

USB Card Reader Plug-in Installation Guide

Xerox WorkCentre[®] 5325/5330/5335

Xerox WorkCentre 7120

Xerox WorkCentre 7425/7428/7435

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Overview

This document describes how to configure off box authentication to a Solution Partner Authentication server with a USB card reader. The USB card reader is connected directly to the USB port on the Xerox machine. When the USB card reader is connected to the machine, an external card reading device is no longer required.

This feature is used to control access to the Multi-Function Printer (MFP) via employee badge to a partner authentication server. Once the server is setup to communicate with the device and selected Services are locked at the LUI, access to those 'locked' services will only be granted to walk up users with valid cards and/or System Administrators.

Prerequisites

- The Multi-function Printer software must meet a minimum software level. The supported devices and the minimum software levels are:
 - WorkCentre 53xx software** - Version 53.10.52 or higher
 - WorkCentre 7120 software** - Version 71.3.0 or higher
 - WorkCentre 74xx software** - Version 75.3.0 or higher
- Must be using supported cards and card readers. See Appendix A.
- The Secure Socket Layer (SSL) must be enabled
- Before installation occurs the [USB Card Reader Install.zip](#) file must be downloaded and saved to a known location on your computer/server.

Note

- Extensible service setup must be enabled if the Xerox Extensible Interface Platform® (EIP) application is used.
- This plug in cannot be used with Xerox Secure Access branded card readers.

Installation

Connecting the USB card reader

Two USB ports are located next to each other on the back of the Xerox machine. Insert the USB connection from the card reader into the USB port on the right side.

Enabling the plug-in feature on the machine

1. Open an internet web browser.
2. Enter the IP address of the machine in the address field.
3. Press **Enter** to go to CentreWare® Internet Services.
4. Select the **Properties** tab.
5. If prompted, enter the system administrator user name and password.

The default user name is **admin** and the default password is **1111**.

6. Select **OK**.
7. Navigate to **Security → Plug-in Settings → Plug-in Settings**
8. Within the **Plug-in Settings** section:
 - a. Check the Plug-in Settings **Enabled** checkbox
 - b. Select **Apply**

A message is displayed stating that the machine must be rebooted before the new settings can take effect.

9. Select **Reboot Machine**.

A message displays asking: “Do you want to reboot?”

10. Select **OK**.

Retrieve the USB Card Reader Plug-in

The USB Card Reader Plug-in is located within the [USB Card Reader Install.zip](#) file mentioned in the Prerequisites section. Double-Click the file labeled **cr.1.0.14.zip** to access the card reader plug-in. Unzip and save the file to a location on your computer where it can be easily retrieved at a later time.

Uploading the USB Card Reader Plug-in

1. Open an internet web browser.
2. Enter the IP address of the machine in the address field.
3. Press **Enter** to go to CentreWare Internet Services.
4. Select the **Properties** tab.

5. If prompted, enter the system administrator user name and password.
The default user name is **admin** and the default password is **1111**
6. Select **OK**.
7. Navigate to **Security** → **Plug-in Settings** → **List of Embedded Plug-ins**
8. Select the **Upload** button to display the Plug-in page.
9. From the Upload Plug-in page perform the following:
 - a. Select the **Browse** button.
 - b. Navigate to the location where you stored the Cardreader.jar file, select the file and select the **Open** button.
 - c. Select the **Upload** button.
Note: A device reboot is necessary for the Plug-in to be successfully added to the machine.
10. Reboot the machine.
 - a. Select the **Status** tab.
 - b. Select **Reboot Machine**.
A message displays asking: "Do you want to reboot?"
 - c. Select **OK**.

Checking the status of the embedded plug-ins

1. Open an internet web browser.
2. Enter the IP address of the machine in the address field.
3. Press **Enter** to go to CentreWare Internet Services.
4. Select the **Properties** tab.
5. If prompted, enter the system administrator user name and password.
The default user name is **admin** and the default password is **1111**.
6. Select **OK**.
7. Navigate to **Security** → **Plug-in Settings** → **List of Embedded Plug-ins**
The list will contain the newly uploaded Plug-in as well as existing Plug-ins (if any).
8. Under the **Status** heading, check the status of the plug-ins.
The status of the newly added plug-in should display Activated.
9. If the Status does not display Activated, select the **Start** button to activate the plug-in of your choice.
Note: In case of multiple plug-ins (uploaded to the machine) and to prevent potential login failures, it is suggested that only the intended plug-in is in Active status while others are Deactivated.
Deactivation steps are provided on the next page.

Deactivation of the embedded plug-ins

1. Open an internet web browser.
2. Enter the IP address of the machine in the address field.
3. Press **Enter** to go to CentreWare Internet Services.
4. Select the **Properties** tab.
5. If prompted, enter the system administrator user name and password.
The default user name is **admin** and the default password is **1111**.
6. Select **OK**.
7. Navigate to **Security** → **Plug-in Settings** → **List of Embedded Plug-ins**
8. Select “**Xerox USB Card Reader (CR.1.0.13)**” or whichever version is installed
9. Select the **Stop** button.
A message displays asking, “Do you want to deactivate the selected plug-in.”
10. Select **OK**.
Note: A device reboot is necessary for Plug-in to successfully deactivate.
11. Reboot the machine to deactivate the current plug-in.
 - a. Select the **Status** tab.
 - b. Select **Reboot Machine**.
A message displays asking, “Do you want to reboot?”
 - c. Select **OK**.

Activating the plug-ins

1. Open an internet web browser.
2. Enter the IP address of the machine in the address field.
3. Press **Enter** to go to CentreWare Internet Services.
4. Select the **Properties** tab.
5. If prompted, enter the system administrator user name and password.
The default user name is **admin** and the default password is **1111**.
6. Select **OK**.
7. Navigate to **Security** → **Plug-in Settings** → **List of Embedded Plug-ins**
8. Under the Status heading, check the status of the plug-ins. Locate the previously Deactivated Plug-in.
9. Check the Plug-in that is Deactivated, select the **Start** button to activate the plug-in.
A message displays asking, “Do you want to start the selected plug-in?”.
10. Select **OK**.

11. Recheck that the status for the plug-ins. Note: The Internet Browser may need to be refreshed for status to reflect the current state.
12. Reboot the machine to activate the plug-in.
 - a. Select the **Status** tab.
 - b. Select **Reboot Machine**.
A message displays asking, "Do you want to reboot?"
 - c. Select **OK**.

After the machine reboots, recheck the status by navigating back to the **Properties tab** → **Security** → **Plug-in Settings** → **List of Embedded Plug-ins**. The status should change to Activated.

13. Ensure that the correct version of the plug-in was uploaded and activated.
 - a. Select the specific plug-in.
 - b. Select **Details** to view the correct version of the plug-in.
 - c. Select **Close** to return to the **List of Embedded Plug-Ins**.

Configuring the machine to use USB card reader plug-in for authentication

The following steps are required for the Xerox MFP to communicate with the Authentication feature.
Note: The SSL (Secure Socket Layer) must be enabled if not already done so.

1. Open an internet web browser.
2. Enter the IP_ address of the machine in the address field.
3. Press **Enter** to go to CentreWare Internet Services.
4. Select the **Properties** tab.
5. If prompted, enter the system administrator user name and password.
The default user name is **admin** and the default password is **1111**.
6. Select **OK**.
7. Navigate to **Security** → **Authentication Configuration**.

The **Authentication Configuration > Step 1 of 2** page displays.

- a. Select **Xerox Secure Access** from the Login Type drop-down menu.
The other default settings can be left alone
- b. Select **Apply**.
A pop-up message displays indicating loss of stored data.
- c. Select **OK**
- d. Select the **Status** tab.

- e. Select **Reboot Machine**.
A message displays asking, "Do you want to reboot?"
 - f. Select **OK**.
8. Repeat the following steps:
 - a. Open an internet web browser.
 - b. Enter the IP address of the machine in the address field.
 - c. Press **Enter** to go to CentreWare Internet Services.
 - d. Select the **Properties** tab.
 - e. If prompted, enter the system administrator user name and password.
The default user name is **admin** and the default password is **1111**.
 - f. Select **OK**.
9. Navigate to **Security** → **Authentication Configuration**
The **Authentication Configuration > Step 1 of 2** page displays.
10. Select **Next**.
The **Authentication Configuration > Step 2 of 2** page displays.
11. In the Access Control section, select the Service Access **Configure...** button
12. Select one of the following settings for each service you want to control:
 - **Unlocked**: This selection allows unrestricted access.
 - **Locked (Show Icon)**: This selection requires the user to login in order to gain access. The service icon is visible to all users in the All Services screen.
 - **Locked (Hide Icon)**: This selection requires the user to login in order to gain access. The service icon is hidden until an authorized user logs in.
13. Select **Apply**.
If prompted, provide the system administrator user name and password.
The default user name is **admin** and the default password is **1111**.
14. Reboot the machine for new settings to take effect.
 - a. Select **Reboot Machine**.
A message displays asking, "Do you want to reboot?"
 - b. Select **OK**.

Enabling Xerox Secure Access settings

1. Open an internet web browser.
2. Enter the IP address of the machine in the address field.
3. Press **Enter** to go to CentreWare Internet Services.
4. Select the **Properties** tab.
5. If prompted, enter the system administrator user name and password.
The default user name is **admin** and the default password is **1111**.
6. Select **OK**.
7. Navigate to **Security** → **Remote Authentication Servers** → **Xerox Secure Access Settings**.
8. In the **Xerox Secure Access Server** section perform the following steps:
 - a. Enter details in the Default Prompt and Default Title fields.
This creates the prompt title that displays on the machine UI along with a message. The message informs users how to authenticate themselves at the machine.
Note: If the **Title** and **Prompt** fields were configured on the Xerox Secure Access Server, no changes are needed. The Server information overrides any information entered.
 - b. Select the **Enabled** checkbox for **Local Login** to allow users to log in at the machine.
 - c. Select the **Enabled** checkbox for **Get Accounting Code** to obtain user accounting data from a networked accounting server (if used).
 - d. Select **Apply**.
 - e. Select **Reboot** for new settings to take effect.
 - f. Select **OK**.

At this point the system should be configured for authentication.

Verification

Swipe a valid card past the card reader

- a) Observe the card reader LED changes color and the reader beeps.
- b) Observe that the user is authenticated and their name appears in the upper right corner of the local user interface display.

Disabling the USB Card Reader

Use the following instruction for disabling the USB card reader for any of the following circumstances:

- The USB card reader is being replaced with an external card reading device.
- Xerox Secure Access is no longer used for authentication on the device.

Note

The directly connected USB card reader and external card reader controller should not be used simultaneously.

Deactivating the Card reader plug-in

1. Open an internet web browser.
2. Enter the IP address of the machine in the address field.
3. Press **Enter** to go to CentreWare Internet Services.
4. Select the **Properties** tab.
5. If prompted, enter the system administrator user name and password.
The default user name is **admin** and the default password is **1111**.
6. Select **OK**.
7. Navigate to **Security → Plug-in Settings → List of Embedded Plug-ins**.
Select "**Xerox USB Card Reader (CR.1.0.13)**" or whichever version is installed.
8. Select the **Stop** button.
A message displays asking "Do you want to deactivate the selected plug-in".
9. Select **OK**.
10. Reboot the machine to deactivate the current plug-in.
 - a. Select the **Status** tab.
 - b. Select **Reboot Machine**.
A message displays asking, 'Do you want to reboot?'
 - c. Select **OK**.

Disabling the plug-in feature

1. Open an internet web browser.
2. Enter the IP address of the machine in the address field.
3. Press **Enter** to go to CentreWare Internet Services.
4. Select the **Properties** tab.
5. If prompted, enter the system administrator user name and password.
The default user name is **admin** and the default password is **1111**.
6. Select **OK**.
7. Navigate to **Security** → **Plug in Settings** → **Plug in Settings**
Remove the checkmark from the Plug-in Settings **Enable** checkbox
8. Select **Apply**.
9. Select **Reboot Machine**.
Note: The machine can also be rebooted by navigating to the **Status** tab and selecting the **Reboot Machine** button.
10. To ensure Plug-in feature was successfully disabled repeat the steps 1 through 7.
The checkmark should be removed from the **Enable** checkbox.
List of Embedded Plug-ins page should be removed at this point as well.

Note

At this point, the **Authentication Configuration** login type can be changed from **Xerox Secure Access** to the desired setting. To do that, navigate to the **Properties tab** → **Security** → **Authentication Configuration**.

Note (2)

The **SSL** (Secure Socket Layer) can also be disabled if not needed (after changing the Authentication Configuration login type to **No Login Required**). To disable SSL, navigate to the **Properties (tab)** → **Connectivity** → **Protocols** → **HTTP**.

Disconnecting the USB card reader from the USB port on the machine

Unplug the USB card reader from the device USB port.

For instructions on installing and configuring the external USB card reader controller, refer to the documentation provided with that device.

Appendix A – Supported USB Card Readers

Proximity readers

These readers support 125Khz & 13.56Mhz which include HID iCLASS®, HID Prox®, Mifare, HID iCLASS®, LEGIC®, and a variety of other card types.

- Elatec TWN3 family USB readers: (<http://www.elatec-rfid.com>)
- RF IDEas RDR-XX6081-AKU family USB Prox readers and all other readers from the “USB Enroll” family including pcProx® Plus. (<http://www.rfideas.com>)
- YSoft v2 family USB readers: (<http://www.ysoft.com>)

Magnetic Stripe readers

These readers support ISO 7813 and ISO 4909 encoding standards for tracks 1, 2 & 3.

- RF IDEas MS3-00M1AKU MagStripe reader. (<http://www.rfideas.com>)
- ID TECH MiniMag II™ MagStripe readers (<http://www.idtechproducts.com>)
- MagTek® Magnetic stripe reader (<http://www.magtek.com>)
- YSoft V2 Magnetic stripe reader: (<http://www.ysoft.com>)

Visual Barcode Reader

This reader supports one dimensional visual barcodes

- Honeywell® 3800G (<http://www.honeywellaidc.com>)

Appendix B Card Reader Configuration Setting

Elatec TWN3 Software

Elatec TWN3 readers must have at least software version V3 03d/4.39 to operate properly on the WorkCentre 53xx, WorkCentre 7120 and WorkCentre 74xx. If connecting an Elatec reader with earlier software to one of these products, the reader software will need to be upgraded first.

Please contact Elatec Customer Support for this software update.

Magnetic Stripe Reader Configuration

The ISO specification for magnetic stripe cards defines the data format for the 3 possible tracks on a magnetic stripe card. Each line starts with a unique character called a sentinel which denotes which line of data is being read. The ISO spec specifies characters used to define the data blocks within a line as well as the line termination character.

Shown below are three lines of data contained on a hypothetical 3 track magnetic stripe card:

```
%B6006493801^XEROX   ^1012110   LQI?  
;6006493801=101211050282809?  
; 6006493801?
```

Xerox MFPs require this data to be concatenated into a single string with only one carriage return as the terminating character.

```
%B6006493801^XEROX   ^1012110   LQI?;6006493801=101211050282809?; 6006493801?
```

In order to determine if the reader conforms to the Xerox standard, the reader can be easily tested using a personal computer.

- 1) Open a text document tool like Microsoft Notepad
- 2) Connect the magnetic stripe reader to a USB port on the computer
- 3) Wait for the card reader driver to be installed.
- 4) Swipe one of the magnetic stripe cards.
- 5) Observe the data displayed in Notepad.
 - a. If the data is presented in a single line with one carriage return the reader is compatible and no programming is required.
 - b. If the reader sends multiple lines or strips off the line start and end characters, the reader will need to be reprogrammed.

Each of the card readers we have tested to-date can be reprogrammed to this format using tools supplied by the manufacturer. Below are links to the manufacturer's website where the card reader configuration tool can be retrieved.

Note that the YSoft and ID TECH Magnetic stripe readers we have tested conformed to the Xerox standard and did not need to be upgraded.

RF Ideas: pcSwipeConfig.exe <http://www.rfideas.com/Software/>

ID TECH: MiniMag II Configuration Software
http://www.idtechproducts.com/index.php?option=com_docman&task=cat_view&gid=298&Itemid=79

MagTek; USB Swipe & Insert Reader programming tool
http://www.magtek.com/support/software/demo_programs/usb_swipe_insert.asp

ID TECH Magnetic Stripe Reader Configuration Upgrade

Software can be found at: http://www.idtechproducts.com/download/swipe-readers/doc_download/38-configuration-software.html

Select the **IDTech_Xerox_Config.zip** file to access the ID TECH MagStripe Configuration file that will be required later in the setup process. The file is located within the [USB Card Reader Install.zip](#) file mentioned in the Prerequisites section.

Save the file to a known location for later use.

After installing and running the Magstripe Configuration Utility:

1. Select Reader Interface button.
2. Select "USB" and then select "Continue":
The reader will beep a few times and the screen will return back to the default view.
3. Select "Change Basic Reader Settings":
4. Select "Load from File":
5. Navigate to where you saved the configuration file, then select it followed by "Open":

You should get a message that loading the file was successful. Select "Ok":

6. Select "Send to MSR":

Reader will beep once or twice and you see a message that the settings were successfully written.

7. You are now done programming the reader. Select "Close" and then "EXIT".

RF IDEas Magnetic Stripe Reader Configuration Upgrade

RF IDEas magnetic stripe readers can be configured with the pcSwipe™ tool available from their website (<http://www.rfideas.com>). Select Support / Software & Downloads then scroll down to **pcSwipe Magnetic Card Reader**. Download and install pcSwipeConfig.exe.

- 1) Connect the reader to the workstation and run the pcSwipe tool.
 - a) Select the Scan/Connect button so the tool will interrogate the reader.

- 2) Once a reader has been recognized, select the Fields tab
 - a) In the Tracks field, enable tracks 1, 2 & 3.
 - b) Select User Field 1, and insure that the checkbox next to “Show Sentinels and Separators” is selected.
 - c) Select User Field 2 and then 3 and insure the “Show Sentinels and Separators” field is selected for those as well.
 - d) Select User Field 4
 - e) Insure the checkbox next to “Enable” is selected.
 - f) Verify that the word <ENTER> appears in the text field adjacent to the User Field 4 button. This is the termination to the data stream.
 - g) If <ENTER> does not appear, select the keyboard icon on the left labeled “Keys”
 - h) Within the pop up which will appear, select <ENTER> and then “Insert”.

- 3) Select the LED/Beep tab.
 - a) Verify that the LED and tone response match the desired behavior
 - b) When all configuration options have been set, this can be written to the reader.
 - c) From the pcSwipeConfig toolbar, select the Flash icon
 - d) The reader will beep and blink and beep when the new settings have been written.