



HP WEB JETADMIN

Columns and Filters Detail

CONTENTS

Overview	2
Feature Navigation and Control.....	2
Obsolete Columns.....	5
Examples	5
Viewing and Using HP Web Jetadmin's Device Data.....	6
Exporting HP Web Jetadmin's Device Data	7
Viewing & Filtering Device Configuration Details	9
Counters Category – Viewing Page Counts	10
Impressions Counting.....	10
Print Usage Counter Selection.....	11
Print Usage Counters vs. Print Sheet Counters	12
Older HP Device Models and Print Counters	13
Engine Cycle Count.....	13
Counter Examples	14
Supplies Column Category	16
using HP Web Jetadmin Filtering.....	17
Filtering Complex Device Details	17
Gotchas	21
Summary.....	21
Appendix A—Naming schema	22

OVERVIEW

HP Web Jetadmin has many columns that can be displayed in device lists and are settable criteria elements within filtering features. As of HP Web Jetadmin 10.2 Service Release 5, many improvements and changes have been made in this area. This document focuses generally on the Columns and Filters functionality for HP Web Jetadmin 10.2 Service Release 5 and later.

FEATURE NAVIGATION AND CONTROL

The navigation and option changes for the Device List Columns, Filters, and Exporting features are among the first things you will notice when using HP Web Jetadmin 10.2 Service Release 5 and later. HP has changed many of the related device data elements and has added new navigation controls that ease navigation of many data elements. Let's focus on the new **Select Columns** user interface first. Finding the **Select Columns** interface can be done by right-clicking on any HP Web Jetadmin device list header. Simply select the **Customize** option in the list (not shown). In Figure 1, note the absence of the **Source** control (used in older HP Web Jetadmin versions and provided **Basic**, **Standard**, and **Advanced** column selection). **Source** has been replaced by the new **Category** control (Figure 1), which contains three main selection items—**Favorites**, **All**, and **Obsolete**. Here is a summary of each:

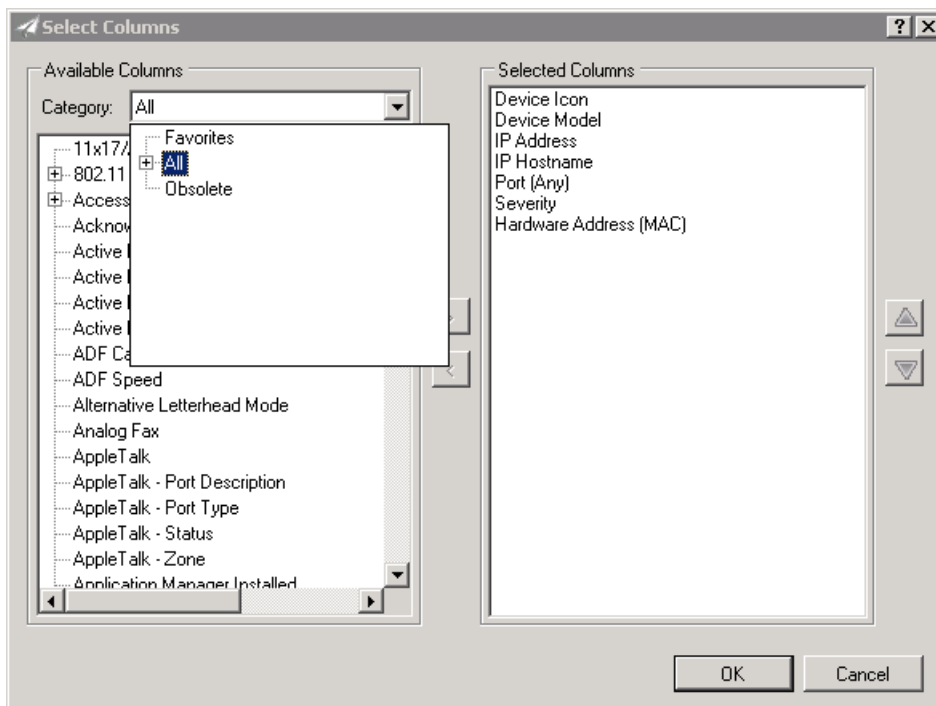


Figure 1 – Select Columns interface with categories

- **Favorites** – Shows a static list of the most frequently used device management attributes. **Contact Person**, **Device Firmware Version**, and **Last Communication** are among the many available choices.
- **All** – Shows all top-level device and non-device Column items. These can be expanded to view sub-columns. Sub-columns or properties are discussed later in the document.
- **Obsolete** – Shows column items that will eventually be removed from the HP Web Jetadmin software. **Obsolete** is discussed later in the document.

Category **All** is shown selected in Figure 1. Note that the **Available Columns** list is populated with all top-level elements (columns) and that certain columns exist with an expand control (+ symbol in a box) that allows the user to view and select even more columns or sub-properties of the top-level element.

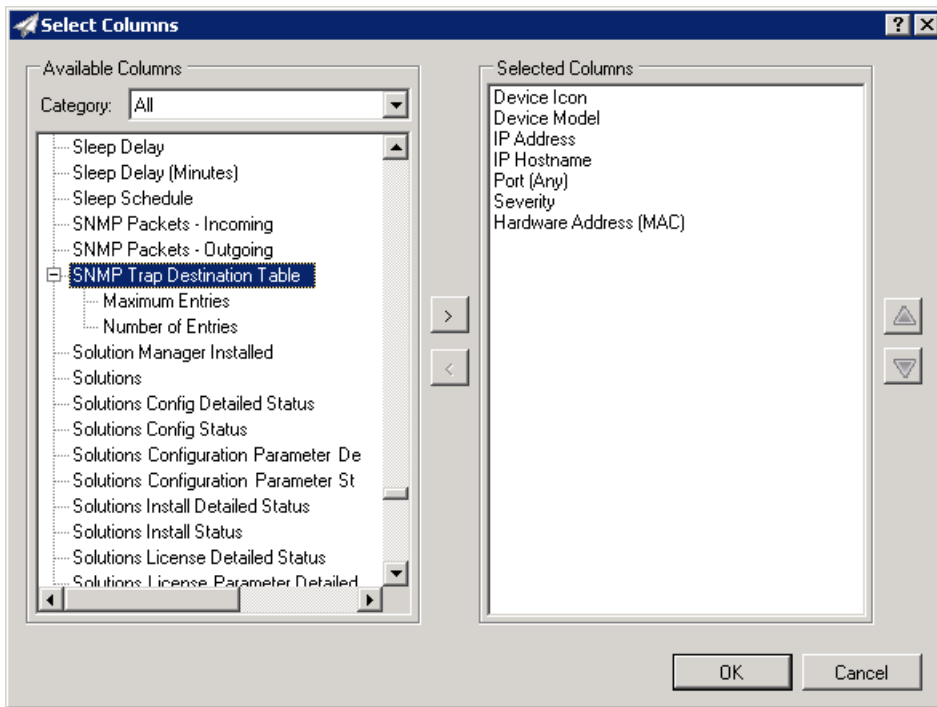


Figure 2 – Select Columns, SNMP Traps Destination Table

In Figure 2, the expanded **SNMP Traps Destination Table** configuration element is shown with two columns beneath it. The **Maximum Entries** and **Number of Entries** columns allow viewing specific properties of the HP Jetdirect SNMP Trap Destination Table. These more complex properties can be found under many top-level elements (columns) throughout the **Available Columns** selection. Complex columns are discussed later in this document.

Filters is another area that changed in HP Web Jetadmin 10.2 Service Release 5. To view the filters control, simply choose the **Filters** menu on any HP Web Jetadmin device list and select **New**. Once in the **Filter Editor** interface, click **Add** to activate the **Function** interface (Figure 3).

In this interface, note the new **Category** drop-down menu. This replaces the older **Advanced**, **Standard**, and **Basic** selection items that were available in older versions of HP Web Jetadmin. The new selections in the **Category** menu are **Favorites**, **All**, and **Obsolete**. Note that any item in the **All** sub-category allows selection of categorized items under the **Device Properties** listing.

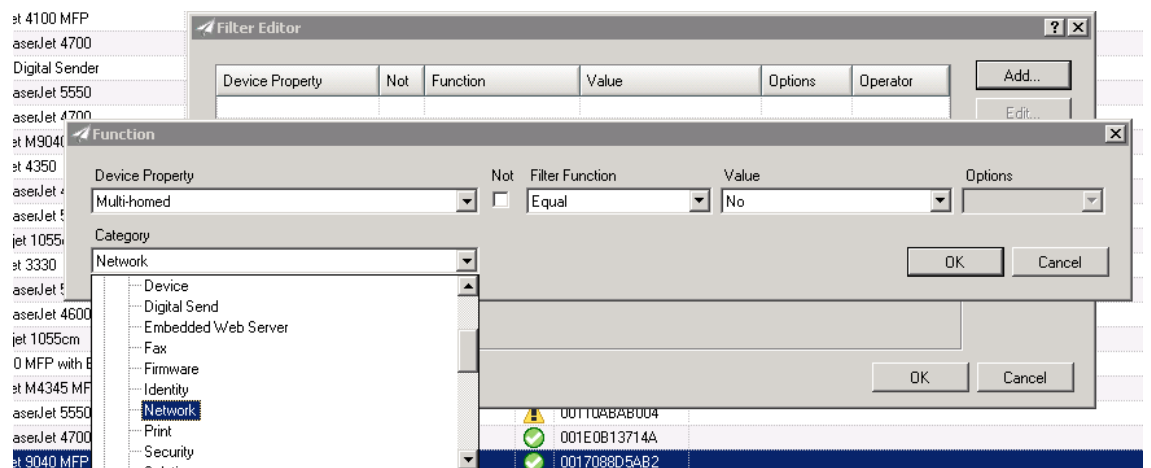


Figure 3 – Filter Editor, Add, Function, Network category selection

Many device properties now contain sub-selections that are not available in HP Web Jetadmin device list columns. In Figure 4, observe the **SNMP Trap Destination Table, All Entries** item selection under **Device Property**. **All Entries** represents the actual content of the SNMP Trap Destination Table at the device. This is the case for device properties that are complex or have a table characterization, as is the case with SNMP Trap Destination Table. This provides a way to filter on a specific table-state, such as **Is List Full**. In previous versions of HP Web Jetadmin, complex regular expressions were needed to detect these states in device filtering.

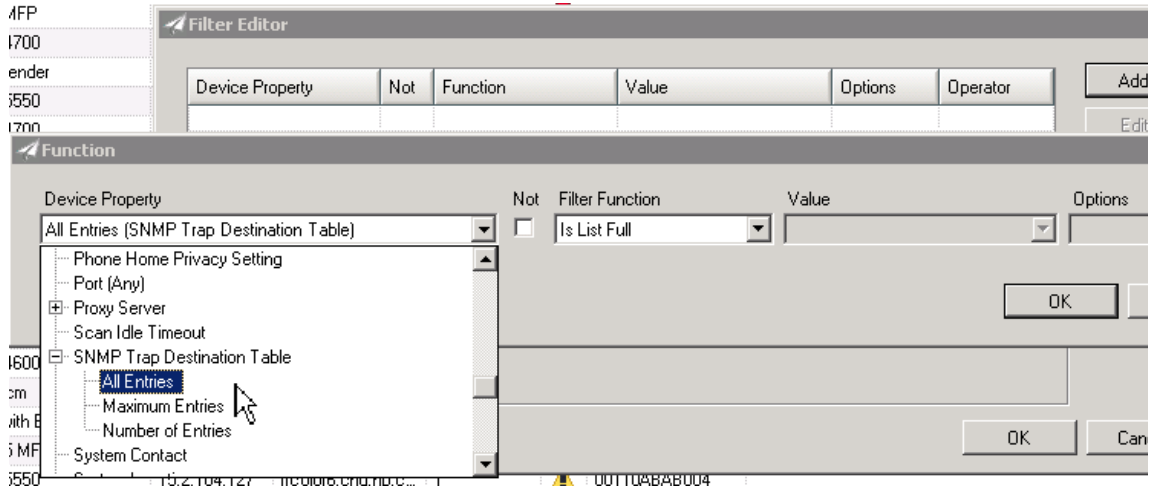


Figure 4 – Filter Editor, Add, Function, shows SNMP Trap Destination, All Entries selection

NOTE Additional details regarding All Entries can be found in the section named *Filtering Device Table Details* later in this document.

Finally, the **Export Devices** interface is yet another area where new columns properties can be found. Export can be activated from any HP Web Jetadmin device list selection. Simply right-click the selection and select **Export** from the resulting list. **Export Devices** (Figure 5) uses the same categories as filters and columns selection interfaces. After a category is selected, the various device data elements and their sub-properties appear in the resulting list. These elements can be selected as export items to be pushed to email, storage, or SQL database views. More export detail and functionality is covered later in this document.

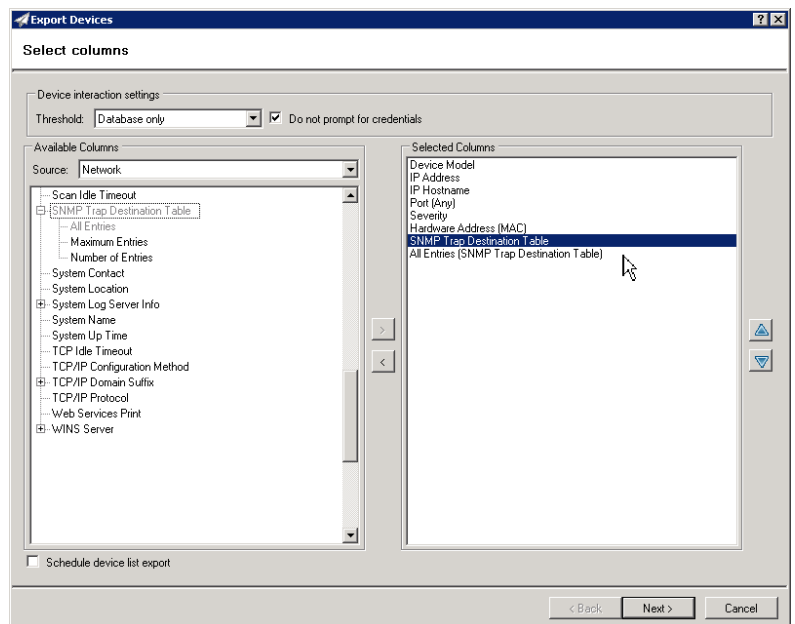


Figure 5 – Export Devices column selection

Obsolete Columns

Many columns in HP Web Jetadmin 10.2 Service Release 5 and later have been categorized as *obsolete*. These columns continue to exist and also function, but will be removed from the software in a future revision (not yet determined). These columns are now located in the **Obsolete** category within HP Web Jetadmin selection interfaces. There are two primary reasons for a column being categorized as obsolete:

- The column no longer has value or is not supported by HP in many current or future products
- The column has been replaced by a new column for various reasons

The second point is true in the majority of cases where columns have been categorized as obsolete for two reasons. First, complex device details have been improved in newer columns with far better functionality. The old (obsolete) column continues to exist and function, but the new column should be strongly considered as a replacement (see the note in the following Examples section). Second, new HP device functionality created a need for column improvements and older HP device functionality has been programmatically bridged into the new column item.

Examples

All of the device usage metrics have been merged into HP Web Jetadmin's newer **Counters** columns and have been moved into the **Obsolete** category. Supplies is another area where an improved column and sub-properties feature provides far better functionality than older, individual supplies columns.

Use the **Select Columns** interface (shown in Figure 6) to understand obsolete columns. Also, obsolete column categorization is noted in other places, such as the HP Web Jetadmin device list column headers and the filter or export interfaces.

When a column has a replacement, the notation available in these areas includes the new column replacement name as shown in Figure 6.

NOTE HP will continue to make obsolete columns available for the next few releases so that administrators and others can continue to rely on them in device lists, filtering, and exporting features. HP will remove these in a future release (to be determined) and will give notice through regular support documentation when these changes occur.

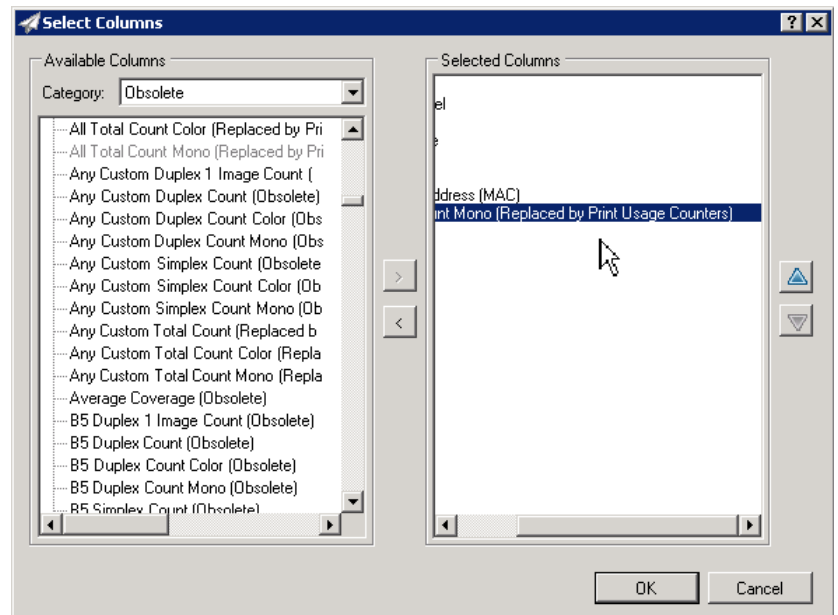


Figure 6 – Select Columns showing an obsolete column selection with a “replaced by” notation

VIEWING AND USING HP WEB JETADMIN'S DEVICE DATA

Newer versions of HP Web Jetadmin (version 10.2 Service Release 5 and later) offer device details through both parent columns and sub-columns. Device details have been placed into this properties-based feature set to make finding columns and acquiring data much easier. In this section, we will look at viewing these details in HP Web Jetadmin device lists and exporting the data to both XML and CSV formats.

Exporting simple device list detail has always been accessible via the HP Web Jetadmin **Device Export** features or via a simple copy command, such as Ctrl-C, on a single or multidevice list entry.

Here is an example of simple device list detail in the comma separated value (CSV) format:

```
"DeviceIcon", "DisplayName", "IPHostname", "LastCommunicationTime", "LastDiscoveryTime", "DeviceStatusSeverity"
"<Not Exportable>", "HP LaserJet M4345 MFP", "NPIA582EC", "12/27/2010 11:11 AM", "12/22/2010 9:11 AM", "Ready"
```

Note that the values are all surrounded by quote characters and are separated by comma delimiter characters. Also note that that header names are HP Web Jetadmin programmatic names rather than the localized names used in device list column headers.

The way complex items are displayed in lists changed in HP Web Jetadmin 10.2 Service Release 5. Note the small magnifying glass icon in Figure 7 that indicates the presence of complex data held within the individual device list cell. In this case, we are showing **Send To Network Folder** settings on an HP MFP model where two folders have been configured to store scanned content.

Device Model	IP Hostname	Send To Network Folder	Last Communication	Last Discovered	Sev
HP LaserJet M4345 MFP	NPIA582EC	Enabled (2 folders)	12/27/2010 10:00 A.	12/22/2010 9:11 AM	Ready

Alias Name	Folder Path	FTP Server	FTP Command Port	FTP Path	User Name	Domain	Enable Default File Name Pr	File Name Prefix	Create Directory Based On	...
Folder_1	\\server\Folder_1	<Not supported>	<Not supported>	<Not supported>		oufDom	SendToNetworkFolderEna...		SendToNetworkFolderCre...	...
Folder_2	\\server\Folder_2	<Not supported>	<Not supported>	<Not supported>		oufDom	SendToNetworkFolderEna...		SendToNetworkFolderCre...	...

Figure 7 – Complex column details exposed in device list tool tip feature

Holding the mouse cursor over the complex column device list cell causes underlying details to appear in a tool tip. Figure 7 shows the actual folders and their settings as configured on the HP MFP device.

NOTE Many newer HP models, such as the CM4540 MFP or CP5225 Series, protect device details with the Embedded Web Server password credential. When this password is activated on the device, many details could appear as **<Unknown>** in HP Web Jetadmin columns and elsewhere. HP Web Jetadmin must have this password saved in its credentials store for it to authenticate and get device details. Use the HP Web Jetadmin **Status** column and look for the message **<Credential Failure>** to determine if a password is needed. If a password is needed, right-click the device in any device list and choose **Update credentials... Tools, Options, Credentials** functionality can also be used to update device passwords as they are discovered. See the *HP Web Jetadmin Security* document for more information.

EXPORTING HP WEB JETADMIN'S DEVICE DATA

HP Web Jetadmin makes it possible to export device data to a file on the local client hard-drive, to an email, or to a specific hard-drive location on the HP Web Jetadmin server. One way to initiate an export through any device list selection is to right-click and select **Export**. Through the resulting dialogues (not shown), the user can export the top-level list details to CSV or XML file formats. The user can specify either a straight export from the HP Web Jetadmin/SQL tables or specify the amount of time allowed before HP Web Jetadmin queries the device directly. The user can even direct the export to store data in a number of locations, including email. One way to export these details is to right-click from a device list. Another way to initiate this operation is to go to **Tools, Export Devices** on the menu bar (not shown).

Let's discuss the different types of device data that HP Web Jetadmin offers. Device details within columns can be described as either *simple* or *complex*. A simple column is best thought of as one column to one value per device. An example of this is **Engine Cycle Count**. In this case, one device column cell for a specific device is always just one value such as 1509. As described previously, complex columns contain an *overview* value and additional details that can be displayed by using the tool-tip feature. An overview value could be an overall total, such as the **Supplies** column described previously. Here the value represents the total number of specific supplies within a given device. Then underneath the **Supplies** column, the user can find many specifics about supplies, such as part numbers, levels, and serial numbers. Complex columns always have a magnifying glass icon as part of their column header.

NOTE Exporting directly to HP Web Jetadmin/SQL tables, which are known as *Views*, is not covered in this document. See the white paper titled *Database Views in HP Web Jetadmin* at www.hp.com/go/wja.

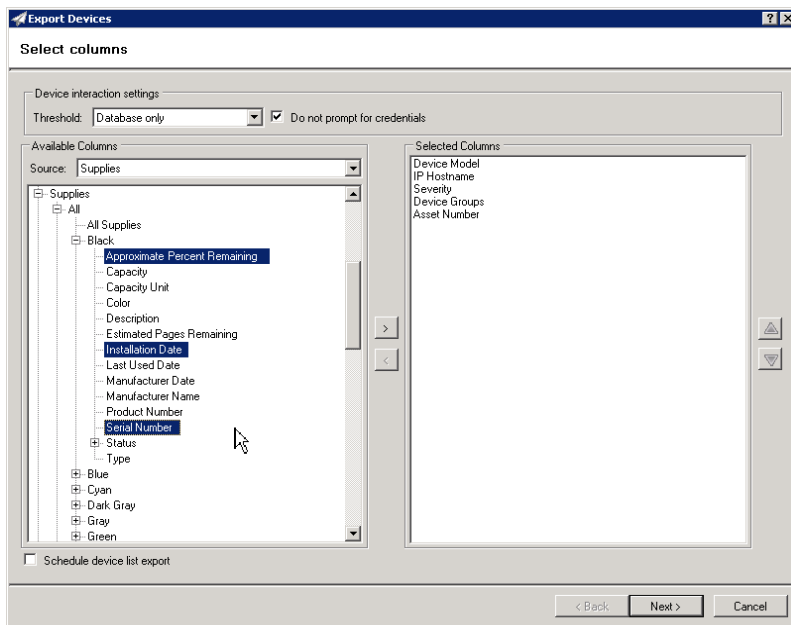


Figure 8 – Select Columns for Export

When exporting the details from a column such as **Supplies**, the user must use **Select Columns** (shown in Figure 8). Notice that the user has bypassed the top-level column **Supplies** and drilled down to specific elements of interest: **Approximate Percent Remaining**, **Installation Date**, and **Serial Number**.

The resulting exported data could appear as shown in Figure 9. This illustrates CSV data opened in a spreadsheet application such as Microsoft Excel. Note that the column header names are represented by the programmatic names.

NOTE Exporting elements from complex or parent columns is a change from earlier releases of HP Web Jetadmin where complex details were rendered in delineated formats. The newer exporting features greatly simplify these operations and result in a more basic data format.

	A	B	C
1	Supplies.All.Black.ApproxPercentRemaining	Supplies.All.Black.InstallDate	Supplies.All.Black.SerialNumber
2	74	9/8/2010 0:00	16850952

Figure 9 – Complex Supplies Export

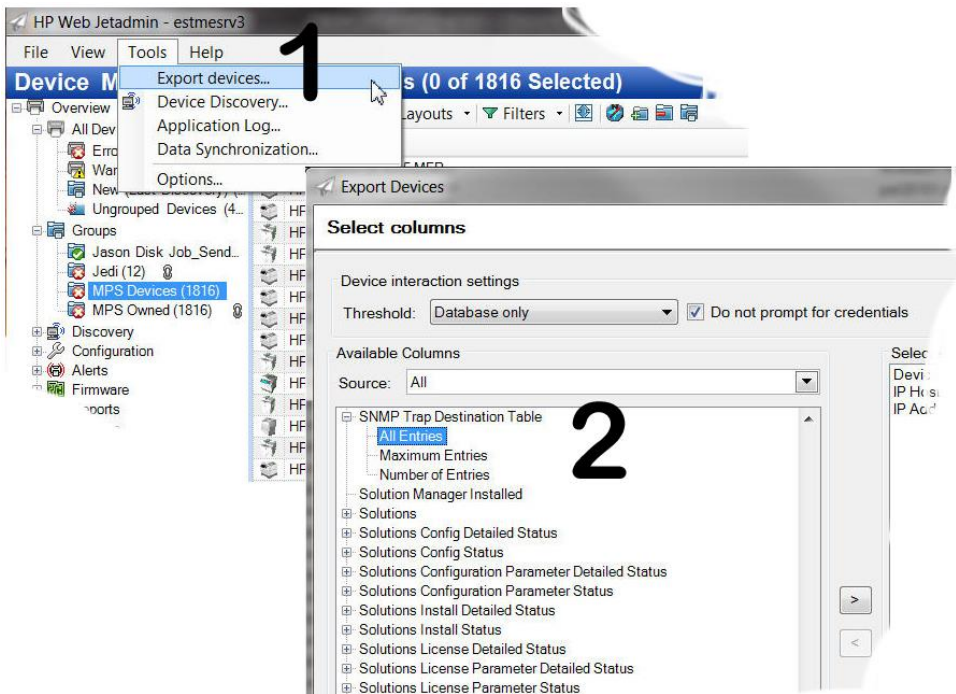


Figure 10 – Tools, Options Exporting SNMP Traps Table, All

```

- <Devices>
- <Device>
  <DisplayName>HP Color LaserJet 4700</DisplayName>
  <IPHostname>ros04085.rose.hp.com</IPHostname>
  <TrapTable>4 of 5</TrapTable>
- <TrapTable.Items>
- <TrapTableEntry>
  <Slot>1</Slot>
  <IPAddress>192.168.88.59</IPAddress>
  <FQDN />
  <Port>27892</Port>
  <Community>wja</Community>
</TrapTableEntry>
- <TrapTableEntry>
  <Slot>2</Slot>
  <IPAddress>192.168.162.16</IPAddress>
  <FQDN />
  <Port>27892</Port>
  <Community>wja</Community>
</TrapTableEntry>
- <TrapTableEntry>
  <Slot>3</Slot>
  <IPAddress>192.168.103.84</IPAddress>
  <FQDN />
  <Port>27892</Port>
  <Community>wja</Community>
</TrapTableEntry>
- <TrapTableEntry>
  <Slot>4</Slot>
  <IPAddress>192.168.107.225</IPAddress>
  <FQDN />
  <Port>27892</Port>
  <Community>wja</Community>
</TrapTableEntry>
</TrapTable.Items>
<LastCommunicationTime>12/27/2010 9:33 AM</LastCommunicationTime>
<FirstDiscoveryTime>12/22/2010 9:11 AM</FirstDiscoveryTime>
<LastDiscoveryTime>12/22/2010 9:11 AM</LastDiscoveryTime>
<PortDisplayString>1</PortDisplayString>
<DeviceStatusSeverity>Ready</DeviceStatusSeverity>
<MacAddress>0014388E2733</MacAddress>
</Device>
</Devices>

```

Figure 11 – XML Formatted Export, SNMP Traps Destination Table

Some complex columns exist in a tabular form and provide no clear way of selecting specific instances or settings within the complex detail. The **SNMP Traps Destination Table** column is a good example of a complex column of this type. In this case, the only selectable complex column details are **Maximum Entries** and **Number of Entries**. The entries themselves are not selectable due to the potential variety of SNMP trap tables available in HP Jethdirect print servers. In the case of the Traps Destination Table, we must use the **All Entries** column (shown in Figure 10).

NOTE The **All Entries** column item is only found in the **Tools, Export devices** feature on the HP Web Jetadmin menu bar. While the actual contents of the SNMP Trap Destination Table can be viewed as a tool-tip from a device in an HP Web Jetadmin device list, the contents can only be exported via the **Tools, Options** feature as shown in Figure 10.

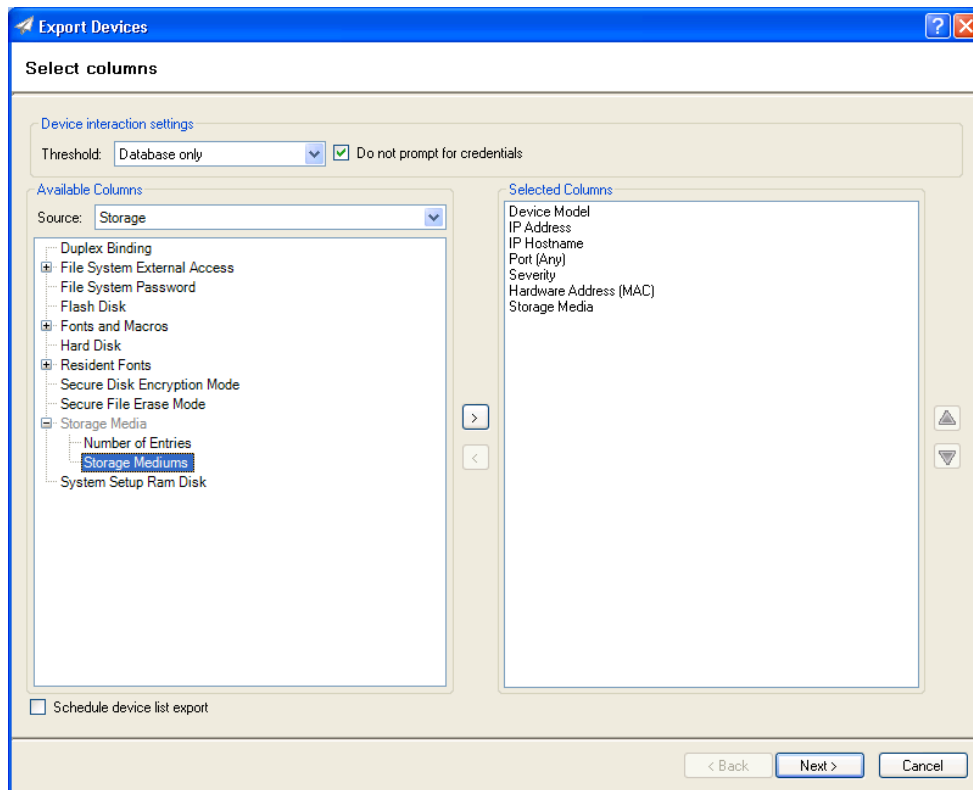
Exporting tabular details is probably best done with the XML file format. Notice in Figure 11 that the XML details can be easily read and that **TrapTable.Items** shows the actual content of the device's Trap Destination Table. By observing the top level item **TrapTable**, you can understand that four of the five possible entries are being used in this case. Of course, this same detail can be exported to CSV format, but the actual contents of the Trap Destination Table remains in XML format between quotes within a comma-separated cell.

Notice that in some cases what is viewed in a complex column by hovering over the column is not necessarily exported as such. For example, if the column for Storage Media is enabled and subsequently exported, all that will be exported is the high level integer value for Storage Device Count, not the complex information that would be viewed when hovering over the value in the column. In order to export that information, start the export wizard and drill down to the Storage Media column. Another selection will be visible

here that isn't visible when adding regular columns called Storage Mediums. Adding this column to the export will include all the complex data that is seen when hovering over the value in the column.

Storage Media	
Storage Device count: 1	
Storage Device count: 1	
Storage Device count: 1	

Storage Media							
Number of Entries: 1							
Storage Mediums:							
Description	Capacity	Used	Read/Write	Media Type	Enabled	Data Content	Encryption Status
Disk in EIO 3	77,867,296	139,168	Read/Write	HardDisk	Yes	<Not supported>	Not Encryptable



VIEWING & FILTERING DEVICE CONFIGURATION DETAILS

HP Web Jetadmin is capable of showing many different device configuration attributes and settings values in device list columns. These device settings can also be used in filtering to allow filtered device lists, automatic grouping, and group policies automation. As of Service Release 5, users should be aware of changes that have been made to device settings columns.

First, a number of newer device configuration elements have been devised to support both newer and older HP device models. This change is due to newer functionality that exists on newer devices that can be mapped from older device configuration elements. In this case, the older device configuration element is now labeled with a "replaced by" statement and will continue to function on both configurations and as a display feature within columns. But, the older element only functions on older devices, not on newer devices.

Second, device details in HP Web Jetadmin 10.2 Service Release 5 underwent a good deal of improvement and simplification. In doing this, HP has created another set of configuration items with the “replaced by” label. Again, these items can be found in the **Obsolete** category in the **Columns Selection** interface.

Here are just a few examples of device settings columns with “replaced by” labeling:

- **SLP Config (Replaced by Network Enable Features)**
- **Default Sign-in Method (Replaced by Access Control for Device Functions)**
- **Fax Send - Setup (Replaced by Fax Send Settings)**

A complete listing of these types of columns is available in the Appendix portion of this document.

COUNTERS CATEGORY – VIEWING PAGE COUNTS

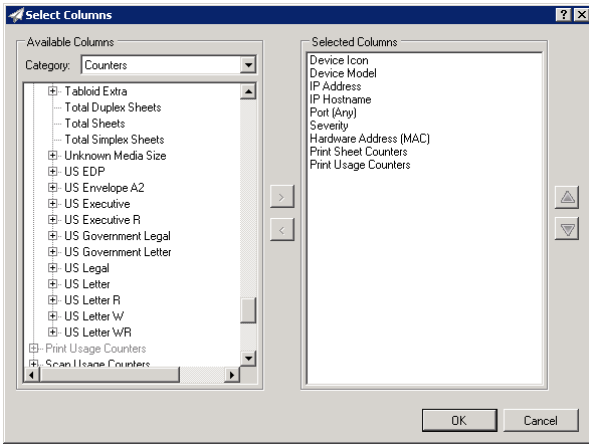
New columns were added in HP Web Jetadmin 10.2 Service Release 5 to separate sheet counting from impression counting. Newer HP devices, such as FutureSmart, started counting in impressions to improve accuracy of billing for color vs. mono. In addition, older printers with recent firmware have the ability to switch to counting impressions instead of sheets.

Impressions Counting

HP has enabled impressions counting on newer device models and optionally on older device models, depending on the firmware revision, to more accurately reflect the usage of a printer’s engine. Simply put, one impression is a printed side of a sheet of print media or paper. The word *printed* is key because sides of sheets where the print engine does not create any print or image are not counted as impressions. A counter named **Blank Impressions** exists (newer HP models only) to count sides of sheets that passed through a printer’s engine without having an image printed on them. Impressions counters measure actual printing rather than simply the number of sheets that pass through the print engine. For example, a duplex sheet that passes through the engine and acquires print on each page side is equal to two *impressions*. As another example, a duplex sheet that passes through the engine and does not acquire print on either side is equal to zero *impressions* and is also equal to two *blank impressions*. **Blank Impressions** counting is available only on newer HP models. The real benefit of impression counting is to more accurately count color vs. mono printing.

By default, newer HP device models, such as the HP LaserJet Enterprise CM4540 MFP series and HP Color LaserJet Enterprise CP5520 Printer series, count impressions. HP Web Jetadmin 10.2 Service Release 5 uses these new counters in the **Print Usage** portion of HP Web Jetadmin columns and in **Reports**. Many HP device models had the **Duplex Impressions** counting feature added to firmware revisions after their initial release. The **Duplex Impressions** feature is configurable from within HP Web Jetadmin to change the device count behavior and also asks that you acknowledge or opt-in to using impressions-based counting. More information can be found by reviewing the HP white papers titled *Impression Counting in HP Web Jetadmin* and *HP LaserJet Multifunction (MFP) and Single Function Series Products – Changes to the Usage Pages for “Print Usage Tracker”*. Both white papers can be found by searching www.hp.com/support.

NOTE Enabling Duplex Impressions is not a reversible option. Please evaluate all details carefully before enabling this option.



Print Usage Counter Selection

As discussed previously in the Feature Navigation and Control section, HP Web Jetadmin 10.2 Service Release 5 has organized column detail so that it is easier to find and understand. This is true with the many usage counters now presented through the new Counters section in both columns and filtering tools. Figure 12 shows the columns selection tool with items under **Print Sheet Counters** exposed. Note that many items under the **Print Sheet Counters** and **Print Usage Counters** parent counters can be expanded by clicking the “+” symbol to show sub-properties. Any of these items and their respective sub-properties can be enabled in a device list and viewed as individual counters.

Figure 12 – Select Columns, Print Usage Counters

A simple rule with these counters is that the expandable items are device-based counters and may or may not be supported on the device, depending on the firmware and/or device model. Under **Print Sheet Counter**, find the following sub-items:

- **Total Duplex Sheets**
- **Total Sheets**
- **Total Simplex Sheets**

These items always reflect the total sum of all sub-items. The same is true for the other counter types, including **Print Usage Counters**. Again, each of the sub-items that can be expanded via a “+” symbol are a device-based counter that is based on the actual property supported at the device. These items include the following:

- **Total Color Impressions**
- **Total Equivalent Impressions**
- **Total Impressions**
- **Total Mono Impressions**

All of these items capture the totals from all of the sub-properties available at the device. **Total Blank Impressions** is one exception to this rule. This counter is device-based and is supported on devices that truly count impressions. Remember, a blank impression is simply a side of a page that passed through the print path without receiving a print impression. These counters are more easily understood when viewed through the device list as shown in the next section.

Print Usage Counters vs. Print Sheet Counters

HP Web Jetadmin 10.2 Service Release 5 implemented two major print counter columns—**Print Usage Counter** and **Print Sheet Counter**. Let's focus on the **Print Usage Counter** column first. The **Print Usage Counter** column can be activated in any device list through the **Layouts** feature or by simply accessing **Customize** through the right-click menu on any column header. Figure 13 shows the **Print Usage Counter** column enabled with the complex column data exposed via a tooltip that was activated by holding the mouse cursor over the **Print Usage** list value for a particular device.

Device Model	IP Hostname	Print Sheet C	Print Usage C
HP Color LaserJet CM4540 MFP	finshowroom20.fi...	392	531
HP Color LaserJet CM4540 MFP	NPI7F501E	<Unknown>	<Unknown>
HP Color LaserJet CM4540 MFP	<Unknown>	<Unknown>	<Unknown>
HP Color LaserJet CM4540 MFP	npi34abe1.ameri...	159	
HP Color LaserJet CM4540 MFP	sgp25pit6009.sg...	<Unknown>	<Unknown>
HP Color LaserJet CM4540 MFP	NPIE68060	1,378	
HP Color LaserJet CM4540 MFP	ipg14.aut.hp.com	<Unknown>	<Unknown>
HP Color LaserJet CM4540 MFP	cda0063.boi.hp.c...	0	
HP Color LaserJet CM4540 MFP	npic92ae9.ameri...	<Unknown>	<Unknown>
HP Color LaserJet CM4540 MFP	hwtest75.boi.hp...	24,731	
HP Color LaserJet CM4540 MFP	npi3381fd.americ...	29	
HP Color LaserJet CM4540 MFP	ts10196.boi.hp.c...	5,683	
HP Color LaserJet CM4540 MFP	hwtest2-222.boi...	3,271	

Print Usage Counters					
Total Impressions:		531			
Total Equivalent Impressions:		531.00			
Total Color Impressions:		128			
Total Mono Impressions:		403			
Total Blank Impressions:		5			
All Media Sizes:					
Media Size	Unit charge	Total Impressions	Total Equivalent Impression	Blank Impressions	Color
Envelope Monarch	0.30	0	0.00	0	0
Envelope C5	0.60	0	0.00	0	0
Envelope DL	0.40	0	0.00	0	0
Envelope B5	0.70	0	0.00	0	0
Envelope C6	0.30	0	0.00	0	0
Custom	1.00	0	0.00	0	0
Any Custom	1.00	0	0.00	0	0
A4 (Rotated)	1.00	0	0.00	0	0
US Government Legal (8.5...	1.10	0	0.00	0	0
Totals	<Not supported>	531	531.00	5	403

Figure 13 – Print Usage Counter

There are several things to note about the data in Figure 13. A device that supports *impressions* counts is shown displaying a number of total values from the list of media counts. The **Total Impressions** value reflects the number of media sides that received print. The **Total Equivalent Impressions** value uses the **Unit Charge** value that reflects an engine cycle media size use factor. The **Total Color** and **Total Mono Impressions** values reflect whether the print is a color or monochrome impression. As stated in the previous section, the **Total Blank Impressions** value represents a count of blank page sides where no image was printed.

The **Print Sheet Counters** column reflects device print path operations and shows **Simplex**, **Duplex**, and **Total** values. Sheet counting does not take into consideration the number of images created in print. Rather, it shows how many pages passed through the device paper path and whether they were processed in simplex or duplex mode. Figure 14 (next page) shows the **Print Sheet Counters** column enabled with detailed information exposed through a mouse cursor activated tooltip.

Device Model	IP Address	IP Hostname	Port (Any)	Se	Hardware Addr	Print Sheet	Print Usage	Device Location	System Contact
HP Color LaserJet CM4540 MFP	16.88.108...	ts10196.boi.h...	1	1	1CC1DEC93A...	2,815	2,952		
HP Color LaserJet CM4540 MFP	16.88.115...	hwtest2-222.b...	1	1	F4CE4651A7F...	1,047	1,100		
HP Color LaserJet CM4540 MFP	15.5.162.2...	coral-xp-v21-c	1	1	005056B51E6A				
HP Color LaserJet CM4540 MFP	15.5.162.86	coral-xp-v21-a	1	1	005056B56637				
HP Color LaserJet CM4540 MFP	15.5.163.97	coral-xp-br2-n	1	1	005056B53C2C				
HP Color LaserJet CM4540 MFP	15.5.162.2...	coral-xp-br2-m	1	1	005056B57E4C				
HP Color LaserJet CM4540 MFP	15.5.162.1...	coral-xp-v21-b	1	1	005056B524A3				
HP Color LaserJet CM4540 MFP	15.5.161.46	NPI7EDD2F	1	1	00237D7EDD...	<Unknown>			

Print Sheet Counters			
Total Sheets:	2,815		
Total Simplex Sheets:	2,510		
Total Duplex Sheets:	305		
All Media Sizes:			
Media Size	Total Sheets	Simplex Sheets	Duplex Sheets
US Government Legal...	0	0	0
Envelope C6	0	0	0
Envelope C5	0	0	0
B5 (JIS 182x257 mm)	0	0	0
Envelope #10	0	0	0
Index Card (5x8 in)	0	0	0
Statement (5.5x8.5 in)	0	0	0
Custom	0	0	0
Index Card (5x7 in)	0	0	0
Totals	2,815	2,510	305

Figure 14 – Print Sheet Counters

The **Print Usage Counters** and **Print Sheet Counters** columns are available on newer HP devices and provide a good deal of accuracy. The HP LaserJet Enterprise CM4540/M4555 MFP series and

HP Color LaserJet Enterprise CP5520 Printer series devices all provide impressions-based counts along with sheet-count capabilities.

Older HP Device Models and Print Counters

HP devices, such as the HP Color LaserJet CM4730 or HP LaserJet M4345, are capable of providing sheet or impressions counts, depending on the firmware revision and the **Duplex Impressions** feature setting. Duplex Impressions, when enabled, forces the device to count only impressions, not sheets. If this feature is enabled, **Print Sheet Counter** is marked <Not supported> and only **Print Usage Counter** reflects device impression values.

If the **Duplex Impression** feature is not enabled, HP Web Jetadmin displays values for both **Print Sheet Counter** and **Print Usage Counter**. And, if this feature is enabled, the **Print Usage Counter** reflects the **Simplex** page count plus the **Duplex** page count multiplied by 2. If this feature is enabled, the value reflected in **Print Usage Counter** is only an approximate impressions count because the device and HP Web Jetadmin do not factor blank impressions into the value. This is due to the older HP device not supporting **Blank Impressions**.

Note the example in Figure 15 (next page). A device list has the **Print Sheet Counters**, **Print Usage Counters**, and **Duplex Impressions** columns enabled. We have used a mouse cursor activated tooltip to show the **Print Usage Counter** details for an HP Color LaserJet CM6040 device that has **Duplex Impressions** enabled. Note that **Print Sheet Counter** reflects <Not supported>, which is true for any device where the **Duplex Impressions** feature is enabled. In this case, the device is set to count impressions and is no longer capable of counting sheets.

Device Model	IP Hostname	Print Sheet C	Print Usage Counters	Duplex Impressions																																																																																				
HP LaserJet 9050 MFP	suo04p027.bbn...	<Not supported>	761,011	Enabled																																																																																				
HP LaserJet 9040 MFP	nyo0101002.nyo...	<Not supported>	689,169	Enabled																																																																																				
HP Color LaserJet CM6040 MFP	mno01017.ita.hp...	<Not supported>	118,501	Enabled																																																																																				
HP CM8060 MFP with Edgeline	npi8dbc5f.vcd.hp...	<Not supported>	Print Usage Counters																																																																																					
HP Color LaserJet CM6040 MFP	frr01005.fra.hp.c...	<Not supported>	Total Impressions: 118,501																																																																																					
HP Color LaserJet CM6040 MFP	soo034p4.swe.h...	<Not supported>	Total Equivalent Impressions: 124,771.60																																																																																					
HP LaserJet 4350	iwf01aglhp02.ind...	<Not supported>	Total Color Impressions: 76,427																																																																																					
HP LaserJet P4015	NPI47DBF3	<Not supported>	Total Mono Impressions: 42,074																																																																																					
HP LaserJet M5035 MFP	NPID1080C	<Not supported>	Total Blank Impressions: 0																																																																																					
HP LaserJet M9050 MFP	czeprl23.cze.hp...	<Not supported>	All Media Sizes:																																																																																					
HP LaserJet M4345 MFP	NPI98FF4F	<Not supported>	<table border="1"> <thead> <tr> <th>Media Size</th> <th>Unit charge</th> <th>Total Impressions</th> <th>Total Equivalent Impression</th> <th>Blank Impressions</th> <th>Mono</th> <th>Color</th> </tr> </thead> <tbody> <tr> <td>Executive (7.25x10.5 in)</td> <td>0.80</td> <td>0</td> <td>0.00</td> <td>0</td> <td>0</td> <td>0</td> </tr> <tr> <td>Letter (8.5x11 in)</td> <td>1.00</td> <td>33</td> <td>33.00</td> <td>0</td> <td>23</td> <td>10</td> </tr> <tr> <td>Legal (8.5x14 in)</td> <td>1.30</td> <td>0</td> <td>0.00</td> <td>0</td> <td>0</td> <td>0</td> </tr> <tr> <td>8.5x13 in</td> <td>1.10</td> <td>0</td> <td>0.00</td> <td>0</td> <td>0</td> <td>0</td> </tr> <tr> <td>11x17 in</td> <td>2.00</td> <td>0</td> <td>0.00</td> <td>0</td> <td>0</td> <td>0</td> </tr> <tr> <td>Statement (5.5x8.5 in)</td> <td>0.50</td> <td>0</td> <td>0.00</td> <td>0</td> <td>0</td> <td>0</td> </tr> <tr> <td>A6 (ISO/JIS 105x148 mm)</td> <td>1.00</td> <td>0</td> <td>0.00</td> <td>0</td> <td>0</td> <td>0</td> </tr> <tr> <td>A5 (ISO/JIS 148x210 mm)</td> <td>0.50</td> <td>13</td> <td>6.50</td> <td>0</td> <td>2</td> <td>11</td> </tr> <tr> <td>A4 (ISO/JIS 210x297 mm)</td> <td>1.00</td> <td>112,066</td> <td>112,066.00</td> <td>0</td> <td>40,449</td> <td>71,617</td> </tr> <tr> <td>A3 (ISO/JIS 297x420 mm)</td> <td>2.00</td> <td>6,259</td> <td>12,518.00</td> <td>0</td> <td>1,559</td> <td>4,700</td> </tr> <tr> <td>BK 270x390mm</td> <td>1.70</td> <td>0</td> <td>0.00</td> <td>0</td> <td>0</td> <td>0</td> </tr> </tbody> </table>		Media Size	Unit charge	Total Impressions	Total Equivalent Impression	Blank Impressions	Mono	Color	Executive (7.25x10.5 in)	0.80	0	0.00	0	0	0	Letter (8.5x11 in)	1.00	33	33.00	0	23	10	Legal (8.5x14 in)	1.30	0	0.00	0	0	0	8.5x13 in	1.10	0	0.00	0	0	0	11x17 in	2.00	0	0.00	0	0	0	Statement (5.5x8.5 in)	0.50	0	0.00	0	0	0	A6 (ISO/JIS 105x148 mm)	1.00	0	0.00	0	0	0	A5 (ISO/JIS 148x210 mm)	0.50	13	6.50	0	2	11	A4 (ISO/JIS 210x297 mm)	1.00	112,066	112,066.00	0	40,449	71,617	A3 (ISO/JIS 297x420 mm)	2.00	6,259	12,518.00	0	1,559	4,700	BK 270x390mm	1.70	0	0.00	0	0	0
Media Size	Unit charge	Total Impressions	Total Equivalent Impression	Blank Impressions	Mono	Color																																																																																		
Executive (7.25x10.5 in)	0.80	0	0.00	0	0	0																																																																																		
Letter (8.5x11 in)	1.00	33	33.00	0	23	10																																																																																		
Legal (8.5x14 in)	1.30	0	0.00	0	0	0																																																																																		
8.5x13 in	1.10	0	0.00	0	0	0																																																																																		
11x17 in	2.00	0	0.00	0	0	0																																																																																		
Statement (5.5x8.5 in)	0.50	0	0.00	0	0	0																																																																																		
A6 (ISO/JIS 105x148 mm)	1.00	0	0.00	0	0	0																																																																																		
A5 (ISO/JIS 148x210 mm)	0.50	13	6.50	0	2	11																																																																																		
A4 (ISO/JIS 210x297 mm)	1.00	112,066	112,066.00	0	40,449	71,617																																																																																		
A3 (ISO/JIS 297x420 mm)	2.00	6,259	12,518.00	0	1,559	4,700																																																																																		
BK 270x390mm	1.70	0	0.00	0	0	0																																																																																		
HP LaserJet M3035 MFP	czeprl50.cze.hp...	<Not supported>																																																																																						

Figure 15 – Older HP Device Model and Print Usage Counter

More information can be found by reviewing the white papers titled *Impression Counting in HP Web Jetadmin* and *HP LaserJet Multifunction (MFP) and Single Function Series Products – Changes to the Usage Pages for “Print Usage Tracker”*. Both white papers can be found by searching www.hp.com/support.

Engine Cycle Count

Many administrators use the **Engine Cycle Count** column to track device usage. This counter continues to be available under the new **Counters** category. This counter is also available on many non-HP devices as it is part of the Standard Printer MIB (RFC 1759). The device counter that HP Web

Jetadmin uses to reflect **Engine Cycle Count** is prtMarkerLifeCount (1.3.6.1.2.1.43.10.2.1.4). Most of HP's LaserJet products represent one page count for each output sheet in simplex mode and two page count for each output sheet in duplex mode. The object used for **Engine Cycle Count** might have different unit values depending on the manufacture, device model, and firmware. Always consult the device manufacturer's documentation for more information about this device counter. HP Web Jetadmin simply reflects the value as represented by the device object.

Counter Examples

After all of the discussions on sheets vs. impressions, let's take a look at examples of counters for three different types of printers:

- Non-FutureSmart device with **Duplex Impressions** disabled
- Non-FutureSmart device with **Duplex Impressions** enabled
- FutureSmart device

Device Model	Duplex Impression	Engine Cycle Count	Total Sheets	Total Simplex Sheets	Total Duplex Sheets	Total Impressions	Total Mono Impressions	Total Color Impressions	Total Blank Impressions	Total Equivalent Impressions
HP Color LaserJet CM4540 MFP	Disabled	125	118	111	7	118	110	8	7	118.00
HP Color LaserJet CM3530 MFP	Disabled	19,763	14,956	10,149	4,807	19,734	5,852	13,882	29	19,734.00
HP Color LaserJet CM3530 MFP	Disabled	2,918	2,306	1,694	612	2,862	574	2,288	56	2,862.30
HP Color LaserJet CM3530 MFP	Enabled	2,480	<Not suppor...	<Not supported>	<Not supported>	2,415	453	1,962	0	2,415.00

Keep in mind that Web Jetadmin is completely at the mercy of the device and how it responds to SNMP object queries. In all cases Web Jetadmin is querying a certain object and reflecting the response.

Non-FutureSmart device with Duplex Impressions disabled

In the two examples above of non-FutureSmart devices with **Duplex Impressions** disabled, sheets are still counted for duplex vs. simplex, but the impressions columns contain values that are based upon sheet counters. The following formulas hold true:

$$\text{Total Sheets} = \text{Total Simplex Sheets} + \text{Total Duplex Sheets}$$

$$14,956 = 10,149 + 4,807 \quad 2,306 = 1,694 + 612$$

$$14,956 = 14,956 \quad 2,306 = 2,306$$

$$\text{Total Impressions} = \text{Total Mono Impressions} + \text{Total Color Impressions}$$

$$19,734 = 5,852 + 13,882 \quad 2,862 = 574 + 2,288$$

$$19,734 = 19,734 \quad 2,862 = 2,862$$

$$\text{Total Simplex Sheets} + 2 * \text{Total Duplex Sheets} = \text{Total Impressions} + \text{Total Blank Impressions}$$

$$10,149 + 2 * 4,807 = 19,734 - 29 \quad 1,694 + 2 * 612 = 2,862 + 56$$

$$19,763 = 19,763 \quad 2,918 = 2,918$$

Engine Cycle Count can be a little unpredictable, but in many cases it will match the calculations above for **Total Impressions + Total Blank Impressions** or **Total Simplex Sheets + 2*Total Duplex Sheets**.

Non-FutureSmart device with Duplex Impressions enabled

Recall from above discussions that enabling **Duplex Impressions** on older devices improves accuracy for billing of color vs. mono but loses the ability to track simplex vs. duplex sheets and blank impressions. Notice that the device above with **Duplex Impressions** enabled claims *<Not supported>* for **Total Sheets**, **Total Simplex Sheets** and **Total Duplex Sheets**. **Total Blank Impressions** also equals zero as this counter cannot determine blank pages once Duplex Impressions was enabled. In this case:

$$\begin{aligned} \text{Total Impressions} &= \text{Total Mono Impressions} + \text{Total Color Impressions} \\ (2415 &= 453 + 1962) \end{aligned}$$

Engine Cycle Count = 2480, which is more or less considered an odometer for the device, includes any blank sheets that pass through the printer.

FutureSmart device

Newer FutureSmart devices provide accurate billing of color vs. mono while preserving the ability to track simplex vs. duplex sheets and blank impressions. In the above example for the HP Color LaserJet CM4540, the following holds true:

$$\begin{aligned} \text{Total Sheets} &= \text{Total Simplex Sheets} + \text{Total Duplex Sheets} \\ 118 &= 111 + 7 \\ 118 &= 118 \end{aligned}$$

$$\begin{aligned} \text{Total Impressions} &= \text{Total Mono Impressions} + \text{Total Color Impressions} \\ 118 &= 10 + 8 \\ 118 &= 118 \end{aligned}$$

$$\begin{aligned} \text{Total Simplex Sheets} + 2 * \text{Total Duplex Sheets} &= \text{Total Impressions} + \text{Total Blank Impressions} \\ 111 + 2 * 7 &= 118 + 7 \\ 125 &= 125 \end{aligned}$$

Engine Cycle Count can be a little unpredictable, but in many cases it will match the calculations above for **Total Impressions** + **Total Blank Impressions** or **Total Simplex Sheets** + **2*Total Duplex Sheets**. In this case it holds true as **Engine Cycle Count** = 125.

While these calculations are exactly the same as those for the non-FutureSmart devices with **Duplex Impressions** disabled, the real difference lies in the accuracy of the counts for color vs. mono vs. blank. Devices with impression counting enabled, such as FutureSmart devices, more accurately account for the type of toner (or lack thereof) placed on a page.

SUPPLIES COLUMN CATEGORY

The new **Supplies** column in HP Web Jetadmin 10.2 Service Release 5 encompasses all aspects of supplies for all supported HP and non-HP devices. The column (shown enabled in Figure 16) uses the total number of supplies as its overview device value in the device list.

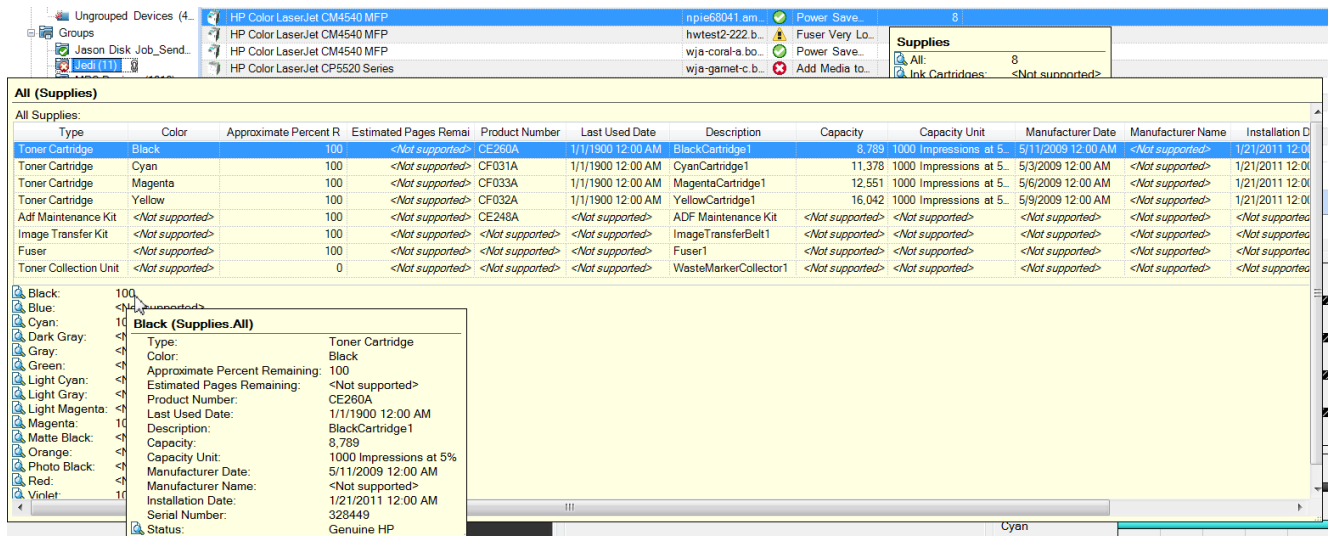


Figure 16 – HP Web Jetadmin Service Release 5 Supplies Column

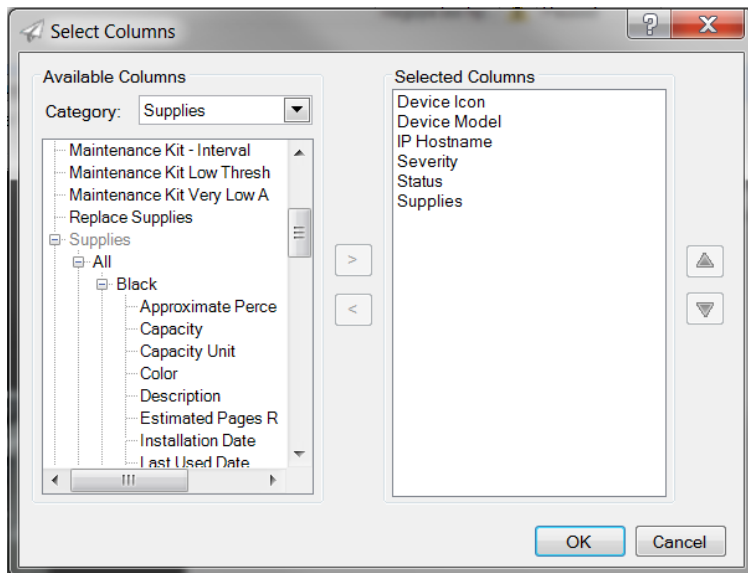


Figure 17 – Supplies Column Selection Control

By moving the mouse cursor over the overview value in the device list, the underlying supplies detail is exposed. Each item with a magnifying glass symbol can be further expanded to expose even more details. In this case, the tool tips show that the device has eight supplies. The next tool tip shows a listing of each of the eight supplies. The next tool tip shows a specific listing of the black supply details.

All of these details can be exposed in a device list as single columns. Figure 17 shows the **Supplies** column selection control. This control provides the same drill-down capability found in device list tool-tips, but it allows the exposure of individual supplies specific values. These values are useful in the device lists, exports, reports, and filtering features. Various related device settings are available in the **Supplies** columns. On supported devices, settings can be displayed representing the following:

Black Cartridge Low Threshold
 Black Cartridge Very Low Action
 Cyan Cartridge Low Threshold
 Cyan Cartridge Very Low Action
 Magenta Cartridge Low Threshold
 Magenta Cartridge Very Low Action
 Yellow Cartridge Low Threshold
 Yellow Cartridge Very Low Action

Image Fuser Low Threshold
 Image Fuser Very Low Action
 Image Transfer Low Threshold
 Image Transfer Very Low Action
 Maintenance Kit Interval
 Maintenance Kit Low Threshold
 Maintenance Kit Very Low Action

These settings affect device behavior for a given condition and can also influence the HP Web Jetadmin Alerting features for supported models only.

USING HP WEB JETADMIN FILTERING

With the many changes in columns and device data structures internal to HP Web Jetadmin, HP has also somewhat changed filtering features. Filters can be found in HP Web Jetadmin device lists, automatic groups, and the embedded, filtered lists that can be created in the HP Web Jetadmin navigation tree under **All Devices**. The filter management interfaces contain one common control under **Filter Editor** named **Function**. This control (shown in Figure 18) allows the user to select any data column and then design a filter action. The **Status** device property and the many tokens or states that are offered for **Status** are shown in the example. In this case, the **Device Communication Error** status is selected and, if used as a stand-alone function of the filter, displays any device that meets this criteria.

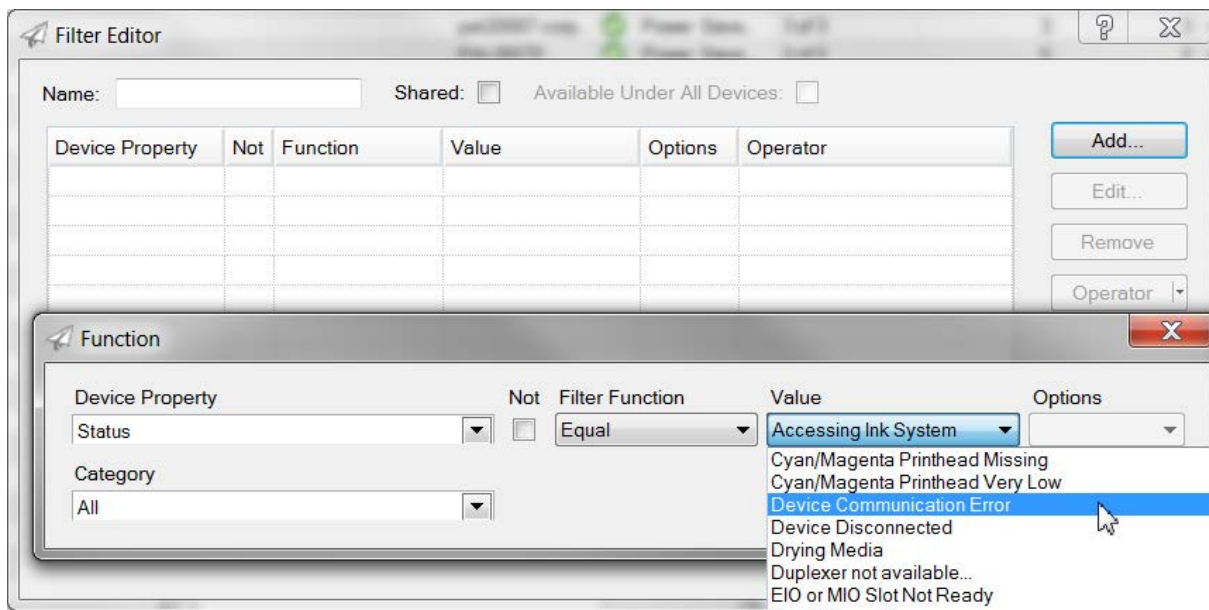


Figure 18 – Filter Editor, Function

This improvement was implemented to create a tokens-based environment where both OS and application localization and strings improvements have no bearing on existing filter settings. It also helps the user to understand potentials, such as the potential device states that HP Web Jetadmin tracks. In earlier releases of HP Web Jetadmin, the user could include a Contains function. This function is no longer available in HP Web Jetadmin 10.2 Service Release 5 and later.

FILTERING COMPLEX DEVICE DETAILS

Device details that exist in this complex or tabular format are included in many column and data types. SNMP Trap Destination Table was discussed earlier in the document along with the Exporting feature. The **All Entries** item, which can be exported to XML or CSV-formatted text, can be used to disclose the contents of a table that is a complex list of settings on the device. Again, this is true in many of HP Web Jetadmin's device properties. To find a complex property in either exports or filtering, simply expand a complex item and look for something like **All Entries** or a similar property that begins with the word **All**. Understanding this area is especially important in filtering.

Filtering on these **All** items is straightforward once a few points are understood. This area can have pitfalls, however, because of the complexity of filtering complex data. We will consider the SNMP Trap Destination Table property for the remainder of this section. Here is the scenario we will consider:

The administrator wants to filter an HP Web Jetadmin list to show devices that contain an SNMP Trap Destination Table, IP Address entry of 192.168.0.254

AND (this is important because the administrator wants a true AND function)

The administrator wants to further filter the list to devices that do not contain an SNMP Trap Destination Table, IP Address entry of 192.168.10.5

In this case, we will build a filter that includes a function to look at the table's IP Address column and include devices with one IP address present but not another IP address. Let's look at the SNMP Trap Destination table itself shown in Figure 19. In this case, the table has both entries so our filter logic will be set up to exclude the device from the list. Note that the administrator is only interested in the table item: **IP Address** as shown in Figure 19. This is key when selecting filter functions that focus on parts of a complex device property.

SNMP Trap Destination Table				
Number of Entries: 2				
Maximum Entries: 3				
All Entries:				
Slot	IP Address	FQDN	Port	Community
1	192.168.0.254		27892	WJA
2	192.168.10.5		27892	WJA

Figure 19 – SNMP Trap Destination Table in HP Web Jetadmin Tooltip

Remember, filtering can be activated on any HP Web Jetadmin device list or within Automatic Groups creation. We will continue to assume our device list scenario where the administrator is building a filter. First the administrator will enter the **Filter Editor** interface and then choose to **Add** a new filter function using **SNMP Trap Destination Table, All Entries** shown in Figure 20.

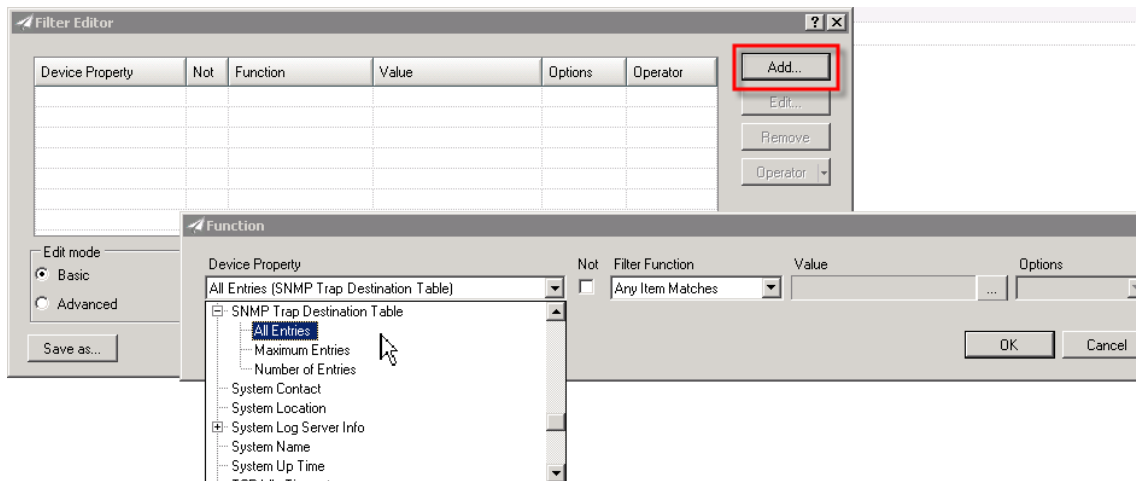


Figure 20 – Adding SNMP Trap Destination Table, All Entries Item

With this item added, we begin to see how filtering has changed in Service Release 5 and later. In the next steps you will be using **Filter Function** and the new "... "control just to the right of **Value** field. These are both shown in Figure 21.

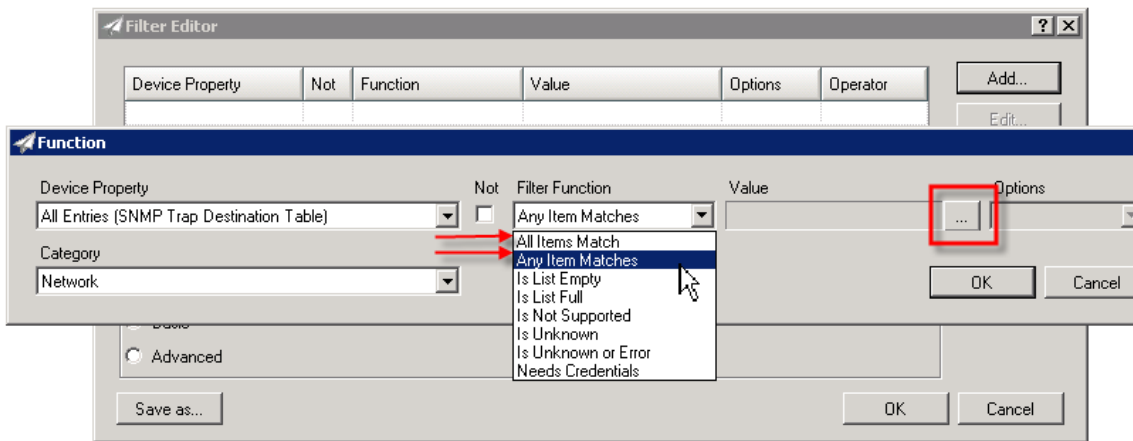


Figure 21 – Any/All Filter Functions

This area of filtering is interesting because of the relationship **Any Items Match** and **All Item Matches** share with the next several ideas – the secondary level of filtering. The next step to building the first part of our filter (the one that is going to find devices that have *any* IP address entry matching 192.168.0.254) is to click the “...” control just to the right of the **Value** field.

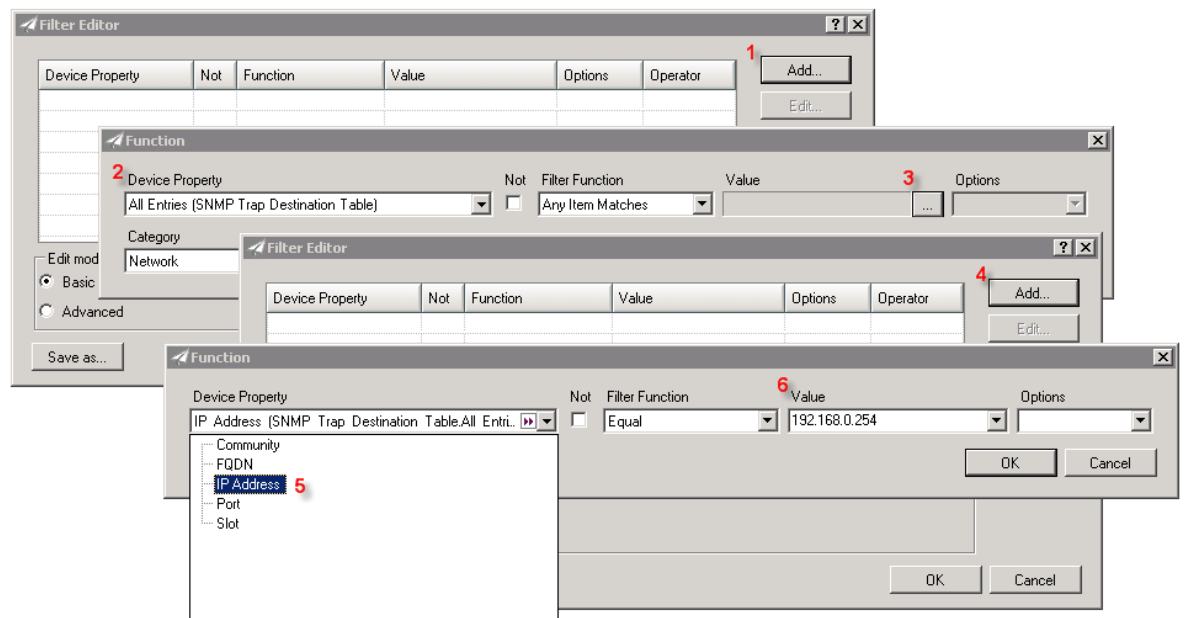


Figure 22 – Filtering at the Secondary Level

Figure 22 shows the sequence to start editing a secondary filter that allows the action to take place within table detail. The first filter being built here is represented by this simple expression:

```
AnyItem([SNMP Trap Destination Table.All Entries], [EQ(\[Trap Table Entry.IP Address\], \[192.168.0.254\])])
```

This is the exact text you would observe by using the **Advanced** editing selection on the primary filtering editor. We will take a short break from building filters and look again at the table detail and how it relates to that actual **Device Property** items shown in Figure 23.

Slot	IP Address	FQDN	Port	Community
1	192.168.0.254		27892	WJA
2	192.168.10.5		27892	WJA

Figure 23 – Table Elements Relating to Device Property Items

Remember, when we are at this level of filtering we are working inside the complex device details. Also remember that each **Device Property** item directly relates to each column within the tabular complex detail as shown in Figure 23.

NOTE There are also cases (not shown here) where the complex element can be expanded to show sub-properties. These are always noted with a looking-glass icon on the table or column header. In these cases, filtering levels go beyond secondary and filters become even more complex. This topic might be reserved for a different document because it does extend beyond the scope of the topic in this document.

We will now return to our scenario and the administrator’s task at hand. We have established our first filter action that locates devices that have a trap destination IP address of 192.168.0.254. Now we will establish our second filter action by starting the whole process again. See the illustration in Figure 24.

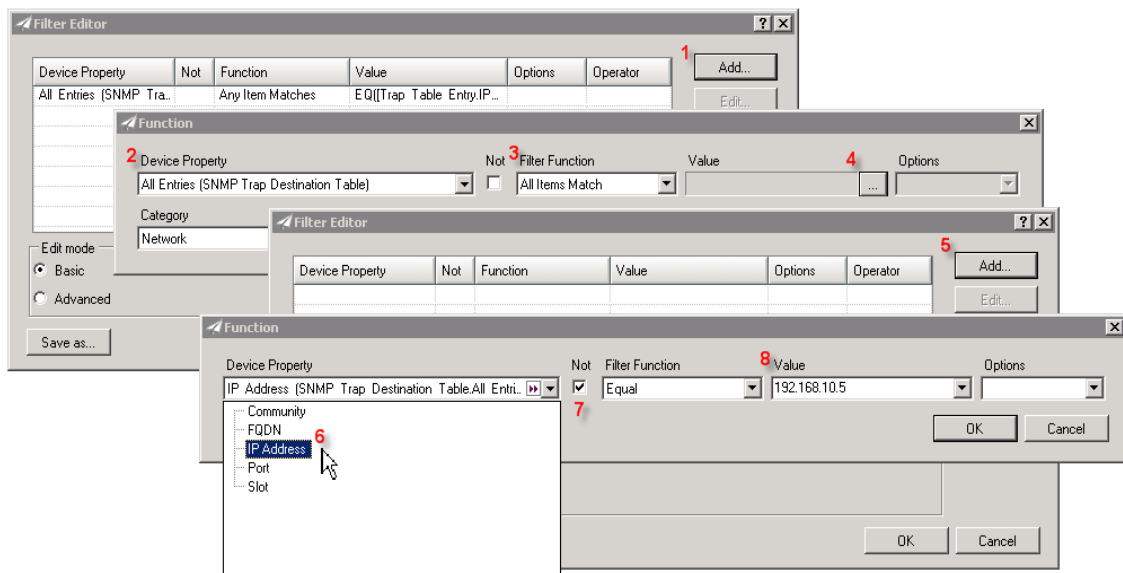


Figure 24 – Configuring NOT Filter Using All Items Match

Now two filter items are created with an **AND** joining them. Figure 25 shows these filters along with an advanced representation shown in Notepad editor.

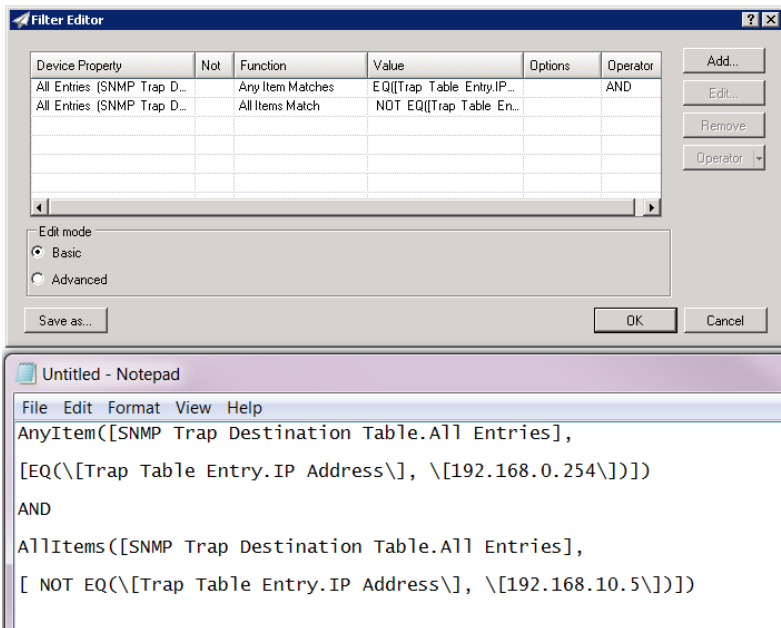


Figure 25 – Resulting Filters

Gotchas

We will take a moment to consider the complexity of this area of HP Web Jetadmin. This portion of the HP Web Jetadmin interface provides a literal logic interface that can be used to build pretty much any test for detecting devices and populating lists and groups. Here are a few tips about creating filtering around complex device details:

NOT – Putting **NOT** at the secondary filter level. It is very important to remember that you can put **NOT** at the primary level, but this creates a different logical test that operates on the overall table values rather than the targeted elements such as **IP Address** and **Community Name**.

Adding Multiple Secondary Filters – This is possible if tests are to be performed on multiple targets. For instance, if a statement such as **IP Address** = xxx.xxx.xxx.xxx **AND Community** = YYYY are desired, then adding multiple filters at the secondary filtering level is okay. In our example, adding both **IP Address** tests is not logical because the secondary filter will ask for an entry to equal xxx.xxx.xxx.xxx **AND** yyy.yyy.yyy.yyy. Since this is not possible, the resulting list will be blank. Both **All Item Matches** and **Any Items Match** have this logical characteristic.

All Item Matches vs. **Any Items Match** – Both items provide different views into complex details. These should be taken literally when forming filter logic. **All Item Matches** means just that, all the items in the selection will be tested to see if they match the filter criteria. Similarly, **Any Items Match** means the test will detect single or multiple items that match the criteria. In our example filter where we used **NOT** equals a specific **IP Address** entry, the test was set up to detect a table where none of the entries had that specific IP address value.

Complex within Complex – Sometimes a complex device detail can contain other complex details. And, sometimes these can contain further complex details. In these cases, we can not only create secondary layers of filtering, but also create tertiary layers of filtering and so on. At this point, it is easy to analyze filtering using the **Advanced** filter editor that we see being used in Figure 25.

SUMMARY

HP Web Jetadmin contains an effective and powerful set of tools in columns and filtering features. This document should serve as a reference for understanding these changes and continued successful use of the HP Web Jetadmin software. Watch for updates to this document in the future.

APPENDIX A—NAMING SCHEMA

Column Name	Location	Programmatic Name
11x17/A3 Media	All.Capabilities	PaperSize11x17
802.11 b/g/n	All.DetailedInfo.Wireless	Dot11Configuration
802.1X Authentication	All.Security	Dot1xAuthentication
Access Control for Device Functions	All.Security	AccessControlForDeviceFunctions
Acknowledged	All.WebJetadmin	Acknowledged
Active Directory Description	All.WebJetadmin.Discovery	ADDescription
Active Directory Location	All.WebJetadmin.Discovery	ADLocation
Active Directory Name	All.WebJetadmin.Discovery	ADName
Active Directory Path	All.WebJetadmin.Discovery	ADPath
ADF Capacity	All.Capabilities	AdfCapacity
ADF Speed	All.Capabilities	AdfSpeed
Alternative Letterhead Mode	All.Print	PrintAlternativeLetterheadMode
Analog Fax	All.Capabilities,All.Fax	HasFax
AppleTalk	All.Network	AppleTalkProtocolStackEnabled
AppleTalk - Port Description	All.DetailedInfo.Network	EthertalkPortDescription
AppleTalk - Port Type	All.DetailedInfo.Network	EthertalkPortType
AppleTalk - Status	All.DetailedInfo.Network	EthertalkStatus
AppleTalk - Zone	All.DetailedInfo.Network	EthertalkAppletalkZone
Application Manager Installed	All.Solutions	IsAppMgrInstalled
Applications	All.Solutions	ListApplications
Asset Number	All.DetailedInfo.Device,All.Identity,Favorites	AssetNumber
Authentication - Copy	All.Security	DeviceFunctionCopyAgent
Authentication - Create Stored Job	All.Security	DeviceFunctionCreateStoredJobAgent
Authentication - Future Installation	All.Security	FutureInstallationAgent
Authentication - Home Screen Access	All.Security	HomeScreenAccessAgent
Authentication - HP Digital Send Service Secondary E-Mail	All.Security	DeviceFunctionDSSSecondaryEmailAgent
Authentication - HP Digital Send Service Workflow	All.Security	DeviceFunctionDSSWorkflowAgent
Authentication - Job Storage	All.Security	DeviceFunctionJobStorageAgent
Authentication - Send E-Mail	All.Security	DeviceFunctionSendToEmailAgent
Authentication - Send Fax	All.Fax	DeviceFunctionSendToFaxAgent
Authentication - Send To Folder	All.Security	DeviceFunctionSendToFolderAgent
Auto Cleaning Page	All.Print	AutoCleaningPage
Auto Continue	All.Print	AutoContinue
Auto Include Margins	All.Copier	DefaultCopierAutoIncludeMargins
Auto Sense Mode	All.Print	AutoSenseMode
AutoSend	All.Device	AutoSendSettings
Average Coverage	All.DetailedInfo.Usage	AverageTonerCoverage
Black Average Coverage	All.DetailedInfo.Usage	AverageBlackCoverage
Black Cartridge Low Threshold	All.Supplies	BlackCartridgeLowThreshold
Black Cartridge Very Low Action	All.Supplies	BlackCartridgeVeryLowAction
Bluetooth	All.Capabilities	CapBluetooth
Booklet Maker	All.Capabilities	HasBookMaker
BOOTP Server	All.DetailedInfo.Device,All.Network	IPBootpServer
Browser	All.Device	DeviceBrowserConfig
Calibration Timing	All.Device	CalibrationTiming
Cartridge Low Action	All.Print	TonerLowAction
Cartridge Out Action	All.Print	TonerOutAction
Channel	All.DetailedInfo.Wireless	Dot11Channel
Check ACL for HTTP	All.Security	NetworkACLTableAllowHTTPAccess
Clearable Warnings	All.Device	ClearableWarnings
Cold Reset Media Size	All.Print	ColdResetMediaSize
Collator	All.Capabilities	HasCollator
Collection Time (Accessory Inventory)	All.WebJetadmin.ReportDataCollection.AccessoryInventory	AccessoriesInventoryOffsetSetting
Collection Time (Device Inventory)	All.WebJetadmin.ReportDataCollection.DeviceInventory	DeviceInventoryOffsetSetting
Collection Time (Device Utilization by User)	All.WebJetadmin.ReportDataCollection.DeviceUtilizationByUser	ByUserTrackingOffsetSetting
Collection Time (Device Utilization)	All.WebJetadmin.ReportDataCollection.DeviceUtilization	DeviceUtilizationOffsetSetting
Collection Time (Event Log History)	All.WebJetadmin.ReportDataCollection.EventLogHistory	EventLogHistoryOffsetSetting
Collection Time (Hourly Peak Usage)	All.WebJetadmin.ReportDataCollection.PeakUsage	PeakUsageOffsetSetting
Collection Time (Supply Utilization)	All.WebJetadmin.ReportDataCollection.SupplyUtilization	SupplyUtilizationOffsetSetting

Column Name	Location	Programmatic Name
Collection Time Zone (Accessory Inventory)	All.WebJetadmin.ReportDataCollection.AccessoryInventory	AccessoriesInventoryTimeZoneSetting
Collection Time Zone (Device Inventory)	All.WebJetadmin.ReportDataCollection.DeviceInventory	DeviceInventoryTimeZoneSetting
Collection Time Zone (Device Utilization by User)	All.WebJetadmin.ReportDataCollection.DeviceUtilizationByUser	ByUserTrackingTimeZoneSetting
Collection Time Zone (Device Utilization)	All.WebJetadmin.ReportDataCollection.DeviceUtilization	DeviceUtilizationTimeZoneSetting
Collection Time Zone (Event Log History)	All.WebJetadmin.ReportDataCollection.EventLogHistory	EventLogHistoryTimeZoneSetting
Collection Time Zone (Hourly Peak Usage)	All.WebJetadmin.ReportDataCollection.PeakUsage	PeakUsageTimeZoneSetting
Collection Time Zone (Supply Utilization)	All.WebJetadmin.ReportDataCollection.SupplyUtilization	SupplyUtilizationTimeZoneSetting
Color	All.Capabilities	ColorSupported
Color Access Control	All.Security	CAC
Color Access Control Level	All.Security	ColorAccessControlLevel
Color Cartridge Very Low Action	All.Supplies	ColorCartridgeVeryLowAction
Color Copy Mode With Auto	All.Copier	ColorCopyModeAuto
Color Copy Option	All.Copier	ColorCopyOption
Color Supply Out	All.Print	ColorSupplyOut
Color/Black Mix	All.Print	MonoColorSwitchMode
Company Name	All.DetailedInfo.Device,All.Identity	CompanyName
Contact Person	All.DetailedInfo.Device,All.Identity,Favorites	ContactPerson
Contracted	All.WebJetadmin	DeviceUnderContract
Control Panel	All.Device	ControlPanelDisplay
Control Panel Access	All.Security	ControlPanelAccess
Control Panel Language	All.Device	DeviceControlPanelLanguage
Control Panel Lock Override	All.Security	ControlPanelLockOverride
Copier	All.Capabilities	HasCopier
Copier Fit To Page	All.Copier	CopierFitToPage
Copier Reduce/Enlarge	All.Copier	CopierReduction
Copy - Alternative Letterhead Mode	All.Copier	CopyAlternativeLetterheadMode
Copy Background Cleanup	All.Copier	DefaultCopierBackgroundCleanup
Copy Content Orientation	All.Copier	CopierContentOrientation
Copy Darkness	All.Copier	DefaultCopierDarkness
Copy Heavy Originals	All.Copier	CopierHeavyOriginals
Copy Image Preview	All.Copier	CopierImagePreview
Copy Job Auto Interrupt	All.Copier	DeviceCopierJobAutoInterrupt
Copy Job Build	All.Copier	CopierJobBuild
Copy Job Scan Ahead	All.Copier	DeviceCopierJobScanAhead
Copy Optimize Text/Picture	All.Copier	CopierScanOptimization
Copy Output Bin	All.Copier	DeviceCopierOutputBin
Copy Pages	All.Counters	PPUTotalCopyPageCount
Copy Pages Per Sheet	All.Copier	CopierPagesPerSheet
Copy Paper Tray Selection	All.Copier	CopyPaperSelection
Copy Reduce/Enlarge	All.Copier	CopierReduceEnlarge
Copy Sharpness	All.Copier	DefaultCopierSharpness
Copy Staple	All.Copier	CopierStaple
Courier Font Type	All.Print	CourierFontType
Credentials Required	All.WebJetadmin,Favorites	NeededCreds
Cyan Average Coverage	All.DetailedInfo.Usage	AverageCyanCoverage
Cyan Cartridge Low Threshold	All.Supplies	CyanCartridgeLowThreshold
Data Collection Enabled (Accessory Inventory)	All.WebJetadmin.ReportDataCollection.AccessoryInventory	AccessoriesInventoryEnabled
Data Collection Enabled (Device Inventory)	All.WebJetadmin.ReportDataCollection.DeviceInventory	DeviceInventoryEnabled
Data Collection Enabled (Device Utilization by User)	All.WebJetadmin.ReportDataCollection.DeviceUtilizationByUser	ByUserTrackingEnabled
Data Collection Enabled (Device Utilization)	All.WebJetadmin.ReportDataCollection.DeviceUtilization	DeviceUtilizationEnabled
Data Collection Enabled (Event Log History)	All.WebJetadmin.ReportDataCollection.EventLogHistory	EventLogHistoryEnabled
Data Collection Enabled (Hourly Peak Usage)	All.WebJetadmin.ReportDataCollection.PeakUsage	PeakUsageEnabled
Data Collection Enabled (Supply Utilization)	All.WebJetadmin.ReportDataCollection.SupplyUtilization	SupplyUtilizationEnabled
Datagrams - Incoming	All.DetailedInfo.Network	UdpDatagramsIncoming
Datagrams - Outgoing	All.DetailedInfo.Network	UdpDatagramsOutgoing
Date/Time	All.Device	DateTimeFromDevice
Date/Time Format	All.Device	DeviceDateTimeFormat
Default Copier Copies	All.Copier	DefaultCopierCopies
Default Copy Collation	All.Copier	CopierCollation

Column Name	Location	Programmatic Name
Default Edge-to-Edge Setting	All.Copier	CopierEdgeToEdge
Default Image Quality	All.Copier	CopierQuality
Default Input Paper Tray	All.Print	DefaultPaperTray
Default Media Size	All.Print	DeviceDefaultMediaSize
Default Media Type	All.Print	DefaultMediaType
Default Number of Copies	All.Copier	DeviceCopierQuantity
Default Number of Sides	All.Copier	DeviceCopierDuplexMode
Default Original Content	All.Copier	CopierImageType
Default Original Density	All.Copier	DefaultCopierContrast
Default Original Media Size	All.Copier	DeviceCopierMediaSize
Default Print Density	All.Print	DefaultDensityCombo
Default Printer Copies	All.Copier	DeviceCopies
Delay Calibration at Wake/Power On	All.Print	DelayCalibrationAtPowerOn
Desired USB Mode	All.Network	USBDesiredMode
Device Announcement Agent	All.Security	HDAPAgentConfiguration
Device Certificates	All.Device	DeviceWebBrowserCertificateConfig
Device Firmware Date	All.DetailedInfo.Device,All.Firmware	DeviceFirmwareRomDateCode
Device Firmware Version	All.DetailedInfo.Device,All.Firmware,Favorites	DeviceFirmwareRevision
Device Groups	All.WebJetadmin,Favorites	DeviceGroupMembership
Device Icon	All.Identity,Favorites	DeviceIcon
Device ID String	All.DetailedInfo.Device	BitronicsStringFormatted
Device Location	All.DetailedInfo.Device,All.Identity,Favorites	DeviceLocation
Device Model	All.DetailedInfo.Device,All.Identity,Favorites	DisplayName
Device Name	All.DetailedInfo.Device,All.Identity,Favorites	DeviceName
DHCPv4 FQDN compliance with RFC 4702	All.Network	DHCPv4FQDNCompliance
Digital Fax	All.Capabilities,All.Fax	HasDigitalFax
Digital Send Pages	All.Counters	PageCountDigitalSend
Digital Sending - Accessing the LDAP Server	All.DigitalSend	DSAccessLDAPServer
Digital Sending - Auto Reset Settings	All.DigitalSend	DSTimeOutPreferences
Digital Sending - Email Attachment Settings	All.DigitalSend	DSEmailAttachmentSettings
Digital Sending Service	All.DigitalSend	DSSConfigCombo
Disable Direct Ports	All.Security	DisableDirectConnectPortsV2
Discovery Date/Time	All.WebJetadmin,Discovery	FirstDiscoveryTime
Disk Jobs	All.Print	GetDSMDDeviceDiskJobs
Display Color Usage Job Log Page On Information Tab	All.Security	DeviceDisplayColorLog
DLC/LLC	All.Network	LLCProtocolStackEnabled
DNS Server	All.Network	DNSServer
Document Feeder Kit Very Low Action	All.Supplies Maintenance	DocumentFeederKitVeryLowAction
D-size Media	All.Capabilities	PaperSizeD
DSS Server Address	All.DigitalSend	DigitalSendDSSServerAddress
Duplex Binding	All.Storage	MediaPathDefaultIndex
Duplex Blank Pages	All.Print	DuplexBlankPages
Duplex Impressions	All.Counters	IsDuplexImpressions
Duplexer	All.Capabilities	HasDuplex
Economode	All.Print	EconoMode
Email	All.Capabilities	CapEmail
Email Address Validation	All.DigitalSend	EmailAddressValidation
Email Address/Message Settings	All.DigitalSend	EmailAddressMessageSettings
Email File Settings	All.DigitalSend	EmailFileSettings
Email Notification Settings	All.DigitalSend	EmailNotificationSettings
Email Scan Settings	All.DigitalSend	EmailScanSettings
Embedded Web Server Language Settings	All.EWS	EwsLanguageCombo
Embedded Web Server URL	All.EWS	EWSUrl
Enable Host USB	All.Security	UsbHostEnable
Enable Send To Email	All.DigitalSend	SendToEmailSettingsEnabled
Enable Send to Network Folder	All.DigitalSend	SendToFolderSettingsEnabled
Enable Send To USB	All.DigitalSend	SendToUsbSettingsEnabled
Encrypt all web communication	All.Network	HTTPSSettings
Encryption Strength	All.Security	EncryptionStrength

Column Name	Location	Programmatic Name
Engine Cycle Count	All.Counters, Favorites	PageCount
ePrint Settings	All.Network	EPrintSettings
Error Handling	All.Network	PrinterErrorBehavior
E-size Media	All.Capabilities	PaperSizeE
Event Info Log	All.DetailedInfo.Device, All.Device	EventInfo
EWS	All.EWS	EWSSupported
EWS Information Protection	All.Security	AdminAccessForInfoTab
EWS Password	All.Security	EWSPasswordsSet
EWS Security	All.Security	EWSSecurity
Fax Archiving	All.Fax	FaxArchiving
Fax Forwarding	All.Fax	FaxForwarding
Fax Header Settings	All.Fax	XDMFaxHeader
Fax Maximum Baud Rate	All.Fax	DSFaxServiceMaxBaudRate
Fax Number	All.Fax	FaxPhoneNumber
Fax Number Confirmation	All.Fax	XDMFaxNumberConfirmation
Fax Receive Settings	All.Fax	FaxReceiveSettingsSetup
Fax Resolution Quality	All.Fax	FaxResolutionQuality
Fax Send - Dialing Mode	All.Fax	FaxDialMode
Fax Send - Resolution	All.Fax	FaxResolution
Fax Send Settings	All.Fax	FaxSendSettingsSetup
Fax Time Format	All.Fax	FaxTimeFormat
File System External Access	All.Storage	FileSystemExternalAccessCombo
File System Password	All.Storage	FileSystemPasswordsSet
First Collected (Accessory Inventory)	All.WebJetadmin.ReportDataCollection.AccessoryInventory	AccessoriesInventoryFirstCollected
First Collected (Device Inventory)	All.WebJetadmin.ReportDataCollection.DeviceInventory	DeviceInventoryFirstCollected
First Collected (Device Utilization by User)	All.WebJetadmin.ReportDataCollection.DeviceUtilizationByUser	ByUserTrackingFirstCollected
First Collected (Device Utilization)	All.WebJetadmin.ReportDataCollection.DeviceUtilization	DeviceUtilizationFirstCollected
First Collected (Event Log History)	All.WebJetadmin.ReportDataCollection.EventLogHistory	EventLogHistoryFirstCollected
First Collected (Hourly Peak Usage)	All.WebJetadmin.ReportDataCollection.PeakUsage	PeakUsageFirstCollected
First Collected (Supply Utilization)	All.WebJetadmin.ReportDataCollection.SupplyUtilization	SupplyUtilizationFirstCollected
First Copy Speed	All.Copier	FirstCopySpeed
Flash Disk	All.Capabilities, All.Storage	HasDiskFlash
Folder Access Settings	All.DigitalSend	FolderAccessSettings
Fonts and Macros	All.Storage	GetDSMDDeviceDiskFontsMacros
Fuser Modes	All.Device	FuserTemperatureMode
GDI	All.Capabilities	CapGdi
Get Community Name	All.Security	GetCommunityNamelsSet
Hard Disk	All.Capabilities, All.Storage	HasDisk
Hardware Address (MAC)	All.DetailedInfo.Jetdirect, All.Identity, Favorites	MacAddress
HCO Multi-Bin Mailbox	All.Capabilities	HasMbm
HCO Separator	All.Capabilities	HasSeparator
High Capacity Output Mode	All.Print	HcoMbmOutputMode
Hold Off Print Jobs During Copy	All.Copier	DeviceCopierHoldOffPrintJobs
Hold Off Time	All.Copier	DeviceCopierHoldTime
Home Screen Applications	All.Device	HomeScreenApplications
Home Screen Language Selection	All.Device	HomeScreenLanguageSelection
HP OXP Adapter	All.WebJetadmin	HPOXPAdapterSettings
HP-GL	All.Capabilities	CapGl
HP-GL/2	All.Capabilities	CapGl2
HTTP Idle Timeout	All.Network	HttpIdleTimeout
I/O Device Revision	All.DetailedInfo.Device	IORevision
I/O Timeout to End Print Job	All.Print	IOTimeout
ICMP - Destination Unreachable	All.DetailedInfo.Network	IcmpDestinationUnreachable
ICMP - Incoming Errors	All.DetailedInfo.Network	IcmpErrorsIncoming
ICMP - Incoming Messages	All.DetailedInfo.Network	IcmpMessagesIncoming
ICMP - Outgoing Errors	All.DetailedInfo.Network	IcmpErrorsOutgoing
ICMP - Outgoing Messages	All.DetailedInfo.Network	IcmpMessagesOutgoing
Image Fuser Kit Low Threshold	All.Supplies.Maintenance	ImageFuserKitLowThreshold
Image Fuser Kit Very Low Action	All.Supplies.Maintenance	ImageFuserKitVeryLowAction

Column Name	Location	Programmatic Name
Image Transfer Kit Low Threshold	All.Supplies.Maintenance	ImageTransferKitLowThreshold
Image Transfer Kit Very Low Action	All.Supplies.Maintenance	ImageTransferKitVeryLowAction
Inactivity Timeout	All.Device	InactivityTimeout
Incoming Fax Count	All.Counters	PageCountFaxIncoming
Input Auto Continue	All.Print	InputAutoContinueMode
Input Auto Continue Timeout	All.Print	InputAutoContinueTimeout
Input Tray 1	All.Capabilities	Tray1CapabilityObject
Input Tray 2	All.Capabilities	Tray2CapabilityObject
Input Tray 3	All.Capabilities	Tray3CapabilityObject
Input Tray 4	All.Capabilities	Tray4CapabilityObject
Input Tray 5	All.Capabilities	Tray5CapabilityObject
Input Tray 6	All.Capabilities	Tray6CapabilityObject
Input Tray 7	All.Capabilities	Tray7CapabilityObject
Install Date	All.DetailedInfo.Device,All.Device	FormattedDeviceInstallDate
Instant Lamp On	All.Device	InstantLampOn
Interpreter Languages	All.DetailedInfo.Device,All.Print	InterpreterLanguageList
Interrupt Copy Jobs	All.Copier	DeviceCopierInterruptCopyJobs
Invalid Personality Reports	All.Device	InvalidPersonalityReports
IP Address	All.Identity,All.Network,Favorites	IP4Address
IP Hostname	All.DetailedInfo.IPv4,All.Identity,Favorites	IPHostname
IP Packets - Incoming	All.DetailedInfo.Network	IPPacketsIncoming
IP Packets - Outgoing	All.DetailedInfo.Network	IPPacketsOutgoing
IPP Printer Install Wizard	All.Network	IPPWizardUrl
IPv4 Information	All.DetailedInfo.IPv4,All.Network	IPv4Info
IPv6 Address List	All.DetailedInfo.IPv6	IPv6Addresses
IPv6 Information	All.Network	IPv6
IPv6 Routes	All.DetailedInfo.IPv6	IPv6Routes
IPX - Ethernet Frame Type	All.Network	IpxFrameType
IPX - Frame Type Token Ring	All.Network	IpxFrameTypeTokenRing
IPX - Queue Server Job Polling Interval	All.Network	IpxJobPollInterval
IPX - RCFG Support Enabled	All.Network	IpxRcfgSupportEnabled
IPX - SAP Broadcast Interval	All.Network	IpxSapBroadcastInterval
IPX - Source Routing	All.Network	IPXSourceRouting
IPX Address	All.DetailedInfo.IPX,All.Network	IpxAddress
IPX Connection Status	All.DetailedInfo.Network	IpxConnectionStatus
IPX Name	All.DetailedInfo.IPX,All.Identity,All.Network	IPXName
IPX/SPX	All.Network	IPXProtocolStackEnabled
Jam Recovery	All.Print	JamRecovery
Jetdirect Firmware - Available	All.Firmware	JetdirectFirmwareAvailable
Jetdirect Firmware - Severity	All.Firmware	JetdirectFirmwareSeverity
Jetdirect Model	All.DetailedInfo.Jetdirect,All.Firmware,All.Network,Favorites	JetDirectModel
Jetdirect Port	All.Network,Favorites	JetDirectExternalPort
Jetdirect Revision	All.DetailedInfo.Jetdirect,All.Firmware,All.Network,Favorites	JetDirectVersion
Job Hold Timeout	All.Print	JobHoldTimeout
Job Retention	All.Print	JobRetention
Job Storage Limit	All.Print	HeldJobSetQueueSize
Job Timeout	All.Network	JobTimeout
Kerberos Authentication	All.Security	DSKerberosAuthentication
Key Press Sound	All.Device	KeyPressSound
Keyboard Layout	All.Device	KeyboardLayout
Last Collected (Accessory Inventory)	All.WebJetadmin.ReportDataCollection.AccessoryInventory	AccessoriesInventoryLastCollected
Last Collected (Device Inventory)	All.WebJetadmin.ReportDataCollection.DeviceInventory	DeviceInventoryLastCollected
Last Collected (Device Utilization by User)	All.WebJetadmin.ReportDataCollection.DeviceUtilizationByUser	ByUserTrackingLastCollected
Last Collected (Device Utilization)	All.WebJetadmin.ReportDataCollection.DeviceUtilization	DeviceUtilizationLastCollected
Last Collected (Event Log History)	All.WebJetadmin.ReportDataCollection.EventLogHistory	EventLogHistoryLastCollected
Last Collected (Hourly Peak Usage)	All.WebJetadmin.ReportDataCollection.PeakUsage	PeakUsageLastCollected
Last Collected (Supply Utilization)	All.WebJetadmin.ReportDataCollection.SupplyUtilization	SupplyUtilizationLastCollected
Last Communication	All.WebJetadmin,Favorites	LastCommunicationTime
Last Discovered	All.WebJetadmin.Discovery	LastDiscoveryTime

Column Name	Location	Programmatic Name
LDAP - Accessing the Server	All.DigitalSend	LDAPAuthenticationAccessLDAPServer
LDAP Database - Device User's Email Address Attribute	All.DigitalSend	LDAPEmailSourceColumn
LDAP Database - Device User's Name Attribute	All.DigitalSend	LDAPDisplayNameSourceColumn
LDAP Database - Entered Name LDAP Attribute	All.DigitalSend	LDAPMatchWithTheInfoColumn
LDAP Database - Search Root	All.DigitalSend	LDAPSearchRootColumn
LDAP Search Method	All.DigitalSend	XDMLDAPQueryMode
LDAP Server	All.DigitalSend	DigitalSendLDAPServerAddress
LDAP Settings	All.DigitalSend	XDMLDAPSettings
LDAP Sign In Setup	All.Security	LDAPSignInSetup
Link Setting	All.Network	NetworkLinkSetting
Link Speed	All.Network	NetworkLinkSpeed
LLMNR (Replaced by Network Enable Features)	Network.NetworkEnableFeatures	NetworkEnableFeaturesLLMNR
Locally Administered Address	All.Network	L.A.A
Magenta Average Coverage	All.DetailedInfo.Usage	AverageMagentaCoverage
Magenta Cartridge Low Threshold	All.Supplies	MagentaCartridgeLowThreshold
Maintenance Kit - Interval	All.Supplies	MarkersuppliesMaintenanceInterval
Maintenance Kit Low Threshold	All.Supplies.Maintenance	MaintenanceKitLowThreshold
Maintenance Kit Very Low Action	All.Supplies.Maintenance	MaintenanceKitVeryLowAction
Managed Toner	All.Print	ManagedToner
Manually Feed Prompt	All.Print	ManuallyFeedPrompt
mDNS Service Name	All.Network	NetworkMDNS
Media Path Usage - Destination	All.DetailedInfo.Usage	MediaPathDestinationUsage
Media Path Usage - Source	All.DetailedInfo.Usage	MediaPathSourceUsage
Model Number	All.Identity	DeviceModelNumber
Multi-homed	All.Network	MultiHomedPartners
Network Enable Features	All.Network	NetworkEnableFeatures
Network Folder File Settings	All.DigitalSend	FolderFileSettings
Network Folder Notification Settings	All.DigitalSend	FolderNotificationSettings
Network Folder Scan Settings	All.DigitalSend	FolderScanSettings
NIC - Bad Packets Received	All.DetailedInfo.Network	JetDirectBadPacketsReceived
NIC - Broadcast Packets Received	All.DetailedInfo.Network	JetDirectBroadcastPacketsReceived
NIC - Broadcast Packets Transmitted	All.DetailedInfo.Network	JetDirectBroadcastPacketsTransmitted
NIC - Description	All.DetailedInfo.Network	JetDirectDescriptionFormatted
NIC - I/O Ports	All.DetailedInfo.Network	JetDirectIOPort
NIC - I/O Type	All.DetailedInfo.Network	JetDirectIOType
NIC - Media Type	All.DetailedInfo.Network	JetDirectMediaType
NIC - Server Status	All.DetailedInfo.Network	JetDirectServerStatus
NIC - Status	All.DetailedInfo.Network	JetDirectStatus
NIC - Total Packets Received	All.DetailedInfo.Network	TotalPacketsReceived
NIC - Total Packets Transmitted	All.DetailedInfo.Network	TotalPacketsTransmitted
NIC - Transmission Errors	All.DetailedInfo.Network	JetDirectErrorsOut
NIC - Unicast Packets Received	All.DetailedInfo.Network	JetDirectUnicastPacketsReceived
NIC - Unicast Packets Transmitted	All.DetailedInfo.Network	JetDirectUnicastPacketsTransmitted
Open/Print from USB Device	All.Security	USBPrinting
Optimum Speed/Cost	All.Print	SpeedCostSwitchMode
Optimum Speed/Energy Usage	All.Print	OptimumSpeedEnergyUsage
Order Supplies % Level	All.Print	OrderSupplies
Original Orientation	All.Copier	Orientation
Other Links	All.EVS	OtherLinksInformation
Outgoing Analog Fax Count	All.Counters	PageCountFaxOutgoing
Outgoing Digital Fax Count	All.Counters	PageCountDigitalFaxOutgoing
Outgoing Servers	All.Device	OutgoingServers
Override A4Letter	All.Print	OverrideA4Letter
OXPd	All.Device	OXPdEnabled
OXPd 1.4 Configuration	All.DigitalSend	SDCCConfiguration
OXPd Accessory Records	All.Device	OXPdAccessoryRecordConfig
OXPd Device Functions	All.Device	OXPdDeviceFunctions
Page Inserter	All.Capabilities	HasPageInserter
Panorama	All.Capabilities	CapPanorama

Column Name	Location	Programmatic Name
Parallel Handshake	All.Network	ParallelHandshake
Parallel Mode	All.Network	ParallelMode
PC Connected	All.Network	IsPcConnect
PCL	All.Capabilities	CapPCL
PCL Form Length	All.Print	PCLFormLength
PCL/XL	All.Capabilities	CapPCLXL
Personal Contacts Setup	All.DigitalSend	XDMEnablePersonalAddressBooks
Phone Home Privacy Setting	All.Network	PrivacySetting
PJL	All.Capabilities	CapPJL
PJL Password	All.Security	PJLPasswordsSet
Port (Any)	All.Network,Favorites	PortDisplayString
Poster Size Paper	All.Capabilities	PaperSizePoster
PostScript	All.Capabilities	CapPostscript
PPM Black & White	All.Capabilities	PpmMono
PPM Color	All.Capabilities	PpmColor
PRCB C1 Firmware Version	All.DetailedInfo.Device	PRCB_C1_Firmware_Version
PRCB C2 Firmware Version	All.DetailedInfo.Device	PRCB_C2_Firmware_Version
PRCB C3 Firmware Version	All.DetailedInfo.Device	PRCB_C3_Firmware_Version
PRCB C4 Firmware Version	All.DetailedInfo.Device	PRCB_C4_Firmware_Version
PRCB C5 Firmware Version	All.DetailedInfo.Device	PRCB_C5_Firmware_Version
Print Engine Revision	All.DetailedInfo.Device,All.Firmware	PrintEngineRevision
Print Mode Usage	All.DetailedInfo.Usage	PrintModeUsage
Print PDF Errors	All.Print	PrintPDFErrors
Print PS Errors	All.Print	PrintPSErrors
Print Sheet Counters	All.Counters	PrintSheetUsage
Print Usage Counters	All.Counters	PrintUsage
Printed Media Info Black Only	All.DetailedInfo.Usage	PrintedMediaInfoBlackOnly
Printed Media Info General Office	All.DetailedInfo.Usage	PrintedMediaInfoGeneralOffice
Printed Media Info General Office Accent	All.DetailedInfo.Usage	PrintedMediaInfoGeneralOfficeAccent
Printed Media Info Professional	All.DetailedInfo.Usage	PrintedMediaInfoProfessional
Printed Media Info Professional Accent	All.DetailedInfo.Usage	PrintedMediaInfoProfessionalAccent
Printer Firmware - Available	All.Firmware	PrinterFirmwareAvailable
Printer Firmware - Severity	All.Firmware	PrinterFirmwareSeverity
Printer Firmware Update	All.Security	RemoteUpgradeEnable
Printer Wakeup	All.Device	PrinterWakeupSet
Projector - Current Source	All.DetailedInfo.Projector	ProjectorCurrentSource
Proxy Server	All.Network	DeviceProxyConfig
PS Defer Media	All.Device	PSDeferMedia
Punch Kit	All.Capabilities	HasPunchKit
Quiet Mode	All.Print	QuietMode
Replace Supplies	All.Supplies	ReplaceSupplies
Replicate MFP	All.DigitalSend	ReplicateMFP
Reset Copy Send Timeout	All.DigitalSend	DeviceCopierResetSendTimeout
Reset Copy Timeout	All.Copier	DeviceCopierResetTimeout
Resident Fonts	All.Storage	GetDSMDeviceResidentFonts
Resolution	All.Print	Resolution
Resolution Enhancement	All.Print	ResolutionEnhancement
Restrict Color	All.Security	RestrictColor
Rotate Offset	All.Print	RotateOffset
Scan Idle Timeout	All.Network	ScanIdleTimeout
Scan Path Usage	All.DetailedInfo.Usage	ScanPathUsage
Scan Usage Counters	All.Counters,All.DetailedInfo.Device	ScanUsage
Scanner	All.Capabilities	HasScanner
Scanner Description	All.DetailedInfo.Scanner	ScannerDescription
Scanner Firmware Date	All.DetailedInfo.Scanner	ScannerFirmwareDate
Scanner Firmware Version	All.DetailedInfo.Scanner	ScannerFirmwareVersion
Scanner Guest	All.DetailedInfo.Scanner	ScannerGuest
Scanner Language	All.DetailedInfo.Scanner	ScannerLanguage
Scanner Media Size	All.DetailedInfo.Scanner	ScannerDefaultPaperSize

Column Name	Location	Programmatic Name
Secure Disk Encryption Mode	All.Storage	SecureDiskAutolock
Secure File Erase Mode	All.Storage	SecureFileEraseMode
Send To Network Folder	All.DigitalSend	SendToNetworkFolderColumn
Serial Number	All.DetailedInfo.Device,All.Identity,Favorites	SerialNumber
Server Collection Time (Accessory Inventory)	All.WebJetadmin.ReportDataCollection.AccessoryInventory	AccessoriesInventoryCollectTime
Server Collection Time (Device Inventory)	All.WebJetadmin.ReportDataCollection.DeviceInventory	DeviceInventoryCollectTime
Server Collection Time (Device Utilization by User)	All.WebJetadmin.ReportDataCollection.DeviceUtilizationByUser	ByUserTrackingCollectTime
Server Collection Time (Device Utilization)	All.WebJetadmin.ReportDataCollection.DeviceUtilization	DeviceUtilizationCollectTime
Server Collection Time (Event Log History)	All.WebJetadmin.ReportDataCollection.EventLogHistory	EventLogHistoryCollectTime
Server Collection Time (Hourly Peak Usage)	All.WebJetadmin.ReportDataCollection.PeakUsage	PeakUsageCollectTime
Server Collection Time (Supply Utilization)	All.WebJetadmin.ReportDataCollection.SupplyUtilization	SupplyUtilizationCollectTime
Set Community Name	All.Security	SetCommunityNamesSet
Severity	All.Status,Favorites	DeviceStatusSeverity
Show Date and Time	All.Device	ShowDateAndTime
Show Network Address	All.Device	NetworkAddressButton
Simple Power Management for One Watt	All.Device	OneWattSimplePowerManagement
Size / Type Prompt	All.Device	SizeTypePrompt
Sleep / Wake Time	All.Device	SleepWakeUpSchedule
Sleep Delay	All.Capabilities	CapPowerSave
Sleep Delay (Minutes)	All.Device	SleepDelay
Sleep Schedule	All.Device	SleepSchedule
SNMP Packets - Incoming	All.DetailedInfo.Network	SnmpPacketsIncoming
SNMP Packets - Outgoing	All.DetailedInfo.Network	SnmpPacketsOutgoing
SNMP Trap Destination Table	All.Network	TrapTable
Solution Manager Installed	All.Solutions	IsSlnMgrInstalled
Solutions	All.Solutions	ListSolutions
Solutions Config Detailed Status	All.Solutions	SolutionsConfigDetailedStatus
Solutions Config Status	All.Solutions	SolutionsConfigStatus
Solutions Configuration Parameter Detailed Status	All.Solutions	SolutionsConfigParamDetailedStatus
Solutions Configuration Parameter Status	All.Solutions	SolutionsConfigParamStatus
Solutions Install Detailed Status	All.Solutions	SolutionsInstallDetailedStatus
Solutions Install Status	All.Solutions	SolutionsInstallStatus
Solutions License Detailed Status	All.Solutions	SolutionsLicenseDetailedStatus
Solutions License Parameter Detailed Status	All.Solutions	SolutionsLicenseParamDetailedStatus
Solutions License Parameter Status	All.Solutions	SolutionsLicenseParamStatus
Solutions License Status	All.Solutions	SolutionsLicenseStatus
Solutions Run Detailed Status	All.Solutions	SolutionsRunDetailedStatus
Solutions Run Status	All.Solutions	SolutionsRunStatus
SRGB	All.Capabilities	CapSRGB
Stacker	All.Capabilities	HasStacker
Stacker Staple Setting	All.Print	StackerStaplerMode
Stand by Fuser Mode	All.Print	StandByFuserMode
Stapler Offset Mode	All.Print	StaplerOffsetMode
Stapler/Stacker	All.Capabilities	HasStapler
Staples Out Override	All.Print	StaplesOutMode
Status	All.DetailedInfo.Device,All.Status,Favorites	DeviceStatus
Status (Accessory Inventory)	All.WebJetadmin.ReportDataCollection.AccessoryInventory	AccessoriesInventoryStatus
Status (Device Inventory)	All.WebJetadmin.ReportDataCollection.DeviceInventory	DeviceInventoryStatus
Status (Device Utilization by User)	All.WebJetadmin.ReportDataCollection.DeviceUtilizationByUser	ByUserTrackingStatus
Status (Device Utilization)	All.WebJetadmin.ReportDataCollection.DeviceUtilization	DeviceUtilizationStatus
Status (Event Log History)	All.WebJetadmin.ReportDataCollection.EventLogHistory	EventLogHistoryStatus
Status (Hourly Peak Usage)	All.WebJetadmin.ReportDataCollection.PeakUsage	PeakUsageStatus
Status (Supply Utilization)	All.WebJetadmin.ReportDataCollection.SupplyUtilization	SupplyUtilizationStatus
Storage Media	All.Storage	GetDSMDeviceStorageMedia
Stored Job Sort Order	All.Print	StoredJobSortOrder
Supplies	All.Supplies	Supplies
Supplies Status Messages on Control Panel	All.Device	ControlPanelSuppliesStatusMessage
Supply Levels Gauge	All.Device	SupplyLevelsGaugeOnCP
Support Contact	All.Network	SupportContact

Column Name	Location	Programmatic Name
Support Phone Number	All.Network	SupportPhoneNumber
Suppress Blank Pages	All.Print	SuppressBlankPages
System Contact	All.DetailedInfo.Device,All.Network,Favorites	SystemContact
System Location	All.Network,Favorites	SystemLocation
System Log Facility	All.DetailedInfo.Network	IPSyslogFacility
System Log Server Info	All.DetailedInfo.Ipv4,All.Network	SystemLogServerInfo
System Name	All.DetailedInfo.Ipv4,All.Network	SystemName
System Setup Ram Disk	All.Storage	SystemSetupRamDisk
System Up Time	All.DetailedInfo.Jetdirect,All.Network	SystemUptime
TCP Idle Timeout	All.DetailedInfo.Ipv4,All.Network	TcpIdleTimeout
TCP Segments - Incoming	All.DetailedInfo.Network	TcpSegmentsIncoming
TCP Segments - Outgoing	All.DetailedInfo.Network	TcpSegmentsOutgoing
TCP/IP Configuration Method	All.DetailedInfo.Ipv4,All.Network	DeviceNPConfigSource
TCP/IP Domain Suffix	All.Network	DomainSuffix
TCP/IP Protocol	All.Network	TcpProtocolStackEnabled
TFTP Config File (Replaced by Network Enable Features)	Network.NetworkEnableFeatures	NetworkEnableFeaturesTFTPConfigFile
Time Services	All.EWS	EwsTimeServiceCombo
Time Zone/Daylight Saving	All.Device	TimeZoneDaylightSaving
Toner Collection Unit Very Full Action	All.Supplies.Maintenance	TonerCollectionUnitVeryFullAction
Total Memory	All.Capabilities	RamTotal
Tray 1 Mode	All.Print	ManualFeed
Tray Size	Supplies.Trays	TraySize
Tray Type	Supplies.Trays	TrayType
Trays	All.Supplies	Trays
Trimmer	All.Capabilities	HasTrimmer
Unique	All.WebJetadmin	DeviceHashCodelsUnique
Usage Instructions	All.DetailedInfo.Usage	UsageInstructions
USB	All.Capabilities	HasUsb
USB File Settings	All.DigitalSend	UsbFileSettings
USB Keyboard	All.Capabilities	HasUsbKeyboard
USB Notification Settings	All.DigitalSend	UsbNotificationSettings
USB Scan Settings	All.DigitalSend	UsbScanSettings
Use Another Tray	All.Print	UseAnotherTray
Use Requested Tray	All.Print	UseRequestedTray
User PIN Authentication	All.Security	UserPinAuthentication
Web Services Print	All.Network	WebServicesPrint
Windows Sign In Setup	All.Security	XDMWindowsSignInSetup
WINS Server	All.Network	WINSServer
WINS Port	Network.NetworkEnableFeatures	NetworkEnableFeaturesWINSPort
WINS Registration (Replaced by Network Enable Features)	Network.NetworkEnableFeatures	NetworkEnableFeaturesWINSRegistration
Wireless - BSSID	All.DetailedInfo.Wireless	Dot11BSSID
Wireless - Regulatory Domain	All.DetailedInfo.Wireless	Dot11RegulatoryDomain
Wireless - Signal Strength	All.DetailedInfo.Wireless	Dot11SignalStrength
Wireless Card	All.Capabilities	HasWireless
Yellow Average Coverage	All.DetailedInfo.Usage	AverageYellowCoverage
Yellow Cartridge Low Threshold	All.Supplies	YellowCartridgeLowThreshold

© Copyright 2015 HP Development Company, L.P. The information contained herein is subject to change without notice. The only warranties for HP products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. HP shall not be liable for technical or editorial errors or omissions contained herein.

Microsoft and Windows are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries.

c02700115EN, Rev. 9, August 2015

