

MetaConsole Client

User's Guide

version 2.3

FOR HP DEVICES



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Overview

A *management console* is a single tool used to manage entire networks. It is a framework within which device- or service-specific management modules can share a user interface, alarm monitoring, and other basic functions. Popular management consoles include Microsoft Management Console (MMC), HP OpenView, Tivoli Enterprise, and CA Unicenter.

MetaConsole technology enables development of a single client module that works with multiple management consoles and multiple network protocols on multiple platforms.

This guide describes how the MetaConsole client manages HP devices.

MetaConsole Documentation

For any type of device you want to manage using MetaConsole, there are two relevant documents in the suite of MetaConsole documentation:

- A *getting started* guide describing MetaConsole's components and explaining the requirements, installation steps, and other details specific to the management environment
- A *client user's guide* describing how the MetaConsole client manages the particular type of device

You are reading the client user's guide for HP LaserJet devices. Chapter 1 introduces the client, and Chapters 2 and 3 contains instructions for using the client to manage HP DeskJet, LaserJet, and related devices.

Chapter 1. About the Client

The MetaConsole client provides device management for HP DeskJet, LaserJet, and related devices. Its main functions are

- Searching the network to discover supported devices
- Maintaining a list of devices
- Reporting status and alerts for each device
- Allowing you to view and change device settings
- Allowing you to view and change network settings

The console window has two panes. You use the *navigation tree* in the *navigation pane* on the left to select the information you want displayed in the *details pane* on the right.

The navigation tree includes

- A **Help** node for online help for MetaConsole server
- A **Configuration** node for configuring high-level MetaConsole settings

For information, see the getting started guide for your console.

- A node for each MetaConsole server

Each MetaConsole server node contains

- **Version Information, Service Providers, and View Alarms** nodes for that MetaConsole server

For information, see the getting started guide for your console.

- A node for each type of device that MetaConsole manages

The **HP Devices** node contains

- A **Help** node for online help specific to managing HP devices
- A **Configuration** node for configuring discovery and alarms related to HP devices

For details, see *Configuration* below.

- A node for each HP device

For details, see *Device Node* on page 3.

Configuration

The **Configuration** node for HP devices includes

- **Discovery Ranges** – IP address ranges within which devices are to be discovered
- **Blocked Ranges** – IP address ranges to be excluded from discovery
- **Manual Discovery** – IP addresses of manually added devices
- **Alarm Management** – events that are to trigger MetaConsole alarms
- **Rates and Timeouts** – refresh rate, poll rate, and timeout settings

Device Node

The node for each device includes

- **Write Community** – the device's Write Community string
- **Status** – a description of the device's status (ready or not ready), plus alerts, pages printed, and other information
- **Printing** – information about cassettes, output trays, device interpreters and print data channels, color settings, and marking technology
- **Settings** – the device's name, location, and contact person, and a wide variety of options such as password, power-save timeout, and control panel language
- **Components** – hardware components and device features, including network disk size, amount of memory, and print speed
- **Maintenance** – options to take the device offline or put it back online, print a test page and to reset the device
- **Networking** – settings specific to AppleTalk, TCP/IP, IPX, and DLC/LLC
- **Diagnostics** – protocol diagnostic information
- **JetDirect** – settings for the JetDirect print server, if present
- **Host Utility** – the embedded application on the device, if present

Chapter 2. Configuring the Client

This chapter presents procedures for configuring the client's behavior regarding HP devices managed through a particular MetaConsole server. For information on higher-level configuration — configuration of MetaConsole servers generally and of a particular MetaConsole server's treatment of *all* devices — see the getting started guide for your console.

At this level, you can configure

- Device discovery
- The events that trigger alarms
- Rates and timeouts

The HP service provider's configuration settings are maintained by the MetaConsole server and are not client specific. All clients use the same values; if any client changes a particular setting, the change affects all clients that use that setting.

Specifying IP Address Ranges to Include in Device Discovery

For each MetaConsole server, you specify ranges of IP addresses for automatic device discovery.

To add a range of IP addresses for device discovery:

1. In the navigation pane, expand the **HP Devices** node and the **Configuration** node, and click **Discovery Ranges**.
2. Under **Add New Discovery Range**, in the **Start Address** boxes, type the lowest IP address in the desired range.
3. In the **End Address** boxes, type the highest IP address in the desired range.
4. Click **Add**.

To remove a range of IP addresses:

1. In the navigation pane, expand the **HP Devices** node and the **Configuration** node, and click **Discovery Ranges**.
2. Under **Auto Discovery Range List**, click the start address or end address of the range to be removed.
3. Click **Remove**.

Specifying IP Address Ranges to Exclude from Device Discovery

If a range of addresses is not specified as described above under *Specifying IP Address Ranges to Include in Device Discovery*, MetaConsole does not discover devices with IP addresses in that range. So in general, it is not necessary to explicitly exclude a range of addresses. However, excluding a range can be useful. For example, if you want MetaConsole to discover devices between 10.0.0.40 and 10.0.0.80 *except for* 10.0.0.52 through 10.0.0.56, you can include the large range but exclude the small range.

To exclude a range of addresses from device discovery:

1. In the navigation pane, expand the **HP Devices** node and the **Configuration** node, and click **Blocked Ranges**.
2. Under **Add New Blocked Range**, in the **Start Address** boxes, type the lowest IP address in the desired range.
3. In the **End Address** boxes, type the highest IP address in the desired range.
4. Click **Add**.

To remove a range from the list of excluded ranges:

1. In the navigation pane, expand the **HP Devices** node and the **Configuration** node, and click **Blocked Ranges**.
2. Under **Blocked Discovery Range List**, click the start address or end address of the range to be removed.
3. Click **Remove**.

Manually Adding or Removing Individual Devices

In addition to specifying address ranges for automatic device discovery, you can manually add addresses to the list of discovered devices.

To manually add a device to the device list:

1. In the navigation pane, expand the **HP Devices** node and the **Configuration** node, and click **Manual Discovery**.
2. In the **Device Address** boxes, type the device's IP address.
3. Click **Add**.

To delete a manually added device from the device list:

1. In the navigation pane, expand the **HP Devices** node and the **Configuration** node, and click **Manual Discovery**.
2. Under **Manual Device List**, click the IP address you want to delete.
3. Click **Remove**.

To delete all manually added devices from the device list:

1. In the navigation pane, expand the **HP Devices** node and the **Configuration** node, and click **Manual Discovery**.
2. Click **Remove All**.

Specifying Events to Raise Alarms

MetaConsole enables you to select events that will result in alarms. An event is just a change in information of the selected type. For details about the form that the actual alarm takes, see the getting started guide for your console.

To select events that will raise alarms:

1. In the navigation pane, expand the **HP Devices** node and the **Configuration** node, and click **Alarm Management**.
2. Select the check box for each type of information you want alarms generated for.
3. Click **Apply**.

Specifying Rates and Timeouts

To set rate and timeout values:

1. In the navigation pane, expand the **HP Devices** node and the **Configuration** node, and click **Rates and Timeouts**.
2. In the **Discovery Refresh Rate** list, click how often the client should refresh the navigation pane's list of discovered devices.
3. In the **Alarm Poll Rate** list, click how often the client should poll for alarms.

Greater numbers of devices require a greater value for **Alarm Poll Rate**, due to the increased network traffic.

4. Click **Apply**.

Chapter 3. Using the Client

This chapter presents simple procedures for displaying and changing information about devices and network protocols.

With the MetaConsole client for HP devices, you can

- Display and change information about a device's status and features
- Display and change information about network protocols used for communication with devices
- Send maintenance commands to devices

Note: Different HP devices report different information to the MetaConsole client. The information provided here describes information and settings common to many devices, but what MetaConsole displays *will* vary depending on the device.

Setting the Write Community String

The Write Community string is used while writing SNMP data to a device and must be set correctly for you to change any device information. The default value, *public*, may not need to be changed.

To configure the device's Write Community string:

1. In the navigation pane, expand the device's node and click **Write Community**.
2. In the **Write Community** box, type the string.
3. Click **Apply**.

Displaying Status and Errors

To display a device's status and instructions for fixing problems:

→ In the navigation pane, expand the device's node and click **Status**.

The details pane reports, in addition to the status of the device, the contact person's name and phone number, the device's location, and the number of pages printed.

Displaying Paper Cassette Information

To display information about a device's paper cassettes:

→ In the navigation pane, expand the device's node and the **Printing** node, and click **Cassettes**.

The details pane displays, for each input tray, the media type, tray type, status, a rough approximation of the number of sheets contained, and the capacity.

Displaying Tray Information

To display information about a device's output trays:

→ In the navigation pane, expand the device's node and the **Printing** node, and click **Trays**.

The details pane displays, for each output bin, the usage, status, and media orientation.

Displaying Printing Interface Information

To display information about the printing interface:

→ In the navigation pane, expand the device's node and the **Printing** node, and click **Interface**.

The details pane displays the language used by each device interpreter and lists, for each print data channel, the type, protocol version, status, and other pertinent information.

Displaying Color Settings

To display a device's color settings:

→ In the navigation pane, expand the device's node and the **Printing** node, and click **Color**.

The details pane displays the role played by the colorant, the tonality that can be realized with the colorant, the name of the color, and a count of color pages printed, if that information is available.

Displaying Marker Information

To display information about a device's marker technology:

→ In the navigation pane, expand the device's node and the **Printing** node, and click **Marker**.

The details pane displays general information as well as type and fullness for each marker.

Setting the Device Name and Description

To modify a device's name and other descriptive text:

1. In the navigation pane, expand the device's node and click **Settings**.
2. In the **Device Name** box, type a name for the device.
This is the name that will display in the navigation pane.
3. In the **Location** box, type a description of the device's location.
4. In the **Asset Number** box, type the tracking number used on equipment.
5. In the **Contact Name** box, type the name of the person to contact regarding the device.
6. In the **Contact Number** box, type the phone number of the contact person.
7. Click **Apply**.

Changing Device Settings

To change settings for a device:

1. In the navigation pane, expand the device's node and click **Settings**.
2. In the details pane, change settings as desired. *Depending on the device, these may include:*

Device Name	Type a name for the device.
Location	Type a description of the device's location.
Contact Name	Type the name of the person to contact regarding the device.
Contact Number	Type the phone number of the contact person.
Job Output Timeout	Type the number of seconds for the printer to wait when trying to deliver a sheet to a full output bin. -1 means wait for a continue event.
Wait Between Jobs	Type the number of seconds device is to wait, after a job-related continuable error, before automatically continuing. -1 means the device does not automatically continue after a job-related continuable error. 0 means the device continues immediately.
High Capacity Output Mode	(display only)
Password	To change the device's password, type a new password.
Confirm Password	To change a device's password, repeat here the new password typed in the Password box.
Asset Number	Type the tracking number used on equipment.
Power-Save Timeout	Select the number of seconds without use before the device enters power-saving "sleep" mode. Options range from 900 (15 minutes) to 10,800 (3 hours).
Toner Low Action	Select Continue if you want printing to continue when toner is low or Stop if you want printing to stop until manually restarted.
Output Auto Continue	Select an auto continue option.
Control Panel Language	Type the numeric code (1-17) for the language for the control panel display.

Control Panel Access	Make a selection to restrict control panel access: <ul style="list-style-type: none"> • No Locking – Manual input accepted from operator panel • Locked – Manual input not accepted from operator panel • Minimal Locking – Minimal locking (details are product specific) • Moderate Locking – Moderate locking (details are product specific)
Device Type	(display only)
Personality Control	(display only)
Decollating	(display only)
Collating	(display only)
Stacking	(display only)

3. Click **Apply**.

Displaying Hardware Features

To display a device's hardware features:

→ In the navigation pane, expand the device's node and click **Components**.

The details pane displays hardware details, which might include information about the device's interpreters, disk size, amount of memory, and print speed.

Sending Maintenance Commands to the Device

The client assists you with these maintenance operations:

- Taking a device offline or putting it online
- Initiating a test print page
- Resetting a device's network controller

To take a device offline or put it online:

1. In the navigation pane, expand the device's node and click **Maintenance**.
2. In the details pane, under **Select Action**, click the **Online/Offline** option.
3. Click **OK**.

To initiate a test print page:

1. In the navigation pane, expand the device's node and click **Maintenance**.
2. In the details pane, under **Select Action**, click the **Test Print** option.
3. In the list under **Test Print**, click the type of information you want to appear on the test print page.
4. Click **OK**.

To reset a device:

1. In the navigation pane, expand the device's node and click **Maintenance**.
2. In the details pane, under **Select Action**, click the **Reset Printer** option.
3. In the list under **Reset Printer**, click the specific action desired.
 - **Reboot Printer** performs power-on initialization and flushes the buffers. I/O cards are reset. NVRAM is not changed.
 - **Reset to NVRAM** resets to the power-on state without doing normal power-on testing. I/O cards are not reset, and buffers remain intact.
 - **Reset to Factory Defaults** performs the same action as a Cold Reset performed from the front panel, except power-on tests are not performed.
4. Click **OK**.

Managing AppleTalk Properties**To display and change AppleTalk-related properties for a device:**

1. In the navigation pane, expand the device's node and the **Networking** node, and click **AppleTalk**.
2. In the **AppleTalk** list, click **Enable** to enable AppleTalk or **Disable** to disable it.
3. In the **Name** box, type the name of the print application.
4. Click **Apply**.

Managing TCP/IP Properties**To display and change TCP/IP-related properties for a device:**

1. In the navigation pane, expand the device's node and the **Networking** node, and click **TCP/IP**.
2. In the **TCP/IP** list, click **Enable** to enable TCP/IP or **Disable** to disable it.
3. In the **Configuration Source** list, click a method by which the device is to obtain its IP configuration.

Note: To select **Manual**, you must first select **BOOTP**.

4. In the **IP Address** box, type the device's IP address.
5. In the **Subnet Mask** box, type the subnet mask.
6. In the **Default Gateway** box, type the IP address of the default gateway.
7. In the **Timeout** box, type the number of seconds after which an idle connection is terminated.
A value of 0 disables the timeout.
8. Click **Apply**.

Managing IPX Properties

To display and change IPX-related properties for a device:

1. In the navigation pane, expand the device's node and the **Networking** node, and click **IPX**.
2. In the **IPX** list, click **Enable** to enable IPX or **Disable** to disable it.
3. In the **Frame Type** list, click a frame type.
4. In the **Token Ring Source Routing** list, click the desired source routing option.
5. In the **NDS PServer** box, type the PServer's name.
6. In the **NDS Tree** box, type the name of the PServer's tree.
7. In the **Polling Interval** box, type how often (in seconds) the server should check each queue for jobs.
8. In the **SAP Broadcast Rate** box, type the number of seconds between SAP broadcasts.
A value of **0** disables SAP broadcasts.
9. Click **Apply**.

Enabling or Disabling DLC/LLC

To disable or enable DLC/LLC and display the server address:

1. In the navigation pane, expand the device's node and the **Networking** node, and click **DLC/LLC**.
2. In the **DLC/LLC** list, click **Enable** to enable DLC/LLC or **Disable** to disable it.
3. Click **Apply**.

Displaying Diagnostic Details

For diagnosing network problems, the client provides details about network settings and activities.

To display diagnostic details:

1. In the navigation pane, expand the device's node, and click **Diagnostics**.
2. In the details pane, click the option you want information about.

Changing JetDirect Settings

To change JetDirect settings:

1. In the navigation pane, expand the device's node, and click **JetDirect**.
2. In the **Parallel Mode** list, click the operating mode of the parallel port.
3. In the **Handshaking** list, click the type of handshaking to be used for data transfer through the parallel port.
4. In the **Error Behavior** list, click the desired system response to errors.
5. In the **Status Page Language** list, click the PDL to be used for the status page.
6. Click **Apply**.

Running the Device's Host Utility

To use the device's embedded Web utility:

1. In the navigation pane, expand the device's node, and click **Host Utility**.
2. In the details pane, click **LAUNCH**.

Note: An error occurs in any of these cases:

- The specific device does not support this feature.
- The host utility is not properly installed and configured.
- The host's IP address is not reachable from the MetaConsole client.
- The **Network Address** box does not contain a valid IP Address or host name.

To install the device's driver, if available:

1. In the navigation pane, expand the device's node, and click **Host Utility**.
2. In the details pane, click **INSTALL**.