

Installation and Setup Guide

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Installation and Setup Guide for HP Web Jetadmin 10.2

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When you install HP Web Jetadmin 10.2, you only need to install it on one hardware platform that meets the recommended minimum requirements (<u>Minimum System Requirements for HP Web</u> <u>Jetadmin 10.2 on page 2</u>) and is centrally accessible on the network. You may then access the software from any supported Windows desktop on the network and manage all supported network-connected peripherals.

HP Web Jetadmin 10.2 offers several installation options. If you have installed a previous version of HP Web Jetadmin 10.2, you can choose to upgrade the previous version or install a new copy. Upgrading an older version preserves your settings for discovery options and groups and is most likely the best choice if you have already been using HP Web Jetadmin 10.2.

NOTE: HP recommends that you fully test HP Web Jetadmin 10.2 in environments where earlier releases have been integrated into critical business operations. HP Web Jetadmin device management, alerting, and other features have been greatly improved with the introduction of HP Web Jetadmin 10.2 and, prior to implementing this software into full production, HP recommends that you fully test and qualify the application.

Please read all support materials when implementing HP Web Jetadmin 10.2. For current information regarding HP Web Jetadmin 10.2 software, see the documents on <u>http://www.hp.com/go/</u> webjetadmin Self Help tab titled Late Breaking News, Supported Devices on HP Web Jetadmin 10.2.

NOTE: If the installation stops with a warning that a reboot is required, reboot the host on which the HP Web Jetadmin 10.2 installer is running. Then relaunch the installer to continue to installation.

Minimum System Requirements for HP Web Jetadmin 10.2

Area	Requirement or Recommendation	Notes
Operating Systems (server and client unless otherwise noted)	• For the server: .NET Framework 3.5 SP1 is the minimum required.	HP Web Jetadmin now supports 32-bit and 64-bit versions of all
	• For the client: .NET 2.0 (SP2 is the minimum required)	supported Windows operating systems.
	Microsoft Windows XP Professional (with SP2 and above)	 Print Management features are not supported on Microsoft Vista systems as either an HP Web
	Windows Server 2003	Jetadmin server or a print management target.
	Windows Server 2008	• A local administrator is required for
	Vista Business Edition	installation or application upgrade.
	Vista Enterprise Edition	 Supported versions of Windows Server 2003 include Enterprise and R2 as well as others.
Virtual Machine (Optional Platform)	VMWare Server	• For a VMWare server, the virtual
	VMWare ESX	machine network must be set to bridged to facilitate HP Web Jetadmin 10.2 communications.
		• It is very important to configure VMWare so that its guest or virtual systems have enough resources to support HP Web Jetadmin and Microsoft SQL server. To ensure appropriate resource provisioning, please see VMWare documentation specific to your version.

 Table 1 Technical specifications for HP Web Jetadmin 10.2 (Product number: J6052AA)

Area	Requirement or Recommendation	Notes
Server Hardware	 Dual-core processor or greater required 2.33 GHz or greater (2.8GHz recommended) System RAM Minimum 3GB required (2GB required for the HP Web Jetadmin Service) .NET 3.5 SP1 required Recommended: Available 4GB storage 	 If .NET is not detected, the software will provide assistance for steps to install .NET Framework. Hewlett-Packard executes application performance measurements using Dual 2.8GHz processor with 3GB RAM. Performance increases are realized by using dual processor systems; HP Web Jetadmin multi-thread coding takes advantage of these systems. Storage requirements will vary depending on implementation, database and migration from older versions. NTFS is the only supported file system. If the installer determines less than 1GB is installed, a message is displayed stating that 3GB RAM is
Client Hardware	 PC with 1.8 GHz or greater processor (2.4 GHz recommended) 1 GB RAM or greater required (2GB RAM recommended) Required: .NET Framework 2.0 SP2 1024 by 768 client display resolution (minimum). Optimized for Normal font size. Default DPI only. 	 If .NET is not detected, the software will provide assistance for steps to install .NET Framework. If the installer determines less than 1GB is installed, a message is displayed stating that 3GB RAM is required.
Database	 SQL Server 2005 Express Edition SQL Server 2005 Standard, Workgroup, or Enterprise Editions 	 SQL Express Edition, if not present, is added at install time. SQL Express Edition database instance is created at install time. SQL memory usage is set to 512MB at install time. SQL Enterprise, Workgroup or Standard Editions are supported via a documented post install procedure. SQL Express Edition database and SQL Enterprise, Workgroup, or Standard Editions are supported if the optional HP Web Jetadmin Database Connectivity Module Software is installed.

Table 1 Technical specifications for HP Web Jetadmin 10.2 (Product number: J6052AA) (continued)

Area	Requirement or Recommendation	Notes
Network	Required: 1 active IPv4 connection	HP Web Jetadmin 10.2 is not supported on multi-homed systems at this time.
		 Active connection required by installer, failure occurs when the active connection is not present.
Install/Upgrade	 Upgrade from HP Web Jetadmin 10.2. and 10.1 	• Upgrade using the latest install executable for HP Web Jetadmin 10.2 that is available on the Web, or migrate using Migration Tool executable (off-host). The Migration Tool is only supported on HP Web Jetadmin 7.8, 8.0, or 8.1.
		• Administrator access is needed to install this application.
HP Web Jetadmin Client Application	Required: Internet Explorer 6 or 7 Required: 1024 x 768 display	No administrator access is needed to run Smart Client
	resolution.	• 15 maximum concurrent client sessions.
Supported browsers	Microsoft Internet Explorer 6.0 or above (client host requirement)	N/A
Shared print queue creation support	 Windows XP Professional or Windows Server 2003 	• Print queue management is not supported in Vista operating systems at this time as either a managed host target or HP Web Jetadmin 10.2 install host.
Network peripheral management supported printers	HP Web Jetadmin 10.2 supports HP and non-HP printers connected through HP Jetdirect print servers and standard printer MIB-compliant third-party network connected printers. The capabilities available for third-party printers will vary from basic to more robust capabilities when the devices are used with HP-certified HP Web Jetadmin 10.2 plug-ins.	N/A
Host access requirements	 Application host: local administrator required for installation or application upgrade; Client host: local user access required for ClickOnce HP Web Jetadmin 10.2 client application; Administrator required for .NET installation 	N/A
Client/Server Security	 Required: Microsoft Domain or Locally managed Windows users and passwords. 	HP Web Jetadmin 10.2 is tested in Microsoft Active Directory domains.
		• Users must either be in HP Web Jetadmin 10.2 server administrator group membership or designated within HP Web Jetadmin 10.2 User settings.

Table 1	Technical specifications	for HP Web Jeta	dmin 10.2 (Product	number: J6052AA)	(continued)
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NOTE: HP Web Jetadmin 10.2 is supported on platforms with Microsoft Windows and .NET Framework high-priority updates. During each development cycle, HP Web Jetadmin 10.2 is regularly tested on platforms with current Microsoft updates. HP will investigate all customer software issues presented by post-release updates. The document Late Breaking News for HP Web Jetadmin 10.2 (found on <u>http://www.hp.com</u>) will be updated periodically to provide the latest software issue information.

NOTE: New! HP Web Jetadmin now requires Windows HTTP SSL service to be loaded. HP Web Jetadmin is now using SSL communication through port 8050 to communicate with newer HP devices and now requires Windows SSL support.

Ports

HP Web Jetadmin 10.2 listens on several ports continuously and opens other ports for specific functionality. Below are the ports used by the system hosting HP Web Jetadmin 10.2 and also remote ports:

Table 2 Ports			
Port Number	Туре	I/O	Details
0	TCP	I	Client Event Notification
69	UDP	Ι	TFTP incoming port, HP Jetdirect firmware
161	UDP	0	SNMP
427	UDP	I	SLP Listen
445	UDP	0	WMI Communication
445	N/A	I	WMI Communication
2493	UDP	I/O	Build Monitor
3088	TCP	I/O	Proto Remoting
3702	UDP	I	Listen (WS Discovery)
4088	TCP	I	Remoting
8000	UDP	I	Web Jetadmin Discovery Listen (remote port)
8000	TCP	I	WebServer (http)
8050	ТСР	I	Device Eventing Callback (HTTPS)
8140	ТСР	I	OXPm Web Services (HTTP)
8143	ТСР	I	OXPm Web Services (HTTPS)
8443	TCP	I	WebServer (https)
9100	TCP	0	Printer Firmware Upgrade
27892	UDP	I	Traps Listener

NOTE: Port Number 0 denotes a random system port number. The I/O column represents communication direction with respect to the HP Web Jetadmin 10.2 server host. Random source ports are used when communicating to ports on remote IP address.

NOTE: All random ports assignments are made by the operating system hosting HP Web Jetadmin.

Steps to Install HP Web Jetadmin 10.2

To begin the installation, follow these steps:

- 1. Access <u>http://www.hp.com/go/webjetadmin</u> to get the HP Web Jetadmin 10.2 software.
- 2. Run wjasetup.exe.
- 3. Follow the instructions as each page is displayed.
- 4. When the installation is complete, click **Close**.

Installing HP Web Jetadmin 10.2 from a Command Line or Script

Sometimes it is required to install software from a command line, through a script, or some automation. Use these steps:

- 1. Create a SetupProperties.xml file using the -x option: WjaSetup.exe -x=SetupProperties.xml.
- If desired, use a text editor or an xml editor of your choice and edit the SetupProperties.xml file you just added.

Validate the SetupProperties.xml file using the -v option, to make sure that the manual editing was done correctly: WjaSetup.exe -v=SetupProperties.xml.

3. Run WjaSetup.exe in silent mode using the -s option: WjaSetup.exe -s=SetupProperties.xml.

When running HP Web Jetadmin install executable in silent mode at a command prompt, use the /wait option. This will cause the command line to wait until the install process exits before continuing. Here is an example:

start /wait WjaSetup.exe -s=Properties.xml

When invoking WjaSetup.exe from other launch points or programs, these must have appropriate wait parameters or methods established to allow the install.exe to complete.

4. If desired, look at the log file created in the Document and Settings folder when WjaSetup.exe runs (for example C:\Documents and Settings\{username}\Local Settings\Temp\hp\wja \WjaSetup\WjaSetup.log).

Extended Modules Features

Operate your managed print environment at peak efficiency. Extend the value of industry leading HP Web Jetadmin 10.2 with greatly increased performance and scalability. This modular solution enables improved productivity and comprehensive print device support.

With two new complimentary extended modules, you can expand the capabilities of HP Web Jetadmin:

- HP Web Jetadmin Database Connectivity Module Software:
 - Attach to an off-server SQL Server Enterprise Farm to create a basic mirrored database that database management administrators can manage.
 - Get access to device list and historical trend data via the direct database warehouse.
 - Report fleet-wide and device-specific performance data, as well as tracking and trending over time, utilizing industry standard reporting software like SAP Crystal Reports software.
 - HP Eco Solutions Reports based on Crystal Reports 2008 include: Device Settings and Capabilities, Copy/Digital Send Capabilities Exception, Device Paper Usage and Digital Processing, and Top 5 Paper Usage (Crystal Reports available from SAP).
- HP Advanced non-HP Device Support Software: Get an advanced level of support for thirdparty devices. HP Web Jetadmin 10.2 and the ANDS Module support key certified non-HP devices with plug-ins to provide advanced device information (standard and propriety) designed for specific vendor models. This ensures the proper queries are being made to support the desired functionality.

Each of these modules is offered for free via a license. Contact your local sales representative for more information.

Obtaining and Using a License

For more expanded features, you can obtain HP Web Jetadmin 10.2 Extended Modules or HP Advanced Non-HP Device Support Software. After you obtain a license, you need to register that license to get access to these additional features. Additional information can be found regarding HP Web Jetadmin **Extended Modules** licensing by visiting <u>http://www.hp.com/go/webjetadmin</u>, **Extended Modules** tab.

Following are steps to register and use your license.

- 1. On the same machine as your HP Web Jetadmin 10.2 server, access the Webware URL (<u>https://www.webware.hp.com</u>) and click **Generate**.
- 2. Type the invoice number in Order number and click Next.
- 3. Select the product for the license.
- 4. Enter the IP address. Click Next.
- 5. Accept the terms and conditions by clicking Accept.
- 6. Complete the Member sign-in page and click Next.
- 7. Complete the License Registration page and click Next.
- 8. A license number will be returned. Copy that license number using Ctrl-C.
- 9. In Start > Programs (or All Programs), access the HP Web Jetadmin program group and select HP Web Jetadmin License Manager.
- 10. Click Add. The Enter License page is displayed.
- **11.** Paste the license number into **License Key** and click **Apply**. Your license will be loaded and you can use the expanded version of HP Web Jetadmin 10.2.
- 12. Restart the HP Web Jetadmin 10.2 Service (HPWJA Service).

Upgrades versus Migrate

Migrating from HP Web Jetadmin 8.x/7.8 to HP Web Jetadmin 10.x is no longer supported starting with HP Web Jetadmin 10.2 Service Release 2. If you need to upgrade from HP Web Jetadmin 8.x/ 7.8 to HP Web Jetadmin 10.x, use an earlier release of HP Web Jetadmin 10.1 or 10.2 and then upgrade to the latest HP Web Jetadmin 10.2, Service Release 2 or later. Upgrading from HP Web Jetadmin 10.x to a later version is still supported, with the exception of upgrading directly from HP Web Jetadmin 10.0 to 10.2.

Upgrading to HP Web Jetadmin 10.2 from HP Web Jetadmin 10.1

You can upgrade to HP Web Jetadmin 10.2 from a system that is already running HP Web Jetadmin 10.1. Obtain the HP Web Jetadmin installation executable and run it on the system hosting HP Web Jetadmin. Upgrading to HP Web Jetadmin 10.2 through **Product Update** is not possible; the install executable must be used.

It is **VERY important** to run a backup of your HP Web Jetadmin 10.1 installation before proceeding with the upgrade. Consult the document WJABackupRestoreInstructions.txt (available in English only) located at %SystemDrive%\Program Files\Hewlett-Packard\Web Jetadmin 10\WJABackupRestore on the HP Web Jetadmin server. The version of HP Web Jetadmin 10.1 should also be noted at this time. From the HP Web Jetadmin client, access **Help > About** and write down the version as **10.1.xxxx** where xxxxx is the build number. This is the version of the installer you will need to have in case a recovery becomes necessary.

NOTE: Prior to installing HP Web Jetadmin 10.2 over a running HP Web Jetadmin installation, use Application Management > Overview > HP Web Jetadmin – All Active Tasks to detect any paused or pending tasks. These should be stopped or resolved before running the installer.

Upgrading Configuration Settings

When you upgrade from HP Web Jetadmin 10.1 to HP Web Jetadmin 10.2, some of the configuration options in HP Web Jetadmin 10.1 are not compatible with the new versions of the options in HP Web Jetadmin 10.2 and cannot be converted automatically. If any of these particular configuration options were used in templates for Configuration or in scheduled configuration tasks, then they will be deleted from the template or task.

Following is a list of the configuration options that will not be upgraded from HP Web Jetadmin 10.1 to HP Web Jetadmin 10.2.

Configuration Category	Configuration Item	
Device	Control Panel Language	
	Default Media Type	
	Media Administration	
	• Time Zone	
	Tray Administration	
	Tray Setup Media Type	

Configuration Category	Configuration Item	
Network	IPv6 - Configuration Precedence	
	IPv6 – DHCPv6 Policy	
	• IPv6 – Enable	
	IPv6 – DHCPv6 DNS Configuration	
	SNMP Trap Destination Table	
Fax	• Fax Printing	
	• Fax Reports and Logs	
Embedded Web Server	Time Services	
	Embedded Web Server Configuration Options	
	Enable Copy Monitor	
	Weekly Timer	
Digital Sending	Activity Log	
	Address Book Management	
	LDAP Settings	
Security	Access Control List	
	Authentication Manager	
	Disable Direct Ports	
	File System Password	
	Get Community Name	
	• VuLDAP	

For example, in HP Web Jetadmin 10.1 you had a **Configuration Template** with three configuration options: **SNMP Trap Destination Table**, **Control Panel Language**, and **Auto Continue**. After upgrading from HP Web Jetadmin 10.1 to HP Web Jetadmin 10.2, this template would only contain **Auto Continue**, as the other two configuration options are incompatible.

If this dialog box is displayed, follow these steps:

- 1. Either copy the information listed and paste it into a word processor, or make sure you can view it later in the **Application Log**.
- 2. Select whether to let this dialog appear again for other clients, or dismiss it forever.
- NOTE: After this dialog box is dismissed by selecting **Do not show again**, you must access the **Application Log** to retrieve this information if you did not copy it.
- **3.** Access each of the configuration templates or tasks containing a configuration option that was not upgraded and add that configuration option again.

Post-Installation Actions

NOTE: The HP Web Jetadmin 10.2 server will start automatically as a Microsoft Service. The HP Web Jetadmin 10.2 server cannot accept HP Web Jetadmin client connections until the HP Web Jetadmin server has fully loaded all services into memory. Dependent upon your HP Web Jetadmin server available system resources, it may take 1-2 minutes for all services to completely load after initial server installation or server reboot.

The first time you launch HP Web Jetadmin 10.2 after installation, a pop-up dialog is displayed stating that no devices have been discovered. You can opt to launch discovery settings at this point.

Once the installation is complete, HP Web Jetadmin 10.2 can be launched from a supported browser by entering the hostname or IP address of the computer on which it is installed, followed by the port number and path. Typical default port numbers for Web services have a value of 80. Since HP Web Jetadmin 10.2 may be running simultaneously with another Web service on the same computer, HP Web Jetadmin 10.2 uses a port number of 8000. If desired, the port value may be altered.

Here is an example of the URL used to activate HP Web Jetadmin 10.2 on a supported Windows desktop:

http://myhost:8000

In most cases, the browser will auto-launch the Smart Client file download and on first-run will present a **Run** dialogue (<u>Smart Client Deployment on page 11</u>). Choose the **Run** button to activate the .NET Smart Client application loader. A short time will elapse while Smart Client installs the application to your desktop system. In some cases, you might have to click **Click Here** in the browser window before the download process is started.

NOTE: If the installation was a re-installation after an uninstallation (<u>Uninstalling HP Web Jetadmin</u> <u>10.2 on page 26</u>), you need to verify the licenses still exist (<u>Obtaining and Using a License</u> <u>on page 7</u>) before you restart the HP Web Jetadmin service to ensure the licensed features will be available. This is particularly important in the case of a remote database connection, because the service will not be able to operate at all until a remote database connection is made.

Configuring the HP Web Jetadmin Service to Restart Automatically

It is recommended to configure HP Web Jetadmin 10.2 to restart automatically whenever the HP Web Jetadmin service fails. If, for example, the database is inaccessible, the HP Web Jetadmin service will be stopped and then automatically restarted. The HP Web Jetadmin service will wait for the database to become accessible and then the HP Web Jetadmin service becomes live.

To configure the HP Web Jetadmin service to restart automatically, follow these steps.

- 1. Access the Windows Control Panel and select Administrative Tools.
- 2. Select Services and then select HPWJA Service.
- 3. Right-click and select **Properties** from the menu.
- 4. Click the **Recovery** tab. For the **First failure**, **Second failure**, and **Subsequent failures**, select **Restart the service**.
- 5. Click OK.

Restarting the HP Web Jetadmin Service Manually

It may be necessary to stop and restart the HP Web Jetadmin 10.2 service. An example of this would be when a network is switched from hard-wired to wireless. Once the network is switched, HP Web Jetadmin 10.2 must be restarted in order for the application to realize the change.

▲ **WARNING!** Restarting HP Web Jetadmin 10.2 services may interrupt background tasks and user sessions. Always check the application before restarting.

To script the stop of all HP Web Jetadmin 10.2 services, use these command strings in this order:

- Net stop HPWJAUpdateService
- Net stop HPWJAService
- Net stop mssql\$HPWJA

To script the start of all HP Web Jetadmin 10.2 services, use these command strings in this order:

- Net start mssql\$HPWJA
- Net start HPWJAService
- Net start HPWJAUpdateService

You can revert back to an older version of HP Web Jetadmin (versions 7.8 or 8.x) from an upgrade if needed. Follow these steps:

- 1. Uninstall HP Web Jetadmin 10.2.
- 2. Use Windows Service Manager to set the older HP Web Jetadmin service (listed as **HP Web** Jetadmin in the Services MMC) to activate and to also start the service.

Smart Client Deployment

HP Web Jetadmin 10.2 uses the Microsoft ClickOnce Smart Client technology to provide you with the best application experience possible. This technology runs a .NET application by automatically downloading and launching it through your web browser. The Smart Client runs as a local .NET application on your computing host and communicates with the HP Web Jetadmin 10.2 service via .NET Remoting. Once the Smart Client application is started, the browser is no longer needed. HP Web Jetadmin 10.2 also uses the browser for online help and proactive Product Update notification but, essentially, the client application runs locally on your computer (like many other applications). With this, the URL form http://hostname:8000 can be used to access HP Web Jetadmin 10.2 remotely from anywhere on your intranet and/or WAN.

NOTE: When the HP Web Jetadmin 10.2 installer builds the shortcut on the install host (DRIVE: \Documents and Settings\All Users\Start Menu\Programs\HP Web Jetadmin 10\) it uses the default port number 8000 in the item URL. You can modify this if the port number of the HP Web Jetadmin URL is altered. Simply change the URL http://localhost:8000 to http://localhost:xxxx where xxxx is the value of the new port number being used.

NOTE: Modification of the HTTP port used to launch the HP Web Jetadmin Smart Client is possible through a configuration file change. The default port numbers are 8000 for HTTP and 8443 for HTTPS. Port numbering is changed through a configuration file found on the HP Web Jetadmin directory:

DRIVE:\Documents and Settings\NetworkService\Local Settings\Application Data\Hewlett-Packard \HPWebJetadmin\config\

File: HP.Imaging.Wjp.Core.WebServer.config.xml

NOTE: Either of the entries for HttpsPort or HttpPort can be altered. Here is an example of the entries:

<property name="HttpsPort">

<type> HP.Imaging.Wjp.Core.Framework.ConfigurationItemString </type>

<value> 8443 </value>

</property>

<property name="HttpPort">

<type>HP.Imaging.Wjp.Core.Framework.ConfigurationItemString </type>

<value> 8000 </value>

</property>

All that is needed to start the Smart Client session is a browser. Administrator rights are not required to run Smart Client applications but .NET 2.0 is required to be installed; local administrator rights might be required prior to the installation.

Some characteristics about Smart Client are:

- The HP Web Jetadmin 10.2 server is initially contacted through http/https.
- The server transfers about 2 MB of Smart Client application to the client where it is saved to disk and runs as the user logged onto the computer.
- The Smart Client application, running on the client, executes commands to download the HP Web Jetadmin 10.2 client files (about 50 MB) and starts UIExec.exe (browser is now inactive).
- UIExec.exe runs and opens the graphical user interface (the HP Web Jetadmin 10.2 client application).
- The server downloads all relevant information to the client and then periodically pings the client when new information exists for retrieval.
- **NOTE:** In most cases, the Smart Client will auto-launch; in some cases local security settings on the workstation may prevent the application from auto-launching. Use the **Start HP Web Jetadmin** button to manually launch the Smart Client or refer to Microsoft documentation to adjust local security settings.

To run the Smart Client in a workgroup on Microsoft Windows XP, you need to adjust the Microsoft security settings:

NOTE: Consult Microsoft documentation to learn more about security policy settings.

- Access the Control Panel on the HP Web Jetadmin 10.2 host computer and go to Administrative Tools > Local Security Policy.
- 2. Go to Local Policies > Security Options.
- 3. Locate the item Network access: Sharing and security model for local accounts.
- 4. Change the setting to Classic local users authenticate as themselves.

To ensure this feature works properly, see <u>Minimum System Requirements for HP Web Jetadmin</u> <u>10.2 on page 2</u>.

Alternate Log-in

In some cases, the client host and the server hosting HP Web Jetadmin 10.2 may not reside on the same Windows security domain or may not reside on any Windows security domain. Since the release of HP Web Jetadmin 10.2 an alternate log-in prompt is provided so that you can enter log-in credentials other than those being used by the current Windows session. Normally, HP Web Jetadmin uses single sign-on functionality to pass the user identity, currently logged into the local desktop Windows session, onto HP Web Jetadmin. HP Web Jetadmin checks this identity either through local Windows users at the server host or through Windows security domain identities. When HP Web Jetadmin fails to authenticate this identity (for any reason) it will display the alternate log-in prompt.

The alternate log-in prompt is handy for a variety of use-cases. For example:

- An HP Web Jetadmin authorized user is accessing software from another unauthorized person's desktop.
- An HP Web Jetadmin server is on a security domain but end-user desktops are not; end users do have log-in identities within this domain that have been given access rights within HP Web Jetadmin **Users** and **Roles**.

Steps for Using Smart Client

Once the HP Web Jetadmin 10.2 installation is complete, a Smart Client session can be started in one of two ways:

- Look in the Start > Programs (or All Programs) group on the computing host where HP Web Jetadmin 10.2 was installed. A program group named HP Web Jetadmin 10.2 should have been created and should contain a shortcut to HP Web Jetadmin 10.2 software. This launches a browser session that starts a Smart Client session with HP Web Jetadmin 10.2.
- 2. Browse to the following URL at the computing host: http://localhost:8000. This also launches a browser session that starts a Smart Client session.
- NOTE: In some cases (for example, Windows Server 2003), the URL of HP Web Jetadmin 10.2 might have to be added to browser trusted security zones.

Configuring HP Web Jetadmin 10.2 to Bind to a Specific NIC

When clients attach to HP Web Jetadmin 10.2, the software performs a redirect using an IP address from the NIC that the application selected during startup. If servers have multiple NICs, HP Web Jetadmin 10.2 does not always select the correct one. Then, during client launch, HP Web Jetadmin 10.2 may redirect to the wrong IP address on the network. When this happens, the client fails to start. Below is a scenario and an instruction for configuring HP Web Jetadmin 10.2 to bind to the correct NIC.

Scenario: The server has multiple NICs, not all of which are accessible by clients:

- NIC1: 192.168.0.35 (accessible to clients)
- NIC2: 192.168.10.10 (not accessible to clients)
- NIC3: 192.168.20.254 (not accessible to clients and selected by HP Web Jetadmin 10.2 during startup)

In this case the clients will be browsing to 192.168.0.35 or its IP Hostname (DNS). When they do, HP Web Jetadmin 10.2 will redirect to 192.168.20.254 and the client startup will fail. In this case, the administrator of the HP Web Jetadmin 10.2 server will need to configure to allow HP Web Jetadmin 10.2 to bind to the correct NIC.

To configure HP Web Jetadmin 10.2 to bind to a specific NIC, follow these steps:

- 1. Locate the file \Program Files\Hewlett-Packard\Web Jetadmin10\Config\WjaService \System.Remoting.config.
- 2. Open the file System.Remoting.config in a simple text editor (like Notepad).
- 3. Edit the text to add the additional item as shown below:

BEFORE (partial text):

(channel ref="tcp" port="4088" name="CMRemotingChannel" rejectRemoteRequests="false" tokenImpersonationLevel="Impersonation" secure="true" protectionLevel="EncryptAndSign" impersonate="false")

AFTER (partial text):

(channel ref="tcp" port="4088" name="CMRemotingChannel" rejectRemoteRequests="false" tokenImpersonationLevel="Impersonation" secure="true" protectionLevel="EncryptAndSign" impersonate="false" machineName="xxx.xxx.xxx")

- 4. Once the additional item machineName="xxx.xxx.xxx" has been added to the file, save and close the file.
- 5. Restart the HP Web Jetadmin 10.2 service.
- 6. Once the service has completely started, browse to the client start page and verify the configuration was successful.

Configuring HP Web Jetadmin 10.2 to Set Static Event Notification Port

If there is a firewall on the HP Web Jetadmin server, the event notification port must be set to **static** and the firewall must be configured to accept connections through this port. Even though a client might have a firewall, that client firewall does not have to be configured in order to launch the client.

HP Web Jetadmin 10.2 directs clients to a TCP connection to get display event update notifications. When the client has established this connection, HP Web Jetadmin will send event update messages prompting the client to update itself via the normal .NET Remoting channel on port number 4088. The port number established for event update notification is communicated to the client when the client first establishes a connection to the HP Web Jetadmin server. The port number that HP Web Jetadmin communicates is somewhat random which can be a problem when a firewall is configured at the HP Web Jetadmin server.

HP Web Jetadmin can use a static port number for the purpose of sending client event update messages. Follow these steps including restarting the HP Web Jetadmin service.

- ▲ WARNING! Restarting the HP Web Jetadmin service can cause critical process interruption. Please ensure all users are logged off and that no active tasks are running on the HP Web Jetadmin server. Use the Client Management Active Clients and Application Management Active Tasks task modules in Application Management to check the HP Web Jetadmin server.
 - 1. Using Notepad, create a new file on the HP Web Jetadmin server:

DRIVE:\Documents and Settings\NetworkService\Local Settings\Application Data\Hewlett-Packard\HPWebJetadmin\WjaService\config\Global.config.xml

2. Edit the file so that it contains the following addition XML section:

<ipmc:configuration xmlns:ipmc="www.hp.com/schemas/imaging/ipmc/config/2004/02/24">

<property name="ClientEventRouter.ServerPort">

<type>HP.Imaging.Wjp.Sdk.Core.Framework.ConfigurationItemString</type>

<value>8099</value>

</property>

</ipmc;configuration>

- NOTE: The port number within <value> can be any unused port number value. In this case, Port 8099 was used for illustrative purposes.
- 3. Save the file.
- 4. Restart the HP Web Jetadmin service (HPWJAService).
- 5. Open the port number on any firewall or similar application.

About Firewall Software

HP Web Jetadmin server host firewall must be configured to allow client and other traffic to pass through the correct ports. See the Ports section (<u>Ports on page 5</u>) to configure your firewall correctly. Some firewall applications allow you to specify the program or executable as a firewall exception. Microsoft's Firewall is one of these. The firewall monitors the application for ports that it is using and allows traffic. In these cases, use the executable hpwebjetadmin.exe found in Program Files\Hewlett-Packard\Web Jetadmin 10\bin as the exception application. Firewall software on the client system should not require any special consideration as the client application does not "listen" to a specific port number.

Default Settings

Configuration Item	Value	Where to change it
Alerts history retention	30 days	Tools > Options > Shared > Server Maintenance > Alerts
Alerts polling rate: Critical alert interval	5 minutes	Tools > Options > Device Management > Device Polling > Alerts
Alerts polling rate: Maximum communication interval	24 hours	Tools > Options > Device Management > Device Polling > Alerts

Table 3 Default Settings for HP Web Jetadmin 10.2

Table 3 Default Settings for HP Web Jetadmin 10.2 (continued)

Configuration Item	Value	Where to change it
Application Log: Maximum number of entries	20,000	Tools > Options > Application Management > Application Log
Application Log: Save log entries for	60 days	Tools > Options > Application Management > Application Log
Background polling options: Number of devices per poll	2	Tools > Options > Device Management > Device Polling > Background
Background polling options: Polling interval	2 seconds	Tools > Options > Device Management > Device Polling > Background
Background polling options: Time between polling intervals	10 seconds	Tools > Options > Device Management > Device Polling > Background
Configuration history retention	30 days	Tools > Options > Shared > Server Maintenance > Configuration
Configuration retries	0	Tools > Options > Device Management > Configuration > General
Device Filters: Time period for device to remain "New"	14 days	Tools > Options > Device Management > Device Filters > New Devices Filter
Device list polling options: Number of devices per poll	2	Tools > Options > Device Management > Device Polling > Device List
Device list polling options: Polling interval	5 seconds	Tools > Options > Device Management > Device Polling > Device List
Device tab options: Devices to allow in multi-view	10	Tools > Options > Device Management > Device Tabs > General
Device tab polling options: Polling interval	5 seconds	Tools > Options > Device Management > Device Polling > Device Tabs
Device tab polling options: Time between polling intervals	2 seconds	Tools > Options > Device Management > Device Polling > Device Tabs
Device tab polling options: Number of devices per poll	3	Tools > Options > Device Management > Device Polling > Device Tabs
Discovery history retention	90 days	Tools > Options > Shared > Server Maintenance > Discovery
Firmware upgrade options	8	Tools > Options > Device Management > Firmware > General
Firmware upgrade options: Maximum concurrent upgrades	8	Tools > Options > Device Management > Firmware > General
Firmware upgrade options: Retries	0	Tools > Options > Device Management > Firmware > General

Table 3 Default Settings for HP Web Jetadmin 10.2 (continued)

Configuration Item	Value	Where to change it
Firmware upgrade options: Time between retries	3 hours	Tools > Options > Device Management > Firmware > General
Hours between configuration retries	8	Tools > Options > Device Management > Configuration > General
HTTP timeout	30 seconds	Tools > Options > Shared > Network > HTTP
Reports Data Collection Times: Accessory Inventory	12:00 AM	Tools > Options > Device Management > Reports > Data Collection Times
Reports Data Collection Times: Device Inventory	12:00 AM	Tools > Options > Device Management > Reports > Data Collection Times
Reports Data Collection Times: Device Utilization	12:00 AM	Tools > Options > Device Management > Reports > Data Collection Times
Reports Data Collection Times: Device Utilization by User	12:00 AM	Tools > Options > Device Management > Reports > Data Collection Times
Reports Data Collection Times: Event Log History	12:00 AM	Tools > Options > Device Management > Reports > Data Collection Times
Reports Data Collection Times: Hourly Peak Usage	12:00 AM	Tools > Options > Device Management > Reports > Data Collection Times
Reports Data Collection Times: Supply Utilization	12:00 AM	Tools > Options > Device Management > Reports > Data Collection Times
Reports data retention	1 year	Tools > Options > Shared > Server Maintenance > Reports
SLP Multicast routers to cross	4	Device Discovery Wizard (must change each time)
SNMP retries	3	Tools > Options > Shared > Network > SNMP
SNMPv1 timeout value	500ms	Tools > Options > Shared > Network > SNMP
SNMPv3 timeout value	1000ms	Tools > Options > Shared > Network > SNMP
Supply polling options: Polling interval	5 seconds	Tools > Options > Device Management > Device Polling > Supplies
Supply polling options: Time between polling intervals	10 seconds	Tools > Options > Device Management > Device Polling > Supplies
Supply polling options: Number of devices per poll	2	Tools > Options > Device Management > Device Polling > Supplies

Table 3 Default Settings for HP Web Jetadmin 10.2 (continued)

Configuration Item	Value	Where to change it
Supply low level	25%	Tools > Options > Device Management > Supplies > General
Device list polling options: Time between polling intervals	7 seconds	Tools > Options > Device Management > Device Polling > Device List

Recommended Configuration Settings for HP Web Jetadmin 10.2

Once HP Web Jetadmin 10.2 is installed, it is ready to run. Some of the initial steps you must take to begin managing devices and the print environment are: application settings, discovery and various features setup. Here are a few simple ideas around deploying HP Web Jetadmin 10.2 once an installation has been completed. It may be necessary to use online help for HP Web Jetadmin 10.2 or other documentation.

Application settings are options like email, SNMP, server, or HTTP. These are found in **Tools > Options** from the HP Web Jetadmin 10.2 toolbar and then navigating the **Application Management** category.

HP Web Jetadmin 10.2 is used to find devices on your networks. It may be as simple as enabling HP Web Jetadmin 10.2 to simply listen for devices on the network passively or it may involve your working with an IT team to map out your entire IP network. Once this network map is known, IP segments can be entered into HP Web Jetadmin 10.2 IP Range discovery and a complete inventory of network connected devices can be completed. PC connected device discovery is also possible from within HP Web Jetadmin 10.2. Many of the same settings and techniques can be used to perform this type of discovery which can lead to an inventory of locally connected devices. HP Web Jetadmin 10.2 online help or other documentation should be consulted prior to planning and implementing HP Web Jetadmin 10.2 device discovery.

Feature setups such as Roles (or permissions), Users, Alerts (for devices, and Device Groups, all need to be configured prior to the initial HP Web Jetadmin 10.2 implementation. Many of these features were described in previous sections here and are discussed in more detail within the online help for HP Web Jetadmin 10.2 and other documentation prior to configuration.

Using a Separate Instance of Microsoft SQL Server 2005

HP Web Jetadmin 10.2 installs and uses by default a database running under Microsoft SQL Express. However, it may be more convenient for HP Web Jetadmin to use MS SQL Server 2005 instead since it may already be installed, or the SQL Express 4GB database limitation may be too restricting. Fortunately, an existing installation of HP Web Jetadmin 10.2 can be configured to use MS SQL Server 2005 instead of SQL Express. For the standard version of HP Web Jetadmin 10.2, as long as SQL Server 2005 resides on the same machine, HP Web Jetadmin can be instructed to use a different database instance under MS SQL Server 2005.

HP Web Jetadmin Extended Modules are available for attaching to a different instance of Microsoft SQL Server 2005 on a remote host. This feature requires an HP Web Jetadmin license to be installed in order to expose the functionality. You will only see an Extended Modules feature if that module has been enabled by installing a license. For more information about obtaining Extended Module licensing browse to http://www.hp.com/go/webjetadmin and view the Extended Modules tab.

HP Web Jetadmin 10.2 will support the following Microsoft SQL Server configurations:

- When installed on the same server as HP Web Jetadmin 10.2:
 - Microsoft SQL Server 2005 Standard Edition
 - Microsoft SQL Server 2005 Express Edition
 - Microsoft SQL Server 2005 Enterprise Edition

Supported Microsoft SQL Server configurations include Database Mirroring, Multiple CPU support, and both 32-bit and 64-bit support.

NOTE: In some failover situations, the HP Web Jetadmin service may need to restart in order to switch to the secondary instance. It is recommended to configure the HP Web Jetadmin service to restart upon failure.

NOTE: Schedule the migration appropriately for your work environment; it could take several hours or more.

The following steps will allow an existing HP Web Jetadmin 10.2 installation to use an instance of MS SQL Server 2005 running on the same machine:

- 1. Install MS SQL Server 2005 on the machine where HP Web Jetadmin 10.2 is running.
- 2. Choose to use a named instance (such as HPWJA_FULL).

Make sure that it runs under the **Network Service** account and is configured to use **Windows Authentication Mode**.

- **NOTE:** The HP Web Jetadmin service runs under the NT AUTHORITY/Network Service which is a local built in account on the server hosting the application. By using this account, the HP Web Jetadmin service runs as a low privilege service. Changing the account that the HP Web Jetadmin service uses is not supported by Hewlett-Packard and is also strongly discouraged. Users should be aware that NT AUTHORITY/Network Service should have default access rights to its %USERPROFILE% (typically c:\Documents and Settings\Network Service\). Also, HP Web Jetadmin, during installation, sets Read, Execute and List permissions on the HP Web Jetadmin 10 directory (usually within ~Program Files\Hewlett-Packard) for the user NT AUTHORITY\Network Service. Finally, the Microsoft SQL instance either created by the HP Web Jetadmin installer or by the end-user should log-on as NT AUTHORITY\Network Service.
- 3. Create a blank database on the new instance named **HPWJA**. For example:
 - Launch the MS SQL Server Management Studio.
 - Open the named instance (HPWJA_FULL).
 - Right-click on the **Databases** folder and select **New Database**.
 - Type the database name HPWJA with NT AUTHORITY/SYSTEM as the owner.
- Edit the following HP Web Jetadmin 10.2 file: C:\Documents and Settings\NetworkService\Local Settings\Application Data\Hewlett-Packard\HPWebJetadmin\WjaService\config \DatabaseSettings.config.xml.

On Microsoft Vista systems this file is located under C:\Windows\ServiceProfiles\NetworkService \AppData\Local\Hewlett-Packard\HPWebJetadmin\WjaService\config

Ensure the file contains the following contents and save it:

<ipmc:configuration xmlns:ipmc="www.hp.com/schemas/imaging/ipmc/config/2004/02/24">

<property name="DatabaseConnectionFactory.CommandTimeoutInSeconds">

<type>HP.Imaging.Wjp.Sdk.Core.Framework.ConfigurationItemString</type>

<value>30</value>

</property>

<property name="DatabaseConnectionFactory.InstanceName">

<type>HP.Imaging.Wjp.Sdk.Core.Framework.ConfigurationItemString</type>

<value>HPWJA_FULL</value>

</property>

</ipmc:configuration>

- 5. Stop and restart the HP Web Jetadmin 10.2 Service (HPWJA Service).
- 6. Launch HP Web Jetadmin 10.2 to validate that the new blank database is now in use (All **Devices** will contain no devices).

Connecting to a SQL Server on a Remote Machine

Following are steps to connect to a SQL server on a remote machine. This feature requires a HP Web Jetadmin license to be purchased and installed in order to expose the functionality. For more information about how to purchase an HP Web Jetadmin module that contains the necessary license, please visit <u>http://www.hp.com/go/webjetadmin</u>.

- Install the remote database using either a named instance or the default instance. This can be accomplished by restoring a previous database backup. Record the name or default name being used.
- **NOTE:** Connections to a remote machine requires a license.
- 2. Create a catalog with a name on the remote database. Record the catalog name.
- **3.** Create a user on the database with database owner rights to the catalog from Step 2. Record the username and remember the password.
- 4. In the config file directory. For example, on Vista: C:\Windows\ServiceProfiles\NetworkService \AppData\Local\Hewlett-Packard\HPWebJetadmin\WjaService\config, create a file named DatabaseSettings.config.xml.

In the file type:

<ipmc:configuration xmlns:ipmc="www.hp.com/schemas/imaging/ipmc/config/2004/02/24">

<property name="DatabaseConnectionFactory.MachineName">

<type>HP.Imaging.Wjp.Sdk.Core.Framework.ConfigurationItemString</type>

<value>insert machine name here</value>

</property>

<property name="DatabaseConnectionFactory.UserName">

<type>HP.Imaging.Wjp.Sdk.Core.Framework.ConfigurationItemString</type>

<value>insert username here</value>

</property>

<property name="DatabaseConnectionFactory.PlainTextPassword">

<type>HP.Imaging.Wjp.Sdk.Core.Framework.ConfigurationItemString</type>

<value>insert plain text password here</value>

</property>

</ipmc:configuration>

If the instance name is not a default instance, insert a property into the file:

<property name="DatabaseConnectionFactory.InstanceName">

<type>HP.Imaging.Wjp.Sdk.Core.Framework.ConfigurationItemString</type>

<value>insert instance used</value>

</property>

If the default instance is being used insert the following property into the file:

<property name="DatabaseConnectionFactory.DefaultInstance">

<type>HP.Imaging.Wjp.Sdk.Core.Framework.ConfigurationItemString</type>

<value></value>

</property>

If the catalog name is something other than HPWJA, insert a property like the following into the file:

<property name="DatabaseConnectionFactory.CatalogName">

<type>HP.Imaging.Wjp.Sdk.Core.Framework.ConfigurationItemString</type>

<value>insert catalog used</value>

</property>

Once changes have been made to this file, an HP Web Jetadmin service restart must be performed in order for the changes to take place. After this service startup, the plain text password item will be replaced with an encrypted password item to secure it against unwanted access.

Other properties that can be set in the file are:

- DatabaseConnectionFactory.MinimumPoolSize
 - Sets the minimum number of connections to keep open to the database
 - Default is 0.
- DatabaseConnectionFactory.MaximumPoolSize
 - Sets the maximum number of connections to allow to be opened to the database.
 - Default is 100.

- DatabaseConnectionFactory.CommandTimeoutInSeconds.
 - How long to wait for results to start being returned in a query.
 - Default is 30.
- DatabaseConnectionFactory.FailoverPartner.
 - The mirror partner for the database.
 - Only available if the external database option has been licensed.
- NOTE: If you are experiencing unexpected shutdowns, HP Web Jetadmin 10.2 should be opened as an exception in the firewall.

Microsoft SQL Server Transaction Logging and Mirrored Databases

Mirrored SQL Server database configuration settings can cause a large number of SQL Server transaction log entries. This is due in part to HP Web Jetadmin 10.2 performing many SQL Server transactions (read/write) over time. These log entries can be limited by either changing SQL Server settings or by performing regular maintenance on your SQL Server databases. Disk space problems may occur without proper database administration. For more information, see Microsoft's documentation for Microsoft SQL Server.

HP Eco Solutions Reports

HP Web Jetadmin 10.2 collects data from networked devices to provide you with details about your organization's printing practices. This information enables you to track printing and manage device settings to help improve environmental performance. The optional **HP Web Jetadmin Database Connectivity Module Software** is an extension to HP Web Jetadmin that provides the ability to use SQL Server Production databases, access to this database of information, and the ability to run a range of intuitive HP Eco Solutions reports to measure printing along key environmental metrics. The **HP Web Jetadmin Database Connectivity Module Software** is a single solution that helps you to evaluate your environment and take action to reduce both the cost and environmental impact of office printing.

NOTE: If you have the HP Web Jetadmin Database Connectivity Module Software, you can use the default SQL Server Express database or the SQL Server Enterprise database. This does not require a separate SQL database.

The HP Web Jetadmin Database Connectivity Module Software provides you:

- The ability to use an external SQL Server Production database.
- Access to the Direct Database Warehouse.
- HP Eco Solutions Reports (bases on SAP Crystal Reports 2008).

The **HP Web Jetadmin Database Connectivity Module Software** is installed and locked with a license when you install the latest version of HP Web Jetadmin 10.2 (dated September 2009 or after) (see <u>Obtaining and Using a License on page 7</u>). Then, you must contact your HP sales representative for the free license and for the HP Eco Solutions reports and order number. You can also access <u>http://www.hp.com/go/webjetadmin</u> and click on the **Features and Overview** tab to send a request to wja.marketing@hp.com. You will receive a zip file with the reports.

NOTE: HP strongly recommends purchasing the HP Premier Web Jetadmin Support with the DBC Module. For information about this module, visit <u>http://www.hp.com/go/webjetadmin</u>.

Report Types

The HP Eco Solutions reports are pre configured SAP Crystal Reports 2008 that let you view your environmental settings of your systems. For more information about using Crystal Reports 2008, see http://www.sap.com/solutions/sapbusinessobjects. For a PDF version of the "Crystal Reports 2008 SP1 User's Guide", visit http://help.sap.com/businessobjects. For a PDF version of the "Crystal Reports 2008 SP1 User's Guide", visit http://help.sap.com/businessobject/product_guides/cr2008V1/en/xi3-1_cr_usergde_en.pdf.

There are four HP Eco Solutions rep	orts:
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Report	Description	Data Included
Device Settings and Capabilities	Reports the availability of paper-saving features as well as the availability and use of energy-saving features.	• Device count: quantity of devices detectable by HP Web Jetadmin 10.2.
		• Duplex-capable devices: the percentage of all reported devices with automatic duplex feature installed, listed by individual device status. This shows your total opportunity to drive paper savings via duplexing.
		• Powersave-capable devices: devices that have this energy- efficient capability. Highlights your potential to further decrease energy consumption.
		Powersave-enabled devices: Percentage of devices with Powersave capability that have Powersave features enabled, listed by individual device status. Shows untapped potential to decrease energy consumption by enabling Powersave on capable devices.
		• Average time to sleep: average of "time to sleep" settings across a selected group, in minutes. Shorter "time to sleep" settings will reduce energy consumed by moving devices out of higher energy states, such as ready mode.
Copy/Digital Send Capabilities Exception	Reports devices without copy or digital send capability; addition of digital send capability can enable digital, rather than	• Device count: quantity of devices detectable by HP Web Jetadmin 10.2.
	paper-based, information management, reducing paper consumption. This report can help you uncover alternatives to paper based processes. Using digitally green alternatives to printing or copying and sharing documents can help your organization speed processes and decrease paper consumption.	 Copy-capable devices: devices with copy capability; such devices can also scan to locally connected devices. Digital send-capable devices: devices capable of copying to file and copying for digital sending.

Report	Description	Data Included
Device Paper Usage and Digital Processing	Reports device use, showing both paper-based and digital information management. This allows comparison of simplex and duplex printing, as well as the use of digital send capability rather than copy.	 Total count: paper throughput, in sheets. Simplex sheets: number of single-
		sided prints.
		• Duplex sheets: number of sheets of paper printed in duplex (double- sided) mode; includes sheets printed on one side while the device is in duplex mode.
		• Simplex versus duplex: percentages of one-sided and two- sided printing. A higher percentage of simplex pages indicates potential to save paper with duplex printing.
		 Copy impressions: number of impressions processed in copy mode; each impression counts once, regardless of whether copied to a single-sided or double- sided copy.
		 Digital send impressions: number of impressions processed in digital send mode.
		• Copy versus digital send: graphs percentage of copy count and digital sends. The higher your copy percentage, the greater your potential to save paper and reduce waste moving to digital processes.
		• Paper usage (sheets)/total impressions: ratio indicating how much information (impressions) is managed with paper. The lower the ratio, the more efficiently the device is being used (for example, less paper is used to transfer information).
Top 5 Paper Usage	Reports the printers with the greatest paper usage among selected groups,	Simplex count: number of single- sided prints.
enabling prioritized follow-up.	• Duplex count: number of sheets of paper printed in duplex (double-sided) mode; includes sheets printed on one side while the device is in duplex mode.	
		• Total count: paper throughput, in sheets.
		 Copy impressions: number of impressions processed in copy mode; each impression counts once, regardless of whether copied to a single-sided or double- sided copy.

Generating HP Eco Solutions Reports

HP Web Jetadmin 10.2 provides comprehensive information about your printer fleet and its use. HP Eco Solutions reports provide an intuitive presentation of environmentally relevant data from the HP Web Jetadmin tool, allowing IT managers to quickly assess opportunities to reduce the environmental impact of their organization's printing, and track progress toward green IT goals over time.

These intuitive HP Eco Solutions reports are available only through the **HP Web Jetadmin Database Connectivity Module Software** which is an extension to HP Web Jetadmin 10.2.

To use the **HP Web Jetadmin Database Connectivity Module Software** for HP Eco Solutions reports, follow these steps.

- 1. Obtain Crystal Reports 2008 from SAP by contacting your reseller or SAP (<u>http://www.sap.com/</u> solutions/sapbusinessobjects).
- 2. Ensure the HP Web Jetadmin Database Connectivity Module Software is installed and enabled with a license (see Obtaining and Using a License on page 7).
- 3. Ensure you have the HP Eco Solutions reports (this will be provided from HP in a zip file).
- NOTE: For additional information, see the whitepaper "HP Eco Solutions with HP Web Jetadmin" (available in English only). Visit http://www.hp.com/go/webjetadmin and select Self Help and Documentation > Documents and Whitepapers > Device Reporting and Exporting > HP Eco Solutions with HP Web Jetadmin.
- 4. Create a System DSN connection to the HP Web Jetadmin 10.2 database (HPWJA). Following are the steps for Windows XP.
 - a. Access Start > Control Panel > Administrative Tools.
 - b. Double-click Data Sources (ODBC).
 - c. Navigate to the System DSN tab and click Add.
 - d. From the driver screen, select SQL Server and click Finish.
 - e. On the **Create a New Data Source to SQL Server** page, name your data source connection (HPWJA is a useful one). Type a description if desired.
 - f. Under Which SQL Server do you want to connect to?, select the server name where your HP Web Jetadmin 10.2 database is hosted on. Click Next.
 - **g.** Leave the default setting of **With Windows NT authentication using the network login ID**. Check with your SQL server administrator for your log on credentials.
 - h. On the next screen, check Change the default master database to and select the HP Web Jetadmin 10.2 database. Click Next.
 - i. Leave the default settings on this screen and click Finish.
 - **j.** Click **Test Datasource**. If the test comes back successful, click **OK**. If the test fails, repeat the steps to ensure you have established the correct connections.
- 5. Link the appropriate HP Web Jetadmin 10.2 database (HPWJA) to Crystal Reports:
 - a. Launch Crystal Reports 2008 through accessing **Start > Crystal Reports 2008**.
 - b. Under My Recent Reports, select Open File.
 - c. Select a report and click **Open**. The report is displayed with no data.

- d. Under Database > Set Datasource Location, you will see two windows: Current Data Source and Replace With. Each report will display the tables used from the HP Web Jetadmin 10.2 database.
- For each table in the Current Data Source window, click it and then navigate to your connection in the Replace With window. Select the correct table name and click Update. When you have mapped all of the appropriate tables or views, you can refresh the report by using the Refresh button in the toolbar or F5.

Uninstalling HP Web Jetadmin 10.2

Uninstalling HP Web Jetadmin 10.2 from a computing host is quite simple. Removing HP Web Jetadmin 10.2 software also removes the Microsoft SQL Express 2005 instance of HP Web Jetadmin 10.2 database. Restoring the database is possible provided you have run the correct backup procedures and have stored the files securely.

Steps to Uninstall HP Web Jetadmin 10.2

To uninstall HP Web Jetadmin 10.2, follow these steps:

- 1. In your Control Panel, go to Add or Remove Programs.
- 2. Select HP Web Jetadmin 10.2 and click Remove.
- 3. Follow the instructions as each page is displayed.
- 4. When the uninstall is complete, click **Close**.
- If desired, look at the log file created in the Document and Settings folder when WjaSetup.exe runs (for example, C:\Documents and Settings\{username}\Local Settings\Temp\hp\wja \Uninstaller\Uninstaller.log).

Steps to Uninstall HP Web Jetadmin 10.2 in Silent Mode

To safely remove HP Web Jetadmin 10.2 in silent mode, follow these steps:

- 1. To get the Uninstaller, access C:\Program Files\Hewlett-Packard\Web Jetadmin 10\Uninstaller \Uninstaller.exe.
- NOTE: C:\Program Files is the default location, but on any user system this could be a different drive and/or folder.
- 2. Use the -x option to extract a properties file (Uninstaller.exe -x=properties.xml).
- 3. After manually editing the properties file, use the -v option to validate a properties file (Uninstaller.exe -v=properties.xml).
- 4. Use the -s option to run the Uninstaller in silent mode using the given properties.xml file (Uninstaller.exe -s=properties.xml).

Backing Up and Restoring HP Web Jetadmin 10.2

Backup and restore scripts are in the HP Web Jetadmin 10.2 install directory (usually at Drive: \Program Files\Hewlett-Packard\Web Jetadmin 10\WJABackupRestore\). The backup and restore scripts are provided as examples that show the best way to backup and restore HP Web Jetadmin 10.2 settings and data including the SQL database. The backup and restore scripts are provided with complete instructions in the text file WJABackupRestoreInstructions.txt that is located in the same directory as the scripts. Please refer to this file when using and testing the backup and restore scripts.

A End User License Agreement

Confirmation and agreement to the HP Web Jetadmin End User License Agreement (EULA) is required before download of the product and is found in the registration process. The EULA is also located in HP Web Jetadmin from the top menu bar under **Help > About**.

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