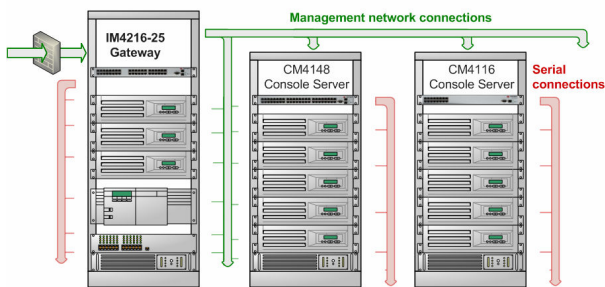




IM4200 Infrastructure Manager

Secure centralized access and control of the local and remote data center

- Centralized management control of all the servers, routers, power switches and other network devices in the data center
- Simple point-n-click access and bullet-proof security. Manage multiple local and remote sites from any location
- High availability by default. Dual power supplies, dual Ethernet, in-built modem and a robust Linux core ensure reliable 24x7 management access
- Sophisticated monitoring, alerts and alarms with removable USB flash logs and embedded Nagios NSCA client and NRPE monitoring servers
- Powerful yet flexible access controls ensure compliance with enterprise policies
- Auditable transaction logs, event traps, off site storage and real time alerts ensure regulatory compliance (SOX, HIPAA)
- Secure in-band and out-of-band serial console and network access
- Manage servers from the hardware and BIOS level up to the operating system and applications
- Power management – IPMI devices and third party LAN and serial controlled power switches
- Supports customized scripts and logs, and configurable alarms and alert trigger events



IM4200 provides secure access and control of up to 48 serially-attached and hundreds of network-attached devices - all through the one central management gateway. Hundreds of serially-attached devices can also be centrally managed, by adding extra console servers to the external management network.

IM4200 infrastructure managers enable IT professionals and network operations center (NOC) staff to securely manage local and remote data centers from anywhere in the world.

Data centers need modern management tools that take advantage today's in-band and out-of-band control technologies. Administrators need console access to the operating systems, and remote SOL access to the BIOS in their servers. They need to use lights-out management applications to access their embedded service processors. NOC managers need secure browser and console access to reconfigure their firewalls and routers. They need to be able to power cycle systems and network devices - using the selection of UPS, IPMI and power strip devices they have deployed.

The IT professionals need secure management access to the most remote sites in their distributed enterprise, regardless of state of the processor, operating system or network. And they need this access to be available before the computers have booted, before the networks have become active, and even before the operating system has been provisioned. The IM4200 family meets these needs.

Centralized remote management

The IM4200 infrastructure manager provides a reliable gateway to enable administrators to securely access their remote infrastructure - then quickly diagnose and fix any problems with the hardware, firmware, operating system or application software.

Each of the mission-critical servers, switches, routers, power controllers and VoIP gateways in the data center has its own in-band and out-of-band management toolkit. A collection of local and remotely dispersed technical managers (such as system administrators, network managers, applications specialists, service providers and vendor help desks) use these tools and each wants to poke secure holes in the site network security to access the particular devices they control.

The IM4200 consolidates this to provide a single point of secure access for all these managers, and for all their tools, protocols and management applications. And all these connections are secure, with authenticated access using up to 128-bit AES encryption, and a selection of filtering and logging facilities.

The IM4200 can be accessed in-band by the local or remote manager using the public data network or a private IP network. Or it can be accessed out-of-band using an alternate broadband route on the second Ethernet port, or a dial-in PPP connection with its integrated modem. So if the in-band operational network is down, flexible access is available out-of-band. Remote managers can also run their in-band system control tools (such as HTTP, X11, RDP, VNC) and in-band lights-out management applications over these out-of-band channels, using embedded SDT Tunneling features.

The infrastructure manager also supports IPMI and SOL and all the out-of-band control tools that accompany BMC and service processors. These new management facilities enable monitoring, logging, recovery, inventory, and control of the hardware, BIOS, OS and applications - independent of the state of the main CPU, network and OS. The BIOS can be reconfigured remotely, and the system can be rebooted remotely - using side-band or out-of-band channels - even when the CPU itself is not operating. Using these same out-of-band channels, managers can have full KVM graphical control of applications running on the server - even when the in-band network access to the server is down. The IM4200 supports an extensive range of these new control tools including IPMI, iLO, RSA, ALOM, DRAC and more.

IM4200 Family Specifications

Serial Console Port Management:

- Windows 2003 Server ACS and EMS support
- SUN / Solaris ready (no inadvertent breaks)
- Break over SSH support
- Port monitoring with triggers for SNMP and email alerts
- Offline data logging (Syslog, NFS, CIFS)
- Online data buffering and logging
- Multiple users per port (with port sniffing)
- Access by TCP port
- Telnet/SSH/Raw TCP connect
- RFC 2217 - Port Redirection
- Windows Remote Desktop or VNC over serial support
- Clustering - single IP for multiple IM4200 / CM4000 devices
- Per serial port user access lists

High Availability:

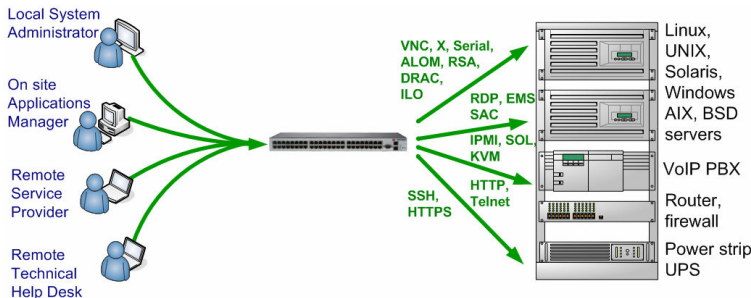
- Dual universal AC or DC input power supplies
- Multiple Ethernets for bonding or out-of-band access
- In built modem for out-of-band dial-in access
- Heartbeat monitor with auto dial-out option
- Multiple local boot images stored locally for roll back
- 512MB FTP/TFTP storage for device configuration files and custom logs & scripts

LAN Port Management:

- Secure SSH tunneling (TCP/UDP applications)
- Secure Remote Desktop access to Windows XP/2003
- Secure VNC access to Sun/Windows /Linux computers
- Secure HTTP(S) access to browser controlled appliances
- Native IPMI 1.5 and 2.0 (RMCP/RMCP+)
- Support for BMC and service processor access and control
- Secure SOL (Serial over LAN) access to BIOS, EMS, ACS
- Service processor access (SMASH, IPMI, ILO, ALOM, more)
- Access to KVM built in to service processors (DRAC, RSA)
- Secure Telnet access
- Limit user access by device and SDT service for that device
- Access triggers with SNMP/email alerts for all tunnel traffic
- Online and offline data logging (NFS, CIFS)
- Port forward to unlimited number of computers/devices
- No limit on number of hosts accessed thru the one tunnel
- Up to 50 concurrent SSH sessions (SDT) open at one time
- No limit on number of clients accessing the one gateway

Security and Authentication:

- Secure Shell (SSH V2&V3)
- TACACS+ , RADIUS and LDAP authentication
- PAP/CHAP authentication (dial up) & dial back support
- Local and remote authentication & system event syslog
- SSH port and IP forwarding support with IP packet filtering
- Unlimited user accounts



SDTConnector point-and-click SSH client:

- Single access point for managing multiple data center sites
- Secure SSH access to all the devices at each site
- Preconfigured to tunnel VNC, RDP, HTTP, HTTPS, SSH
- Pre-configurable to access common LOM services
- Customize with arbitrary TCP/UDP ports / applications
- Strong Encryption (3DES, Blowfish, OTP, Kerberos)
- Easy for user to install with point and click operation
- Simple for the administrator to configure and manage
- No limit on the number of IM4200s that can be accessed
- Runs on any OS (Windows, Linux, Solaris X) with JRE

IM4200 System Management:

- Secure (HTTPS) & local (HTTP) browser management
- Command Line interface (Linux Shell)
- ARP-Ping (IP address assignment)
- SNMP

Accessibility:

- In-band (local Ethernet or secure tunnel over Internet)
- Out-of-band (dial-up modem access) included
- Additional Ethernet for broadband out-of-band connection
- Local serial console access

Other Protocols Supported:

- DHCP for dynamic IP assignment, NAT port redirection
- NTP for time synchronization, PPP for dial up access
- Flash upgradeable - free upgrades from online FTP site
- HTTP, FTP, TFTP client for file transfer

Operating System:

- Linux - source code access
- 512MB flash for custom scripts and logs

Models:

- IM4248-2: 48 serial ports (R-J45 RS-232) & 2 Ethernet ports (RJ-45 10/100Base-T)
- IM4216-2: 16 serial ports & 2 Ethernet ports
- IM4208-2: 8 serial ports & 2 Ethernet ports

Power, Size & Weight:

- Internal dual socket universal 100-240V AC or internal dual +/- 36V to 72V DC
- Power Consumption less than 30W
- 17 x 12.3 x 1.75 in (44 x 31.3 x 4.5 cm)
- 11.8 lb (5.4 kg)

Environmental:

- Ambient operating: 5°C to 44°C (41°F to 112°F)
- Storage: -30°C to +60°C (-20°F to +140°F)
- Humidity: 5% to 90%

CPU/Memory:

- 166MHz ARM (Micrel KS8695P)
- 64MB SDRAM 16MB Embedded Flash 512MB USB Flash

MTBF

- IM4208/4216/4248-2: 150,000 hrs

opengear
secure server management