opengear

CM4116 & CM4148
Quick Start Guide

Thank you for purchasing the CM4116/48 console server. This Quick Start walks you through installation, configuration and local operation. For more details please refer to the *User Manual* on the CDROM.

Step1   Check kit contents

CM4116/48 Console server

UTP cables (2) and DB9F-RJ45S straight and cross-over

Quick Start & CDROM

Power cable

Step 2   Connect the hardware

➢ Plug the CM4116/48 console server into the AC mains

➢ Connect the *LAN* port on the console server to your network, connect your serial devices to the console server *SERIAL* ports 1 through 16/48

Note: If you plan to use out-of-band (OoB) dial-in access, connect an external modem to the LOCAL serial port.

Step 3   Set up the console server

The default console server IP Address is *192.168.0.1* (subnet mask *255.255.255.0*). With a web browser on any computer that is LAN connected to the console server:

➢ Enter **https://192.168.0.1** into the address bar

Note: The LAN connected computer must have an IP address in the same network range (192.168.0.xxx) as the B096 console server. If this is not convenient, you can use the *ARP Ping* command to set the IP address (refer *User Manual* or online FAQ for details). The console server also has its DHCP client enabled by default, so it will automatically accept any network IP address assigned by any DHCP server on your network – and will then respond at both 192.168.0.1 and its DHCP address.

➢ Log in using the default system user name *root* and the default password *default*, a **Welcome** screen listing the basic configuration steps is displayed

➢ Select **System: Administration**, enter and confirm a new **System Password** and click **Apply**

➢ To assign your console server a static IP address or to permanently enable DHCP, select **System: IP** then **Network Interface** and check **DHCP** or **Static** for **Configuration Method**

Step 4   Configure serial & network devices

➢ Select **Serial & Network: Serial Port** to display the label, mode and protocol options currently set for each serial port – by default, each serial port is set to Console Server mode (refer the *User Manual* if other modes are required)
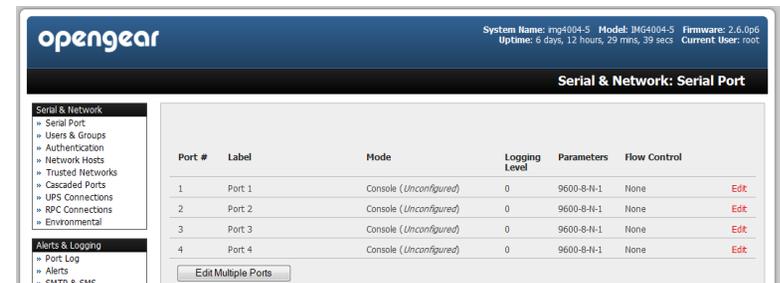
➢ To configure the serial port, click **Edit**

➢ Configure the **Common Settings** (Baud Rate, Parity, Data Bits, Stop Bits and Flow Control) to match those of the device being controlled

➢ Select the **Console Server** protocols (Telnet, SSH, TCP and RFC2217) that are to be used for the data connection to the serial port

- A **Logging Level** may also be set to specify the level of information to be logged and monitored for the serial port

- Click **Apply**

- To enable access through the console server to a locally networked computer (referred to as a *host*), select **Serial & Network: Network Hosts** and click **Add Host**
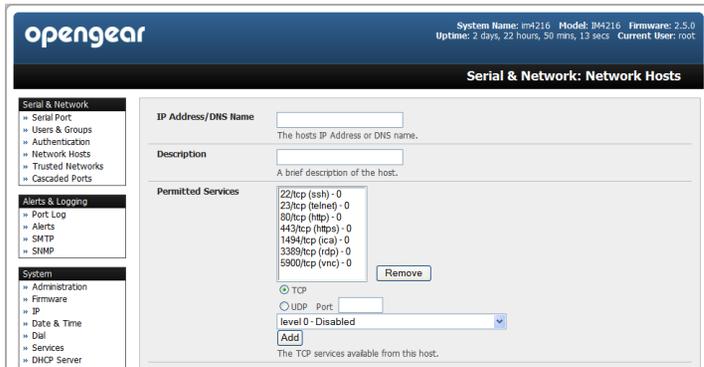
- Enter the **IP address/DNS Name** of the host

- Edit the **Permitted Services** used for accessing this host, e.g. HTTPS (TCP port 443), VNC (TCP port 5900), or add custom TCP or UDP port numbers – only the services specified here are tunneled through to the host, all other services are blocked

- At this stage you may also specify the level of information to be logged and monitored for each host access

- Click **Apply**

Step 5   Add new users

Note: It is recommended that you set up a new Administrator user (in the *admin* group with full access privileges) and login as this new user for all ongoing administration functions (rather than continuing as *root*)

- For each new user, select **Serial & Network: Users & Groups** and click **Add User**

- Enter a **Username** and enter and confirm a **Password**, and nominate the **Accessible Hosts** and **Accessible Ports** the user is allowed to access

- To grant limited access to the Management Console, check the *user* **Group**, to grant full access to the Management Console, check the *admin* **Group** – by default the user is granted no Management Console access
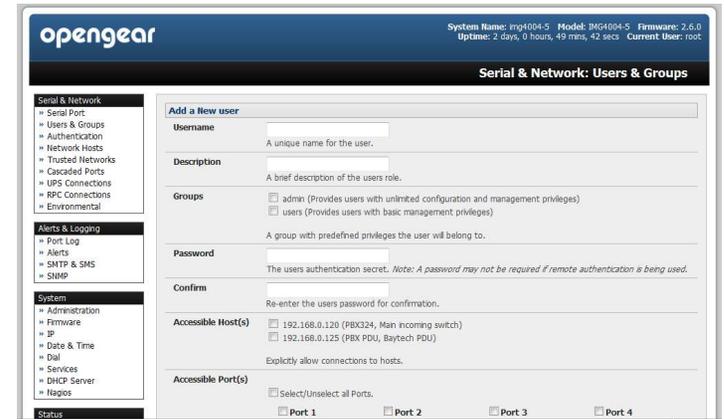
- Click **Apply**

Step 6   Advanced configurations

The console server offers many more advanced functions including:

- ❖ The **Alerts & Logging: Alerts** facility monitors serial ports, hosts, user logins, UPSes (Uninterruptible Power Supplies), RPCs (Remote Power Controllers, such as PDUs and IPMI devices) and EMDs (Environmental Monitoring Devices). A broad selection of trigger events (such data patterns, temperature or battery levels) can be specified. When triggered, a warning email, SMS, Nagios or SNMP alert is sent to a nominated destination.

- ❖ Extensive management of UPSes and RPCs using open source *NUT* and *Powerman* tools. The **Manage: Power** facility enables both administrators and regular users to monitor and control attached PDU power strips, and servers with embedded IPMI BMCs.

- ❖ Connect EMDs to any serial port (with an adapter) and remotely monitor the temperature, humidity, physical access, smoke alarms, etc. Details are provided in the *EMD5000 Quick Start* supplied with the EMD.

- ❖ Historical logs of all communications with serial and network attached devices, system activity, UPS and PDU power status, environmental status, etc. The level of logging is set as ports and devices are configured, **Alerts & Logging: Port Log** allows this history to be saved locally or remotely. Logs can be viewed from the **Status** and **Manage** menus.

- ❖ Other advanced features, such as *Serial Port Cascading*, remote *Authentication*, *Trusted Networks*, *Secure Tunneling*, *Nagios Distributed Monitoring*, the *Command Line* interface – these are covered in detail in the *User Manual* on the CDROM.

Note: On the CDROM you will also find the SDT Connector software tool. Once you have configured the console server, this tool provides you with secure, point and click access to the console server and all the attached devices. **Refer to the provided *SDTConnector Quick Start* for details on setting up remote management of the console server and connected devices.**