WATCHD C

INSTALLATION AND INITIAL CONFIGURATION MANUAL

Hewlett Packard WES

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Introduction

Purpose of the manual

This manual describes the procedure for installing WES v3 (Watchdoc Embedded Solution) on ![HEWLETT PACKARD] devices.

Intended audience

This manual is intended to be used by technicians responsible for installing the WES on Watchdoc v6.x. Such technicians must have information on the print server, the Watchdoc hosting server, as well as the properties of the device.

Symbols used

The terms followed by an asterisk * are defined in the glossary.

> (i) Information: reports important information required to fine tune the installation or configuration of the solution or information that may be useful for a better understanding or knowledge of a notion or a function of the tool, or provides a specific case of use of this tool.Contact Doxense®

Doxense's technical assistance service is reserved for certified, technical partners and can be contacted via **Connect**, customer portal dedicated to partners.

For all other questions, please contact your Doxense® consultant or send us an email at contact@doxense.com

Versions

Date	Description
01/2025	Update of the troubleshooting section
10/2024	Update of the document formatting
05/2024	Update of the WES v3 installation procedure
03/2020	Update of the available devices list
09/2018	Update of the available devices list
06/2018	Update of the Device Lock out section.
11/2017	Addition of a note about the unsupported models.
08/2017	Rereading and corrections
05/2017	Addition of the Authentication Method and Print Job Release Mode parts.
03/2017	UpDate of the screenshot.
02/2017	New graphical version, adding device prerequisites, adding Organisational Requirements
09/2016	First version.

Prerequisites and priorconfiguration

Configure ports

The network ports to open are the following:

Source	Port	Protocole	Target
Service Watchdoc	TCP 57627 TCP 7627	HTTP HTTPS	Printing devices

Device configuration

Configuration of the Hewlett-Packard WES must be preceded by configuration on the device from its web administration interface.

Admin password

By default, no security parameters are defined on devices. To enable security settings:

1. access the device administration website using a browser ;
2. cick on the **Security** tab;
3. In the **General Security** interface, enter a password for the admin user (or reset the password if it already exists):

Future Smart Level

To operate, WES v3 requires at least **FutureSmart level 4**.
To check the **FutureSmart level** field in the administration interface:

1. open the device administration website using a browser;
2. from the administration interface, go to the **General** or **Troubleshooting** tab;
3. In the left-hand menu, click on **Firmware Update**;
4. In the **Current Firmware Information** section, check the HP FutureSmart level;

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5. if the level is not at least 4, go to the section **Installing new firmware**;
6. go to the **Product Support** web page and select a higher firmware version;
7. check the firmware date: the firmware must be at least March 2014 old;
8. download the firmware to your workspace;
9. return to your device's administration interface and click on **Choose file**:
10. browse your working space to download the new firmware version;
11. once the firmware has been installed, restart your printing device to complete the installation;
12. the device will restart and the update will begin.

Scan to mail - Scan and send by e-mail

This function allows the user to scan a document and send it to an email address.
If you want to use this function on your device:
1. In the device administration web interface, on the **Scan > Digital Send tab, select the Enable Scan to email** check box **Activate Scan to send by e-mail**;
2. then click **Default Job Options** ;
3. on the **Default Task Options** interface, select the **Enable Scan to network folder** check box;
4. complete the settings

- SMTP server: enter the address of the SMTP server used;
- From: select User address (login required) and uncheck the User editable box ;

5. then click **Apply** to accept the settings:
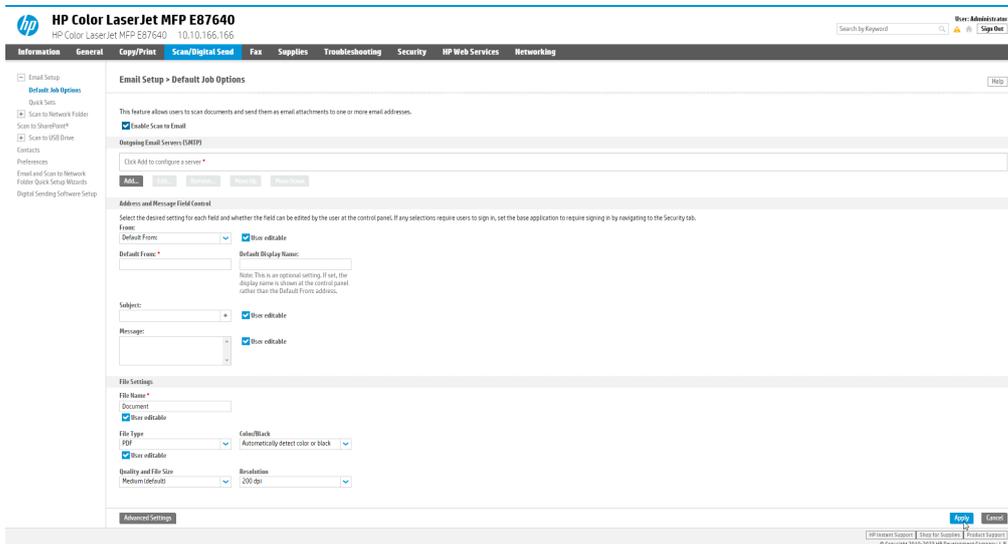
Scan To Folder - Scan to a personal folder

This function allows the user to scan a document and send it to a personal network folder.
You will need to set up a service account with write access to users' network sub-folders.
If you want to use this function on the device :

1. in the device administration web interface, on the **Scan > Digital Send** tab, click the **Scan to network folder** menu entry;
2. In the **Default Job Options** interface, select the **Enable Scan to Network Folder** check box;
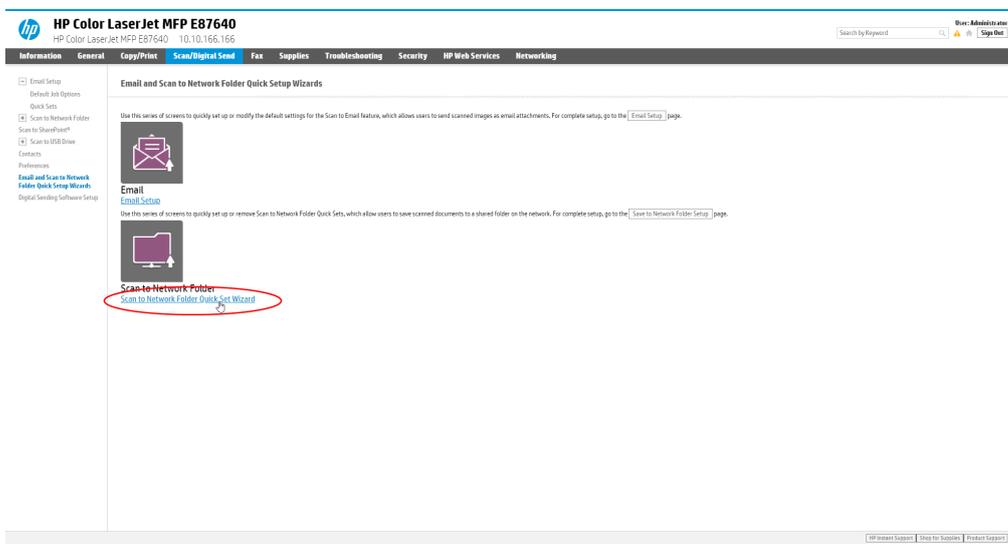
3. Complete the **Folder settings** (path, authentication settings, Windows Domain) according to how you have configured the network folders dedicated to this function.
4. then click **Apply** to accept the settings.

Create and configure the WES profile

Create the WES profile

On a clean Watchdoc installation, a first WES profile is automatically created with default parameters at the end of the wizard procedure, but you can, at any time, edit existing profiles to modify them or create a new profile.

1. From the **Main menu** in the administration interface;
2. in the **Configuration** section, click on **Web, WES & Scan destinations**:
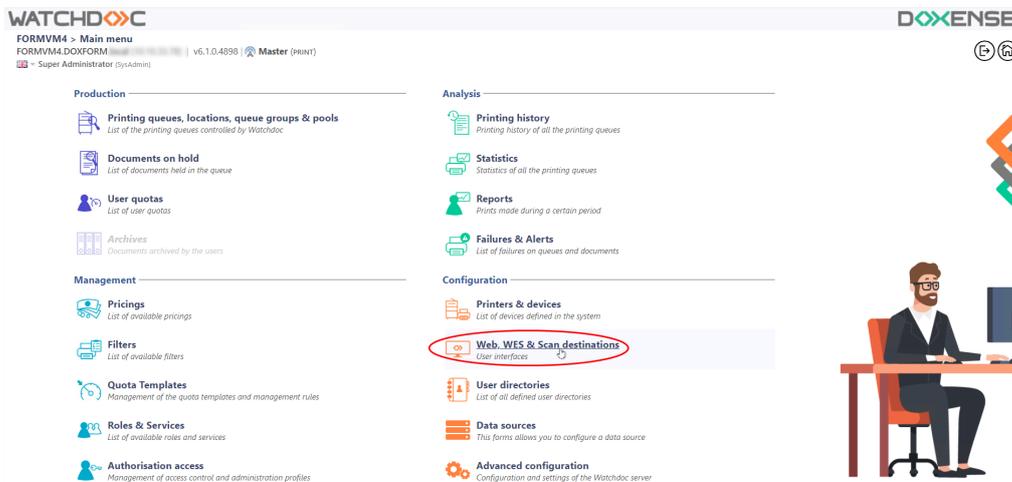
3. in the **Web, WES & Scan Destinations - Client Interface Management** interface, click on **Create a new WES profile**;
4. in the list, select the profile you want to create:
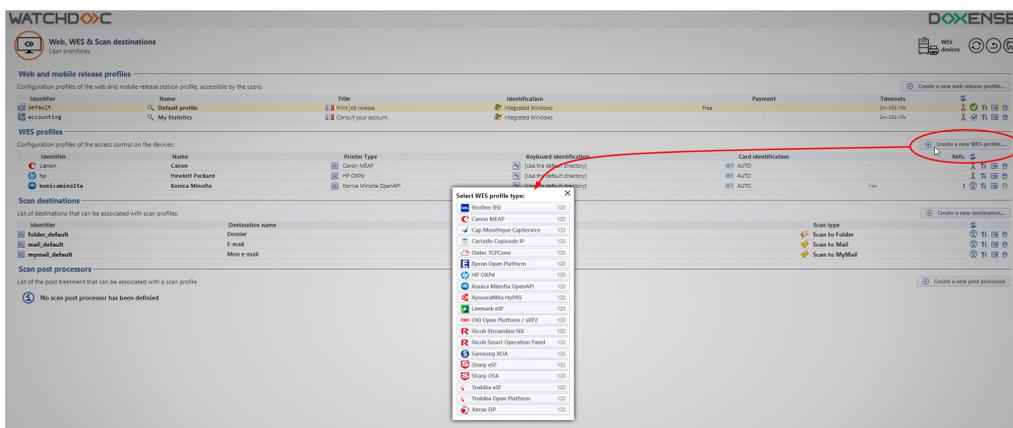
➔ you will access the **Create a WES profile** form, which contains a number of sections in which you can configure your WES.

Configure the WES profile

Configure the Properties section

Use this section to state the main WES properties:
- **Identifier:** Enter the single identifier for the WES profile. It can comprise letters, numbers and the '_' character with a maximum of 64 characters. This identifier is only displayed in the administration interfaces.
- **Name:** Enter the WES profile name. This explicit name is only displayed in the administration interfaces.
- **Global:** In the case of a domain configuration (master/slaves), tick this box to replicate this profile on the slave servers.
- **Language:** Select the WES display language configured from the list. If you select Automatic detection, the WES adopts the language it finds by default in the device configuration.
- **Version:** Select the version of WES. For v3, you can customise the interface by choosing the colour of the buttons and images to match your graphic identity:
  - **Colour:** enter the Hexadecimal color value corresponding to the WES button's colour. By default, the buttons are Watchdoc orange customized (#FF901). Once the value is entered, the colour is displayed in the field.
  - **Images:** if you want to customize the WES images, enter the folder path in which are recorded images you want to display instead of the default images (stored in C:\Program Files\Doxense\Watchdoc\Images\Embedded\Doxense\[Manufacturer_ Name] by default).
    see Customize the WES.

Configure the keyboard authentication mode

- **Keyboard authentication:** tick the box (at the section level) to enable user authentication from a physical keyboard or the touch screen one, then set out how this authentication works:
  - **Directory:** From the list, select the directory to query during keyboard authentication. If no directory is set, Watchdoc will query the default directory.

- **PUK[1] Code:** the PUK code is automatically generated by Watchdoc according to the parameters defined in the directory and communicated to the user on the "My account" page.
- **Login and PIN Code:** consisting of 4 or 5 digits, the user PIN code (1234, for example) is registered as anLDAP attribute or in a CSV file. It is associated to the user login (available with the Watchdoc 5.1 version).
- **Login and password:** users will use their LDAP credentials. We do not recommend using this mode :

> (i) We do not recommend authentication by login and password. Nevertheless, if you opt for this mode, make sure that the device's screen and keyboard are configured in the user's language and that they allow all characters to be entered, even diacritics (accents, cedilla, tilde).

Configure the card authentication mode

Card authentication: tick the box (at the section level) to enable user authentication from a card, then set out how this authentication works:

- **Directory:** From the list, select the directory to query during cards authentication. If no directory is set, Watchdoc will query the default directory.
- **Self registration :** If you enable the **self-registration**[2] from the WES, state how the user assigns their card to their account:
  - **Disabled:** the self-registration is not allowed: if the user is unknown, an error message is displayed;
  - **with PUK code:** the embedded solution will ask the user for its PUK code. If the PUK code is correct, Watchdoc® stores the card number with the user's login in its database;

1(Print User Key). In Watchdoc, this is a code associated with a user account to allow the user to authenticate in a WES. The PUK code is generated thanks to an algorithm. The user can consult it in the "My account" page of Watchdoc.
2An action in which a user account is associated with its own card code. Registration is carried out the first time a card is used. The registration can be carried out by the IT manager when he issues the card to a user or by the user himself who enters his identifier (PIN code, PUK code or username and password) which is then associated with his card code. Once the registration is completed, the card code is permanently associated with its owner.

- **with login and PIN code:** the embedded solution will ask the user for his login and his PIN cpde.
- **with login and password:** the embedded solution will ask the user for his login and his password. If the data keyed in are correct, Watchdoc® stores the card number with the user's login in its database.
- **Notify the user on self-registration:** check this box to send a notification to the user when his badge has been enrolled.
- **Format :** State, where necessary, how the character string for the badge number string is to be transformed. E.g. raw;cut(0,8);swap.
  Specificity of the **Format** parameter: typically, when the code PUK is stored in an attribute of the LDAP directory, it is encoded for security reasons. Obtaining the code corresponding to that of the badge therefore requires a transformation of the format read by the badge reader. If you have a problem setting this parameter, contact Doxense Support.

Configure the Anonymous section

Tick this section to activate the **Anonymous connection** in order to allow an unauthenticated user to access to the device by clicking a button.
It is possible to restrict the features that the anonymous user can access by applying a privilege policy to the queue, group, or server, and using the Anonymous User filter.

- **Button Label:** Enter in this field the label displayed on the access button to the device features. By default, the text is **Anonymous**;
- **Redirection:** From the list, choose the application to which the anonymous user must access after clicking the **Anonymous**:
  - **Home:** The user accesses to the device homepage;
  - **Copy Application:** The user accesses to the copy application;
  - **Scan Application:** The user accesses to the scan feature;
  - **Fax application:** The user accesses to the scan feature;

Configure the Accounting section

In this section, specify whether you want the accounting to be performed by the device itself or from the Watchdoc parser.

- **Device > Uses the prints accounting information from the device** : tick this box if you want accounting to be supported by the device instead of the Watchdoc parser. This

only applies to print jobs. Results are more reliable especially when the job is not fully printed (canceled).

Accounting
Device ☑ Uses the prints accounting information from the device instead of from the Watchdoc parsers.

Configure the Pull-print section

In this section, you can change options about the Watchdoc release application: sort order of the document, tariff information and optional pages.
You can bypass this application by enabling the automatic release mode. When the user is authenticated on the device, all its documents are released.

- **Sort Order:** Set the documents order on the device screen:
  - **Reverse chronological:** More recent documents will top the list ;
  - **Chronological:** Older documents will top the list.
- **Options**:
  - **Release all documents at login**: tick the box to ensure that all queued jobs are automatically printed when the user logs on to the print device. In this case, the user does not access the list of queued jobs to validate which ones to print.
  - **All documents are checked by default**: tick the box to ensure that all pending jobs are automatically ticked in the list of pending jobs when the user authenticates.
- **Display Options:** from the list, select the pricing information displayed to the user via the WES: none, the price or the cost of their printouts
- **Force the monetary display to 2 decimal digits:** Tick the box to limit the number of decimal digits displayed to the user in the tariff information.
- **Display print policy warning messages:** tick this box if you wish to inform users of the printing policy in place which could change their initial choices.
- **Optional pages:**Tick the box to enable user adding more pages previews:
  - **Enable Page Zoom:** User can have a page by page preview (PCL 6 driver required)
  - **Enable spool edition:** User can modify the initial printing criteria;
  - **Use a custom logo:** (for WES V2 only) tick the box if you want to display a custom logo instead of the default Watchdoc logo.Then specify the path of this logo in the Properties > Images field.
- **Monetary symbol**: Tick the box if you want to customize the monetary symbol and enter a currency symbol other than the default € one.

Configure the Device section

This section is used to define the connection mode between the server and the print devices.

- **Server Address type:** The device needs to contact the Watchdoc server when the user tries to connect or wants to release his documents. You can specify the Watchdoc server address in four different ways: IP Address, DNS address, DNS alias or Custom address ;
- **Device security**: Indicate the device administrator login and password which Watchdoc needs to communicate with it during certain operations (automatic installation, SOAP requests, etc.).

Configure the Scan section

This section is used to configure the <u>WEScan</u> function. It can only be activated with a WES V3.

- **Display preferences- Use the last values chosen by users:** allows the user to be offered the most used scanning profiles (predefined settings), which offers a time saving when scanning uses are often the same. Then specify whether the classification should be done using:
    - the **type of profile:** (the most frequently chosen profile);
    - the **date of use** (profile chosen the last time it was used).
- **Open default profile bar:** provides an interface in which the user can choose between all the scanning parameters, which is useful when the scanning uses are very varied. Then specify whether you want to display the settings or the (pre-set) profiles.
    - the **scan settings** ;
    - the **scan profiles** (pre-configured).
- **Allow users to switch display modes:** tick this box to allow the user to customize their interface by choosing their preferred display mode.

- **Scan profiles:** for each profile listed, you can check:
  - **activation:** to make it active in the embedded interface;
  - **inheritance:** to allow the user to create a new profile inheriting the parameters of the existing profile. The user will then be free to modify one or more parameters of the original profile;
  - **Post processing:** if a post-scan treatment has been configured (see Post-scan processor), select it from the list ;
  - **destinations :** the **destination** is the place where the scanned document is sent. For each profile, you can activate, deactivate and define one or more destinations by default:
    - **E-mail:** Send the scan to the e-mail of a recipient entered in the interface;
    - **My e-mail:** send the scan to the user's email (always known if the user has an AD account);
    - **Folder:** send the scan to a predefined folder in the workspace accessible to the user.

Configure the Lockout section

In this section, you can configure the functions that are made accessible or inaccessible to users:

- **Features always granted**:The GUID of each application installed on the device can be found in the WEStraces once the WES has been installed (for example: "Print in color" = "68bccf58-bfd7-422e-9788-29a36dc061cd").
- **Locking mode**: from the list, select the appearance of the device screen when locked:

> ⓘ After changing the locking mode, stop and restart the print queue in question, in order to clear its cache to take account of the new settings.

- **Full - login screen**: the user is asked to log into the WES using the credentials configured in the Authentication sections (by PUK code, user name and PIN code, user name and password or by card):
- **Full - Home screen**: all applications are locked, but their icons are visible. After selecting an application, the user must authenticate before accessing it.
- **Selective**: you can select which applications will be locked (ticked box) and which will be open access (unticked box).

- - **Administration**: gives access to the WES administration interface;
  - **Reports**: gives access to the following report pages:
    - **Status page**: provides information about the device's counters;
    - **Configuration page**: displays the device configuration page (address, ports, etc.);
    - **Other pages**: displays other report pages.
  - **Device maintenance**: gives access to the device maintenance interface;
  - **Job Status**: gives access to a page displaying the status of print jobs;
  - **Supplies**: gives access to a page showing the status of consumables;
  - **Supplies status page**: gives access to a page displaying the status of consumables;
  - **Color usage**: gives access to a page for using colour printing;
  - **Trays**: gives you access to a page displaying the status of the bins;
  - **Photocopy ID card**: gives access to the photocopy function
  - **E-mail:Scan to mail**: allows you to scan and send documents to an e-mail address;
  - **Fax**: accesses the fax function;
  - **Retrieve from memory**: allows you to print jobs saved in the device's internal memory;
  - **Retrieve from USB**: allows you to print jobs from a USB stick plugged directly into the device;
  - **Save to memory**: saves jobs to the device;
  - **Save to network directory**: scan to directory: scan and save to a network folder;
  - **Save to SharePoint**: scan to a SharePoint folder;
  - **Save to USB**:Scan to USB: scans and saves to a USB memory device.
- **Unavailable features**: By default, applications not listed are not locked. You can add to the list by clicking on the **Add a new permission** button and entering the name and GUID of the application.The GUID of each application installed on the device can be found in WEStraces once the WES has been installed.

Configure the History section

This section displays information on the configured WES and on modifications made to it :

Validate the profile

1. Click on the ⊘ button to validate the WES profile configuration.

→ Once validated, the WES profile can be applied to a print queue.

Configure the WES onto the queue

Access the interface

1. From the **Main Menu** of the Watchdoc administration interface, in the **Production** section, click **Print Queues, Queue Groups & Pools:**
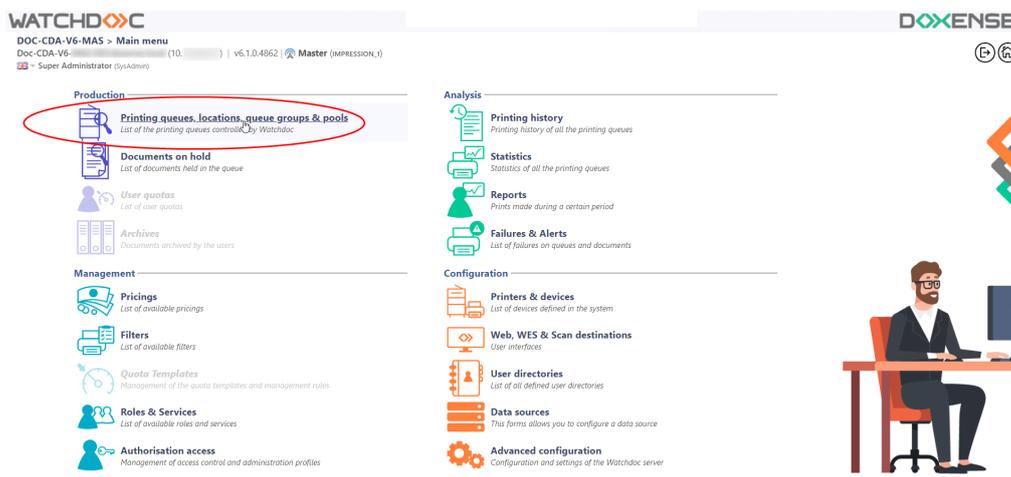
➔ This takes you to the print queues interface. In this queue, activate the **Controlled** filter, then select the queue you want to configure:
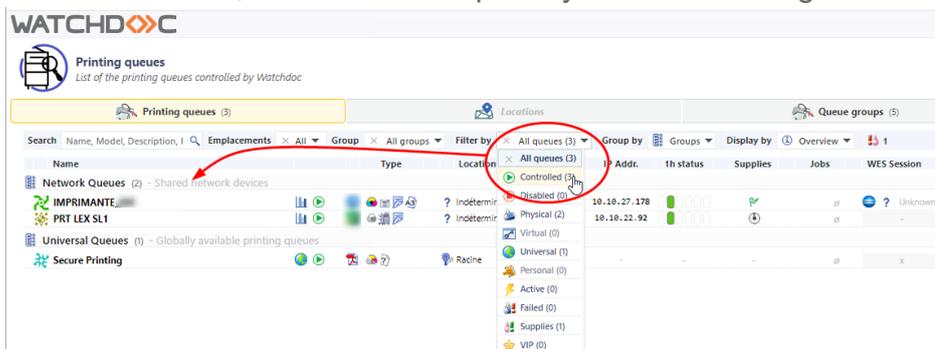
2. For this queue, click the **Edit Queue Properties button** at the end of the line.

➔ You are taken to the **Print Queue Properties** interface in which several sections are displayed. WES properties are managed in the **WES** section.

Configure the print queue mode

In the **Print Queue Properties** interface, **General Information** section, select the operating mode for the queue:
- **Mode:** select Validation to have users validate queued jobs so that they are actually printed. If the queue belongs to a group configured in Validation mode, you can also select **Like Group.**

Configure the WES onto the queue

In the Print Queue Properties interface, click on **WES** to access the dedicated section.

- **Activate embedded interface:** tick the box to use a WES.
- **Profile subsection:** From the list, select the WES to configure. The list comprises profiles created ahead of time in your instance of Watchdoc. If the desired profile is not found there, you will need to configure it (see <u>Configure a WES</u> article).
- **WES identifier** subsection: Once you have ticked the box and selected the profile, the ID of the WES field will fill itself with "$AUTOSERIAL$". Keep it that way so that the server will determine itself the serial number of the device and use it as the WES ID. You can also input directly the serial number of the device in this field.
- **Diagnosis subsection:** It may be useful to activate WES trace logging, especially to diagnose an anomaly. Use this subsection to specify settings relating to WES trace log files:
  - **WES specific logs:** Tick the box if you would like to generate trace log files on communications between Watchdoc and the WES and to keep them on the server.
    - **Log level:** From the list, select the type of requests you wish to trace:
      - **Auto**: retains standard traces ;
      - **Include binary content**: retains detailed traces.
  - **File locations:** Use this field to enter the path to the folder where you wish to save the trace files. If no path is specified, then by default, Watchdoc saves the trace files to C:\Program Files\Doxense\Watchdoc\logs.
- **Wes Settings subsection**: Use this section to configure the connection settings between the WES and Watchdoc in cases where the connection is a secure one, so that you can override the device username, password and the type of connection that is configured in the instance just for one queue:
  - **TLS/SSL**: Tick this box if the connection is secured using this protocol and fill-in the following fields:
  - **Use the default credentials**: Tick this box to use the identifiers already preset when the WES was configured.
  - **Device Username**: Use this field to enter the device administrator's account;
  - **Device Password**: Use this field to enter the password assigned to the device administrator;
  - **Device can handle colour documents**: Tick this box if the if the print device offers:

Configure the Spool transformation

The **Spool transformation** function lets Watchdoc impose or propose to users changes to the initial print criteria to better match the print policy implemented:

- **Enabled:** Tick the box to enable the feature. Enable this feature enables Client Side Rendering mode in the Device section.
- **Disbabled:** Tick the box to disable this feature
- **Use group value:** Tick this box to use this feature as set in the print queues group.
- **Diagnostics:** Watchdoc enables spool logs, especially to analyse the printing activity;
  - **Enable spool logs:** tick the box if you want that the spools may be save and set the tracing conditions;
  - **Level:** in the list, select the traces that you want to save (none, errors, edited spools and all);
  - **Enable for:** in the list, select how long you want to enable spool tracing (an hour, a day, a week or a month).

Validate the configuration

1. Click on to validate the WES configuration on the print queue.
2. After having configured the WES onto the queue, you must install it.

N.B.: After **modifying** a WES profile already installed on a print queue, it is necessary to restart the queue so that it takes account of the profile modifications. To restart a

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queue, click on the "pause" and then "start" buttons in the queue list:

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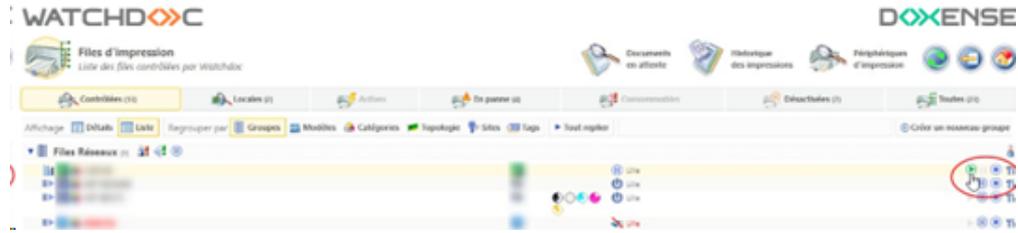
Install a WES on the print queue

Presentation

In the **Print Queue Properties** interface, below the **General Information** section, the **WES OXPd** section appears. This section contains several buttons:
- **Access the device's WEB interface**: shortcut to the device's internal administration website;
- **Install**: used to install the WES on the print queue;
- **Uninstall**: enables Watchdoc to uninstall the WES on the device. Once the WES has been uninstalled, the device must be restarted;
- **Edit configuration**: shortcut to the WES section in the print queue properties.

Procedure

To install the HP WES automatically, click on the button **Install**.
This installation takes place in several steps listed in the **Installation Report** (verification, connecting to the device, push-pull-print, sending the login, security configuration).
➔ When all the dots in the Installation Report are green, this means that the installation has gone well and the WES is ready to use.

Troubleshoot the WES

General troubleshooting rules

- **What?** What procedure can be used to reproduce the incident?
- **When?** What date and time did the incident occur?
- **Where?** On which printer did the incident occur?
- **Who?** On which user account did the incident occur?
- **Watchdoc.log:** thank you for providing the Watchdoc.log file;a
- **config.xml file**: thank you for providing the Watchdoc.log file;
- **server/device communication logs**: please activate the trace files on each file.

Once this information has been gathered, you can send a resolution request from the Connect portal, the incident management tool dedicated to partners.

To obtain the best possible record of the data required for diagnosis, use the Watchdoc DiagTool® supplied with the Watchdoc installation program (cf. Creating a log report with DiagTool).

Scan, fax and photocopying are not in Watchdoc

If the scan, fax and photocopy jobs are not counted by Watchdoc, verify that the address (host name or IP) of the Watchdoc server configured in the device is correct:
1. Iin the configuration interface of the queue, in the WES section, click on the button **Application status** (displayed when the WES is properly installed);
2. Click the **Download** button to download the log files and WES configuration;
3. In the downloaded .zip file, open the Config.json file using a text editor and check the information corresponding to the address of the server (Address) and ports;
4. If the configuration of the address and / or ports is not correct, click on the Configure button on the queue configuration interface.
5. Verify that the procedure has resolved the problem.

Activating WES Traces

To diagnose a problem with WES applications, you need to activate the log files specific to WES communications :
1. in the Watchdoc web administration interface, from the **Main Menu**, **Production** section, click **Printing queues, queues groups & pools**;
2. In the list of queues, click on the name of the queue with the WES for which you want to activate the trace files;
3. in the queue management interface, click on **Properties**;
4. in the **WES** section, click on the **Edit the settings** button:
5. in the **WES>Diagnostics** section, tick the **Enable traces** box;
6. in the **Trace level** list, select:

- **Auto:** retains standard traces;
- **Include binary content:** retains detailed traces.

7. In the **Path field**, enter the path of the folder in which the trace files should be saved. If you leave the field blank, the trace files will be saved by default in the Watchdoc_install_dir/Logs/Wes_Traces/QueueId installation folder:

(i) Activating the logs may slow down the server, so it is strongly recommended that you deactivate this option once the problem has been resolved.

Card reader installation problem

Context
When configuring a Hewlett-Packard WES, if you connect the card reader before installing the WES, the device issues an error message stating that "no application is supported by this USB device".

Cause(s)
This message occurs when the card reader is connected but WES Watchdoc is not yet installed.

Resolution
This problem can be solved by not connecting the card reader until the WES is installed (see the WES profile configuration procedure in the Hewlett-Packard WESI).

Card enrolment not possible

Context
When installing Hewlett-Packard WES with a Watchdoc version lower than 5.4.1.3967, when the user swipes his badge for auto-enrolment, the LED turns green, but nothing happens.
In WES Traces, the following message is displayed:
"startIndex cannot be larger than length of string".

Cause(s)

The problem in the WEs code has been corrected in Watchdoc versions higher than 5.4.1.3967.

Resolution

To resolve this problem, update Watchdoc (v. 5.4.1.3967 min.).

Home screen update problem

Context

After changing the screen lock mode in the WES profile (Full - home screen / Full - login screen), the change is not reflected on the print device screen:

Cause(s)

The old configuration may be cached.

Resolution

First of all, check that the Home screen Application setting is "Quit" (default):

1. from the general print queue information, click on the device **IP address**:

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2. authenticate as administrator on the print device:
3. in the banner, click on the **General** tab;
4. in the **Control Panel Customizatio**n menu, click on **Home Screen Customization**:
5. for the **Home screen application** parameter, check that the selected value is **Logout**. If not, select this value, then click on **Apply**:
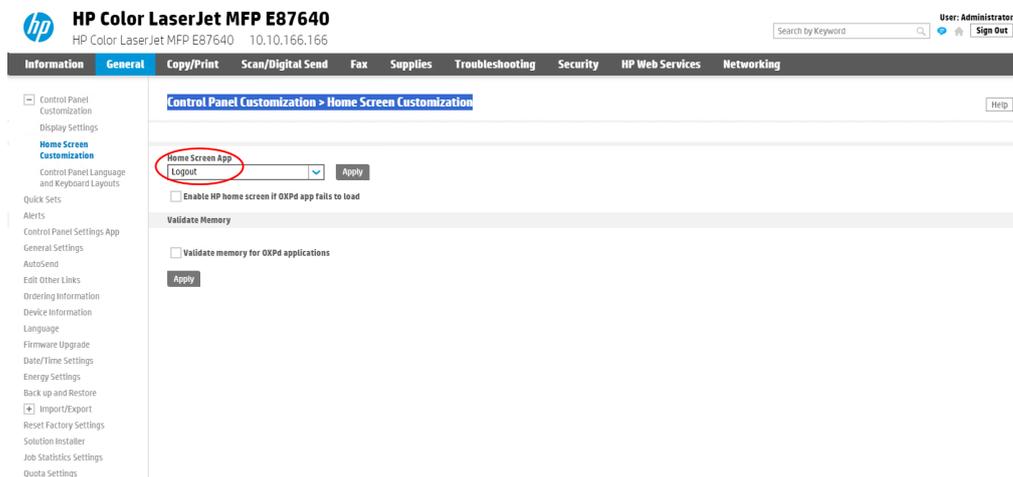
6. Then, in the Watchdoc administration interface, stop the printing queue and restart it.
7. Check on the device screen that the configuration defined in the WES profile has been taken into account.

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