

Select the Best Console Server for Your Application

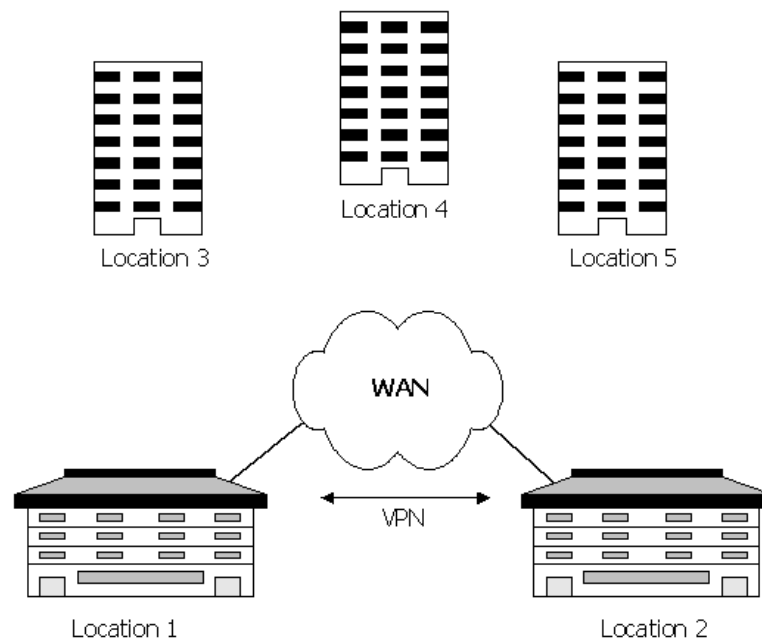
Lantronix offers a wide variety of terminal servers and console servers for managing network and telecom equipment. This application note describes a typical network infrastructure scenario and the factors that should be considered when selecting products for console management.

Application Requirements and Topology

In this example, a system administrator has five remote locations with a combination of two Linux™, two Windows Servers™ and four Apple® OSX servers, along with one Cisco® 2600 router, two Extreme® 10/100/1000 switches and three APC® universal power supply units at each location.

Two locations are connected using VPN (virtual private network) connections. The other locations are remote, with no dedicated WAN (wide area network) or Internet connections.

The administrator wants a solution to manage all locations from a main office using one centralized interface.



What factors needs to be considered in selecting console servers?

Physical Configuration

Number of Locations – This application needs at least one terminal server or console server per site, but potentially more depending on the number of connections.

Number of Connections or Ports – Evaluate the equipment that will need to be accessed through the console or terminal server to determine the number of ports required.

- Fourteen devices, each with one serial or console port: two Linux servers, two Windows servers (see note on Windows Servers below), four Apple OSX servers, one Cisco router, two Extreme switches, and three APC UPSs
- Connectivity – one port for Modem connections
- Additional ports for future growth – Each site will require at least a 16-port device. However, if there will be other devices to connect in the future, the administrator may want a console server with more ports.

Access Type

Consider the type of access available to the console server at each location.

- WAN / VPN – Two of the sites have connections to the Internet. Console servers at these locations could be accessed through the Ethernet port from the network.
- Dial up – Three locations without Internet access will require modems for dial-up access. However, the other two locations may also want modems for back up, in the event that the network is down or unavailable.

Security

Evaluate whether user authentication and data encryption are required.

- No security requirement – ETSxxP or ETSxxPR could be used in some locations.
- Security requirement – Locations require SSH for encryption and Radius support for authentication; SCSxx00 or SCSxx05 / xx20 product will be required.

Single Interface to Manage All Locations

- At least one of the console servers will need to be an SCSxx00 product to support this requirement. These products support the Menu feature that enables all of the other locations to be accessed from that single device.

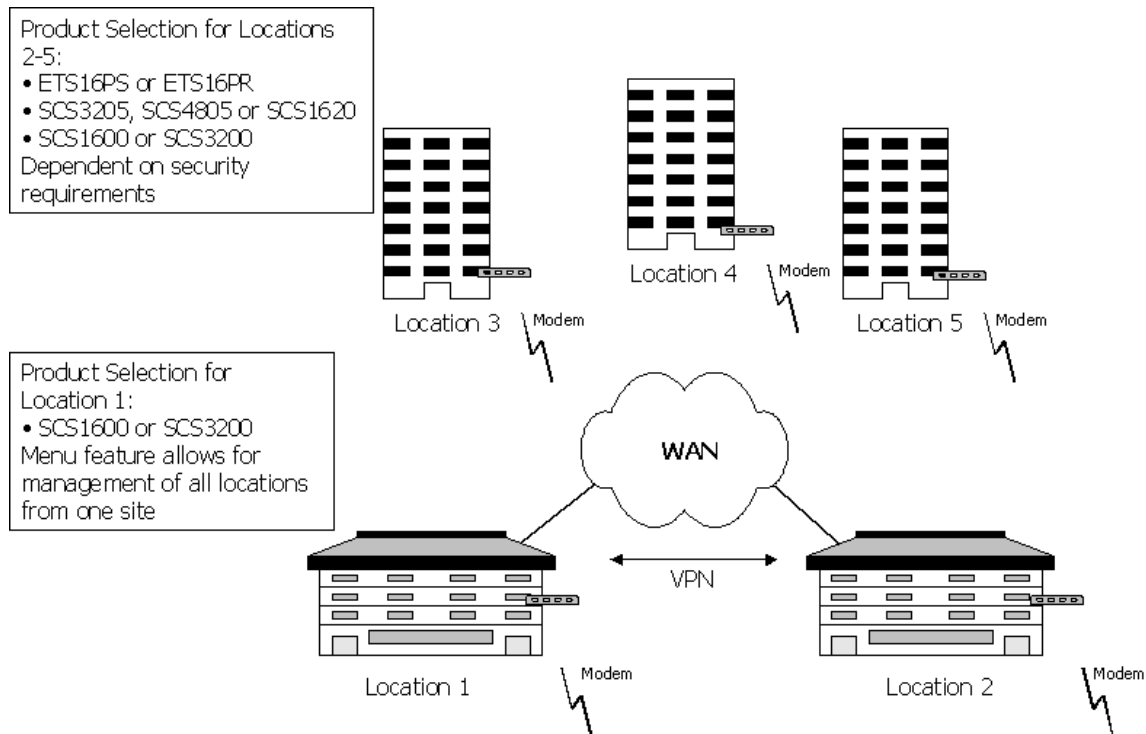
Windows Server Version

- Windows Server™ 2003 or later – Windows 2003 now supports remote management through the Emergency Management Services (EMS) features using serial port. Any terminal server or console server can be used for this application.



Choosing the Best Solution

After evaluating the needs of this application example, the following products will provide the features required for this system administrator.



Simplify product selection by evaluating these factors for your network. Lantronix offers a complete line of products from Terminal Servers that provide basic console access to Secure Console Servers with added security and data encryption features. With serial port densities from eight to 48 ports, some with built in modems, the best solution for this application is available from Lantronix.

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