

HP CM8050/CM8060 Color MFP: HP AutoSend for Edgeline Products

Document Summary

- Overview of the HP AutoSend for Edgeline feature



Contents

Introduction.....	2
Feature Overview	2
Feature Benefits	2
Enabling AutoSend	2
Feature Security.....	4
Network Traffic	4
E-mail Message Attributes	5
What's Included in the XML File.....	5
Miscellaneous.....	5
System Information	5
Usage Metrics	6
Logs	8
Consumables.....	8
Preventative Maintenance	9
What's NOT Included in the XML File	10
Troubleshooting AutoSend	11
AutoSend Authorization.....	12
Sample XML File and XML File Viewer.....	13

Introduction

This document gives an overview of the HP AutoSend for Edgeline feature and provides information to help you understand how it operates and the impact it has on security and network communication. This information is intended for both internal and external audiences.

The AutoSend feature described in this document is based on firmware version 20071204 73.022.0.

Feature Overview

The HP AutoSend for Edgeline feature automatically sends machine metrics from the Edgeline MFP to one or more e-mail addresses in the form of an e-mail message, with the machine metrics embedded in an XML file attachment. There are two views of the machine metrics that the HP AutoSend for Edgeline can generate: an administrator view and a service view. This document focuses on the service view, as this is the data that HP is interested in to help achieve the feature benefits listed below.

Feature Benefits

The machine metrics that are included in the XML file that is generated by the HP AutoSend for Edgeline feature allow HP to see product reliability issues quickly and to react promptly. HP AutoSend for Edgeline is part of a continuous program to improve uptime and reliability.

Receiving machine metrics from your MFPs allows HP to provide you with future product updates and firmware changes that will enhance uptime. With HP AutoSend for Edgeline, HP can:

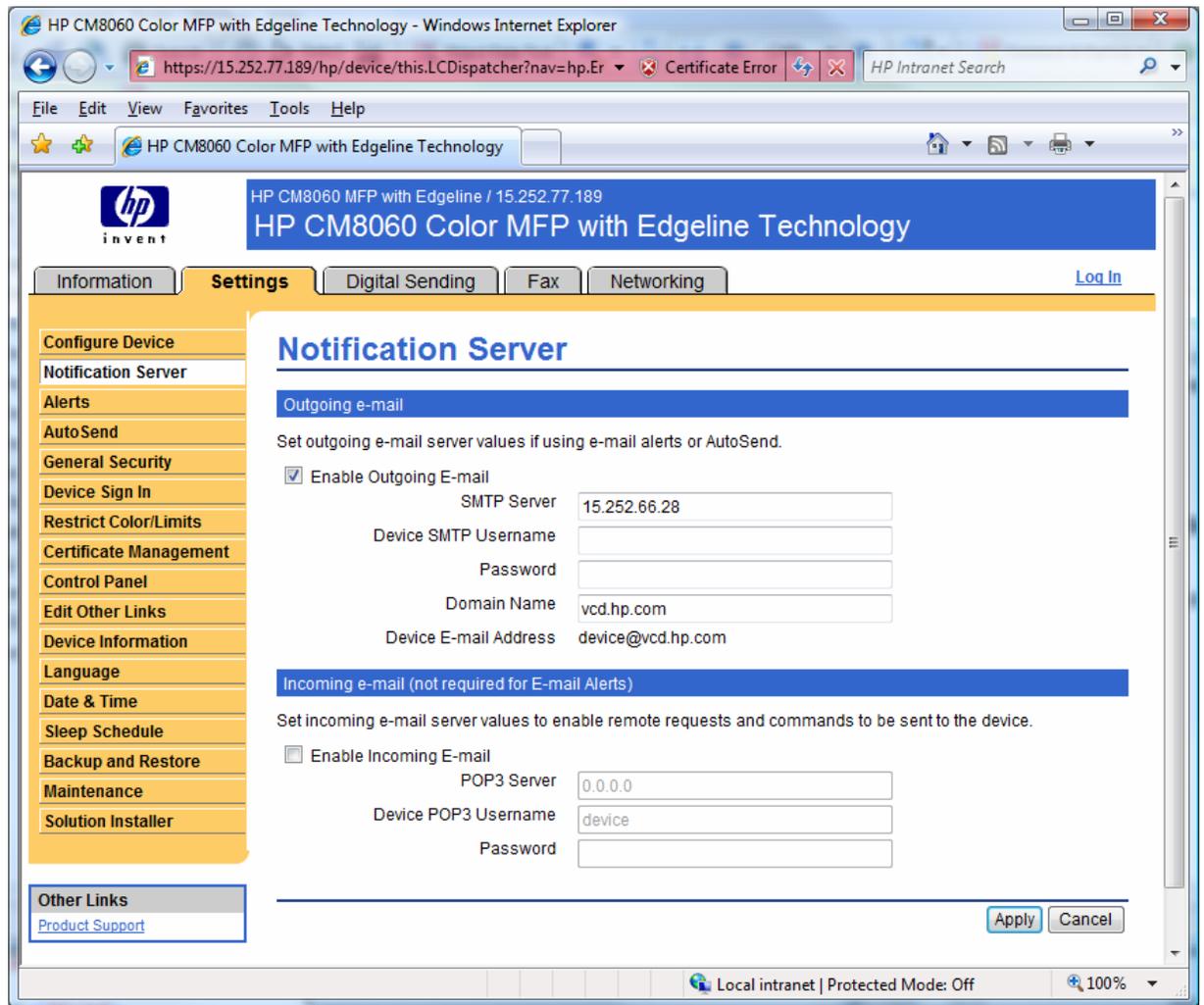
- Improve maintenance procedures
- Increase reliability
- Provide improved parts design for future product changes
 - Can result in fewer service calls and increased uptime

Enabling AutoSend

There are two steps that must be done to enable HP AutoSend For Edgeline. Both are done using the Embedded Web Server (EWS). A more detailed set of instructions can be found in the HP CM8060/CM8050 Color MFP with Edgeline Technology Install Guide.

To enable HP AutoSend for Edgeline

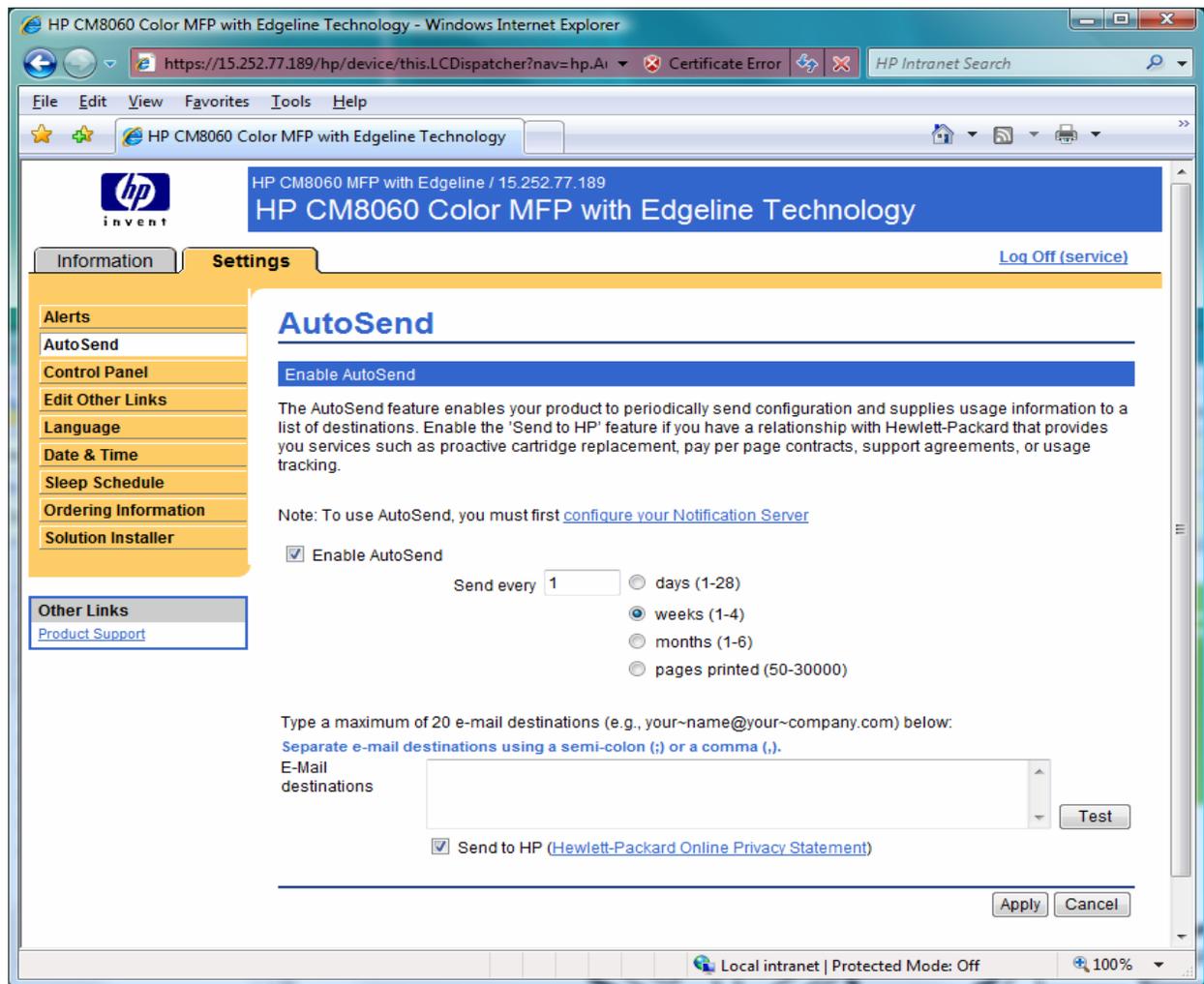
1. Set up the notification server:
 - a) After launching a web browser and connecting to the EWS, select the **Settings** tab.
Note: In order to see the **Settings** tab, you may need to be logged in as admin.
 - b) Next, select the **Notification Server** from the menu on the left side of the screen. This should lead you to a screen shown below.
 - c) Check the **Enable Outgoing E-mail** check box, and then fill in the **SMTP Server** field along with the **Domain Name** field.
 - d) If you are using *unauthenticated e-mail*, you can stop here and click the **Apply** button.
 - e) If you are using *authenticated e-mail*, you must also fill in the **Device SMTP Username** and **Password** fields. Once complete, click **Apply**.



2. Set up AutoSend:

- a) Log in as *service* by using the **Log In** link in the upper right corner of the screen. Please note, this is a **CRITICAL** step to ensure that AutoSend is setup correctly, and the service view of machine metrics is sent to HP.
Note: The password should have been set up in the CDFT service application under remote service password.
- b) Select the **Settings** tab.
- c) Select **AutoSend** from the menu on the left side of the screen which should get you to the screen shown below.
- d) Check the **Enable AutoSend** check box.
- e) Select the frequency that you would like to have this data sent from the device. HP is recommending a minimum of **Send every 1 week**.
- f) Check the **Send to HP** check box to have the AutoSend data sent automatically to HP.
- g) If you would like to have the AutoSend data sent to your reseller, local support person, or possibly onsite IT support, you can enter up to 20 e-mail addresses in the **E-mail destinations** field.
- h) During the initial setup, you may wish to use a test e-mail address (e.g. your mobile phone) to verify that the notification server was configured correctly and that the Edgeline device is able to send e-mail outside of the customer firewall. In order to perform this test, enter one or more e-mail addresses and then click the **Test** button.
NOTE: If the test fails, this is a good indication of three potential problems: the customers e-mail server is configured to disallow e-mail from this Edgeline device to leave the customers network; the customers e-mail server is configured to block e-mail from the Edgeline device; or

- i) Click **Apply** to save the AutoSend configuration.



Feature Security

The HP AutoSend feature uses an SMTP server to transport an e-mail message with a file attachment to a destination of e-mail addresses as specified in the AutoSend configuration. If a customer e-mail/infrastructure environment requires authenticated e-mail, the configuration of AutoSend supports using either authenticated or unauthenticated e-mail messages. You must log in as the admin user to view or set the SMTP username and password in the Embedded Web Server.

Network Traffic

In the AutoSend configuration, the **Send every** value will determine how often an e-mail message will be sent over the network. The size of the e-mail message should never exceed 500KB. In general, e-mail messages should be in the 300KB range. The sending of this e-mail is the only impact on network traffic that the AutoSend feature has. You can control how often this e-mail message is sent when configuring this feature. For more information, see the section titled **Enabling AutoSend**.

E-mail Message Attributes

The e-mail message that is generated has the following attributes:

Subject Printer Snapshot (Date/Time) – Model # - Serial Number
 e.g. Printer Snapshot (Nov 28,2007 5:44:18 PM) – C5958A – SG73CB1018

To myprinter@hp.com

From device@domain.com

Message Body Empty

Attachment Printers.xml

What's Included in the XML File

The machine metrics that are packaged by the HP AutoSend feature are grouped into the following areas: Miscellaneous, System Info, Usage Metrics, Logs, Consumables, and Preventative Maintenance. For each group, each of the data items are listed along with typical values of each field where it makes sense.

Miscellaneous

- Create Date – creation date of the XML file
- Create Time – creation time of the XML file

System Information

- Product – HP CM8060 Color MFP **or** HP CM8050 Color MFP
- Device Name – HP CM8060 MFP with Edgeline **or** HP CM8050 MFP with Edgeline
- Model Number – C5957A **or** C5958A
- Manufacturer – HP
- Serial Number – unique number for each Edgeline device, e.g. SG742C1009
- Service ID – Records the date that the unit was first put into service.
- Firmware Datecode – date and revision ID for the device firmware, e.g. 2007-09-28 72.026.0
- Install Date – date only, e.g. 2007-01-27
- Language Interpreters (revision and date)
 - ALS, PJI, Postscript, PDF
- HW Components and Drivers Installed – includes a component type, ID, storage capacity, storage type, make and model, revision. Some examples include:
 - Type – Filter Driver; ID - IOF 196 (-): Capella MIPA (active) (20070716); Max Capacity – 6291456; Unit – Byte
 - Type – bus; ID – compact flash; Max Capacity – 1;Unit – slots
 - Type – digital storage; ID – hard disk; Make and Model – ST3808110AS; Max Capacity – 68861344; Unit – kilobyte.
 - Type – io; ID – jdi; Make and Model – HP JetDirect J7974E; Revision – V.34.40.
 - Type – board; ID – formatter
 - Type – board; ID – scanner_cpb; Revision – 3.029 (0.0)
 - Type – board; ID – scanner_scb; Revision – RBI P07 2.8 P07 1.14
 - Type – digital storage; ID – ram; Max Capacity – 1048576; Unit – kilobyte;
 - Type – digital storage; ID – DIMM; Max Capacity – 1048576; Unit – kilobyte
 - Type – control panel

- Media Input Configuration (tray identification, max capacity, media size loaded/default)
 - Tray 1, 80, ISO A4 210x297mm
 - Tray 2, 500, ISO A4 210x297mm
 - Tray 3, 500, ISO A4 210x297mm
 - Tray 4, 500, ISO A3 297x420mm
 - Tray 5, 4000, ISO A4 210x297mm
- Media Output Configuration (bin identification, max capacity, orientation, finish function)
 - Output Bin 1, 380, Face Down, None
 - Output Bin 2, 380, Face Down, None
 - Output Bin 3, 380, Face Down, None
 - Output Bin 4, 380, Face Down, None
 - Output Bin 5, 2500, Face Down, Stapler

Usage Metrics

In this section, there are references to equivalent, absolute, impressions and sheets. These are explained as follows:

1. Equivalent vs. Absolute: These define the size of the media used to calculate the counter value.
 - Absolute means the actual media size was used. Equivalent means the count was normalized to the US Letter/A4 media size. For example:
 - a) A simplex 11x17 printed page would produce:
 - i. 1 absolute sheet
 - ii. 2 (Letter) equivalent sheets
 - b) Impressions vs. Sheets: These define whether or not a counter refers to one or both sides of a page. Impressions refer to a single side of a paper. Sheets refer to the entire piece of paper. For example, a duplex 11x17 printed page would produce:
 - i. 2 absolute impressions
 - ii. 4 (Letter) equivalent impressions
 - iii. 1 absolute sheet
 - iv. 2 (Letter) equivalent sheets

The following usage metrics are included in the XML file:

- US Letter/A4 equivalent impressions printed
 - Total
 - Monochrome only
 - Color only
- Absolute impressions printed
 - Total
 - Monochrome
 - ☞ Simplex
 - ☞ Duplex
 - ☞ Dimplex
 - Professional Color
 - ☞ Simplex
 - ☞ Duplex
 - ☞ Dimplex
 - Professional Color Accent

- ☞ Simplex
 - ☞ Duplex
 - ☞ Dimplex
- General Office Color
 - ☞ Simplex
 - ☞ Duplex
 - ☞ Dimplex
- Total number of jobs for each language
 - ☞ PCL
 - ☞ PostScript
 - ☞ PDF
- Total number of absolute sheets sent to each output bin (bin 1.. bin5)
- For each media size that the device is capable of printing on (7.25x10.5in, 8.5x11in, 8.5x14in, 8.5x13in, 11x17in, 5.5x8.5in, 7.75x10.75in, 10.75x15.5in, 148x210mm, 210x297mm, 297x420mm, 215x305mm, 225x320mm, 305x430mm, 128x182mm, 182x257mm, 257x364mm, 4x6in, 5x8in, custom, 12x18in, 5x7in)
 - Counter for # of sheets printed
 - ☞ Monochrome simplex
 - ☞ Monochrome duplex
 - ☞ Color simplex
 - ☞ Color duplex
 - ☞ Color dimplex
 - ☞ Professional Color Simplex
 - ☞ Professional Color Duplex
 - ☞ Professional Color Dimplex
 - ☞ Professional Color Accent Simplex
 - ☞ Professional Color Accent Duplex
 - ☞ Professional Color Accent Dimplex
 - ☞ General Office Color Simplex
 - ☞ General Office Color Duplex
 - ☞ General Office Color Dimplex
 - Media size name
- For each media size that the scanner is capable of detecting (7.25x10.5, 8.5x11, 8.5x14in, 8.5x13in, 11x17in, 5.5x8.5in, 7.75x10.75in, 10.75x15.5in, 148x210mm, 210x297mm, 297x420mm, 215x305mm, 225x320mm, 305x430mm, 128x182mm, 182x257mm, 257x364mm, 4x6in, 5x8in, 12x18in, 5x7in)
 - Counter for # of sheets scanned in
 - ☞ Duplex
 - ☞ Simplex
- Total number of impressions broken down by
 - Copy

- Fax receive
- ADF Simplex
- ADF Duplex
- ADF Total
- Flatbed
- Total number of scan impressions broken down by
 - Digital Send
 - Network folder
 - Scan
- Total number of jobs broken down by
 - Fax receive
 - Fax Send
- Total number of sheets broken down by input source
 - Manual Feed
 - Tray 1 .. Tray 5

Note: The warning log is only included in the XML file if AutoSend was enabled using the service login.

Logs

The device error and warning log is transmitted in the XML file. For each error and warning, the following information is included in the XML file: not usage log

- Event Code
- Description
- Time Stamp
- Repetitions
- Impression Counter

The maximum number of warnings and errors that are transmitted is 200 each for warnings and errors.

Consumables

For each ink cartridge (black, cyan, magenta, yellow and bonding agent), the following information is included in the XML file:

- Marker color (e.g. black)
- Description (e.g. Yellow Cartridge HP C8753A)
- Serial Number
- Max Capacity in tenths of milliliters and in milliliters
- Current Level
- Measurement Units
- Overall State which includes true/false values
 - Authorization Level for Genuine HP supplies
 - Missing/Present
 - Low
 - Out

- Expired
- Failure
- Leak
- Unknown Manufacturer
- Unsupported

Preventative Maintenance

The preventative maintenance items listed below have the following information captured: Description, Current Page Count, Current Threshold, Time Stamp, Current Value. With these values, we are able to interpret the following: estimated next maintenance due and % remaining.

Note: The preventative maintenance information is only included in the XML file if AutoSend was enabled using the service login.

- Accumulator Roller
- ADF Feed Sensor
- ADF Glass
- ADF Hinges
- ADF Pick Rollers
- ADF Timing Sensor
- Aerosol Duct Kit
- Aerosol Filter
- Carriage Drive Belt
- Carriage Encoder Sensor
- Carriage Encoder Strip
- Carriage Felt Oiler
- Charcoal Filter
- Cooling fan filters
- Curler output transmission belts
- Drop detect sensors
- Drum jam sensors
- Drum screen
- Filter scanner chamber
- Horizontal transport drive rollers
- Scanner lamp
- Spittoon
- Tetris sensor
- Tray 1 pick roller
- Tray 2 pick roller
- Tray 3 pick roller
- Tray 4 pick roller
- Tray 5 pick roller
- Web-wipe

What's NOT Included in the XML File

When AutoSend is enabled using the service login and remote service password, the following data items are not included in the XML data file:

- General Fax Settings
- LAN Fax Settings
- Internet Fax Settings
- Analog Fax Settings
- Email Settings
- LDAP Settings
- Network Folder Settings
- Email Job Settings
- Fax Job Settings
- Security Services Settings
- Novell NDS Authentication Agent Information
- Windows Negotiated Authentication Agent Information
- Permission Groups Information
- Color Access Control Information
- Embedded Usage Tracking and Control Information

Some of the items above are included in the administrator view of the AutoSend data, but are NOT included in the service view of the AutoSend data.

Troubleshooting AutoSend

Here are some potential known problems that you may encounter when using the AutoSend feature

- XML file does not contain warning log or preventative maintenance information.
 - AutoSend was configured incorrectly. You must log in as service before enabling AutoSend. Please see the section above titled **Enabling AutoSend**.
- After configuring AutoSend, no e-mail is received either by HP or an address that was put in the **E-mail destinations** field.
 - Check the **Notification Server** configuration to ensure that the SMTP server name and Domain Name is correct. If authenticated e-mail is required, make sure that the Device SMTP user name and password is correct.
 - Verify that the customer SMTP server is configured to allow the Edgeline device to send e-mail. Some customers will internally block ranges of IP addresses in their e-mail configuration.
 - Verify that the customer SMTP server is configured to allow the Edgeline device to send e-mail outside the customer network environment.
- If the customer e-mail configuration will allow the device to send e-mail, but blocks that e-mail from leaving the customer network, a potential workaround for this is as follows:
 - Identify a mailbox within the customer network environment can be the destination for the e-mail message.
 - Put this e-mail address in the destinations field on the Enable AutoSend screen, and uncheck the Send to HP box.
 - For the user of this e-mail address, a simple outlook rule can be used to automatically forward the e-mail message to myprinter@hp.com. For example, setup a rule to automatically forward e-mail messages from edgeline-autosend@customer.com to myprinter@hp.com.
- The XML file that I receive is corrupt.
 - A known issue with the original release of FW could cause the generation of a corrupt XML file that was not readable. This has been fixed with the first CPE release of FW.

AutoSend Authorization

HP invites you to participate in a program that will allow HP to provide better service for your printers and provide HP with information that will allow us to develop future products that better meet your needs. If you agree to participate HP will activate AutoSend software which will send information about your printers to an HP entity, which may be located overseas, in compliance with the HP Privacy Policy located at www.hp.com/go/privacy.

Customer can receive copies of all e-mails that are sent to HP if customer provides HP with an e-mail address list.

If you agree to participate and give your written permission below, the following types of machine metrics can be transmitted to HP:

- (1) event logs, both error and warning
- (2) page counters (total pages, monochrome/color breakdown, professional color, professional color accent, general office color, general office color accent)
- (3) consumables status and state
- (4) preventive maintenance information such as preventive maintenance counters and logs
- (5) internal machine configuration
- (6) general system information (model number, serial number, firmware revisions, installation date)

HP suggests that the machine metrics be transmitted once/week and such collection will have a negligible impact on the connection or system performance. The frequency can be changed to daily or can be based upon the number of pages printed if the customer wishes. The machine metrics will be retained by HP for ten years and will not be shared with anyone outside of HP.

You may discontinue participation in this program at any time by using the Embedded Web Server to turn off AutoSend - your field service engineer can help you with this.

Yes, I agree to have HP activate AutoSend software to transmit the data described above to HP. HP may transmit the data automatically without notifying me.

No, I do not agree to have HP activate AutoSend software.

Signed _____

Authorized representative

Dated _____

Sample XML File and XML File Viewer

A sample XML file has been embedded in this document for your reference. You can copy and paste these files from this document to your hard disk and open the **Printers.xml** file with Microsoft Word (assuming you have an XML viewing plug) or use the XML File Viewer (**XDMViewer.exe** also embedded) to view the **Printers.xml** file.



Printers.xml



XDMViewer.exe

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