




# SafeCom HP Unified Client Administrator's Manual

Date: 2019-07-19  
Version: 5.9.1.9343

The logo for KOFAX, consisting of the word "KOFAX" in a bold, blue, sans-serif font.

Document Revision Date	Revision List
July 10, 2019	Final release.
April 30, 2019	Interim release.
December 21, 2018	Preview release.
December 1, 2018	Draft release.

## Symbols Used In This Guide

	The accompanying text provides cross-reference links, tips, or general information that can add to your understanding of a topic.
	The accompanying text provides key information about a step or action that might produce unexpected results if not followed precisely.
	<i>Read the accompanying text carefully.</i> This text can help you avoid making errors that might negatively affect program behavior.

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## Chapter 1

# Introduction

## SafeCom HP Unified Client

SafeCom HP Unified Client is a solution for HP LaserJet, LaserJet Enterprise and PageWide Enterprise MFPs. It integrates with the touch-screen control panel of the HP MFP and offers user authentication by code and/or card.

SafeCom HP Unified Client works together with the SafeCom G4 Server software and is designed to help companies and organizations gain control over their printing costs and document security. The SafeCom solution can be enhanced with add-on modules to build customer specific and scalable solutions.

### Supported languages

SafeCom HP Unified Client supports the following display and input languages on the device:

- Chinese (S)
- Chinese (T)
- Czech
- Danish
- Dutch
- English
- Finnish
- French
- German
- Hungarian
- Italian
- Japanese
- Korean
- Norwegian
- Polish
- Portuguese
- Russian
- Spanish
- Swedish
- Thai

- Turkish

Safecom G4 Server and Safecom Administrator supports English only.

## Requirements

- Any networked HP LaserJet, LaserJet Enterprise and PageWide Enterprise MFP, printer, and scanner listed [here](#).
- SafeCom G4 Server installed
  - This release of SafeCom HP Unified Client requires SafeCom G4 Server version 10.520.11.221 or above.
- HP device requirements in details:
  - Firmware 4.7.2 or newer
  - Touch screen resolution 800×600 or better
  - Partial clean should be performed if you are installing the SafeCom HP Unified Client onto a device which had the SafeCom Go HP client earlier or it was added to Device Server.

**Note** If your SafeCom solution uses both Device Web Server and Device Server instances, then these must be installed on a separate server.

### Network requirements


The network must allow communication via certain network ports, including TCP ports 7500 and 7700, and UDP port 5742. If there is a Device Web Server in use, then port 8444 should be open too.

Refer to chapter *TCP and UDP port numbers used by SafeCom* in SafeCom G4 Administrator's Manual.

## Partial Disk Clean on supported devices

To remove the SafeCom Go solution from the device, first perform a partial disk clean.

To perform a partial disk clean:

1. Delete the device from the **SafeCom Device Server** where the device is added (see [Uninstall SafeCom HP Unified Client](#) for details). The device must be in the idle state  in order for the deletion to be performed correctly.

**Note** If the device is configured to another server, click the **Reconfigure Device** to force a reconfiguration of the device to your server.

2. Turn off the device.
3. Turn the device back on again.
4. Tap the HP icon when it appears.

5. When the next HP icon appears, tap it as soon as the device starts counting (for example 1/8) to enter the **Administrator** menu.
6. Select the **Partial clean** option.
7. Press **OK**.
8. Press **Back**.
9. Press **Continue**.

## SafeCom ID Devices

**Table 1 SafeCom HP Unified Client supported SafeCom ID devices**

- Kofax Micro Card Reader
- Kofax MX
- Kofax MX (Keyboard)
- HP Reader (CZ208A/X3D03A)
- Elatec TWN3
- Elatec TWN3 (Keyboard)
- RFIDeas pcProx (Y7C05A)

Additional information about the ID devices is available in the *SafeCom G4 Administrator's Manual* (D60650).

**Note** ID devices require unique ID Device Licenses. SafeCom ID devices come with ID device licenses, whereas ID device licenses for third party ID devices must be purchased separately.

## HP Universal Print Driver

Download HP Universal Print Driver from the HP website. It can be used for PCL5, PCL6 and PostScript with SafeCom Pull Print if it is installed and run in **Traditional mode**, where UPD forwards the print data to the SafeCom Pull Port.

### Remarks:

- The installation of the UPD may take several minutes, be patient.
- The print jobs produced with UPD can be quite large in size as everything is always rendered in color, even if the device does not support color. This goes for PCL5, PCL6, and PostScript. To improve performance it may be necessary to use the printer's model-specific driver. To investigate, print to file and compare the respective file sizes.
- In a Microsoft Clustered Environment the UPD must be installed on the virtual server. However, if you wish the UPD to appear on the nodes that make up the cluster server it must be installed on each of these nodes.

The HP Universal Print Driver can also be used together with the SafeCom Push Port for tracking of documents that are sent directly to the device.

**Note** Be aware that some applications may split (for example, when using mixed page size) the print job at the device to multiple jobs, which are then tracked and charged (for the start-up cost) separately.

**Note** Any paper sizes that cannot be specified in the charging scheme will be tracked as Other.

## Install HP Universal Print Driver

To install HP Universal Print Driver do the following:

1. Obtain a copy of the HP Universal Print Driver and unpack it. Double-click **install.exe** that came with the HP Universal Print Driver.
2. Click **Yes** to accept the license agreement.
3. Select **Traditional mode** and click **Install**.
4. The **Add Printer Wizard** appears.
5. Click **Add a local printer**.
6. Choose **Create a new port** and select **Standard TCP/IP Port** from the dropdown list. Click **Next**.

**Note** To allow the UPD to optimize its output and reduce print files it should connect to the HP device through a Standard TCP/IP port once before it is changed to use a SafeCom Pull Port.

7. The **Add Standard TCP/IP Printer Port Wizard** appears, click **Next**.
8. Enter **Printer Name or IP Address**. Click **Next**. Click **Finish**.
9. Select the HP Universal Printing variant (PCL5, PCL6 or PS) that matches your needs and click **Next**.
10. Enter a **Printer Name** and choose whether or not this printer should be your default Windows printer. Click **Next**.
11. Check **Share this printer...** and enter **Share name**. Click **Next**.
12. Do not click **Print a test page** to verify the system. Click **Finish**.
13. The UPD is now installing which may take some minutes. Please be patient.
14. When the **HP Universal Printing Installation** dialog reports that the installation has completed you can click **Finish**.

## Check the Printer properties

1. Right-click the printer and click **Printer properties**.
2. On the **Device Settings** tab scroll to **Installable options** and change **Automatic Configuration** to **Update Now**. This will cause the UPD to contact the device and get information about its configuration.
3. Click **Apply**.
4. On the **Advanced** tab check **Start printing after last page is spooled** as this allows faster spooling.
5. Click **Apply**.

## Make the printer use the SafeCom Pull Port

1. Click on the **Ports** tab in the **Printer properties** dialog.
2. Clear **Enable bidirectional support**. Click **Apply**.
3. Click **Add Port...**
4. Choose **Create a new port** and select **SafeCom Pull Port** from the dropdown list. Click **Next**.
5. Enter a unique name of your choice for the port in **Port Name**. Click **OK**.
6. The **Configure SafeCom Pull Port** dialog prompts you to enter the IP address or host name of the **SafeCom Server** and choose **Use network logon** as method of **Authentication**. Click **OK**.

**Note** It is possible to configure the SafeCom Pull Port to override the HP Universal Printing driver name.

7. Click **OK**. The **SafeCom User Logon** dialog appears. Enter **User logon** and **Password** of a user that has SafeCom Administrator or Technician rights.
8. Click **OK**.
9. Click **Apply**.

## Print a test page

1. Click on the **General** tab in the **Printer properties** dialog.
2. Click **Print Test Page** to verify the system. Click **Close** when prompted to confirm that the test page printed correctly.

For high load systems you can minimize the wait for documents to be processed and transferred to the SafeCom server by checking **Enable printer pooling** on the **Ports** tab and add multiple identically configured **SafeCom Pull Ports**. In our experience 1-4 ports is sufficient and no more than 12 ports should be added.

## Available documentation

### SafeCom G4

- *SafeCom G4 Administrator's Manual (D60650)* — A comprehensive manual that the administrator should consult to set up a successful SafeCom solution. Includes information about SafeCom Tracking, SafeCom Rule Based Printing, SafeCom Client Billing, and SafeCom Pay.

### SafeCom HP Unified Client

- *SafeCom HP Unified Client Administrator's Manual* — **(this manual)** Manual on how to install, configure and use SafeCom HP Unified Client.

## About this manual

This manual applies to SafeCom G4 Server version 10.520.11.221 and Device Web Server version 5.9.1.9343.

This manual is organized as follows:

- Chapter [Introduction](#) lists the supplied SafeCom documentation, system requirements and describes how this manual is organized.
- Chapter [SafeCom HP Unified Client - Device Web Server](#) describes the installation of SafeCom HP Unified Client via the SafeCom Device Web Server.
- Chapter [Using SafeCom HP Unified Client](#) describes how to interact with the HP device's control panel when SafeCom HP Unified Client is installed.
- Chapter [Troubleshooting](#) contains troubleshooting hints.

## Document history

EN-SCS-HP-UC-AM-5.9.1-T751-20190719 is the final version of the *SafeCom HP Unified Client Administrator's Manual*.

EN-SCS-HP-UC-AM-5.9.0-T751-20181221 is the preview version of the *SafeCom HP Unified Client Administrator's Manual*.

## Chapter 2

# SafeCom HP Unified Client - Device Web Server

## Overview

Make sure the SafeCom G4 Server software installation has been completed prior to installing SafeCom HP Unified Client.

## SafeCom HP Unified Client – Device Web Server installation

### Installation

After installing SafeCom G4 Server and HP Universal Print Driver complete the following steps to install the Device Web Server (DWS):

To install SafeCom Device Web Server do the following:

1. Select and run the installer file to launch the Setup Wizard.
2. On the Welcome screen, click **Next** to begin the installation process.
3. Read and accept the terms of the End User License Agreement and click **Next**.
4. On the Destination Folder screen, accept the default installation folder or click **Change** to select a new folder.

Application data for SafeCom Device Web Server will be stored at:

```
c:\Windows\System32\config\systemprofile\AppData\Local\Nuance\
```

5. Click **Next**.
6. Review settings before copying of files starts. Click **Install**.
7. Click **Finish**.

### Windows Firewall - ports that must be opened

If Windows Firewall is enabled, it may prevent the SafeCom solution from working. Disable the firewall or open the ports listed below.

TCP	Inbound on SafeCom Device Web Server	Protocol
-----	--------------------------------------	----------

8444	Device Web Server communication	SafeCom
------	---------------------------------	---------

**Note** If the Device Web Server and G4 Server are installed on the same server, then additional port configuration is required. Refer to the SafeCom G4 Administrator's Manual for details.

## Add the device via SafeCom Administrator

Before adding a device, IPP (Internet Printing Protocol) has to be enabled for device discovery to work properly. As IPP is disabled by default in recent HP devices, make sure to enable it (see [Problems when adding a device - device is not discoverable](#) for detailed instructions). After configuration is completed, you may disable IPP protocol on the device again.

While the device is being added to SafeCom, SNMP v1/v2 read-write access must be enabled on the device web page under **Networking > Configuration > Network Settings > SNMP**. After the device has been added, SNMP v1/v2 can be disabled on the device. If a custom Get Community Name value is specified for the device, make sure to specify this community name on the first page of the Add device wizard.

To add a device do the following:

1. Click the **Devices** container, right-click the content area and then click **Add device**. The **Add device** wizard displays.
2. From the **Device server** drop down menu, select the desired server. If the server is not listed, then type the host name or the IP. Make sure that the value for the **Community name** field on this dialog matches the **SNMP Get Community Name** setting on the device web page under **Networking > Configuration > Network Settings > SNMP**. Click **Next**.

**Add device**

Please type in the hostname or IP address of the device/controller and click the Next button to establish a connection to the device.

Device/controller

Address:

Device server

Address:

SNMP

Community name:

< Back   Next >   Cancel

**Note** If the server runs on Windows Server 2012 R2, then specifying Device Web Server by IP address may not work, in this case use host name instead.

**Note** Name resolution is essential for certification in the SafeCom solution. If the Device Web Server is in a network environment where name resolution does not work, devices may not be added to the server properly. Ensure that the server has a valid FQDN, and DNS name resolution works.

Status information is retrieved from the Device Web Server. Click **Next**.

3. Enter the **Printer address** (the device IP address or host name) and click **Next**.

**Add device**

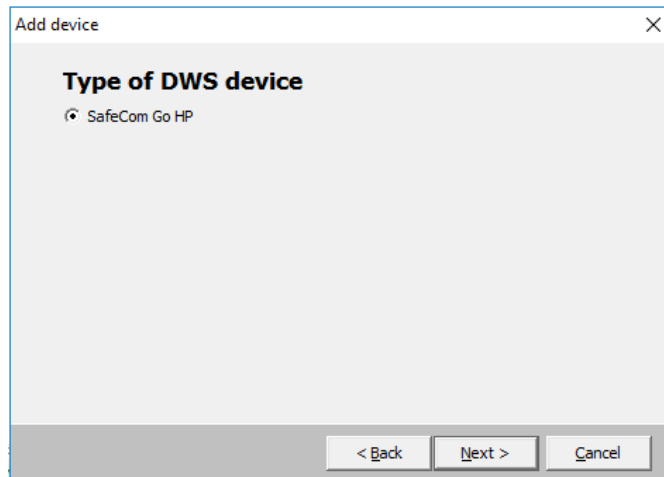
**Attach printer**

Please type hostname or IP address of the printer.

Printer address:

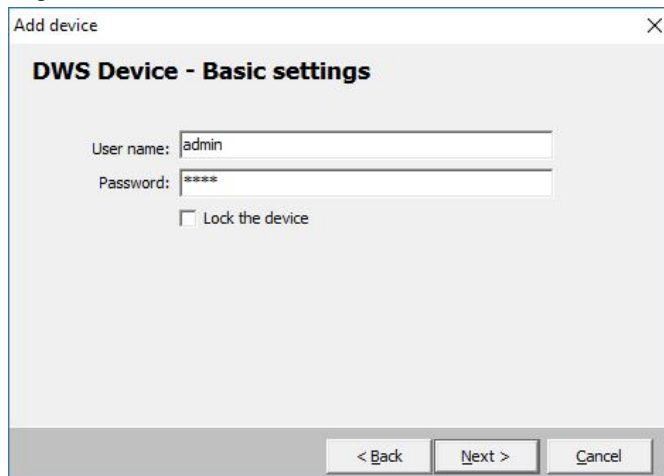
< Back   Next >   Cancel

4. Information is then retrieved from the device. Click **Next**.
5. Now select **SafeCom Go HP** as the type of device and click **Next**.



**Note** This screen appears if the device is not identified as an HP device. In this case, consider checking the IP address or host name of the device.

6. Provide credentials for the device. These should match with the ones specified in the device's security settings:



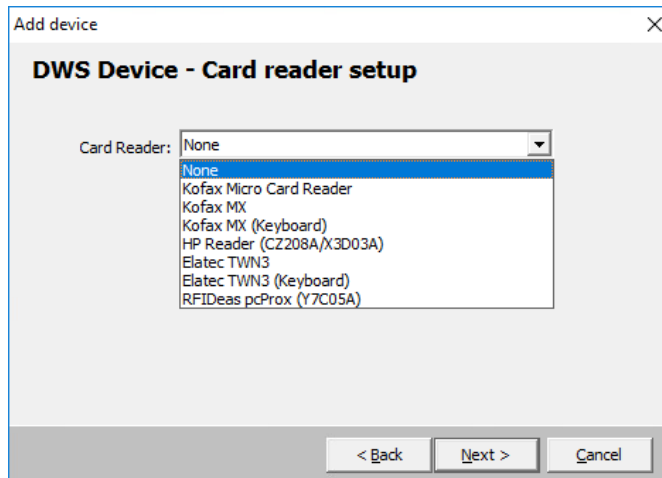
- a. Enter the **User name** and **Password** as specified on the device web page.
- b. If you want to use the HP Mandatory Sign-In screen select the **Lock the device** check box.
  - If **Lock the device** is selected the device will run in In DLA (Device Level Authentication) mode. Pressing the **Sign in** button shows the Welcome screen with a label Swipe your card. When the device is idle, a sign-in screen (also called the mandatory sign-in screen) covers the home screen.
  - If **Lock the device** is cleared the device will run in In FLA (Function Level Authentication) mode. Pressing the **Sign in** button shows a message box instructing the user to swipe his

card. When the device is idle, the device home screen is displayed with small lock symbols on locked applications.

**Note** The Quick Select bar is always visible, this allows the user to change the default application to be launched after a successful login. Welcome screen does not accept tapping.

c. Click **Next**.

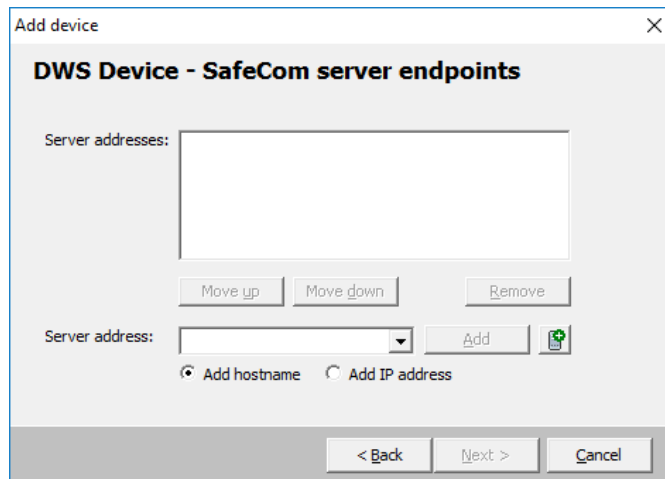
7. Select a Card Reader:




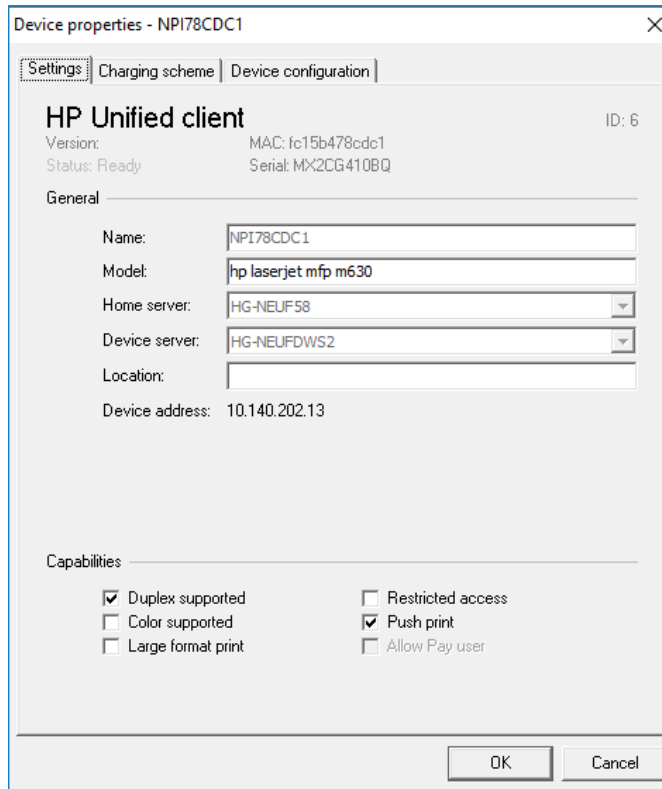
**Note** If your card reader is not in the list, then you need to add it to SafeCom. For details see [Card reader configuration](#).

**Note** Some card readers may not work right after the device installation. In this case unplug the card reader and plug it in again.

8. Fill the list of SafeCom server endpoints:

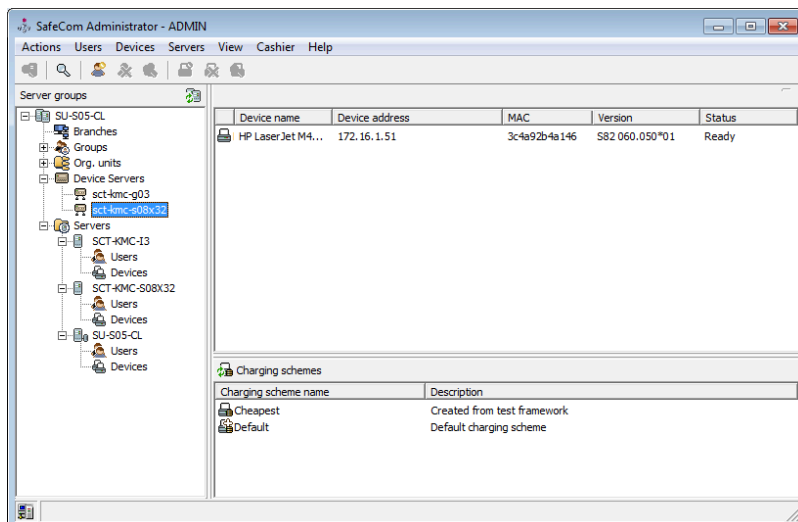


- a. Choose one of the **Add hostname** or **Add IP** address options to determine the way addressing the server.
  - b. Select a server in the **Server address** drop down list.
  - c. Click **Add** to add the selected server to the **Server addresses** list above. Optionally, use the  button on the right to add the current server. Repeat from step 8.b on if you want to add multiple servers to the list.
  - d. Use the **Move up** and **Move down** buttons to define the order of the servers. Move the Primary server to the top position.
9. The **Device Properties** dialog now opens.



**Note** Make sure not to use any accented characters in **Name**.

- Click **Add** to register the device and save it in the database. After approx. 1 minute the device is added to the server.  
The device is now added and listed under **Devices**.



11. Go to section [Configure device in SafeCom Administrator](#) to continue with the configuration of the device.

In case of any problems while adding a device, check [Troubleshooting](#).

## Configure device in SafeCom Administrator

Use the Device properties dialog to configure the behavior of HP Unified client on the device. This dialog box consists of three tabs:

- Settings – Set or verify general settings, such as device name, server, and address. Control capabilities such as duplex or color. See [Settings tab](#) for details.
- Charging scheme – Select from available primary and secondary charging schemes for the device. See [Charging scheme tab](#) for details.
- Device configuration – Set access control, licenses, log on methods, printing engine and toner options, tracking on device, and menu elements. See [Device configuration](#) for details.
- Application access control – For details on client application access control see [Application access control](#).

## Settings tab

Device properties - NPI78CDC1

Settings | Charging scheme | Device configuration

**HP Unified client** ID: 6

Version: MAC: fc15b478cdc1  
Status: Ready Serial: MX2CG410BQ

**General**

Name: NPI78CDC1  
Model: hp laserjet mfp m630  
Home server: HG-NEUF58  
Device server: HG-NEUFDWS2  
Location:  
Device address: 10.140.202.13

**Capabilities**

<input checked="" type="checkbox"/> Duplex supported	<input type="checkbox"/> Restricted access
<input type="checkbox"/> Color supported	<input checked="" type="checkbox"/> Push print
<input type="checkbox"/> Large format print	<input type="checkbox"/> Allow Pay user

OK Cancel

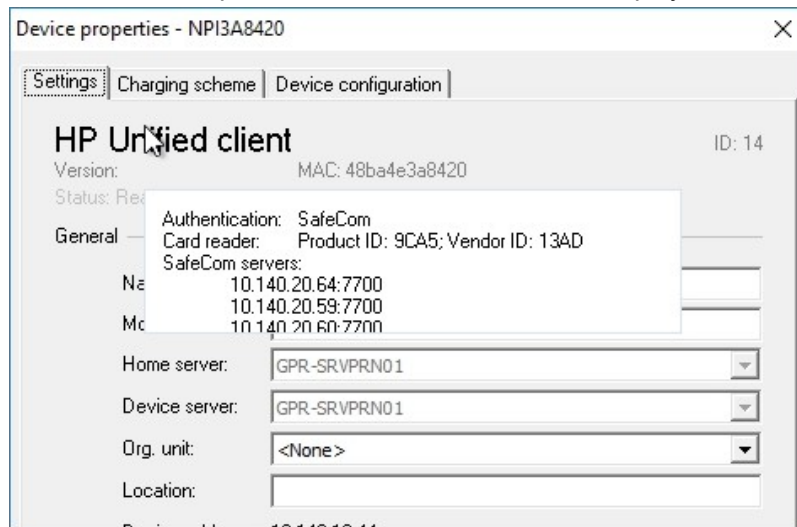
This tab provides basic information on the device and the client in these sections:

- *Device name* – The title section displays the following:
  - *Device name* – It must be a unique alphanumeric text. DWS uses this property as a unique identifier.

**Note** It has to be set at device addition and cannot be changed later.

- Version
- Status
- MAC address
- Serial
- ID (in the upper right corner)

Hover the mouse pointer over the device name to display the following wiring information:



- Authentication
- Card reader information
- SafeCom server IPs
- General section – This section contains the following properties:

- Name – Device name

**Note** Changing the host name or the IP address of the device after installation is not supported.

- Model – Device model name
- Home server – G4 Server instance name, always disabled
- Device server – DWS name, always disabled
- Org. unit – organization unit
- Location – Geographical location
- Device address – IP address of the device (read only)

- Capabilities section – This section offers the capability options listed below. Clear the corresponding check box to turn off the feature or select the check box to turn on.
  - Duplex supported
  - Color supported
  - Large format print
  - Restricted access
  - Push print
  - Allow Pay user

## Charging scheme tab

This tab lets you select and edit the primary and secondary charging schemes for the device. You may select from the lists, click the corresponding View button to edit the selected scheme.

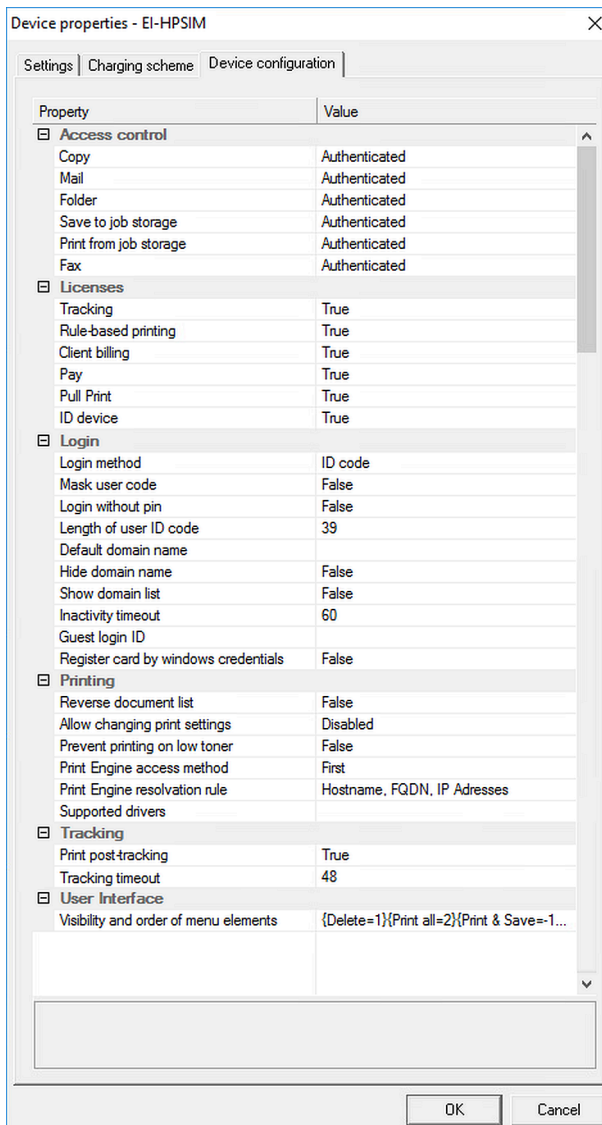
The screenshot shows a window titled "Device properties - EI-HPSIM" with a close button (X) in the top right corner. The window has three tabs: "Settings", "Charging scheme" (which is selected), and "Device configuration". The "Charging schemes" section is titled "Charging schemes" with the subtitle "View and edit charging schemes". It contains two sections: "Primary scheme" and "Secondary scheme". The "Primary scheme" section has a dropdown menu with "1" in a circle to its left and "Cost price 1" selected. Below the dropdown is a "View..." button. The "Secondary scheme" section has a dropdown menu with "2" in a circle to its left and "Cost price 2" selected. Below the dropdown is a "View..." button. At the bottom of the window are "OK" and "Cancel" buttons.

**Note** Secondary prices may be different, as they are calculated only on the server side.

## Device configuration

The **Device configuration** tab is used to configure SafeCom HP Unified Client in the following subjects:

- Access control – Authentication and authorization. See [Access control](#).
- Licenses – Settings involved in licensing. See [Licenses](#).
- Login – Login methods, card, domain and masking options. See [Login](#).
- Printing – Printing engine, toner and driver options. See [Printing](#).
- Tracking – Tracking on device and timeout options. See [Tracking](#).
- User Interface – Menu elements and order. See [User interface](#).



Change the settings according to the following descriptions:

- Access control (authorization)

You may update the authentication method of the following functions:

- Copy
- Mail
- Folder
- Save to job storage
- Print from job storage
- Fax

The administrator can control the accessibility and tracking of the functions listed above by picking from the following set of properties:

- **Authenticated:** The function is available for those authorized users who have access to it. If a user has no access granted to the function, cannot access the feature, even after successful authentication.<sup>1</sup> Authenticated functions are tracked.
- **Non authenticated:** Accessibility of the function is not restricted and the function is not tracked. Authentication level influences this property.
- Licenses

**Note** For details on licensing refer to chapter *Device license and user settings dependencies* in the *SafeCom G4 Administrator's Manual* (D60650) document.

- **Tracking:** This is relevant only with SafeCom Tracking.
- **Rule-based printing:** This option requires a Rule-Based Printing (RBP) license.
- **Client billing:** Set to **True** to display the **Account** icon on the device screen, allowing you to set up the billable account. Set to **False** to remove the icon.
- **Pay:** A Pay user (where cost control is Pay) can log in to a device with a SafeCom Pay license and to a device with a Tracking license provided.
- **Pull Print:** Set to True to enable pull printing on the device.
- **ID device:** ID devices require unique ID device licenses. SafeCom ID devices come with ID device licenses, whereas ID device licenses for 3rd party ID devices must be purchased separately.

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<sup>1</sup> For details on user Access rights see [Control user access rights](#).

- Login

**Note** For Windows authentication, the card reader cannot be used. To use a card reader and Windows authentication, users should select Auto-sense.

- Login method: This determines how users log in. Choose between:

- **Auto-sense:**

- If there is a card reader connected to the device, then users may login by Card, or by Windows authentication.
- If there is no card reader connected to the device, then users may login by ID code.

- **Card:** Users may log in by card-swipe only, entering user credentials or ID is not allowed.

The Sign in button is always visible and enabled on HP device screens, with or without the Mandatory sign-in screen, in other words, in FLA (Function Level Authentication) or DLA (Device Level Authentication) modes.

- In FLA mode: Pressing the Sign in button shows a message box instructing the user to swipe his card. When the device is idle, the device home screen is displayed with small lock symbols on locked applications.
- In DLA mode - Pressing the Sign in button shows the Welcome screen with a label Swipe your card. When the device is idle, a sign-in screen (also called the mandatory sign-in screen) covers the home screen.

**Note** The Quick Select bar is always visible, this allows the user to change the default application to be launched after a successful login. Welcome screen does not accept tapping.

- **ID code** (default): Users need to use the authentication screen to enter one of their ID codes manually. Card-swipe is not allowed if ID code is selected.

**Tip** Tap Sign in to reach the authentication screen.

- **Card or ID code:** Both card-swipe and ID code are allowed. For details see the Card or the ID code option.
- **Windows authentication:** Allows the user to log in by entering their Windows user name, password, and domain. The SafeCom administrator may configure the way how user domains display on the screen.

**Note** The option Windows authentication allows the user to log in by entering their Windows user name, password, and domain. The SafeCom G4 server must be a member of the domain or trusted by the domain.

**Note** Card identification cannot be used if Windows authentication is selected. If you want to use Windows authentication with card-swipe, then choose Auto-sense as Login method instead.

- **Mask user code:** Set this value to True to mask the ID code with asterisk (\*) when entered at the device.
- **Login without pin:** Set this value to True if users do NOT need to enter a 4-digit PIN code at login. This setting applies to the device and overrides the equivalent user property on the SafeCom G4

server. Use of PIN code is possible on devices with touch-screen, keypad or optional external keyboard.

- Length of user ID code: Specify the maximum length of the ID code (typed or read from the card). Default value is 39.
- Default domain name: Specify the domain to pre-fill the domain for users when logging into a device. If using SafeCom Mobile Pull Print the domain must be specified, as the users are not prompted for domain when logging into a device using a smart phone. If the default domain is not specified, but the users are required to use domains, they can enter the domain with their username (domain \username).
- Hide domain name: Can be used if you specified a default domain name. Set this value to True to allow the users to log in without typing in the domain.
- Show domain list: Set this value to True to enable SafeCom to offer the list of domains registered in SafeCom Administrator.
- Inactivity timeout: Specifies the amount of time of inactivity (in seconds) after which a user is automatically logged out.
- Guest login ID: Specify an existing user ID for the rule of the guest user. This allows users to tap a Guest button on the SafeCom HP Unified Client login screen. All guest activities will be tracked according to that user's settings.
- Register card by Windows credentials: Set this value to True to let the users assign a new card by providing their Windows credentials, without entering a PUK code.

**Note** DWS restart may be needed for this server setting to take effect.

- Printing
  - Reverse document list: Set this value to True to show the latest printed documents at the top of the document list.
  - Allow changing print settings: Set this to Enabled to let all users change their finishing options on this device. Select the Per user settings value to manage this feature on a per user basis.
  - Prevent printing on low toner: Set this value to True to disable printing activities if the toner is low.
  - Print Engine access method: Set the method for finding the print engine.
  - Print Engine resolution rule: Specify the identifiers and their precedence to use to find the print engine by editing the print engine resolution configuration. Click the browse button on the right of the value to display the Print Engine resolution configuration dialog box. Select (enable) or clear (disable) the items of the list and use drag and drop to reorder items. Click OK to save the settings and close the dialog box.
  - Supported drivers: When Pull Printing, SafeCom compares the driver name embedded in the print job with its list of driver names. If no match is found and if **Show fidelity warning** is checked in the **Server properties** in **SafeCom Administrator**, the document appears with a fidelity warning icon [⚠] in the document list. This way the user is warned that fidelity is low and the document may print incorrectly.
- Tracking
  - Print post-tracking: Set this value to True to track pull and push print jobs based on statistics reported by the device.
  - Timeout for tracking push-print jobs: Specify the time (in hours) that the server waits for job statistics to arrive from the device. If statistics data does not arrive in this time period, the job will be tracked as an Unattended job. The default value is 48.

- User interface

**Note** In case of DLA, the content of the Quick Select bar is also configurable in this group.

- Visibility and order of menu elements: Set the visibility and order of the menu items of the Pull Print screen. Click the browse button on the right of the value to display the Client menu configuration dialog box. Select (enable) or clear (disable) the items of the list and use drag and drop to reorder items. Click OK to save the settings and close the dialog box.

## Application access control

HP Unified Client controls the access to third-party applications. These applications are automatically detected when [adding the device to SafeCom](#), but they will be accessible to SafeCom only after a successful login.

**Note** Third-party applications should be installed in advance, prior to adding the device to SafeCom.

**Note** If a third party application is installed after SafeCom has been installed on the device, the device must be removed and re-added in SafeCom for access control to work.

## Card reader configuration

All card reader hardware should be added to SafeCom to appear in the Add device list (see [How to add a card reader](#) for details).

### Supported card readers

The following readers are included in the default configuration:

- Kofax Micro Card Reader
- Kofax MX
- Kofax MX (Keyboard)
- HP Reader (CZ208A/X3D03A)
- Elatec TWN3
- Elatec TWN3 (Keyboard)
- RFIDeas pcProx (Y7C05A)

## How to add a card reader

You may add any card reader to SafeCom by specifying the appropriate Vendor ID (VID) and Product ID (PID) values. Refer to the card reader documentation for these values, then proceed with the following steps.

1. Open `scCardReaders.ini` in a plain text editor such as Notepad.

If you used the default installation path, then the `scCardReaders` file is located on the computer running the SafeCom G4 Server, in the following folder:

```
c:\Program Files\SafeCom\SafeComG4\Device_software
```

2. Navigate to the [HPUC] section, then add a new line for the card reader, following this scheme:

```
<name>=<VID>,<PID>,<is keyboard>
```

- *name* – The name of the device to display in the list of card readers when adding a device.
- *VID* – The VID specified in the documentation of the card reader.
- *PID* – The PID specified in the documentation of the card reader.
- *is keyboard* – Use either 1 for keyboard readers or use 0 for non-keyboard readers.

A typical example:

**Example** RFIdeas pcProc,0104,3BFA,0

3. Save the changes.

## DWS failover and groups

### Failover service notification

SafeCom Administrator allows you to group your Device Web Servers, enabling a failover solution.

SafeCom monitors the status of the group members, and in case of a group member failing or shutting down, the rest of the device server group distributes the workload of the offline server among the rest.

DWS Failover service notifies the job-server service when controllers of devices are changing either due to outage of a DWS node or restoring the original controller of devices. It implies database change and the `DeviceServerId` field of `scDeviceInfo` table in `scCore` database is updated accordingly. The Device properties dialog box shows the controller server in the Device Server field.

### Device server & DWS group representation in SafeCom Administrator

Device servers node in tree view has two types of child nodes:

- DS / DWS groups
- DS / DWS servers that are not members of any group

The group member servers are child elements of group nodes.

Selecting a node makes the right pane of SafeCom Administrator adopt to the type of the node:

- Device servers – List of DS / DWS server that are not organized into groups

- Device server group – List of group members
- DS /DWS – List of devices controlled by the server (DS / DWS)

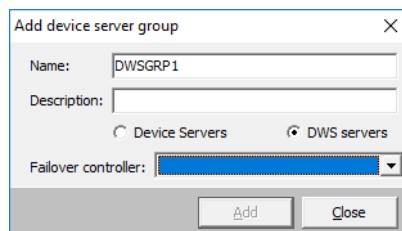
Double clicking on any list item displays the appropriate property dialog box:

- Clicking on a Device Server or Device Web Server (DS / DWS) shows the Server properties dialog box. Failover tab appears in case of DWS group members that shows the list of controlled devices and their primary DWS.
- Clicking on a device shows the Device properties dialog.

## Configure Device Web Server failover

Follow these steps to add and populate a DWS failover group:

1. Log in to **SafeCom Administrator**.
2. Open the **Device Servers** list.
3. Right click on the node, then select **Add device server group** in the context menu.
4. Enter a name and optionally a description for the device server group.
5. Select the **DWS servers** option.  
The **Failover controller** list below gets populated according to the selected option.
6. Select the controller from the list to use for failover.



7. Click **Add**.  
The newly added group shows up under the **Device servers** node.
8. Drag and drop the device servers to incorporate them into the newly created group.

## SafeCom HP Unified Client - How to

The following subsections contain step-by-step instructions for some of the administrator's most common tasks.

### Select login method

To set the method of user identification:

1. Log in to SafeCom Administrator.
2. Click **Devices** in the left-hand menu, and then select the desired device in the list.
3. Right-click on the device, then select **Device properties** from the context menu.  
The **Device properties** dialog box appears.

4. On the **Device configuration** page scroll to the **Login** section, then select one of the values for the **Login methods** property.

Choose from the following:

- Auto-sense
  - If there is a card reader attached, then login by card or entering Windows credentials are enabled.
  - If there is no reader attached, then user can authenticate by entering ID code (and maybe PIN code).
- ID code
- Card
- ID code or card
- Windows authentication

**Note** Identification by card requires the installation of a SafeCom ID Device (card reader).

5. Click **OK** to save the settings and close the dialog box.

## Enable Copy Control

The SafeCom solution can control access to the MFP's copy function.

For SafeCom to be able to control and track Copy and Copy in color, it needs to be set up as follows:

- Authentication for copy should be enabled in SafeCom Administrator. See step 1 for details.
- Access rights for copy should be granted for the user. See step 2 for details.

Follow the steps below to set up copy control:

1. Make sure authentication for copy operations is turned on in SafeCom Administrator:
  - a. Log in to SafeCom Administrator.
  - b. Click **Devices** in the left-hand menu, and then select the desired device in the list.
  - c. Right-click on the device, then select **Device properties** from the context menu. The **Device properties** dialog box appears.
  - d. On the **Device configuration** page in the **Access control** section select the **Authenticated** value for the **Copy** property.
  - e. Click **OK** to save the settings and close the dialog box.

2. Grant copy access right for the user.
  - a. Log in to SafeCom Administrator.
  - b. Click **Users** in the left-hand menu, and then select the desired user(s) in the list.  
You may select multiple users.
  - c. Right-click on the user(s), then select **User properties** from the context menu.
  - d. On the **Settings** page in the **Access rights** section select **Copy**. Optionally, to allow the user to copy in color as well, select the **Copy in color** check box.  
By default both **Copy** and **Copy in color** are checked. Enabling access control for color copy only is NOT recommended if the SafeCom solution is also to track copies. Mono copy jobs that are produced after the user has logged in to the color copy function are tracked as long as the user remains logged in. Mono copies are obviously not tracked when there is no user logged in. Similar situations arise if **Copy** is checked and **Copy in color** is cleared.
  - e. Click **OK** to save the settings and close the dialog box.

## Enable Scan to Folder

For SafeCom to be able to control access and track Scan to Folder, it needs to be set up as follows:

- Authentication for scan to folder operation should be enabled in SafeCom Administrator. See step 1 for details.
- Access right for scan should be granted for the user. See step 2 for details.
- The Save to Network Folder feature should be enabled for the device on the device's web page. See step 3 for details.

1. Make sure authentication for scan to folder operation is turned on in SafeCom Administrator:
  - a. Log in to SafeCom Administrator.
  - b. Click **Devices** in the left-hand menu, and then select the desired device in the list.
  - c. Right-click on the device, then select **Device properties** from the context menu.  
The **Device properties** dialog box appears.
  - d. On the **Device configuration** page in the **Access control** section select the **Authenticated** value for the **Folder** property.
  - e. Click **OK** to save the settings and close the dialog box.
2. Grant scan access right for the user.
  - a. Log in to SafeCom Administrator.
  - b. Click **Users** in the left-hand menu, and then select the desired user(s) in the list.  
You may select multiple users.
  - c. Right-click on the user(s), then select **User properties** from the context menu.
  - d. Make sure that **Scan** is selected in the **Access rights** section of the **Settings** page.
  - e. Click **OK** to save the settings and close the dialog box.

3. Make sure that **Scan to Network Folder** is enabled on the device's web page.
  - a. Open the device's embedded web server web page in a web browser and log in.
  - b. Click the Scan/Digital Send tab and then **Scan to Network Folder > Default Job Options** .
  - c. Check the **Enable Scan to Network Folder** check box and verify that all other save to network folder settings are set up according to your needs.
  - d. Click **Apply** at the bottom of the web page.

## Enable E-mail

SafeCom can control access to the MFP's Scan to Email function. For SafeCom to be able to control access and track e-mails, it needs to be set up as follows:

- Authentication for mail operation should be enabled in SafeCom Administrator. See step 1 for details.
- Access right for scan should be granted for the user. See step 2 for details.
- The **Email** application for each device must be enabled on the device's web page. See step 3 for details.

1. Make sure authentication for Mail operation is turned on in SafeCom Administrator:
  - a. Log in to SafeCom Administrator.
  - b. Click **Devices** in the left-hand menu, and then select the desired device in the list.
  - c. Right-click on the device, then select **Device properties** from the context menu. The **Device properties** dialog box appears.
  - d. On the **Device configuration** page in the **Access control** section select the **Authenticated** value for the **Mail** property.
  - e. Click **OK** to save the settings and close the dialog box.
2. Grant E-mail access right for the user:
  - a. Log in to SafeCom Administrator.
  - b. Click **Users** in the left-hand menu, and then select the desired user(s) in the list. You may select multiple users.
  - c. Right-click on the user(s), then select **User properties** from the context menu.
  - d. Make sure that **E-Mail** is selected in the **Access rights** section of the **Settings** page.
  - e. Click **OK** to save the settings and close the dialog box.
3. Make sure that **Email** is enabled on the device's web page.
  - a. Click the Scan/Digital Send tab and then **Email Setup > Default Job Options**.
  - b. Check the **Enable Scan to Email** checkbox and verify that other settings are set up according to your needs. For example, the default from and to e-mail addresses are set up under the

**Address and Message Field Control** pane. To set up for example the default from address to the user's e-mail address, select **User's address (Sign-in required)** in the **From:** field.

- c. Click **Apply** at the bottom of the web page.

**Note** Be aware that the setup of default **From:** and **To:** e-mail addresses is no longer handled by SafeCom. Now the settings are available on the device web page on the **Scan/Digital Send** tab under **Email Setup**.

## Control user access rights

You can control users' access rights to specific functions via SafeCom Administrator. (Refer to the *SafeCom G4 Administrator's Manual* for details on user rights).

To update user rights, do the following:

1. Click **Users** in the left-hand menu, and then select the desired user(s) in the list.
2. Right-click on the user(s), then select **User properties** from the context menu. The **User properties** dialog box shows up.
3. On the Settings tab, in the **Access rights** section select its check box to enable a function, or clear to disable it.

You can control access rights for the following features:

- Copy
- Copy in color
- E-mail
- Scan
- Fax
- USB memory print
- USB memory scan
- Print all button

## Enable Client Billing on the device

Note that the following two settings must be set up in SafeCom Administrator for the billing code to become part of the tracking record.

1. Enable **Client Billing** on the Device configuration tab in the Device properties dialog in SafeCom Administrator:
  - a. Log in to SafeCom Administrator.
  - b. Click **Devices** in the left-hand menu, and then select the desired device in the list.
  - c. Right-click on the device, then select **Device properties** from the context menu. The **Device properties** dialog box appears.
  - d. On the **Device configuration** page in the **Licenses** section select the **True** value for the **Client billing** property.
  - e. Click **OK** to save the settings and close the dialog box.

2. Enable **Bill clients for cost** on the **Settings** tab in the **User properties** dialog in SafeCom Administrator.
  - a. Log in to SafeCom Administrator.
  - b. Click **Users** in the left-hand menu, and then select the desired user(s) in the list. You may select multiple users.
  - c. Right-click on the user(s), then select **User properties** from the context menu.
  - d. Make sure that **Bill clients for cost** is selected in the Print documents section of the Settings page.

**Tip** If the **Bill clients for cost** check box is disabled, then select either the **Tracking** or the **Pay** option in the **Cost control** section below.

- e. Click **OK** to save the settings and close the dialog box.

## Enable using the Home Folder

The Home Folder feature allows users to save their work to a personal network folder. Using the folder requires meeting the following requirements:

- The folder name is given as a fully qualified domain name.
- The users to be assigned for using the feature must be members of the domain.
- The default domain must be set via the SafeCom Go web page.
- The applications (scan, fax, email, and so forth) to be used for jobs destined to the Home Folder must have the proper access rights for the folder (read, write).
- The applications (scan, fax, email, and so forth) to be used for jobs destined to the Home Folder must have the relevant credentials to access the folder (preferably the user's own credentials should be used).
- Home Folder name must not contain the % character.

To set the usage of the Home Folder, do the following:

1. Open the device's embedded web server web page in a web browser and log in.
2. Click the **Scan/Digital Send** tab.
3. Click **Scan to Network folder** > **Quick Sets** on the left menu.

**Note** A Quick Set for Scan to Network Folder requires user credentials to retrieve the network folder path from the network directory. A network sign-in method should be selected for the device before using the Home Folder feature.

4. Select **Add** or **Configure**, as appropriate.

**Note** Use the **Previous**, **Next**, **Finish** and **Cancel** buttons on the bottom right to navigate between the pages of the wizard.

The Quick Sets Setup Wizard starts.

5. Specify **Quick Set Name**, **Quick Set Description** and **Quick Set Start Options**.

6. Navigate to the Folder options page. Select the **Save to a personal shared folder** option and enter **HomeFolder** (case sensitive) in the **Retrieve the device user's home folder using this attribute** field.
7. Optionally, navigate between the rest of the pages and set up details in the Notification, Scan Settings, and File Settings pages.
8. Click **Finish** to save the Quick Set.
9. Login to SafeCom Administrator.
10. Set the Home Folder for users via either:
  - Enter the **Home folder** property manually on the **Identification** tab of **User Properties**.
  - Use the **Import Home Folder** AD field in the **Active directory configuration** page of **User Import Configuration**.

When using CSV import with Home Folder, ensure that you use the full folder path of the users ( `<address>\Home\<username>`).

## Determine the DWS version

You may check the version of the **SafeCom Device Web Server** the following way:

In **SafeCom Administrator**, select **Device servers** from the left-hand pane. The version number is displayed in the Version column.

## Determine the HP Unified Client version

You may check the version of the **HP Unified Client** the following way:

At the device, tap **About** in the menu. The version number is displayed in the about box.

## Configure Push Print Post Tracking

SafeCom Push Print Post Tracking is an extension of the tracking feature of the SafeCom solution. The tracking and charging data was based on the information that former versions of SafeCom components were able to collect while documents were printing at the workstation or the server. This data is not accurate enough to calculate the precise tracking information and the price of the jobs. The software utilizes the detailed information that is sent by the printing device itself and all information is calculated from these reports.

**Note** The device needs to be up and running, connected to the network, to be able to send tracking data to the SafeCom server. Disconnecting or powering off the device while some tracking data is still pending may result in inaccurate tracking.

## Configuring Post Tracking push print jobs

The feature does not require extra steps to configure devices for post tracking push print jobs, as all SafeCom components automatically recognize whether the feature is available in the specific configuration. You simply have to add the device to the SafeCom G4 server and associate it to a Safecom Push port. By enabling the Print post-tracking device configuration setting in SafeCom Administrator, both push and pull jobs will be tracked based on the job information reported by the device itself.

## Using Push Print Post Tracking

SafeCom push print post tracking extends the usage of the existing tracking feature, allowing you to track push print jobs in more detail.

All Push Print jobs for which Post Tracking is enabled are created in a **Pending** state, and remain in this state while awaiting post tracking data; this state can last up to 48 hours. The length of time jobs spend in **Pending** state can be configured using the CleanPushTrackPendingInterval 32-bit DWORD registry setting under HKEY\_LOCAL\_MACHINE\SOFTWARE\SafeCom\SafeComG4. The default value is 48 hours. The system will update the track list every 6 hours.

- If the post tracking data is received within the **Pending** time period, the tracking record is updated with the precise counters (based on the cost calculated from the post tracking data), and the job status is set to Completed. In pay environments, the price is recalculated and the pay user's balance is modified via an **Adjustment** transaction. Be aware that while the job is in **Pending** state, the pay user's balance is reduced according to the initial job data.

Tracking record	
Field	Value
<b>Job</b>	
Name	Test Page
Generated	9/17/2015 10:10:31 AM
Size	0 B
Paper	A4
Duplex	No
Color	No
Driver	HP Universal Printing PCL 6 (v6.0)
Type	PUSH
Destination	
<b>User</b>	
ID	3
User logon	CARD
Full name	
Description	
Cost code	N/A
<b>Device</b>	
ID	11
Name	M630
Model	HP LaserJet MFP M630
Location	N/A
Duplex	Yes
Color	No
MAC	fc15b478cdc1
<b>Page count</b>	
Tracking state	PENDING
Tracking pages	1
Driver pages	1
Parser pages	1
Color pages	0
Sheets	1

- If no post tracking data is received within the specified **Pending** duration, the job goes into **Completed** state, and in case of pay users, all costs are refunded via a **Withdrawal** transaction. These jobs are marked accordingly in the SafeCom Tracking database.

User transactions can be checked in the scPurse database directly or in Safecom Administrator, under **User properties > Account**. Safecom Web Interface provides a UI for the end-users to review their transactions.

The following screenshot displays the lifecycle of a job when Push Print Post Tracking is enabled:

ID	Date/Time	Author	Type	Comment	Value	Account 1	Account 2
365	10-02-2016 16:06:51	ADMIN	Cashier	Add 100 to account	100,00	100,00	-
366	10-02-2016 16:06:56	ADMIN	Cashier	Add 200 to account	200,00	-	200,00
369	10-02-2016 16:16:45	USER 1345	Printing	Pull Print: A4 3 pages Saines PC.pdf	-15,10	-	184,90
372	10-02-2016 16:16:49	USER 1345	Push Printing	Push Print: A4 3 pages Saines PC.pdf	-15,10	-	169,80
373	10-02-2016 16:16:53	USER 1345	Push Printing	Push Print: Job k original price A4.pdf	-20,10	-	149,70
372	10-02-2016 16:17:07	USER 1345	Adjustment	Push Print: A4 3 pages Saines PC.pdf	0,00	-	149,70
373	10-02-2016 16:17:15	USER 1345	Adjustment	Push Print: Job k original price A4.pdf	4,00	-	153,70
****	4 Reservations	****	****	Reservations not shown	****	****	****

Summary (11 transactions):  Show reservations

Account 1 changed with 100,00 in 1 transactions. Deposited: 100,00. Subtracted: 0,00.  
 Account 2 changed with 153,70 in 6 transactions. Deposited: 204,00. Subtracted: 50,30.  
 Reserved changed with 0,00 in 4 transactions. Deposited: -600,00. Subtracted: 600,00.

In pay environments, the Push Printing, Adjustment and Withdrawal transactions are performed on the accounts of the users accordingly. Both accounts can be changed with each transaction.

If the push print post tracking requirements are not met during printing (for example, due to an older version of Print Client or SafeCom Go software), the job immediately goes into a **Completed** state, the pay user's balance is reduced accordingly, and the post tracking data is not taken into account by the SafeCom G4 server.

The Tracking service can be configured in online or offline mode in a multi-server environment. The final storage location of the tracking data is always the Safecom Primary server. In online mode, the records are created on the primary server database immediately. In offline tracking mode, records are stored temporarily on the server that is bound to the Safecom Push port until the job reaches **Completed** state. The records are then moved to the primary server depending on the scheduled tracking collection.

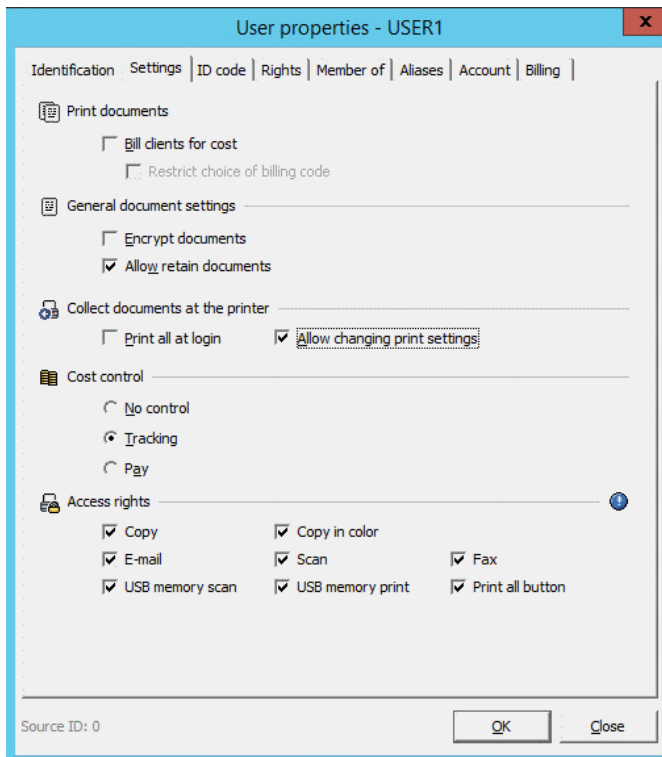
If the device fails to send the post tracking data (because of the device home server being unavailable), it is stored and the device resends it after the next printing.

**Note** Since the SafeCom Web Interface is configured to use the primary server, users see their tracking data after the scheduled tracking collection.

**Note** Secondary prices may be different, as they are calculated only on the server side.

## Configure users and devices to allow modifying job settings

The Force Mono-Duplex (FMD) feature allows the users to force monochrome and/or duplex printing on the device. The feature can be enabled and disabled per user and per device. To control this user setting, open SafeCom Administrator and bring up the **User Properties** dialog.



The figure above indicates how the feature can be enabled for a user by setting the **Allow changing print settings** option. The setting can be managed for a group of users if the **Property** dialog is opened when multiple users are selected from the user list. If applied, users can see the relevant control icons on the device.

**Note** If this setting is applied to the Default user correctly, all new users inherit this setting.

The setting for the device can be controlled in SafeCom Administrator.

Open the device property page in SafeCom Administrator. On the **Device configuration** page you can find the options as the screenshot below indicates it. The available options are the following:

- **Enabled** – the device allows users to control their print jobs independently from the settings of the specific user.
- **Disabled** – the device hides the options from all users and the job settings cannot be changed.
- **Per user setting** – the device enables or disables the features according to the currently logged on user's settings.

The screenshot shows the 'Add Device - NPI4CE177' dialog box with the 'Device configuration' tab selected. The 'Allow changing print settings' option is highlighted in blue. Below the table, there is a detailed description of this option.

Property	Value
Pull Print	True
ID device	True
<b>Login</b>	
Login method	ID code
Mask user code	False
Login without pin	False
Length of user ID code	39
Inactivity timeout	60
Guest login ID	
Register card by windows credentials	False
<b>Printing</b>	
Reverse document list	False
<b>Allow changing print settings</b>	Disabled
Prevent printing on low toner	False
Print Engine access method	First
Print Engine resolution rule	HN,FQDN,IP
Supported drivers	
<b>Tracking</b>	
Print post-tracking	True
Timeout for tracking push-print jobs	48
<b>User Interface</b>	

**Allow changing print settings**  
Enable or disable managing finishing options for all users on the device. As third option, the feature can be available per user basis.

**Note** To properly calculate job prices, ensure that the duplex and color capabilities of the device are set correctly on the **Settings** tab of the **Device Properties** in SafeCom Administrator.

In pay environment the prices of jobs are recalculated if the user requests B&W or duplex printing. The new prices are shown in the job list. The displayed prices are just estimates, as they are based on not necessarily accurate data coming from the server side calculated when the documents were printed. The correct price can be calculated knowing the accurate page counters, the number of color pages and page sizes.

## Uninstall SafeCom HP Unified Client

**Note** Deleting the device not only detaches it from the SafeCom server but also uninstalls the HP Unified Client from the device. If the same device connects to multiple SafeCom servers, then uninstallation makes the device inaccessible to those servers also.

1. Log in to SafeCom Administrator.
2. Click devices in the left-hand menu, and then select the device from which the SafeCom solution must be uninstalled.

3. Perform any of the following steps to remove the device:
  - a. Right-click on the device, then select **Delete device** from the context menu.
  - b. Click the **Delete** icon in the top menu.
4. Click **Yes**.

## Relocate DWS application log folder

Relocation of your log folder to a more accessible path pays off when archiving log files or contacting support. Do the following to relocate log files to the `C:\safecom_trace` folder, which is the established position of application logs in SafeCom solutions.

1. Locate your DWS folder, which is `C:\Windows\System32\config\systemprofile\AppData\Local\Nuance\Integrated\DWS\webserver\conf` by default.
2. Open the `DWSSettings.properties` file in a plain text editor, such as Notepad.
3. Append a new line with the `LOG_FILE_PATH` setting, specifying the new location for log files:

```
LOG_FILE_PATH=C:\\safecom_trace
```

**Note** If the file already has the `LOG_FILE_PATH` setting, then edit the existing line instead.

**Note** Make sure to use a double backslash when separating the drive name (C:) from the path.

4. Save the changes and close the plain text editor.
5. Restart the Device Web Server service.

SafeCom DWS will save the application log files into the `C:\safecom_trace` folder from now on.

## SafeCom HP Unified Client device trace facility

Use the SafeCom trace facility only if SafeCom Support instructs you to do so.

1. Log in to SafeCom Administrator.
2. Click **Servers** in the left-hand menu, and then select the desired server in the list.
3. Right-click on the server, then select Server properties from the context menu.
4. Make sure that the check box **Write event to Windows event log** is selected on the Server page.
5. Click OK to save the settings and close the dialog box.

To check the logged events, right-click on the server, then select Event log from the context menu.

In case you need to provide logs, visit the following locations and gather the files within.

**Note** Compress the log files in ZIP format prior sending to the support team.

- Client side log:

```
https://<your device ip address>/hp/device/oxpd/oxpdlog.txt
```

- Application log:

```
C:\Windows\System32\config\systemprofile\AppData\Local\Nuance\Integrated\
DWS\webserver\webapps\DwsMain\WEB-INF\felix-cache\bundle174\data
```

Locate the DATA folder under the bundle\*\*\* folders (e.g. bundle176).

**Tip** It is recommended to set up a more accessible location (C:\safecom\_trace by standard) for the application log files. See [Relocate DWS application log folder](#) for details.

- Web server log:

```
C:\Windows\System32\config\systemprofile\AppData\Local\Nuance\
Integrated\DWS\webserver\logs
```

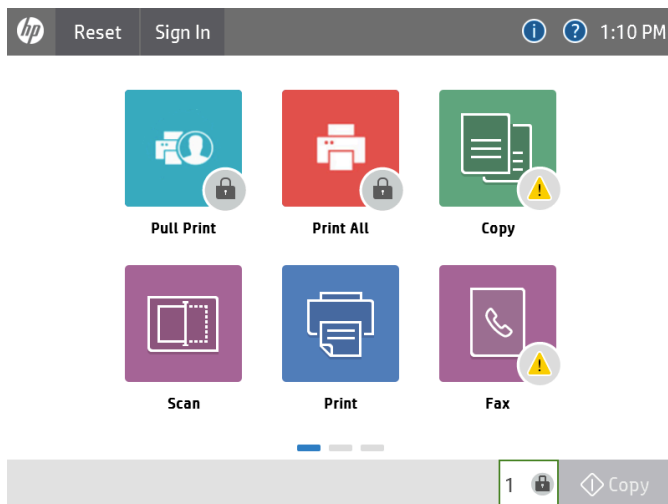
## Chapter 3

# Using SafeCom HP Unified Client

The size and looks of the touch-screens of the devices do vary, but the workflows are identical.

## Login

The login sequence is initiated if you are not already logged in and tapped any icon (such as **Pull Print** or **Copy**) that requires SafeCom to handle **MFP authentication**.



If the copy function requires SafeCom authentication pressing the green **Copy** button will also initiate the login sequence. Once logged in the documents placed in the automatic document feeder (ADF) will be copied. If Print all at login is selected on the server in **User properties** > **Settings** then HP Unified Client devices will print all documents at login, excluding retained ones.

The recommended login sequences are described in the following chapters:<sup>2</sup>

- [Login with card](#)
- [Login with card and PIN code](#)
- [Login with ID code](#)
- [Login with ID code and PIN code](#)
- [Login with Windows](#)

<sup>2</sup> A PIN code only is required if both the user and the device is set up to require PIN code. This applies to both the login sequences and when the user registers a card using a PUK code.

**Note** Do not power off the device prior to Logout (see [Logout](#)). The device needs to be up and running, connected to the network, to be able to send tracking data to the SafeCom server. Disconnecting or powering off the device while some tracking data is still pending may result in inaccurate tracking.

**Note** After adding the device to SafeCom, the first login may take a longer time.

## Login with card

Use the card reader.

## Login with card and PIN code

1. Use the card reader.
2. Enter **PIN code** on the touch-screen or on an optional external keyboard.
3. Tap **OK**.

## Login with ID code

1. Tap **Sign In** (or press the green **Copy** button to copy).
2. Enter **ID code** on the touch-screen or on an optional external keyboard.
3. Tap **OK**.

## Login with ID code and PIN code

1. Tap **Sign In** (or press the green **Copy** button to copy).
2. Enter **ID code** on the touch-screen or on an optional external keyboard.
3. Tap **OK**.
4. Enter **PIN code**.
5. Tap **OK**.

## Login with Windows

If **Login method** is set to **Windows authentication**, it is possible to log in by entering your Windows login credentials:

1. Tap **Domain** and specify the Domain.
2. Tap **User name** and enter username on the touch-screen. Tap **OK**.

**Note** **User name** cannot be blank.

3. Tap **Password** and enter password on the touch-screen. Tap **OK**.

**Note** **Password** cannot be blank

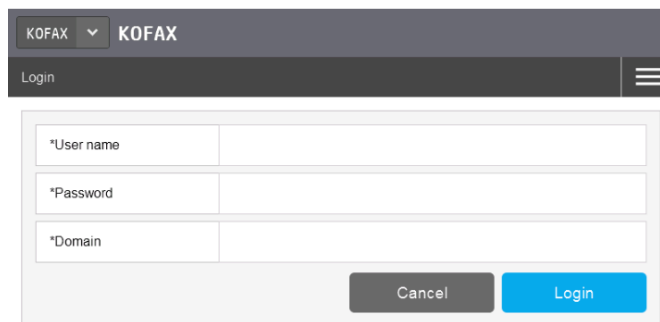
4. Tap **OK**.

## Register card at device with Windows credentials

**Tip** If there is an available PUK code in the SafeCom system, the user also has the option to register the card using a PUK code (see screenshot in section [Register card at device with PUK code](#)).

**Tip** For Windows authentication, the card reader cannot be used. To use a card reader and Windows authentication, users should select Auto-sense.

1. Use the card reader and if the card is unknown the **SafeCom Card Registration** page appears.



The screenshot shows a mobile application interface for card registration. At the top, there is a header with a dropdown menu set to 'KOFAX' and a 'Login' button. Below the header is a form with three input fields: '\*User name', '\*Password', and '\*Domain'. At the bottom of the form are two buttons: 'Cancel' and 'Login'.

2. Specify the appropriate domain in the **Domain** text box.
3. Tap the **User name** field and enter the Windows user name on the touch-screen or on an optional external keyboard. Tap **OK**.
4. Tap the **Password** field and enter the Windows password. Tap **OK**.
5. Tap **OK**.
6. The card is now registered and the user is logged in.

## Register card at device with PUK code

1. When using a card reader, if the card is unknown and there is an available PUK code in the SafeCom system, the **SafeCom Card Registration** page appears with the options to register the card using a PUK code or Windows credentials.

2. Tap the **PUK** field and enter the PUK code on the touch-screen or on an optional external keyboard.
3. If required, enter the PIN code and tap **OK**.

**Note** On this screen, the user must provide the new PIN code twice.

4. The card is now registered.

## Verify server status

To verify server status do the following:

1. On the device, go to the login screen and select **Server status** from the hamburger menu. The Server Status page displays.

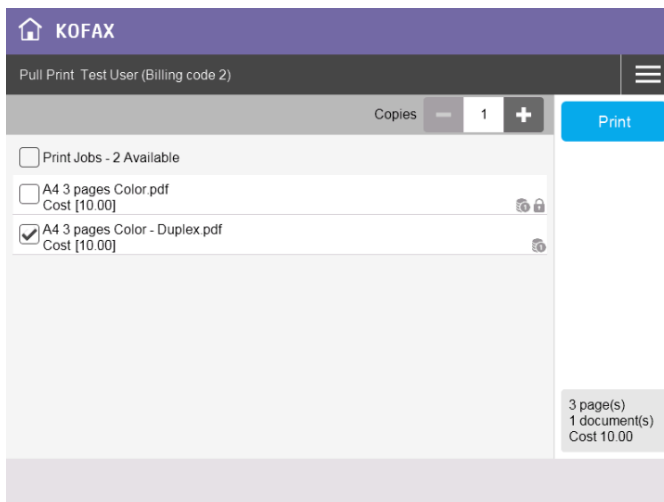
Server Status		
Name	Status	Server Address
* SafeCom primary	Online	HG-NEUF58

2. Check the status.

**Note** The Server Status page may list multiple servers, an asterisk (\*) marks the active endpoint (server).

## Pull Print - Document list

Tap the **Pull Print** icon to access the **Document list** that allows you to print individual documents. Documents appear in chronological order with the newest at the top of the list.



In the document list, the following icons may mark the document:

- : shows the document is retained.
- : shows the document has a billing code.
- : shows the document is delegated. Tap the Info button to see information about who delegated the document.
- : shows the document is group printed.
- : shows the document is forced to print in black and white.
- : shows the document is forced to print in duplex.
- : shows the document fidelity is low and the document may print incorrectly.

The printing cost of the document (for example, **1.60**) is below the document name.

- Tap **Print all** to print all documents, excluding any retained documents. Documents are printed in chronological order (oldest first).
- Tap **Refresh** to update the list of documents with pending documents that has finished spooling after the user logged in.
- Tap **Print** to print the selected documents.
- Tap **Retain** if you want the selected documents to remain on the list (server) after they have been printed. A retained document is marked with a preceding .
- Tap **Delete** to delete the selected documents.
- Tap **Info** to see information about the selected documents, including cost, driver name, use of color and duplex.
- Tap **Copies** to request multiple copies of a document. **Print all** always prints one copy of each document.

## Copy

Tap the green **Copy** icon to copy the documents placed in the automatic document feeder (ADF).

## Folder

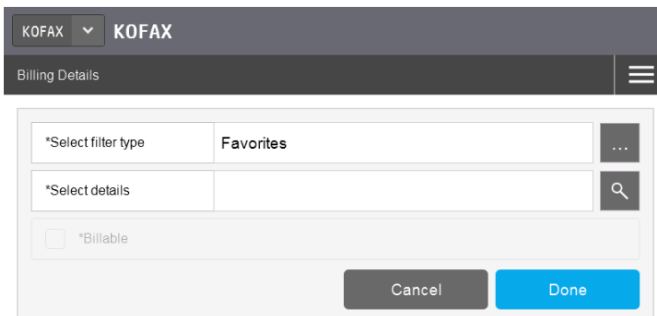
Tap the Scan icon, then tap the Scan to Network Folder icon to scan and send the document to a folder.

## E-mail

Tap the Scan icon, then tap the Scan to Email icon. It is configurable if the fields should be editable or not. For each field tap the field button and enter the value on the touch-screen or on an optional external keyboard. Tap the **Send** button to scan and e-mail the document.

## Selecting a Billing Code

If billing codes are enabled by the administrator, then the following screen appears during the login process. In this case, the user is required to select a billing code.



The screenshot shows a mobile application interface for selecting a billing code. At the top, there is a dark header bar with a dropdown menu showing 'KOFAX' and a hamburger menu icon. Below the header is a section titled 'Billing Details' with a search icon. The main content area contains a form with the following elements:

- A field labeled '\*Select filter type' with the value 'Favorites' and a three-dot menu icon to its right.
- A field labeled '\*Select details' with a magnifying glass search icon to its right.
- A checkbox labeled '\*Billable' which is currently unchecked.
- At the bottom of the form are two buttons: a grey 'Cancel' button and a blue 'Done' button.

The screen offers the following:

- Select filter type: Filter the list of billing codes by the options below:
  - Favorites
  - Last used
  - Personal

**Note** If Personal is selected, the tracking data will contain “Personal” as the code, and “Used for personal billing” as the description. This differentiates it from the tracking data not subjected to billing (for example data from a device which does not have a billing license).

- Select Details: This box is active if Favorites or Last used was chosen in Select filter type. Searches among billing codes.
- Billable: Select this check box to use the selected billing code in invoicing. If this check box is cleared, then the selected billing code is still applied, but not detailed in the customer invoice.

**Note** This check box is only available if the administrator has recorded the selected billing code as billable.

## Logout

There is a configurable Inactivity timeout that defaults to 60 seconds. The logout process is initiated if the user does not interact with the screen or any other device buttons.

**Note** Set a high Inactivity timeout value in order to avoid undesired automatic log out during those time-consuming operations not requiring any user interaction on the device screen. See [At the Printer: Undesired timeout](#) as a troubleshooting example.

To log out actively perform one of the following actions:

- Tap **Sign Out**.
- Swipe a card again (if a card reader is connected and you logged in by card).

**Note** The Cancel print jobs after unattended error feature is disabled by default. If this feature is enabled, then jobs pending due to unattended errors, such as paper jam or out of paper, will be automatically deleted from the print queue as the user logs out. Visit **Security > General Security > Printing > Cancel print jobs after unattended error** on the HP device web page to enable or disable this feature.

**Note** If you experience users being intermittently logged out during workflows, check [At the Printer: Undesired timeout](#) for a solution.

## Chapter 4

# Troubleshooting

## Introduction

This chapter contains troubleshooting hints for the SafeCom HP Unified Client product. Additional troubleshooting hints are available in the Troubleshooting chapter in the *SafeCom G4 Administrator's Manual* (D60650).

## At the Printer: Card reading not working

- Is the card reader powered and firmly connected?
- Is the card compatible with the reader?
- Make sure you used the correct VID/PID values when adding the device to SafeCom Administrator.
- If the card reader was added or changed after adding the device to SafeCom Administrator, then you need to remove the device and add it again together with its card reader.

## At the Printer: Device freezes as Register with Windows credentials pressed

If the device is installed in DLA mode and Card is selected for login method then tapping the Register with Windows credentials button may result in a freeze. The Present your card screen appears and the device does not react to further card swipes.

**Solution:** Use HP devices with firmware version 24.7.2 or newer.

## At the Printer: Undesired timeout

If you experience users being intermittently logged out during workflows, it is recommended to use the device's native timeout feature instead of SafeCom's inactivity timeout to control automatic logout.

To do so, increase the SafeCom inactivity timeout to a large value (such as 3600 seconds), and set the device's timeout at **General > Control Panel Customization > Display Settings > Inactivity Timeout** to the desired timeout value. (See [Inactivity timeout](#) for details.)

## At the Printer: Sign-in failed

If a DWS is registered by host name then Sign-in on the device will fail in network environments lacking name resolution.

**Solution:** Provide name resolution on the network.

**Workaround:** Open the Server Properties dialog box in SafeCom Administrator and update the IP address manually in the Server address box.

## At the Printer: Source not reachable / Job inaccessible

The user is trying to collect a document that resides in a folder on a computer that is not reachable for the printer.

The Job inaccessible message may also result from improper licensing. Ensure that the **Pull Print** value is set to True under **Device properties > Licenses** in SafeCom Administrator.

## At the Printer: USB Error

If you get the message The USB storage device that was just inserted is not supported, it is likely that you have installed the USB ID Device on the device *before* installing the SafeCom solution on the device.

This error disappears when SafeCom is installed on the device.

This error also may occur if the card reader was added with an invalid VID/PID.

## At the Printer: User cannot log out until the last job is spooled

When printing a large number of jobs or a large number of copies of the same job, a user cannot log out from the device until the last job is spooled to ensure correct accounting. This may cause a delay in logging out for users who are printing a large number of documents.

## Add device to device controller service failed error

SafeCom HP Unified Client allows using special characters in device passwords but using some of these characters may result in unexpected behavior. The following special characters are safe to use:

- + \* ? ! % = . \$ / { } \_ , ( ) :

**Workaround:** It is not recommended to use any special characters other than the ones in the list above in device passwords.

## Certificate generation for DWS fails

If certificate generation fails for the DWS server, ensure that the server has a valid FQDN (Fully Qualified Domain Name), and DNS name resolution works.

## Incorrect tracking information

Using non-supported drivers for Pull Print may result in incorrect tracking information. There are known issues with Kyocera ClassicUniversalDriver\_v31.

**Solution:** Use a supported driver.

## OXPd Application Error - Mime type not supported

This error message appears if you try to print to a device which has a name that includes accented characters.

**Solution:** Remove the device from SafeCom, then add the device again, specifying a name without accented characters in Name. For details, see number 9.

## Prevent low toner feature does not work

Some HP devices do not notify on low toner level, though Low Warning Tresholds are set correctly and Low Warning Treshold Message is enabled on the device. (Meanwhile, the Document Feeder Kit Low message displays correctly.) This causes SafeCom's Prevent low toner feature fail.

## Prices do not match

Price1 and Price2 can be different in case of using a paper size unsupported by SafeCom or the device.

Use the kind of media supported by both SafeCom and the printing devices in order to keep consistency.

## Problems when adding a device - valid certificate required

To install SafeCom HP Unified Client on a HP device, a valid certificate must be present on the device. If the certificate is invalid, then adding the device fails.

Possible causes:

- If the certificate changes on the device (for example, due to certificate regeneration) then the device may need to be re-added to SafeCom.

- Using Partial Disk Clean may result in invalid certification if using a self-signed certificate.
- Any changes altering time zone settings can result in a certificate validation failure.

**Solution:** Remove the device, then create a new certificate and add the device again.

## Problems when adding a device - device already configured

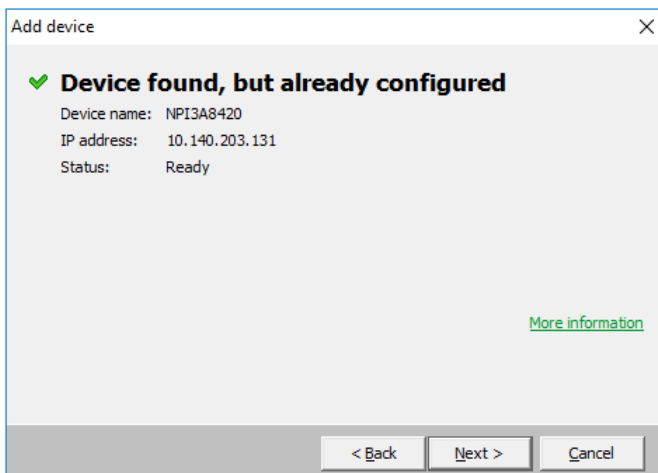
It might happen that the device to be added to the SafeCom system has been configured before. In this case you should follow the troubleshooting procedure that fits your situation.

### The device is registered in the SafeCom database

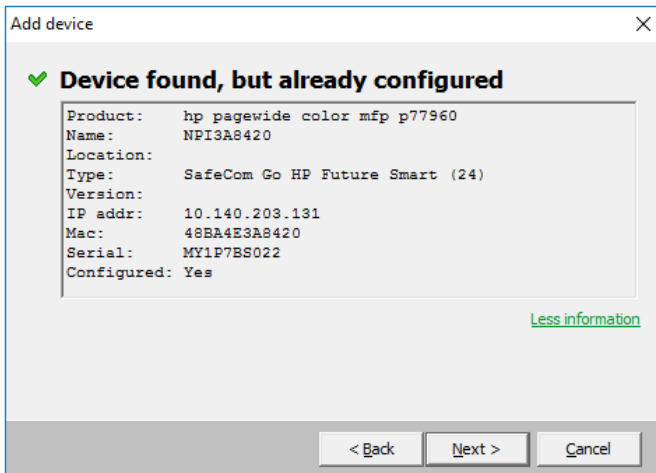
If the device exists in the SafeCom database and it is assigned to one or more servers then there is no way to add it again. The SafeCom Administrator displays a warning and optionally shows the property dialog of the device.

### The device is registered in the DWS

It may lead to inconsistency if a device has been deleted from the SafeCom database while the corresponding Device Web Server was temporarily out of order. The device remains registered in the Device Web Server, but it is missing from the SafeCom database. When you try to add this device again, the Add Device wizard displays the following screen:



Optionally, click More information to verify that the device already has been added to the selected Device Web Server:



If you continue with the Add device wizard (click Next), then the wizard performs the following steps:

1. Removes the device from the Device Web Server.
2. Registers the same device to the Device Web Server again.
3. Adds the device to the SafeCom database as a new device.

## Problems when adding a device - device is not discoverable

If IPP (Internet Printing Protocol) is not enabled on an HP device, then the Add device wizard fails to add the device. Do the following to fix the problem:

1. Log in to the device.
2. Navigate to **Networking > Other Settings > Misc. Settings** on the device web page.
3. Make sure to enable Internet Printing Protocol by selecting the IPP Printing and IPPS Printing check boxes, then save the settings.
4. Start over the Add device wizard and complete the installation. (See [Add the device via SafeCom Administrator](#) for details.)

## SafeCom HP Unified Client has incorrect IP address

SafeCom does not support TCP/IPv6, so if you are in such an environment you must disable the use of TCP/IPv6.

## Sign-In methods are disabled on the device

Installing an authorization agent (such as SafeCom) on HP FutureSmart 4 devices disables all manual authorization controls. Users may not be able to manually configure authorization on the affected devices once SafeCom is installed.

## Signing in message appears while canceling

"Signing in" message appears if the user taps Cancel during authentication on the ID Code screen. This issue has no effect on functionality.

## Unable to find device

When using a Push port, the Unable to find device error message appears after a device was removed and then added again.

To solve this problem, remove the device in SafeCom Administrator, then add it again with another push port.

## Unexpected unattended push prints appear

If you see any unsolicited unattended push prints, then make sure that the device is not in use as a TCP/IP printer.