would have all devices within one rack daisy-chained together, with one external connection.
- Many servers have dedicated management Ethernet ports. The port may be connected to the second Ethernet connection to consolidate its data with the device, reducing the number of cables by half.
- Similarly, any other arbitrary Ethernet device could be aggregated. Examples might be:
  - A PC that has its primary LAN port connected, so that full function “lights-out” remote operation could take place
  - A network-enabled power strip (such as the SecureLinx SLP)
  - Any other Ethernet connected piece of equipment that might be conveniently located near the device.

**Q:** What if multiple Spiders are daisy-chained and a host server loses power or otherwise becomes unavailable?

**A:** As with any KVM switch, a failure of the power source will cause remote access to the Spider to be lost. Also, access to Spiders and servers ‘down stream’ in the daisy chain will be lost – which can be avoided by connecting an optional power supply (model 520-085-R) to each Spider in the chain.

**Q:** Are older Sun keyboard (DIN-8 type) and Video (13W3) connectors supported?

**A:** No.

**Q:** Is the Spider’s serial port Sun Break Safe?

**A:** No. The current design of the Spider will generate a condition on the serial port upon a cold boot that will be interpreted by the Sun host as a serial break. Therefore, if you power up a Spider (from a cold start) while it is serially connected to a Sun server, the operating system will halt, causing a suspend condition. This will not happen if the Spider is warm booted (reset without removing power). It will also not happen if the serial cable is removed or inserted on the Sun host or Spider while both are running. A break condition can be prevented by:

- Powering on the Spider (from a cold boot) before plugging in the serial cable.
- Using Sun’s alternate break sequence (see the Sun Solaris man page for the “kbd” command on how to enable this).

**Q:** Does the Spider have connections for a local video, keyboard and mouse connection?

**A:** No. Spider is designed to replace the local keyboard, mouse, and monitor on your host system and is typically accessed over an IP network via the Ethernet connection. If local access to the host system is needed, there are a couple of workarounds:

- Connect a notebook PC to the second Ethernet (cascade) port of the Spider (or the last cascade port in a chain of Spiders), and set up the notebook with an IP address on the same local subnet as the Spider. All Spiders and their attached host systems on the local subnet can now be accessed via a web browser.
- On the host system, install a dual-head graphics card with the desktop "cloned" on both screens (one output for the Spider and one for the local monitor). Install a USB keyboard and mouse for input control.

**Q:** Does the SecureLinX Management Appliance (SLM) support Spider?

**A:** Yes, the Spider is supported by the SLM. Initially, it will include the following features: auto discovery via the SNMP protocol, grouping, access control, and web connection via HTTP / HTTPS.

**Q:** What does the Spider View utility do?

**A:** Spider View is a simple Windows-based program (it will not install on Unix, Linux, or MAC) that is installed on the client PC. It will allow you to auto-discover, setup, group, and access multiple Spiders found on the local subnet, or you can add individual Spiders to a "launch list" one at a time. The Spider View utility is included on the CD-ROM supplied in the original packaging, and will be downloadable from the Lantronix Support website.