The Perle CS9000 Console Server offers network managers a reliable and cost-effective solution to remotely manage and trouble-shoot distributed server farms/racks and network appliances (routers, RAS etc). By connecting the console management ports on these network devices to the serial ports on the Perle CS9000 Console Server they can be managed in-band or out-of-band via a corporate LAN/WAN or dial-in connection.

A cost effective solution for backup management of network devices

Features and Benefits:

- **Easy local or remote configuration and setup**
- **In and Out of Band management allowing LAN/WAN or dial in access to network devices**
- **The only console server that will manage both Unix and Windows NT/2000 servers**
- **No break signal issued on power cycle to prevent costly Sun Server reboots**
- **Large local port buffers ensure easy device management and maintenance**
- **Secure unlimited remote buffer data storage allows vital system information to be encrypted and stored through NFS**
- **Advanced menu system for secure login and easy device management**
- **Integrated security features provide secure access to critical network devices**
- **Cable options available for easy installation**
- **Lifetime warranty for security and peace of mind**

Application

- **Server Farm Management**
- **Network Appliance Management including:**
  - **- Routers**
  - **- Remote Access Servers**
  - **- Firewalls**
  - **- PBX's**
  - **- Switches**
  - **- Raid Boxes**

Since an administrator can connect anytime from anywhere, they save significant amounts of time and reduce overall costs by keeping system disruption to a minimum. With the provision of local or secure remote port buffers, data generated by attached devices while unattended can also be viewed anytime from anywhere to aid in problem diagnosis.

The Perle CS9000 provides a comprehensive suite of security features that allow organisations to implement robust security planning and prevent unauthorised access. The CS9000 comes configurable for SSHv1 or SSHv2 for data encryption. Other security features include packet filtering, support for RADIUS authentication and the ability to disable unwanted daemons such as Telnet and http.
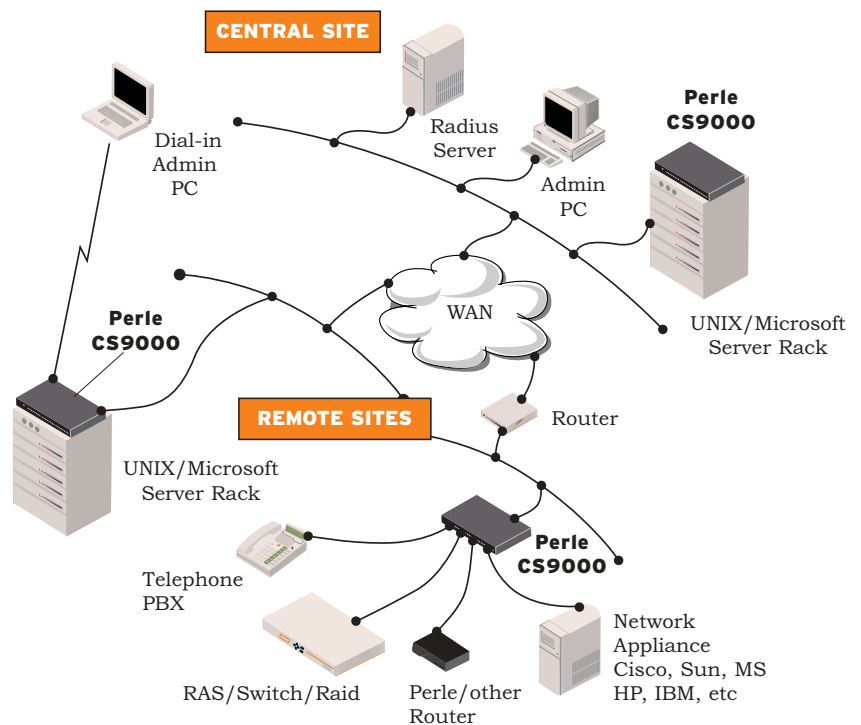
By installing optional software, Perle WinAttach on to a Microsoft NT or Windows 2000 server the CS9000 can be used as a backup management device in Microsoft environments. This means one method can be used to access Unix, Microsoft and other network devices simplifying an administrators burden.

A wide array of software tools allow the Perle CS9000 to be configured, managed and flash upgraded either locally or remotely over the network or via the Internet.

Command line and menu interfaces are also included, as is a separate local management port. In addition, industry standard control and management facilities are supported – SNMP, BOOTP, DHCP and DNS.

Class Leading service and Support

The Perle CS9000 is backed by the best service and support in the industry including Perle's unique lifetime warranty.

Technical Specifications

Connectivity

Serial Ports
- CS9008 model: 8 RS232 serial ports
- CS9016 model: 16 RS232 serial ports
- CS9024 model: 24 RS232 serial ports

Backbone LAN Attachment
- 10/100Mbps RJ45

Management Port
- RS232 DB25 Female

Physical

Architecture
- 32 bit processor
- 16Mb Ram
- Custom ASICs
- Up to 230 Kbps throughput per port

Serial Port Signals/Protection
- TXD, RXD, RTS, CTS, DTR, DSR, DCD and GND
- All serial ports are ESD protected to 15kV through air

LED Indicators
- Main – Power and Network
- Serial – Send and Receive integrated into each RJ45 connector

Power, Dimensions and Weight
- Internal, auto-ranging, 110-240V, 25W
- 45 x 230 x 430 (H x L x W)
- 2.0 kg

Environmental
- Operating Temperature: 0ºC to 40ºC
- Storage Temperature: -30ºC to 70ºC
- Operating Humidity: 5 to 95% RH (non-condensing)
- Storage Humidity: 5 to 95% RH (non-condensing)

Cable Options
- Cable options available for connection of Sun, Cisco PC's. For more details visit www.perle.com/products

Approvals
- EMC: EN55022 Class A, FCCA
- Safety: CSA 22.2.950, NRTL/C, IEC 950, EN60950
- CE Approval
- Solaris Ready

Software

Perle WinAttach (optional)
- Software to give administrators of Microsoft NT or W2000 systems, management control through the COM port. For further details visit Perle's Web site at www.perle.com/products

Port Buffers - Configurable
- CS9008 1051k to 1103k local per port
- CS9016 495k to 552k local per port
- CS9024 310k to 368k local per port
- Unlimited 3DES encrypted remote data storage

Administration
Local or Remote management using:
- Command Line
- Menu Command Interfaces with Easy Port Access
- JETset Web-based configuration utility

Network Protocols
- TCP/IP, UDP, ICMP, SNMP*, ARP, Proxy ARP, RARP, DHCP*, BOOTP, RIP and Static Routing, SSH*, PPP, SLIP, CSLIP, TELNET*, RLOGIN, CLEAR TCP HTTP, WINS, DNS
- * can be disabled if required*

Remote Access and Security
- SSH v1 and v2 supported
- Limited packet filtering
- RADIUS authentication (RFC2058)
- RADIUS accounting (RFC2059)
- PAP and CHAP
- Fixed and Roaming Callback
- Modem initialisation strings

Client Software Requirement
- Administrator's client system must be capable of SSH or Telnet over a TCP/IP network. Break can be sent from Telnet and SSH if required.

Upgrades
FLASH update via:
- Network using BOOTP, DHCP or TFTP
- Local management port using Jetload

Warranty
- Limited lifetime warranty

Technical Support
End User
- Free 60 day access to Perle's hotline technical support for all registered new products.
  www.perle.com/support/warranty_reg.html

Value Added Resellers / Distribution Partners
- Free access to Perle's hotline technical support for all registered partners.
  www.perle.com/partners/index.html

Maintenance Agreement
- To ensure rapid system recovery, maintenance agreements are available for Perle hardware. These include on-site service or express part replacement in many areas, and free access to hotline technical support.
  www.perle.com/support/service_sales.html

Free Software
- Perle provides free software upgrades to registered users via Perle's Web site.
  www.perle.com/downloads

Visit the Perle Web site for up-to-date product support and technical information.
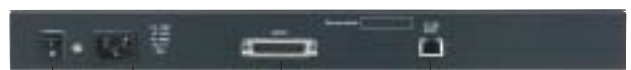www.perle.com/products

Ordering Information
For Product Codes and Model Descriptions, please visit Perle's Web site at www.perle.com/products and select Product Family Console Server

Power and network LEDs   Front-mounted RJ45s with data activity LEDs

Power Connector   ON/OFF Switch   Admin Port   10/100Mbps Port

Perle products available from:

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3 Wintersells Road
Byfleet, Surrey
KT14 7LF, United Kingdom
www.perle.com

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