

IM4004-5

Quick Start Guide

Thank you for purchasing the IM4004-5. 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



IM4004-5
Management gateway



UTP cables (2), DB9F-RJ45S straight & Xover, RJ-45 plug to jack Cisco adapter



Quick Start &
CD-ROM



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 IM4004-5
- Connect the *NETWORK* port to your Ethernet network. Connect your USB devices to USB 1-2 and management LAN devices to the Ethernet ports *ETH 1-4*

Note: For out-of-band (OoB) dial-in access connect a USB modem to USB1 or USB2 or connect the serial modem to the *LOCAL* DB9 serial port. If you plan to use an external cellular USB modem for OoB access, refer to the User Manual. For broadband OoB connect the access device (such as DSL modem) to *ETH1*.

- Connect your serial devices to the IM4004-5 serial ports *PORT 1-4*. Plug the male plug of the RJ-RJ adapter into any Cisco equipment being managed. Then connect the female jack to your IM4004-5 with a standard Cat5 UTP cable.

Step 3 Set up the console server

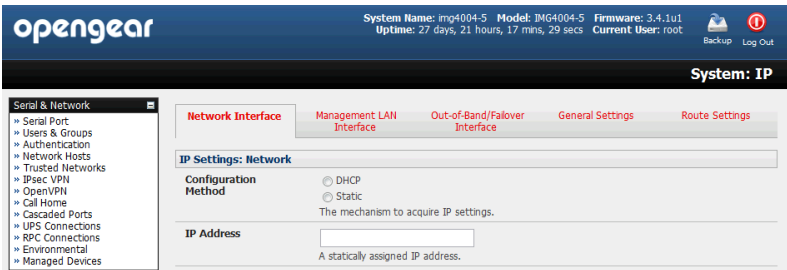
The default IP address for the *NETWORK* port is *192.168.0.1* (subnet mask *255.255.255.0*). With a web browser on any computer that is LAN connected to the console server:

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

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

Note: The computer must have an IP address in the same network range (192.168.0.xxx) as the console server. Alternately, you can use the *ARP Ping* command to set the IP address (refer *User Manual* or online FAQ for details). The console server also DHCP client enabled by default. 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.

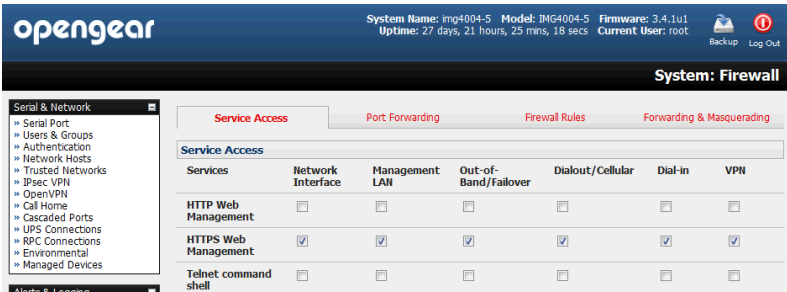
- Select **System: Administration**. Enter and confirm a new **System Password** and click **Apply**
- Select **System: IP** then **Network Interface** and check **DHCP** or **Static** for **Configuration Method**



The IM4004-5 has a switch that provides ETH 1-4 as an Ethernet management LAN with firewall/router isolation and DHCP server. By default these ports are inactive. To activate the management LAN gateway:

- Select **System: IP** then **Management LAN Interface**. Uncheck **Disable** and enter the **IP Address** and **Subnet Mask** for the Management LAN network segment, leaving **Gateway** and **DNS** fields blank. If you wish to use the DHCP server, refer to the *User Manual*
- Ethernet port *ETH 1* can be configured as a broadband failover or OoB access port – to activate, refer to the *User Manual* – otherwise leave **Failover Interface** at its default select, **None**.

Note: The console server's firewall determines which protocols/ services can be used to access which ports/ devices. By default only HTTPS and SSH access is enabled to the console server itself. But you can use **Service Access** menu on **System: Firewall** to change settings for the console server itself (and for connected serial ports). Similarly using the **Forwarding & Network** menu you can permit remote IP access (e.g. over cellular) to devices on Network or Management LAN. Refer to User Manual and FAQs before changing any of the default services or access settings.

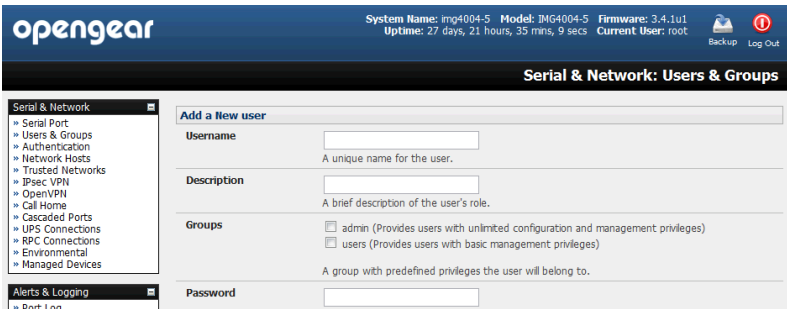


Step 4 Configure serial, network & USB devices

- 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**:
 - 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 device (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**
- Your IM4004-5 has two USB ports on the front face. Attached USB devices are auto-configured
 - The console server has an internal 4GB flash drive for log file storage. External USB flash can also be attached -for loading updated firmware or config files
 - The USB2.0 ports can also be used for connecting to USB console ports on UPS supplies or attaching cellular USB modems

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 users to monitor and control 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*, *Failover* and *Out-of-Band Access*, the *Command Line* interface – these are covered in detail in the *User Manual* on the CDROM.

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**



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>

❖ **Note:** The IM4004-5 product supersedes the IMG4004-5 line. The new product provides an additional USB port with cellular modem support and additional internal flash. However it no longer offers plug-in PCMCIA card support
