

A man with a beard, wearing a blue polo shirt, is shown in profile, smiling as he interacts with a large, tilted touchscreen display. The background is a dark, modern office environment with a window showing a bright, hazy outdoor scene. The overall lighting is dramatic, with strong highlights and deep shadows.

# EPP4—Firmware migration strategy for PCI PTS POI 5 compliance

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NCR security white paper

March 19, 2020. REV 1.2 Includes updated PTS V3 expiration date

# EPP4—Firmware migration strategy for PCI PTS POI 5 compliance

## Summary

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The NCR EPP4 is approved against the security requirements defined in PCI PTS POI version 3 and version 5. The approval of all PCI PTS POI version 3 (PTS 3) will expire on **April 30, 2021**. Any customer who deploys an ATM after that date must use the PTS 5 version of EPP4 to remain PCI PTS compliant. The only difference between the PTS 3 version of EPP4 and the PTS 5 version of EPP4 is in the firmware loaded into the module. This paper describes the migration strategy for this firmware upgrade.

## PCI PTS identifiers for EPP4

**Verify PCI PTS compliance by confirming that the PCI identifiers listed on the PCI website match the identifiers of the EPP.**

You can find the approved identifiers at: [www.pcisecuritystandards.org](http://www.pcisecuritystandards.org) > Assessors and Solutions > Approved PTS Devices > and then search for NCR Corporation.

After April 30, 2021, the listings of NCRs approved PTS 3 devices will be removed, but you can still find the approval record by following the link in the section on the page, “Devices with Expired Approval.”

Note that PCI compliance covers the module itself and the date of installation. For example, a PTS 3 approved device installed on April 30, 2021 would be deemed PCI compliant, but the same device installed one day later would not be PCI compliant.

## Approval identifiers

### EPP4 PTS 3

#### Approval

Model:	Hardware ID:	Firmware ID:
5815 EPP	009-0031480	INTL_80xxxx with loader UL104xxx INTL_81xxxx with loader UL104xxx

### EPP4 PTS 5

#### Approval

Model:	Hardware ID:	Firmware ID:
5815 EPP	009-0031480	GLBL_01xxxx with loader UL104xxx

You can find the EPP identifiers from the module via SYSAPP on the ATM rear panel. The model and hardware ID are also printed on the rear label of the module.

# Firmware migration strategy

**The APTRA XFS Platform software stores the EPP firmware. The configuration of the APTRA XFS Platform controls the version of firmware that the EPP will use. That means, to upgrade your firmware, you have to upgrade your APTRA XFS platform software. This ensure that, on reboot, the platform will always load and run the firmware version specified by the platform configuration, regardless of the firmware version loaded in the EPP.**

For EPP4, the firmware is specific to EPP4. This means EPP4 firmware won't run on an EPP3 or EPP2, and vice versa. This means customers must use a relatively modern version of APTRA XFS Platform to have full support for EPP4 firmware configuration. Customers with older platforms can use EPP4, but they won't have firmware management functions beyond the capability to swap INTL\_xx with LGCY\_xx firmware.

**APTRA XFS 6.08** is the minimum platform version for full EPP4 firmware management support. Alternatively, you can upgrade supported versions of the platform with the EPP component and the PIN Service Provider component to provide full EPP4 firmware management.

**APTRA XFS 6.05** is the current minimum supported platform for upgrades.

To upgrade supported platforms, you need the following minimum versions of these **software components**:

- **USB Encrypting PIN Pad 2 03.02.00**
- **XFS PIN SERVICE PROVIDER 06.03.00**

All EPP firmware sets are stored within the USB Encrypting PIN PAD 2 software component.

Note that PCI PTS 5 compliant GLBL\_xx firmware does NOT support SHA-1, as per PCI PTS requirements. This means GLBL\_xx firmware does NOT support NCR Basic RKM or NCR Enhanced RKM.

**Note that PCI compliance covers the module itself and the date of installation. For example, a PTS 3 approved device installed on April 30, 2021 would be deemed PCI compliant, but the same device installed one day later would not be PCI compliant.**

## APTRA XFS configuration options

You can configure the APTRA XFS platform to automatically update any EPP installed in the ATM with the appropriate firmware set from the platform. The configuration options include:

### Configuration Options for APTRA XFS

- DEFLT** Upgrades the installed firmware with a later version if one exists in the platform
- FIXED** Does not change or upgrade the installed EPP firmware, regardless of what exists in the platform
- PCI\_** Upgrades the installed firmware to the latest applicable PCI PTS compliant firmware which exists in the platform

*Note: We omitted country-specific firmware options for clarity.*

## Examples of the effect of APTRA XFS configuration options

To show you the effect of these options, we've put together an example of how EPPs behave when installed.

For this example, assume the APTRA XFS platform contains an EPP software component, which contains INTL\_65, INTL\_81 and GLBL\_01. This platform supports both EPP3 and EPP4. EPP3 contains INTL\_61 as shipped from the factory; EPP4 contains INTL\_80 as shipped from the factory. All versions of INTL\_ firmware above or equal to INTL\_80 will only run on EPP4. All versions below INTL\_80 will only run on EPP3 or EPP2.

APTRA XFS contains	Factory EPP contains	DEFLT results in	FIXED results in	PCI_ results in
INTL_65				
INTL_8	EPP3=INTL_61 EPP4=INTL_80	EPP3=INTL_65 EPP4=INTL_81	EPP3=INTL_61 EPP4=INTL_80	EPP3=INTL_65 EPP4=GLBL_01
GLBL_01				

*Note: We omitted country-specific firmware options for clarity.*

## Ordering EPP4 with pre-loaded PTS 5 firmware

**NCR also gives customers the option to order the EPP4 from the factory, pre-configured with the PTS 5 firmware. We're providing this offer for customers who may have a policy of only ordering PCI compliant equipment from NCR.**

PLEASE NOTE: The PTS 5 firmware has platform software pre-requisites, which are the same as if the firmware were to be loaded via the platform. Therefore, to run PTS 5 firmware, the ATM MUST be running **APTRA XFS 6.08**, or the platform MUST be upgraded with the following minimum versions of software components:

- **USB Encrypting PIN Pad 2 03.02.00**
- **XFS PIN SERVICE PROVIDER 06.03.00**

This pre-requisite actually means that it isn't necessary to order the PTS 5 firmware from the factory to deploy PTS 5 firmware. That's because the same firmware can be delivered from the platform on first reboot of the ATM—provided the platform is configured to load PTS 5 firmware.

## Product IDs for pre-loaded PTS 5 firmware

**To receive the EPP4 with pre-loaded PTS 5 firmware, you have to add feature F662 to the ATM configuration at time of ordering.**

For example, if you order a 6684 that requires PTS 5 firmware, add PID 6684-F662 to the ATM order. This PID will instruct the NCR plant to upgrade the EPP4 firmware prior to shipment. If PID 6684-F662 is not added to the configuration, the EPP4 will be shipped with the default firmware, which is INTL\_80.

If you have questions or need additional information, please contact your NCR Account Manager.

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