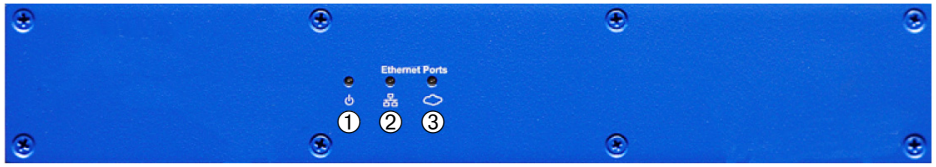
MSM710 Controller Quickstart

This Quickstart applies to both the MSM710 (also known as E-MSM710) Access Controller (J9328A) and the MSM710 (E-MSM710) Mobility Controller (J9325A).

This Quickstart introduces the MSM710 Controller and shows you how to get started using it. Please visit www.hp.com/networking/support for the latest documentation including the *MSM7xx Controllers Management and Configuration Guide*.

Hardware overview



MSM710 front panel
1: Power light
2: LAN port light
3: Internet port light

MSM710 rear panel
1: Power
2: Reset button
3: LAN port
4: Internet port
5: Console port

Package contents
MSM710, documentation, power supply, self-adhesive rubber feet.

LAN port and Internet port
The MSM710 has auto-sensing 10/100/1000 Ethernet ports, each with a corresponding status light on the front panel. The LAN port supports Power over Ethernet (PoE) 802.3af, enabling the MSM710 to be powered by a PoE switch or PoE power injector.

Reset button
Press and quickly release the button to reset the MSM710. This button can also be used to reset the MSM710 to factory defaults. See *Resetting to factory defaults* in the *MSM7xx Controllers Management and Configuration Guide*.

Console port
The MSM710 console port is a standard serial port with DB-9 connector. To connect to a computer, use a standard (straight-through) serial cable (male-to-female). For pin-out details, see the *MSM7xx Controllers Management and Configuration Guide.*

Status lights
All three status lights are located on the front panel.

Light	State	Description
Power	Off	The MSM710 has no power.
	Blinking	The MSM710 is starting up. If the power light continues to blink for several minutes, it indicates that the software failed to load. Reset or power cycle the MSM710. If this condition persists, contact HP Support.
	On	The MSM710 is fully operational.
Ethernet: LAN and Internet	Off	Port is not connected or there is no activity.
	Blinking	Transmit/receive activity.
	On	Stays on for a short period when the link is established.

Important information to read before installation

Warning: PROFESSIONAL INSTALLATION REQUIRED

Prior to installing or using this device, consult with a professional installer trained in RF installation and knowledgeable in local regulations including building and wiring codes, safety, channel, power, indoor/outdoor restrictions, and license requirements for the intended country. It is the responsibility of the end user to ensure that installation and use comply with local safety and radio regulations.

Cabling: You must use the appropriate cables, and where applicable, surge protection, for your given region. For compliance with EN55022 Class-B emissions requirement, use shielded Ethernet cables.

Country of use: Some versions of the unit require the installer to select the country of operation during set up. Once the country has been set, the unit will automatically limit the available wireless channels, ensuring compliant operation in the selected country. Incorrectly entering the country may result in illegal operation and may cause harmful interference to other systems.

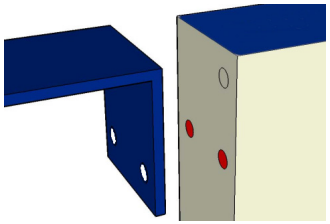
Safety: Take note of the following safety information during installation.

- If your network covers an area served by more than one power distribution system, be sure all safety grounds are securely interconnected.
- Network cables may occasionally be subject to hazardous transient voltages (caused by lightning or disturbances in the electrical power grid).
- Handle exposed metal components of the network with caution.
- This product does not have a power switch. It is powered-on when the LAN port is connected to the external power supply is plugged into a PoE power source.
- This product and all interconnected equipment must be installed indoors within the same building (except for outdoor models), including all PoE-powered network connections as described by Environment A of the IEEE 802.3af standard.

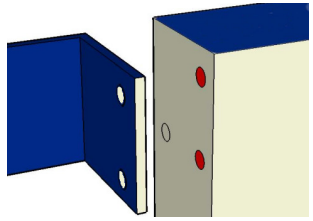
Installation

It is recommended that you mount the MSM710 only after performing the procedures in this Quickstart and familiarizing yourself with the product.

- For table-top usage, attach the rubber feet to the bottom corners.
- For rack or wall mounting, you can order the optional part: **HP MSM710 Controller Rack Mounting Kit**, part number J9404A.
- For standard 48 cm (19-inch) rack mounting first attach a mounting bracket to each side of the MSM710 using the provided screws (see image to right), and then mount it in the rack.



- For wall mounting, attach the MSM710 to a wall so that the front faceplate (with status lights) faces the ceiling, the Ethernet ports face the floor, and the top of the unit is flat against the wall. Do this as follows:



1. Rotate the mounting bracket 90 degrees (from how it is used for rack mounting) and attach it to the two screw holes along the bottom edge of the MSM710 (see image to right).
2. Drill holes in the wall and insert appropriate wall anchors (not supplied) according to their directions. The anchors must support at least 2.2 kg (5 pounds). Allow extra weight for cables.
3. Fasten the MSM710 to the wall anchors using the screws supplied with the anchors. If needed, use washers on top of the bracket.

Powering the MSM710

The MSM710 can be powered by:

- The provided 48-volt power supply.
- A 10/100 or 10/100/1000 PoE-enabled switch. Various PoE-enabled switches are available from HP.
- An HP PoE 1-Port Power Injector (J9407A).

Caution: If the MSM710 will be powered by a user-supplied PoE power injector, use only a gigabit-compatible power injector. Although 10/100 PoE-enabled switches are compatible, PoE injectors designed for 10/100 networks only are NOT compatible with the AP.

Initial configuration

This procedure describes how to perform the initial configuration of a factory-default MSM710, enabling you to establish a wired connection through the MSM710 to the Internet.

The MSM710 is managed via its Web-based management tool using at least Microsoft Internet Explorer 7/8 or Mozilla Firefox 3.*x*.

Note: Since the provided power supply is the recommended way of powering the MSM710, it is the assumed powering method in all procedures in this Quickstart.

Note: Do not power on the MSM710 until directed.

A. Configure the management computer

1. Configure your computer to use a static IP address in the range **192.168.1.2** to **192.168.1.254**, and a subnet mask of **255.255.255.0**. Set the default gateway to **192.168.1.1**, and DNS server to **192.168.1.1**. For example to do this in Windows Vista, use **Control Panel > Network and Sharing Center > Manage Network Connections > Local Area Connection,** right-click **Properties** then select **Internet Protocol Version 4 (TCP/IPv4) > Properties**.

B. Make these connections

1. Disconnect any cable from the LAN port on your computer, and disable any wireless connection.
2. Connect the MSM710 LAN port to the LAN port on your computer.
3. Connect the MSM710 Internet port to a network with Internet access or to the PC port of a DSL modem or equivalent.

C. Start the MSM710

Power on the MSM710 and wait until the power light stops blinking.

D. Connect to the management tool and log in

Note: A factory-default MSM710 is assumed.

1. In a Web browser, enter the address: **https://192.168.1.1**.
2. A security certificate warning is displayed the first time you connect to the management tool. This is normal. Select whatever option is needed in your Web browser to continue to the management tool. The security warning will not appear again unless you change the IP address of the MSM710.
3. On the Login page, enter **admin** for both **Username** and **Password** and then select **Login**.
4. On the License Agreement page, read the agreement and select **Accept License Agreement**.
5. The registration page appears. It is recommended that you register later by selecting **Controller >> Maintenance > Registration**.
6. If a **Country** prompt appears, select the country in which the MSM710 will operate.

   Caution: The correct country must be selected.
7. At the password prompt it is recommended that you change the default password. Enter the new password and select **Save**. Passwords must be at least six characters long and include four different characters.

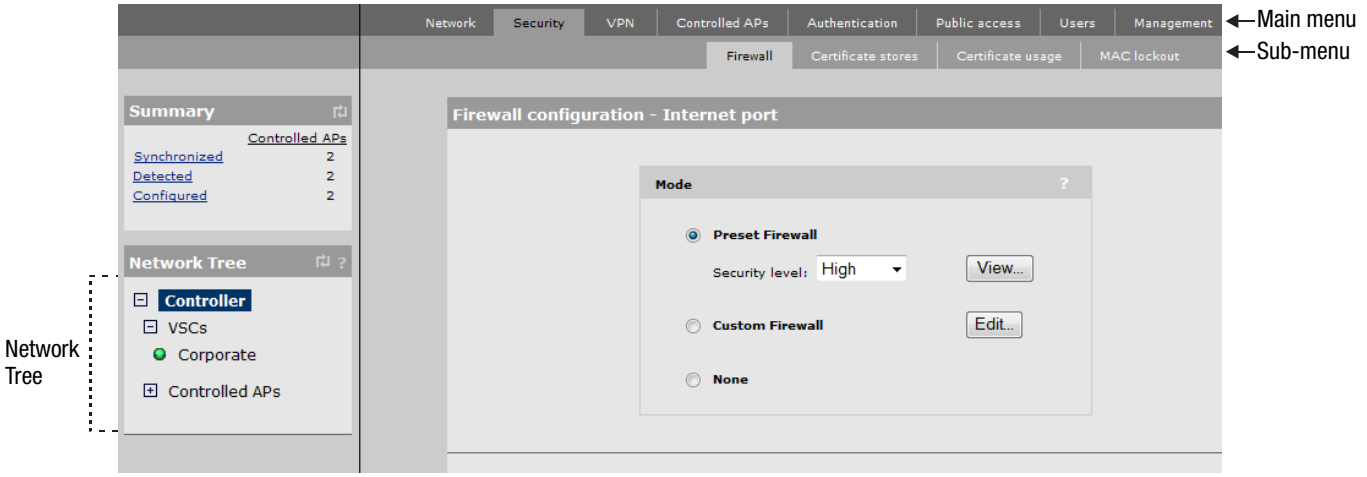
Using the management tool

In this quickstart and referenced documentation, instructions to select specific management tool elements and menus are specified in the form:

"Select **Controller >> Security > Firewall**."

This instructs you to select the **Controller** element in the Network Tree, and then in the right pane, select the **Security** main menu, and finally, select its **Firewall** sub-menu. All elements to the left of the double angle brackets **>>** are found in the Network Tree.

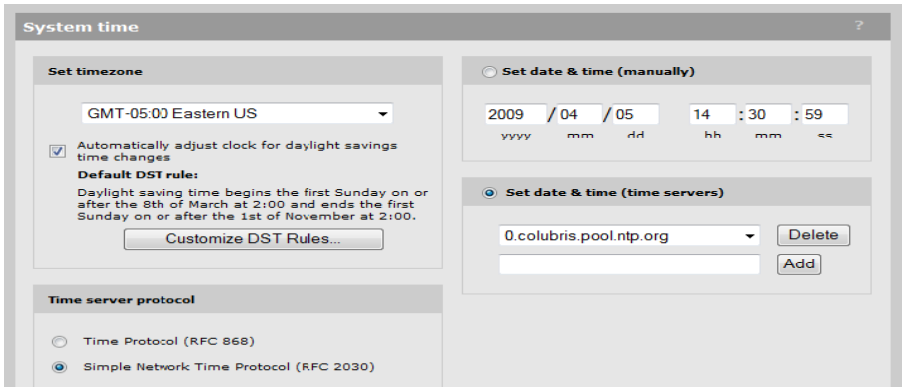
Key elements of the management tool user interface are defined as follows:



E. Configure system time settings

Accurate time is critical for correct operation of the MSM710, as the time configured on the MSM710 is used on all controlled APs. Configure system time settings as follows:

1. In the management tool, select **Controller >> Management > System time**.



2. Set the **timezone** and DST as appropriate for your region.
3. If the MSM710 will be connected to the Internet, select **Set date & time (time servers)**. By default, the list contains two ntp vendor zone pools that are reserved for HP Networking devices. By using these pools, you will get better service and keep from overloading the standard ntp.org server.

   If the MSM710 will not be connected to the Internet, select **Set date & time (manually)** and set the time and date.
4. Select **Save** and verify that the date and time are accurately set.

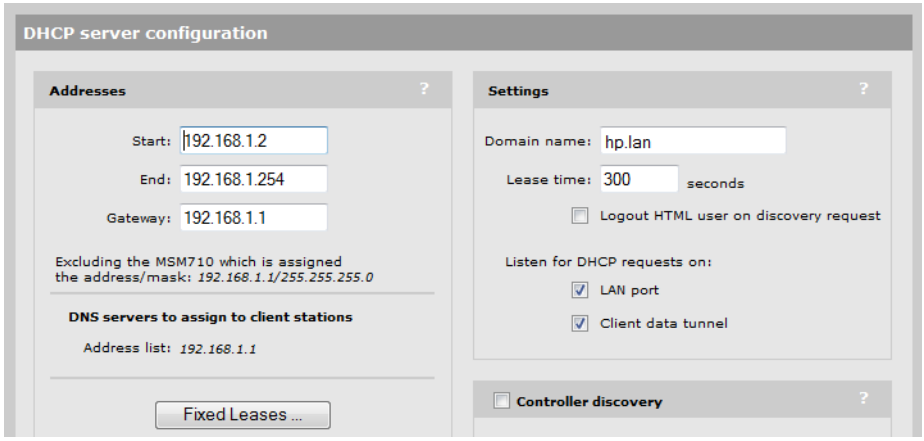
F. Optionally enable the DHCP server

Caution: **DO NOT enable the MSM710 DHCP server if the network to which the LAN port will be connected has its own DHCP server.**

The MSM710 DHCP server is useful for automatically assigning IP addresses to devices such as access points (APs) and their wireless clients.

If you choose to use the MSM710 DHCP server, enable it as follows:

1. Select **Controller >> Network > Address allocation > DHCP server > Configure**.



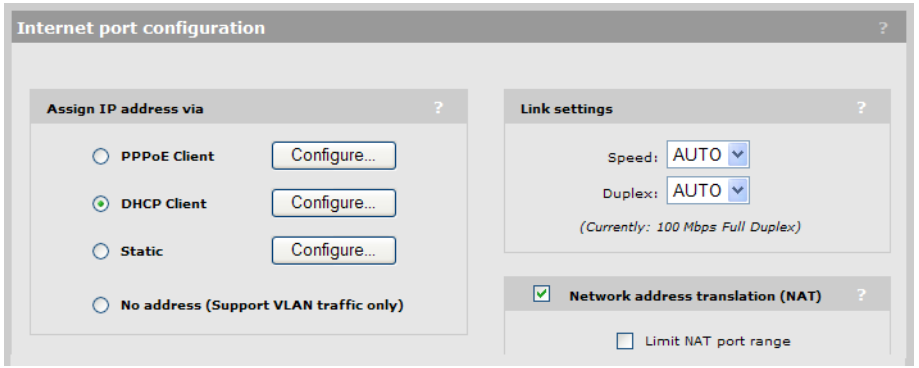
2. Define the **Start** and **End** IP addresses. The **Gateway** is automatically assigned based on the LAN port IP address.
3. Select **Save**.

G. Configure the Internet port

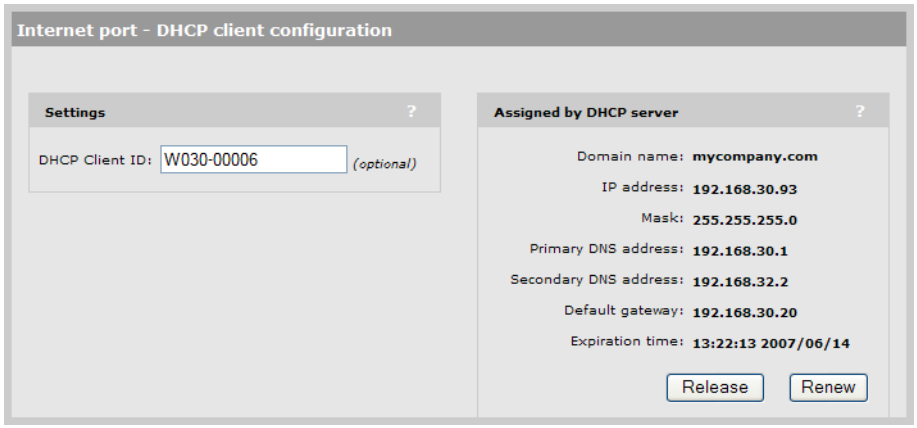
By default, the Internet port operates as a DHCP client. If your network provides a DHCP server, the Internet port will automatically obtain an IP address. No configuration is required.

To view and/or adjust DHCP settings, do the following:

1. Select **Controller >> Network > Ports** > **Internet port**. By default, **Assign IP address via** is set to **DHCP Client**. Select **Configure** next to **DHCP Client**.



2. In the **Assigned by DHCP server** box verify that an **IP address** is assigned.

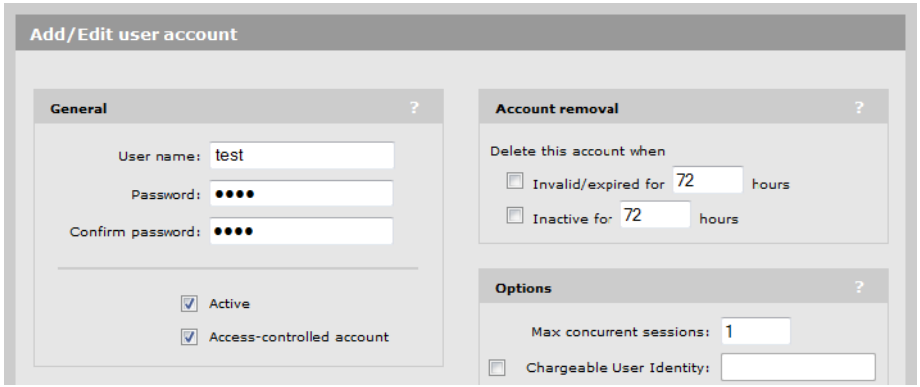


3. If your Internet service provider or network administrator requires a different configuration, for example a static IP address assignment, select **Controller >> Network > Ports** > **Internet port** and choose another option in the **Assign IP address via** box. Select the corresponding **Configure** button and configure the needed settings. For more information, see *Internet Port Configuration* in the *MSM7xx Controllers Management and Configuration Guide*.

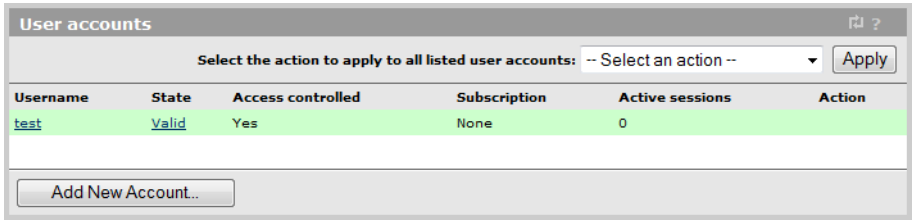
H. Create a test user account

Create a user account to test the public access interface as follows:

1. Select **Controller >> Users > User accounts** and select **Add New Account**.
2. On the **Add/Edit user account** page, under **General**, enter a **User name** and **Password** for the account (**test** for example) and select **Save**.



3. Confirm that the **User accounts** list displays the new account.



I. Test the public access interface

This test uses your existing wired connection to the MSM710 LAN port to test the public access interface. The MSM710 Internet port must be connected to the Internet for this test to be successful.

1. Open your Web browser and enter the address of an Internet site, for example **www.hp.com**. The MSM710 intercepts the URL and displays the public access interface Login page.
2. Enter the **Username** and **Password** for the test account you created earlier. Both the desired Web page and the public access interface session page open.

The MSM710 is now ready for operation. See the *MSM7xx Controllers Management and Configuration Guide*.

Working with controlled APs

When installing the MSM710 with one or more MSM4xx or MSM3xx Access Points (MSM APs) that are operating in controlled mode, the MSM710 is used to provide centralized management, control, and configuration of the APs. MSM APs operate in controlled mode by default.

A. Make these connections

1. Disconnect your computer from the MSM710 LAN port.
2. Connect a factory-default Ethernet switch to the MSM710 LAN port.
3. Connect your computer to the switch.
4. Connect an MSM AP (in its factory-default state) to the switch.

Note: This interconnection scheme is basic. See the *MSM7xx Controllers Management and Configuration Guide* for more-advanced schemes.

B. Verify MSM AP discovery

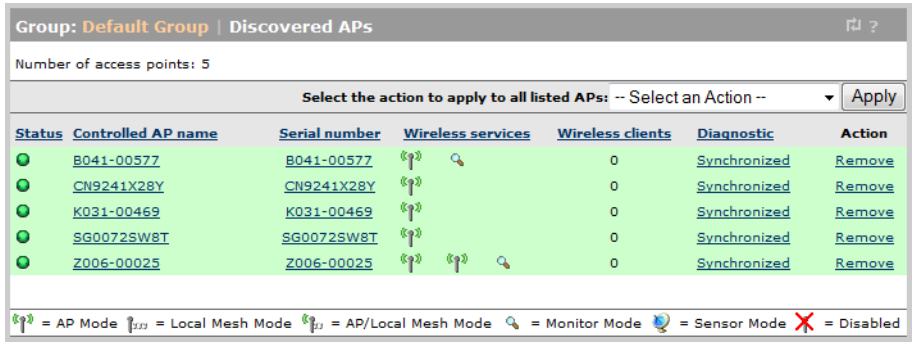
The discovery process enables APs to find the MSM710 on the network and establish a management tunnel with it.

Note: This procedure assumes that the MSM710 and the MSM AP are on the same subnet (L2 connected). For full discovery information, including configuring discovery when the MSM710 and the MSM AP are separated by a router (L3 connected), see *Discovery of controlled APs* in the *MSM7xx Controllers Management and Configuration Guide*.

By default, MSM APs are configured to obtain an IP address via DHCP. Therefore, to support plug-and-play installation, the MSM710 should be configured to operate as a DHCP server as described in *Optionally enable the DHCP server* on page 4.

To verify that the MSM AP has been discovered, do the following on the MSM710:

1. In the **Network Tree**, select the **+** symbol next to **Controller** and then select the **+** symbol next to **Controlled APs**.
2. In the **Network Tree**, select **Default Group**. The Discovered APs page opens. Watch for the MSM AP Diagnostic to change to **Synchronized**.



C. Test the wireless public access network

Test the APs using a Wi-Fi-equipped computer:

1. To ensure that you are using a wireless connection, disconnect any network cable from the test computer.
2. Configure your computer to connect to the wireless network created by an MSM AP. By default, this network is named **HP**.
3. Log in to the public access interface as described in *Test the public access interface* on page 5 and confirm that you can browse the Internet.

Caution: **WIRELESS SECURITY: It is recommended that once the MSM710 is installed, you review the security information in the *MSM7xx Controllers Management and Configuration Guide* and adjust security settings to safeguard the wireless network from intruders.**

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