

WATCHD C



INSTALLATION AND INITIAL CONFIGURATION MANUAL

Brother BSI WES

DOXENSE Print, breathe !

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Introduction

Purpose of the manual

This manual describes the procedure for installing WES v3 (Watchdoc Embedded Solution) on **brother**® BSI 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.

 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
10/2024	Update of the installation prerequisites and the installation procedure
09/2024	Update of the installation prerequisites and the installation procedure
04/2018	Update of the WES installation process
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.

Configure the devices

Devices prior configuration

Brother WES configuration must be preceded by configuration on the device from the device administration web interface.

Set the device password

By default, the Brother device settings web site is not password protected. In order to deploy the embedded interface, it is mandatory to configure one. This configuration is carried out from the device management interface.

1. from a browser, access the print device configuration interface;
2. authenticate yourself with the access account you have been given;
3. click on the **Administrator** tab;
4. enter a new password in the dedicated field ;
5. then confirm the new password in the dedicated field;
6. click on **Send**;
7. Log out and then log back in with the new password to test it.

Activate Brother Solution Interface

Device configuration is performed via the Brother Solution Interface (BSI), which must be activated using the Brother Solutions Activation Tool (BSAT). This tool supports all models compatible with the BSI SDK.

When the tool is launched, a network search is automatically performed. If the workstation being searched is on the same network/VLAN as other devices, they will all be listed at the end of the search.

If you want to add an unlisted device:

1. in the **Search** menu, click on **Add a device**:
2. in the **Add a device** box, fill in one of the following search criteria:
 - a node **name** (NETBIOS or DNS);
 - an **IP address**;
 - a **range of IP addresses**;
3. click on **OK** to launch the search:
4. at the end of the search, the models detected appear in the list with the following information: Name, IP address, serial number, model and status. This status can have several values:
 - **BSI enabled**: the machine is ready to receive an embedded interface;
 - **BSI not enabled**: the machine is compatible, but it is necessary to enable BSI before deploying it;
 - **BSI not supported**: the machine is not compatible to receive an embedded interface;
 - **Completed**: activation has just been carried out using the tool;
5. from the list, select the device or devices for which you want to activate BSI;
6. click on the **Activate BSI** button;

7. in the **Watchdoc Licence Agreement** box, read and accept the conditions to continue the installation;
8. in the **CPJL box**, browse the Watchdoc® installation folder to select the file containing the product activation key (.cpjl extension);
9. in the **Solution ID** box, enter the value: **548CCFE057090007**;
10. click **OK** to confirm the activation key selection;
11. in the **Activate BSI** box, enter the device password in the input field ;
12. click **OK**.

→ The tool then activates BSI on the selected devices and reboots them.



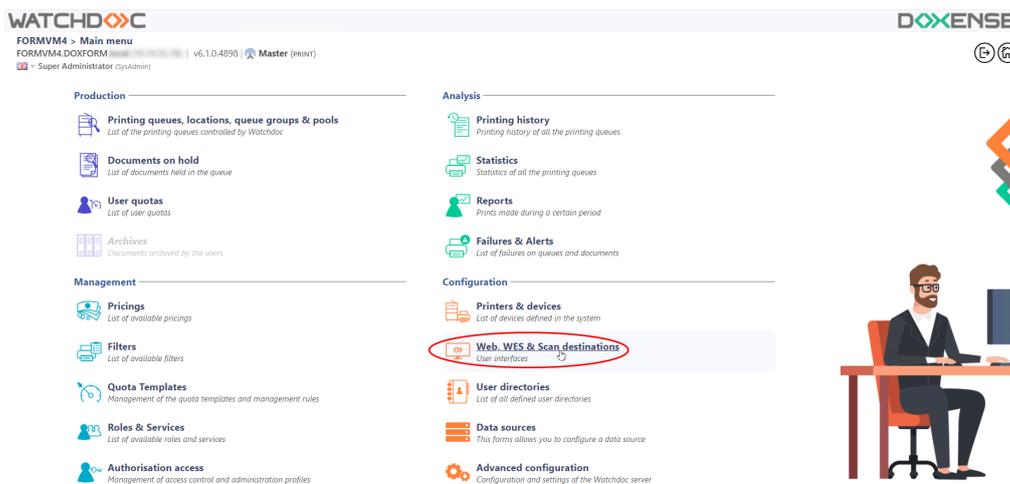
If each device has a different password, activation must be performed for each device.

Configure the WES profile

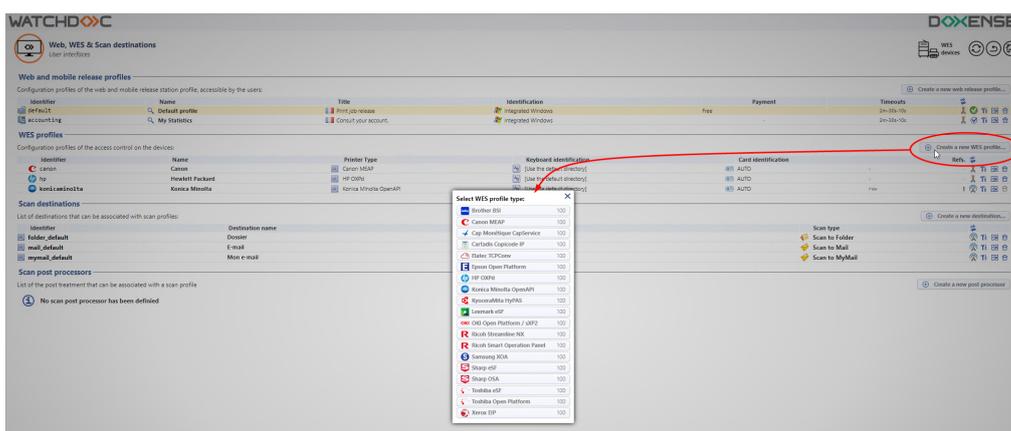
Create the WES profile

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 master/slave configuration, 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.



Configure a WES profile - Brother BSI
This form allows you to configure a WES configuration profile

Properties	
Identifier	brother
Name	Brother BSI
Language	Automatic detection

Configure the Keyboard authentication section

You can activate Keyboard and/or Card authentications. For each option, you have to select the directory that Watchdoc will use for authentication requests.

Enable: 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
- **Authentication mode:** Specify how users are to authenticate themselves (entering a PIN code, a PUK code or an account and password).
 - **PUK code authentication:** codes are generated automatically by Watchdoc (Generation parameters are in the directory form);
 - **Login and PIN Code:** consisting of 4 or 5 digits, the user PIN code (1234, for example) is registered as an LDAP 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.

Keyboard authentication	
Directory	[Use the default directory] Domain used to map the PIN Code to the user account
	Login (PUK code) --- Please Select Mode --- Login and Password Disabled Login (PUK code) Login and PIN Code

i We do not recommend authentication by login and password. However, 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 special characters (accents, cedilla, tilde).

Configure the Card authentication section

Enable: 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 badge authentication. If no directory is set, Watchdoc will query the default directory.
- **Self Registration:** : If you enable enrollment¹ from the WES, state how the user assigns their card to their account, using their PUK code or their account and password.

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;
- **Login and PIN code:** the embedded solution will ask the user for its login and PIN code. If the login and PIN code are correct, Watchdoc stores the card number with the user's login in its database;
- **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.

Card authentication

Directory  AUTO 
Domain used to map the Card ID to the user account

Self Registration  Authorise new users to register their card on the terminal:
 Disabled 

Notify the user on self-registration

Format 

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.

- **Release all documents at login:** When the user logs on by swiping his card or typing his PIN code, Watchdoc releases all user documents on the device where he logs on.
In this case, the user cannot access the list of pending jobs to choose which ones to print.

Pull print

Sort order  By chronological order ("FIFO") 

Options Release all documents at login

Configure the Device section

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

- **Server address:** This parameter is used to specify whether the print devices connect via the IP address, DNS alias or DNS name (determined when the service is started) of the Watchdoc server. If the server has several IP addresses or if you want to specify the address manually, select 'Address shown' and fill in the field.
N.B.: if the server has several IP addresses, Watchdoc uses the first one it finds. If the device is on a different VLAN, the WES may not be able to contact Watchdoc. In this case:
 1. create a WES profile per **IP address**
 2. choose **Custom Address** and specify an IP for each profile
 3. when installing the WES on the print queue, select the WES that corresponds to the device's VLAN.
- **Maximum name size:** specify the maximum size of the server name in characters.

Device

Server address 

Max user name length
Input -1 for no limit

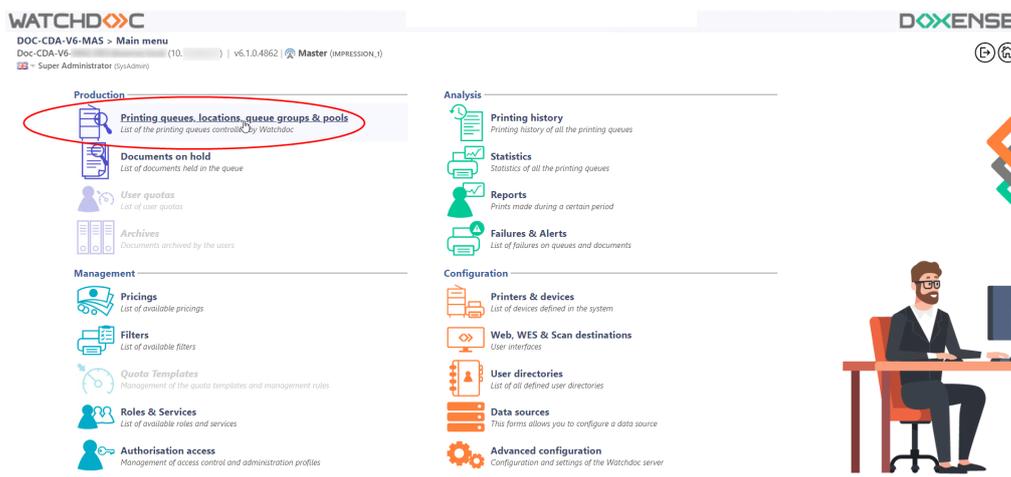
Validate the profile

1. Click the button  to validate the WES profile configuration.
→ Once validated, the WES profile can be applied to a print queue.

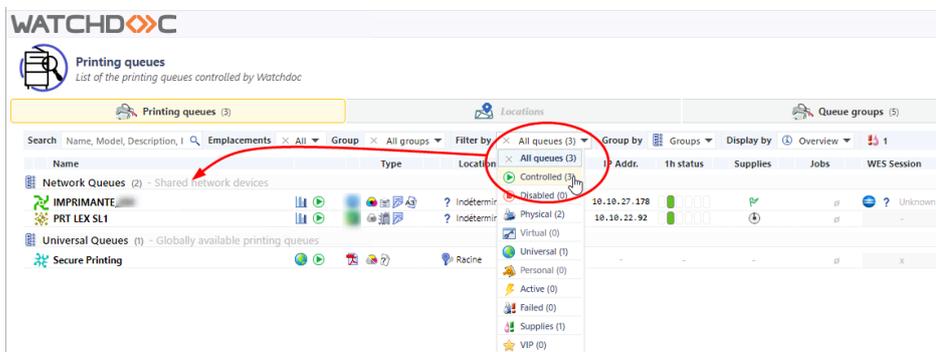
Configure the WES on the queue

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 **Ti** 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.

- **Device - 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 [Configure a WES](#) 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:
 - **Log level:** From the list, select the type of requests you wish to trace:
 - **Auto:** retains standard traces;
 - **Include binary content:** retains detailed traces.



Although all options are possible, we strongly recommend that you opt to activate binary content so that as much information as possible can be collected for diagnostic purposes. For performance reasons, traces should only be activated for analysis and diagnostic purposes.

- **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

Device Activate the embedded interface

Profile

Server-side configuration profile

WES Identifier

Id of the device associated with this queue

Diagnosis WES specific logs

Log level

Files location

Validate the configuration

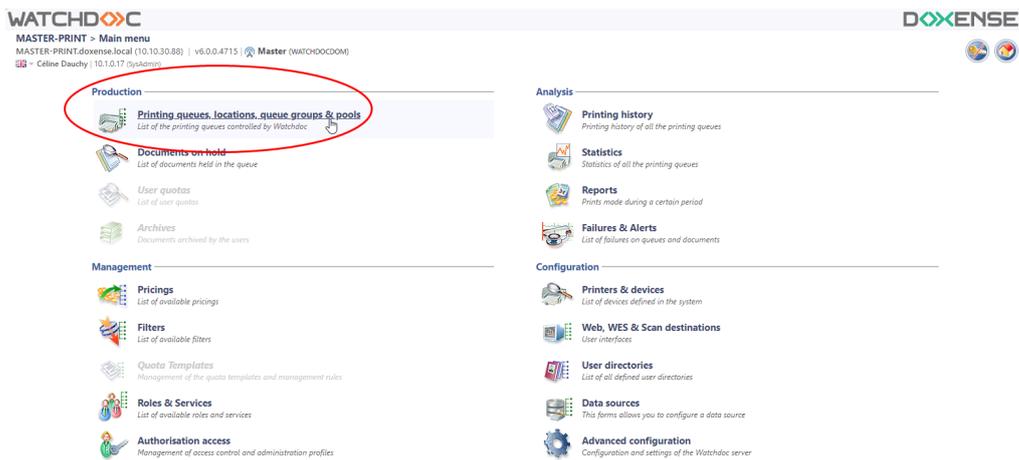
1. Click on the button to validate the WES configuration on the print queue.
2. Once you have configured the WES on the queue, you need to install it.

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 queue, click on the 'pause' and then 'start' buttons in the queue list.

Install the WES onto the queue

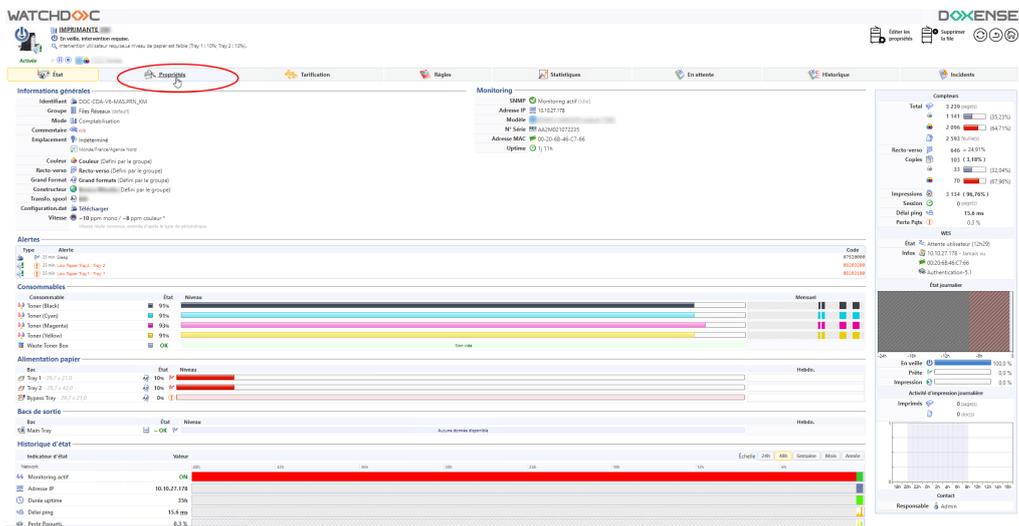
Access the interface

1. From the **Main Menu** of the Watchdoc administration interface, in the **Production** section, click **Print Queues, Queue Groups & Pools**:



→ You will access the **Printing queues** interface:

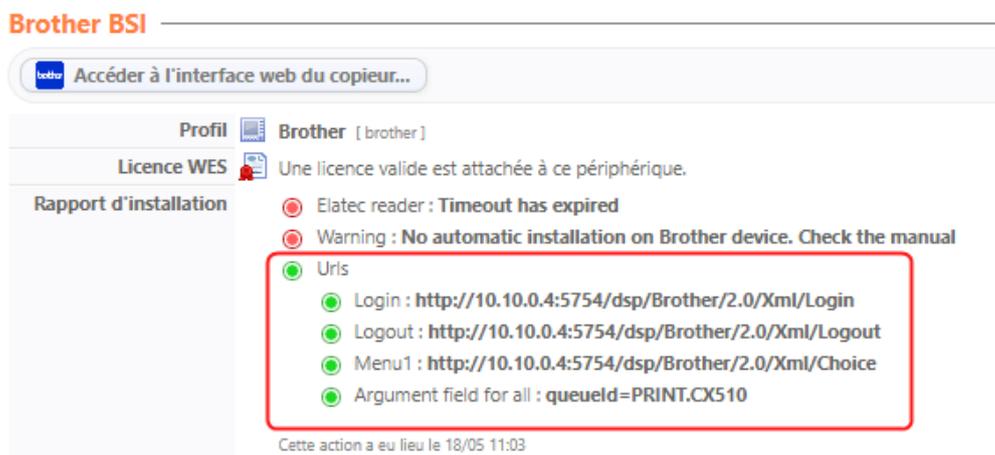
2. click on the file for which you wish to install the WES;
3. in the queue management interface, click on the **Properties** tab:



4. In the queue properties, the **Brother BSI** section appears:
5. Click on the **Install** button:



6. A message will inform you that the installation is not automatic: the URLs listed must be transferred to the Brother device interface to complete the installation.



Complete installation on Brother® devices



The installation procedure may vary depending on the model. If the following procedure is not sufficient, refer to the manufacturer's documentation for installation instructions specific to your model.

The information you need to set up the peripherals is listed in the WES installation report, so you can copy and paste it.

To complete the device settings:

1. access the printer management web interface as an administrator;
2. in the **Administrator** tab, click on the **Solutions** or **Solutions Settings** menu item;
3. you access the **Solutions application input** menu:
4. in the **Solutions application Input** menu, click on **Login**;
5. In the **Login** box, complete the following fields:
 - **Application ID**: enter the application identifier (e.g. Watchdoc_ID);
 - **URL**: enter the value copied from the WES installation report `http://[server IP]:5754/dsp/Brother/2.0/Xml/Login`
 - **Argument**: enter the value copied from the WES installation report or the following value: `queueId=[queue id in watchdoc]`
6. In the **Solutions application Input** menu, click on **Menu1**;
7. In the box **Menu1**, complete the following fields:

- **Application ID** : enter the application ID (e.g. Watchdoc);
 - **Display name**: enter the name of the application you want to be displayed on the device screen;
 - **URL**: enter the value copied from the WES installation report `http://[server IP]:5754/dsp/Brother/2.0/Xml/Login`
 - **Argument**: enter the value copied from the WES installation report or the following value: `queueid=[queue id in watchdoc]` :
8. In the **Solutions application** entry menu, scroll up to the **Solutions** entry;
 9. In the **Solutions Settings** box, complete the following fields:
 - **Solutions**: select **Yes** to activate Watchdoc on the device;
 - **Solutions button title**: enter the labels you want to appear on the device screen (e.g. 'Printouts'). N.B.: the label must not contain more than 11 characters. If it is, it will be truncated.
 - **Login portal**: select Yes to allow the user to access the login portal;
 - **Login portal message**: enter in this field the message displayed to the user when they access it (e.g. 'Enter your code' if authentication requires the PIN or PUK code);
 - **Screen displayed after login**: select the screen you want to be displayed once the user has authenticated;
 - For devices with an integrated badge reader: **Internal NFC** reader: tick the Yes radio button.
 10. click on the **Send** button:
 11. After restarting the machine, from the Solutions menu, click on **Solutions Application Entry** to finalise the device settings.
 12. Run a print job to check that the WES is working.

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. In 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:



The screenshot shows the WES configuration interface. The 'Diagnosis' section is highlighted with a red circle. It contains the following options:

- WES specific logs
- Log level: [dropdown menu]
- Include binary content: [dropdown menu]
- Files location: [text input field]



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