

Honeywell

Updating to MR16 or MR17 Firmware

Models: PX940, PM23, PM43, PC42, PM42, PX4ie, PX6ie

Installation Guide

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UPDATING PRINTER FIRMWARE

About this Guide

Scope

This guide describes the process of updating printer firmware to MR16 or MR17 with the release of secure firmware updating, a feature that only allows a printer's firmware to be updated to a genuine Honeywell supplied firmware signed by Honeywell.

This document is not applicable if you are updating printer firmware using the USB boot method because the process for updating using the USB boot method has not changed.

Revision History

Revision	Date	Description
A	April 2020	First official release
B	August 2020	Second official release
C	September 2020	Added support for devices using MR17

Intended Audience

This guide is primarily intended for IT administrators who install and configure the printer product range for PX940, PM23, PM43 series printers from printer firmware x10.16.xxxxxx onwards or printer product range PC42, PM42, PX4ie, PX6ie from printer firmware x10.17.xxxxxx or later.

Related Documents

Updating to Secure Bootloader (PRNT-BL-MR16-IG-01) - This document describes the method to update the printer bootloader. This step is optional and should only be performed by experienced technical personnel. Refer to this document ONLY if you wish to also update the bootloader and are certain you do not wish to update back to an earlier version of firmware in the future.

Introduction

As part of a series of steps to further enhance security, we are introducing the secure firmware updating function for x10.16.xxxxxx and x10.17.xxxxxx firmware release for printers or later.

Moving forward from this version, all future firmware releases will be signed and authenticated by Honeywell. The firmware updating function of the printer (via network, USB menu, MDM, Configuration tools) will verify the firmware file before flashing the released firmware into the printer.

As firmware currently running on printers with earlier versions (x10.15.xxxxxx and earlier) does not support this function to authenticate the firmware files (firmware.bin), this first release shall be a transitional release where both a signed and unsigned firmware.bin file will be made available.

For added security by having firmware signing verification while performing USB firmware update via power off/on method, the printer bootloader needs to be updated. This is a separate optional procedure, not described in this document, and only advisable if the added security is desired, and should only be performed by experienced technical staff. For the bootloader download and update procedure, please refer to honeywellaidc.com for the latest download for your printer.

 ATTENTION	<ol style="list-style-type: none">1. The printers MUST be updated to MR16 or MR17 firmware to be able to update to future firmware versions (official release or field trials).2. Once updated to MR16 or MR17 (and later), the firmware cannot be downgraded to older versions.3. For printers with older bootloader versions, downgrading to older firmware is still possible using the USB drive at bootup (provided the bootloader is not also updated to secure version).
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Printer Models Affected

The distributed firmware files (firmware.bin) of the following printer models will adopt this feature, signed with Honeywell PKI infrastructure, for each future release from 10.16.xxxxxx or 10.17.xxxxxx onwards.

Printer Model	Firmware Version
PX940	MR16 (10.16.xxxxxx or later)
PM23/43	MR16 (10.16.xxxxxx or later)
PC42	MR17 (10.17.xxxxxx or later)
PM42	MR17 (10.17.xxxxxx or later)
PX4ie	MR17 (10.17.xxxxxx or later)
PX6ie	MR17 (10.17.xxxxxx or later)

Updating Printers

During this transition, both unsigned and signed firmware files will be released. The selection of using signed or unsigned files is dependent on the version of the firmware currently installed (and running) on the printer.

If a printer is running a firmware version x10.15.xxxxxx or earlier, then it will only be able to accept firmware files that are unsigned.

If a printer is running a firmware version x10.16.xxxxxx or x10.17.xxxxxx or later, then you **MUST** use the signed firmware.bin file to perform a firmware update or update the firmware via USB boot.

 TIP	It is important to know what firmware version is running on the printer when attempting to do a firmware update and not how it was updated previously.
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Updating Printer from Version 10.15.xxxxxx or earlier

Method 1 (via USB boot)

1. Download the firmware-signed.bin.
2. Copy the file to an empty USB thumb drive (4GB or smaller, formatted with FAT32).
3. Plug the USB thumb drive into the USB port of the printer and power cycle to perform the update.
4. When the printer has rebooted after the update, check that the firmware version is now updated.

Method2(withLCDinterface)

1. Download the firmware-unsigned.bin.
2. Copy the file to an empty USB thumb drive (formatted with FAT32) under the directory path \firmware\.
3. Plug the USB thumb drive into the USB port on the printer.
4. From the UI LCD display Ready screen, open the Main Menu.
5. Select Tools > USB Menu > Upgrade Firmware.
6. Select the firmware-unsigned.bin file to start the firmware update process.
7. When the printer has rebooted after update, check that the firmware version is now updated.

Method 3 (Over Network)

1. Download the firmware-unsigned.bin.
2. Perform the firmware update from printer web page interface (refer to the printer user guide for instructions on how to do this).
3. When the printer has rebooted after update, check that the firmware version is now updated.

Updating Printer from Version 10.16.xxxxxx or 10.17.xxxxxx

Method1 (via USB boot)

1. Download the firmware-signed.bin.
2. Copy the file to an empty USB thumb drive (4GB or smaller, formatted with FAT32).
3. Plug the USB thumb drive into the USB port of the printer and power cycle to perform the update.
4. When the printer has rebooted after update, check that the firmware version is now updated.

Method2(withLCDinterface)

1. Download the firmware-signed.bin.
2. Copy the file to an empty USB thumb drive (formatted with FAT32) under the directory path \firmware\.
3. Plug the USB thumb drive into the USB port on the printer.
4. From the UI LCD display Ready screen, open the Main Menu.
5. Select Tools > USB Menu > Upgrade Firmware.

6. Select the firmware-signed.bin file to start the firmware update process.
7. When printer has rebooted after update, check that the firmware version is now updated.

Method 3 (Over Network)

1. Download the firmware-signed.bin.
2. Perform the firmware update from printer web page interface (refer to printer user guide for instructions on how to do this).
3. When printer has rebooted after update, check that the firmware version is now updated.

Downgrading Printers

This section is only applicable if the printer's bootloader has not been updated to the secure version.

Downgrading printer to version 10.15.xxxxxx or earlier

Updating Firmware (to 10.15.xxxxxx or earlier) – (via USB boot)

1. Download the firmware.bin.
2. Copy the file to an empty USB thumb drive (4GB or smaller, formatted with FAT32).
3. Plug in the USB thumb drive to the USB port of the printer and power cycle to perform the update.
4. When the printer has rebooted after the update, check that the firmware version is now updated

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