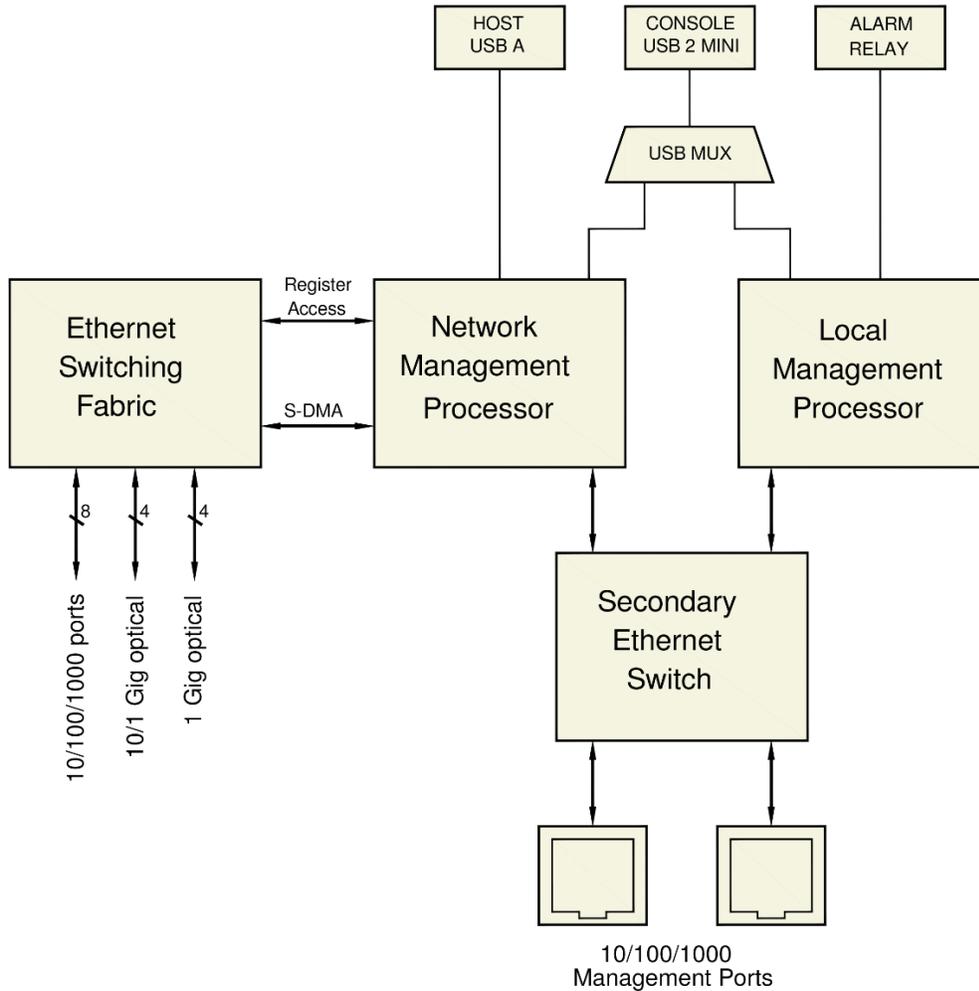


OM10K Management Interface Access

- Accessing Local Management Processor with USB
- Accessing Network Management Processor with USB
- Accessing Network Management Processor with Ethernet

Block Diagram



The Local Management Processor shows link and SFP status, optical power, alarm, and register data for various devices in the OM10K. Configuration data for the switch fabric cannot be accessed here.

The Network Management Processor configures the switch fabric and its ports using CLI commands. The host USB port can be used for software updates and file transfers. The Ethernet management ports can be used for remote access and file transfers (e.g., tftp and nfs).

USB Access to the Local and Network Management Processors

The USB-2 mini console port connects to both the *Local* and *Network* management console interfaces.

The FTDI virtual COM port (VCP) driver <<http://www.ftdichip.com/Drivers/VCP.htm>> needs to be installed on your system. It may install automatically on some Windows systems.

A terminal program is required. Putty, Tera Term, Terminal, minicom, etc., can be used.

For Windows systems, we suggest using Tera Term as it supports the Xmodem protocol for software updates. It can be downloaded at <<https://ttssh2.osdn.jp/index.html.en>>. PuTTY is also good but lacks Xmodem support. It can be downloaded at <<http://www.chiark.greenend.org.uk/~sgtatham/putty/>>.

After the driver is installed, connect the OM10K to your PC with the provided USB cable.

VCP will create two COM ports – one for the *Local* and one for the *Network* management interface.

If Tera Term is used, it will show you the available serial ports; otherwise these ports will be visible under the “Ports (COM & LPT)” item in the Windows Device Manager.

To connect the Network Management you need the higher COM port number.

To connect the Local Management you need the lower COM port number.

USB to Serial Connection Setup Example

If using Tera Term

Start a New Connection

Select **Serial** mode

If the OM10K is plugged in you will see the available COM ports.

Select Setup/Serial Port

On Setup/Serial Port drop-down

Port: = COM?

Baud Rate: = 115200

Data: = 8 bit

Parity: = none

Stop: = 1

Flow control: = none

The interface to the Local management console assumes a dumb terminal, so almost any terminal type is usable. The default terminal type for the Network management console is VT102.

Enter **Setup/Save Setup** so the next time you access Tera Term the settings will be correct.

At this point, pressing enter on the keyboard will bring up the local management menu or the network management login prompt.

You should see *OM10K MAIN MENU* for Local Management Processor.

or

OM10K Login: for Network Management Processor.

Enter *root* or *user* and empty password.

Logging in as *root* gives authority to modify **all** system files and directories.

You should see following root prompt: ~ #

To access the CLI interface enter *telnet 127.0.0.1 12345*

You should then see *Console #*

Accessing the Network Management processor using the Ethernet Ports

There are two Ethernet management ports on the OM10K called MANAGEMENT 1 and 2. The network management processor is accessed using the telnet protocol from a system connected to one of these ports. The network management interface is not accessible from ports 0 to 27 for security reasons. Both the Linux system and the switch CLI can be accessed via Ethernet. The Local Management processor cannot be accessed via Ethernet at this time.

A terminal program with telnet support is required. Telnet, Putty, Tera Term, etc., can be used.

If you are using Tera Term, the CLI can be accessed as follows:

Select File/New connection

Select TCP/IP, Host 192.168.0.58, Service = Telnet, TCP port# 12345

You should see *Console #*.

CLI commands can now be entered and '?' can be used for help.

The Linux system can be accessed remotely using telnet on port 23. Access can be disabled by commenting out the telnetd command in /etc/init.sh and rebooting.

Password support can be enabled and new users added.

Ssh can be added for encrypted access with the available OM10K development tools.

Changing the Default Ethernet IP Address

The IP Address of the OM10K can be changed by modifying U-Boot using the USB Console. This is only necessary when the Ethernet management ports are used and the default IP is unsatisfactory. Presently only a fixed IP address is allowed.

To access U-Boot type any character in the first three seconds after RAM initialization while the system is booting.

The cursor should become *lux>>*

To see the U-Boot environment enter *lux>> printenv*

Changes to environment variables are made using the *setenv* and *saveenv* commands.

The commands are self-documenting.

For example, to obtain help enter *lux>> ? setenv*

or *lux>> ? saveenv*

The default network configuration for the control and management system is:

ipaddr=192.168.0.58

gateway=192.168.0.1

netmask=255.255.255.0

serverip=192.168.0.60.

For example, to change ipaddr enter *lux>> setenv ipaddr 192.168.0.57*

lux>>saveenv

Execute the *boot* command after changing the IP to get to the management interface.

See *App.5: OM10K Updating File System.pdf* for further information.

Relevant Application Notes:

These following application notes are available in the *DOWNLOADS* sections.

www.luxcom.com/product/om10k-8/ and www.luxcom.com/product/om10k-24/

App.2 OM10K LUA CLI Overview.pdf gives an overview of the CLI (Command Line Interface) command structure, and how to modify the configuration files so the desired CLI commands are executed at startup.

App.3 OM10K Port Monitor Setup.pdf gives examples of setting up Span/Tap Monitor ports using CLI commands.

App.4 OM10K VLAN Setup.pdf gives examples of setting up Port and Tag based VLANs using CLI commands.