

# CM4008

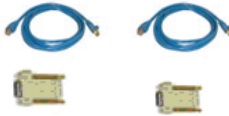
## Quick Start Guide

Thank you for purchasing the CM4008 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.

### Step 1 Check kit contents



CM4008  
console server



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



Quick Start &  
CDROM



5VDC IEC power  
supply and cable

### Step 2 Connect the hardware

- Plug the power supply into the AC mains and connect the DC power cable to the *5VDC* power socket on the CM4008
- Connect the CM4008 *LAN* port to your network, connect your serial console devices to the CM4008 serial *PORTS* 1-8.

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

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### 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 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**

The screenshot shows the OpenGear web interface for System Administration. The top header includes system information: System Name: img4004-5, Model: IMG4004-5, Firmware: 2.6.0p6, Uptime: 6 days, 12 hours, 36 mins, 16 secs, Current User: root. The main content area has a form with the following fields:

- System Name:** img4004-5 (with a note: "An ID for this device.")
- System Description:** (with a note: "The physical location of this device.")
- System Password:** (masked with dots, with a note: "The secret used to gain administration access to this device.")
- Confirm System Password:** (masked with dots, with a note: "Re-enter the above password for confirmation.")

An "Apply" button is at the bottom of the form. A sidebar on the left contains a tree view with "Serial & Network" selected.

- 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 labels, modes and protocol options currently set for each serial port – by default all serial ports are set in Console Server mode (refer the *User Manual* if other modes are required)
- To configure a serial port, click **Edit**

The screenshot shows the OpenGear web interface for Serial & Network: Serial Port configuration. The top header includes system information: System Name: img4004-5, Model: IMG4004-5, Firmware: 2.6.0p6, Uptime: 6 days, 12 hours, 29 mins, 39 secs, Current User: root. The main content area features a table with the following data:

Port #	Label	Mode	Logging Level	Parameters	Flow Control	
1	Port 1	Console (Unconfigured)	0	9600-8-N-1	None	Edit
2	Port 2	Console (Unconfigured)	0	9600-8-N-1	None	Edit
3	Port 3	Console (Unconfigured)	0	9600-8-N-1	None	Edit
4	Port 4	Console (Unconfigured)	0	9600-8-N-1	None	Edit

An "Edit Multiple Ports" button is located below the table. A sidebar on the left contains a tree view with "Serial & Network" selected.

- 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 that port

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

The screenshot shows the 'Serial & Network: Network Hosts' configuration interface. At the top, system information is displayed: System Name: m4216, Model: BM4216, Firmware: 2.5.0, Uptime: 2 days, 22 hours, 50 mins, 13 secs, Current User: root. The left sidebar contains navigation menus for Serial & Network, Alerts & Logging, and System. The main content area has the following sections:

- IP Address/DNS Name:** A text input field with a placeholder 'The hosts IP Address or DNS name.'
- Description:** A text input field with a placeholder 'A brief description of the host.'
- Permitted Services:** A list of services with checkboxes: 22/tcp (ssh) - 0, 23/tcp (telnet) - 0, 80/tcp (http) - 0, 443/tcp (https) - 0, 1494/tcp (ca) - 0, 3389/tcp (rdp) - 0, 5900/tcp (vnc) - 0. A 'Remove' button is located to the right of the list.
- Protocol Selection:** Radio buttons for 'TCP' (selected) and 'UDP'. A 'Port:' field is present.
- Level:** A dropdown menu showing 'level 0 - Disabled'.
- Add:** A button to add the host.
- Footer:** 'The TCP services available from this 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**

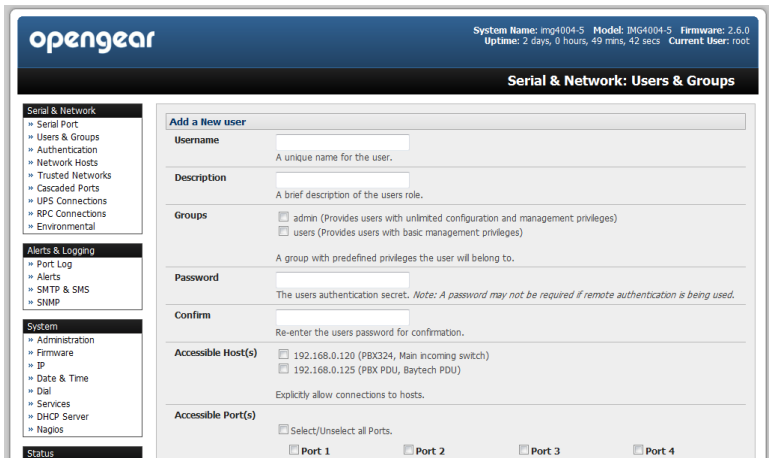
## Step 5 Add new users

**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**



**Please register your product** to activate the warranty and to automatically receive advice of future firmware updates. Go to: <http://opengear.com/product-registration.html>



## 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.

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**Note:** On the CDROM you will find the *PortShare* and *SDT Connector* software tools. *SDT Connector* provides you with secure, point and click access to the console server and all the attached devices. *PortShare* connects the COM/tty port applications on your Windows PC, Linux server or virtual machine to the serial devices attached to the console server. **Refer to the provided *Quick Starts* for details**

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