MetaConsole Client
User's Guide for Canon Devices version 2.0

Canon

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Contents

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 Canon devices for CA Unicenter NSM.

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 Canon devices. Chapter 1 introduces the client, and Chapters 2 and 3 contain instructions for using the client to manage the complete line of Canon imageRUNNER, imageCLASS and CLBP 460 PS devices.

Chapter 1.   About the Client

The MetaConsole client provides device management for the complete line of imageRUNNER, imageCLASS and the CLBP 460 PS 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 client 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 **Configuration** node for configuring high-level MetaConsole settings

  For information, see the MetaConsole for Unicenter 3.0 Getting Started Guide for Canon.

- A node for each MetaConsole server

  Each MetaConsole server node contains

  - A **Configuration** node for information related to that MetaConsole server

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

  - A node for each type of device that MetaConsole manages.

    The **Canon Devices** node contains

    - A **Configuration** node for configuring discovery and alarms related to Canon devices

      For details, see *Configuration* below.

    - A node for each Canon device

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

Configuration

The **Configuration** node for Canon devices includes

- **Help** – online help for the client and service provider
- **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 and poll rate 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, including active alerts and instructions for fixing problems

- **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 settings for various device features

- **Components** – hardware components and device features, including network interface type, disk size, amount of memory, resolution, and print speed

- **Maintenance** – commands to directly affect the device by taking it offline, resetting it, printing a test page, and so on

- **Networking** – settings specific to AppleTalk, TCP/IP, and IPX; information about the network interface; and details about the use of IP, TCP, UDP, ICMP, and SNMP protocols

- **Host Utility** – the embedded application on the device, if present

Device Icon

The background color of the device icon itself indicates the state of the device, which can be:

- Running — fully operational with no known error conditions

  Note: This icon is displayed if MetaConsole cannot determine the state of the device.

- Testing — in a testing state and not operational

- Warning — operational but in an unusual condition that might degrade functionality (for example, low toner)

- Down — not operational

State	CA Unicenter Map
Running	Green
Testing	White
Warning	Yellow
Down	Black

Chapter 2.   Configuring the Client

This chapter presents procedures for configuring the client's behavior regarding Canon 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 MetaConsole for Unicenter 3.0 Getting Started for Canon Guide.

At this level, you can configure

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

The Canon 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 **Canon 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 **Canon 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 **Canon 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 **Canon 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 **Canon 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 **Canon 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 **Canon 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 **Canon 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 **Canon 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 to Manage Devices

This chapter presents procedures for displaying and changing information about devices and network protocols. With the MetaConsole client, you can

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

Setting the Write Community String

The Write Community string is used while writing SNMP data to a device. You must set it correctly in order to change any device information.

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 the contact person's name, along with detailed status of device components.

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 each cassette's name, paper size, a rough approximation of the number of sheets contained, and status.

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 each tray's type.

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 details about each print data channel.

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 information about the device's color technology, if present.

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 information about the device's marking technology.

Setting the Device Name and Description

To modify a device's name and location and the contact person's and service person's names:

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 **Contact Name** box, type the name of the person to contact regarding the device.

5. In the **Contact Number** box, type the phone number of the contact person.

6. In the **Service Person Name** box, type the name of the device's service person.

7. Click **Apply**.

Enabling or Disabling Jam Recovery

To enable or disable jam recovery for a device:

1. In the navigation pane, expand the device's node and click **Settings**.

2. In the details pane, select or clear the **Jam Recovery** check box.

3. Click **Apply**.

Enabling or Disabling Queues

To enable or disable the direct queue, print queue, or hold queue for a device:

1. In the navigation pane, expand the device's node and click **Settings**.

2. In the details pane, select or clear the **Direct Queue**, **Print Queue**, or **Hold Queue** check box.

3. Click **Apply**.

Enabling or Disabling Automatic Printing of the Job Log

To enable or disable jam recovery for a device:

1. In the navigation pane, expand the device's node and click **Settings**.

2. In the details pane, select or clear the **Auto Printing** check box.

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 information including the device's network interface type, disk size, amount of memory, print resolution, print speed, and localization language and country.

Sending Maintenance Commands to the Device

The client assists you with these maintenance operations:

- Initiating a test print page

- Resetting network settings to their factory defaults

To initiate a test print page:

1. In the navigation pane, expand the device's node and click **Maintenance**.

2. In the details pane, click the **Test Print** option and **OK**.

To reset network settings to their factory defaults:

1. In the navigation pane, expand the device's node and click **Maintenance**.

2. In the details pane, click the **Reset Factory Defaults** option and **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**.

   In the details pane, the following information is displayed:

Name	The name of the print application.
Zone	The zone of the print application.
Address	The AppleTalk address in the format NNNN**:**OO**:**SS
	NNNN is the network number, OO is the node number, and SS is the socket number. For example: ff00**:**de**:**81

2. To change the phase type: In the **Phase Type** list, click a phase type, and then click **Apply**.

Managing TCP/IP Properties

The TCP/IP properties that are displayed can differ depending on the device model.

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 details pane, change the following settings as desired:

TCP Settings	
Enable TCP/IP	Select this check box to enable TCP/IP, or clear it to disable TCP/IP. (This check box might not be displayed.)
Frame Type	The frame type is displayed here, but you cannot modify it.
Configuration	Click in the list to select a configuration method for IP address information.
IP Address	Type the IP address of the printer controller.
Subnet Mask	Type the subnet address mask of the printer controller.
Gateway Address	Type the gateway address of the printer controller.
DHCP Server Address	(Only if your **Configuration** selection is DHCP) Type the IP address of the DHCP server.
Enable DHCP	(Only if your **Configuration** selection is DHCP) Select this check box to enable DHCP, or clear it to disable DHCP.
RARP Server Address	(Only if your **Configuration** selection is RARP) Type the IP address of the RARP server.
BOOTP Server Address	(Only if your **Configuration** selection is BOOTP) Type the IP address of the BOOTP server.
Enable BOOTP	(Only if your **Configuration** selection is BOOTP) Select this check box to enable BOOTP, or clear it to disable BOOTP.

SMB Settings	
(This section might not be displayed.)	
Enable SMB	Select this check box to enable SMB, or clear it to disable SMB.
Domain/Workgroup	Type the name of the SMB domain or workgroup.
Scope ID	Type the SMB scope ID.
SMB Server Name	Type the SMB server name.
Enable LM Announce	Select this check box to enable LM Announce, or clear it to disable LM Announce.
Name Server Settings	
Enable WINS Resolution	Select this check box to enable WINS resolution, or clear it to disable WINS resolution.
WINS Server	Type the name or IP address of the primary WINS server.
Node Type	Click in the list to select the node type.
Print Applications	
(This section might not be displayed.)	
Enable LPD	Select this check box to enable LPD, or clear it to disable LPD.

3. Click **Apply**.

Managing IPX Properties

The IPX properties that are displayed can differ depending on the device model.

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 details pane, change the following settings as desired:

Enabled Frame Type(s)	
Select or clear check boxes to enable or disable frame types, or in the **Mode** list, click the frame type to enable . (Selection method depends on device model.)	
Print Application	
(This section might not be displayed.)	
Mode	Click in the list to select a print application.
NDS	
Tree Name	Type the name of the PServer's tree.
Context	Type the name of the PServer's context.
PServer	Type the PServer's name.
Password	Type the PServer password.

Bindery (This section might not be displayed.)	
Binderies	Click to select a bindery.
Clear	Click to clear the File Server, PServer, and Password boxes.
File Server	Type the name of the file server where the PServer is located.
PServer	Type the PServer's name.
Password	Type the password required for logging in to the file server.

3. Click **Apply**.

Displaying Network Interface Information

To display information about the network interface:

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

The details pane displays facts about the network interface, including network topology, the device's physical address, and the total octets transmitted and received.

Displaying Protocol Diagnostic Details

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

To display diagnostic details:

→ In the navigation pane, expand the device's node, the **Networking** node, and the **Protocol Diagnostics** node, and click the node for the desired protocol.

The details pane displays statistics about network traffic.

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.