Firmware Release Notes

Entrust Desktop Retransfer Printer Firmware

This document provides a summary of the new features and updates to the Entrust® Datacard® (formerly Artista®) CR, CE and RS Series Desktop Retransfer Printers firmware.

Version Information

Firmware Version	R4.54.1 -SP2 R4.14.1-SP2
Release Date	November 2026
Update of Released Version	R4.54.1-SP1 (R4.54.1-5000) R4.14.1-SP1 (R4.14.1-5000)
Component Versions:	
• Printer	R4.54.1-5002 R4.14.1-5002
• Printer BSP	R4.50.25-8 R4.10.25-8
• Embosser Firmware Version	E1.1.57-1
• Laminator Firmware Version	L1.1.8-2
• TIM Impresser Module Firmware Version	I1.1.6-1
• Multi-hopper Firmware Version	M1.3.4-1
• Laser Firmware Version	Z1.1.0-302
• Smart Card Coupler	DE-ABCM_L_DC2_211006_CCID_PCSC DE-ABCM5_CCID_DC_260903

Affected Printers

- Entrust® Datacard® Artista® CR803 and CR805 Retransfer ID Card Printers
- Entrust® Artista® CR825, CE875 Instant Issuance Systems
- Entrust® Datacard® (formerly Artista®) RS4 Instant Issuance System

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Firmware Release for Dual Hardware Configurations

Entrust® Datacard® (formerly Artista®) firmware releases now support multiple hardware configurations. These configurations are identified by the leading portion of the firmware version. R4.1x or R4.5x. firmware is available as either a stand-alone update application or as firmware files.

The firmware update application **FirmwareUpdate_R4P.54.1-5002_R4S.14.1-5002.exe** contains all the necessary firmware files and will automatically identify the hardware configuration and apply the correct firmware to the printer.

The FLS files **R4P_54_1_5002.fls and R4S_14_1_5002FS.fls** are used by the Adaptive Issuance™ Issuance Device Management software to update printer firmware. If you do not have this software, use the stand-alone update application to update your printer firmware.

R4.x4.1-SP2 Firmware Release

Improvements

- Reverted Duali Large Memory smartcard module (DE-ABCM-DC) FW to the version in the R4.x3.1 release (211006). Multiple customers had problems with the update that was introduced in R4.x4.1.
- Updated module firmware for Multi-Hopper (MH), Tactile Impression Module (TIM). These updates support newer EEPROM parts being used in manufacturing the modules.



If the printer detects that the attached module contains the new EEPROM part, downgrades below R4.x4.1-5002 will be prevented as the module will not save settings properly with prior released firmware.

Security

- Apache updated to version 2.4.69 to address latest CVEs.
- gSOAP updated to version 2.8.146 to address vulnerabilities.
- Applied upstream Linux kernel patches to address latest CVEs.

Prior R4.x4.1-SP1 Firmware Release

Security

- Updated printer operating system and patch level to the version released in October 2026.
- Update PHP to version 8.4.27 to address latest CVEs.

Prior R4.x4.1 Firmware Release

New Features

- Updated certificate upload function in Printer Manager to allow for complex private key passwords. The new allowed character set is numbers, letters, spaces, and the following special characters ~@{}&%#^*.,/=+$()-_!<>?:;[]. The minimum length is now 8 and the maximum is now 64.
- Added FactorySplashScreenImage setting for manufacturing to adjust the branding of the front panel startup image on RS4 printers only.

Improvements

- Improvements made to running a cleaning card with the printer:

  Refer to “Clean the Printer” in the Maintenance chapter of the printer’s User’s Guide for details on running a cleaning card.

  - Improved cleaning of the magnetic stripe encoder rollers when CleaningProcess is set to EnhancedVertical.

    EnhancedVertical is an existing setting that adds additional cleaning cycles with the cleaning card in the printers vertical module.
    Access the CleaningProcess setting from Printer Manager using administrator level access at **Printer Setting** > **CleaningCard** > **CleaningProcess**. Choose between Standard (default) and EnhancedVertical.
    Refer to the Printer Manager chapter in the printers Installation and Administrator's Guide for details.

  - Prevent a second vertical module scrub action that occasionally caused drive belt skipping when CleaningProcess is set to EnhancedVertical.
  - Removed several extra prompts for running cleaning cards. The only prompt now is to "Insert Cleaning Card".
  - Cleaning cards started within Printer Manager are now correctly picked from the exception slot on Multi-hopper systems instead of H1.
  - Prevent Adhesive cleaning cards from being sent into the vertical module (magstripe and Smartcard sections) of the printer.
  - Within the Printer Manager Cleaning Card user interface, identify the cleaning card type (Isopropanol) needed.
- Updated Duali ABCM5 Smartcard module firmware to the 260903 revision. Restores auto-get response behavior and associated enable/disable functionality, fixes the handling of WTX messages from cards, and fixes get ATR compatibility with certain cards.

- Updated Duali Large Memory Smartcard module firmware to 260206. Fixes the handling of WTX messages from cards.
- Update Laminator module FW version L1.1.8-2. Fixes occasional L2 errors during firmware update and makes sure laminator heaters are only enabled if rollers can be raised on startup.
- Fixed rare bug where the printer would be unable to save the correct time when shutting down or restarting.
- Fixed a bug where occasionally the first CSR (Certificate Signing Request) attempted via Printer Manager after booting would result in an error E347.
- Removed unused Service level printing settings from Printer Manager:
  - FilmToCardSpeedRatioRetransferGen1Mechanism
  - FilmToCardSpeedRatioStripGen1Mechanism
  - FilmToCardSpeedRatioRetransferGen1Mechanism3Phase
  - FilmToCardSpeedRatioStripGen1Mechanism3Phase
  - V2FilmToCardSpeedRatioRetransferGen1MechanismVersion3
  - V2FilmToCardSpeedRatioStripGen1MechanismVersion3
  - FilmToCardSpeedRatioRetransferGen1MechanismVersion3
  - FilmToCardSpeedRatioStripGen1MechanismVersion3
- Fixed spacing on front panel for German and French translations of "Service Code".
- Corrected the formatting of the Suspend state on the panel for French, Spanish and Portuguese languages.
- Fixed a bug on RS4 printers when a service code is shown on the front panel for more than a minute, it would be duplicated on the panel.

Security

- Updated printer operating system and patch level to the version released in March 2026.
- Disable unused kernel modules that have recently announced CVE's.
- Clear memory used to temporarily store card data before freeing it.

- Merged four settings into a single new TLSEncryptAllCardData setting for controlling secure communications with the printer. Added privacy risk warning in Printer Manager if this setting is changed to disabled.

  

  Access the TLSEncryptAllCardData setting from Printer Manager using administrator level access at **Printer Setting** > **Communication** > **TLSEncryptAllCardData**.

  Refer to the “Secure Printing Requirements” in the Printer Installation chapter and the Printer Manager chapter in the printers Installation and Administrator's Guide for details.

- Updated password storage in Printer Manager to save salted, hashed passwords for all new passwords.
- Added Printer Manager authentication failure delays to prevent brute force password discovery.
- Removed usage of TLS_ECDHE_RSA_WITH_AES_256_CBC_SHA384 and TLS_ECDHE_RSA_WITH_AES_128_CBC_SHA256 TLS 1.2 ciphers due to weaker CBC modes.
- Removed certain internal OS details from troubleshooting snapshots and logs.

Prior R4.x3.1 Firmware Release

Improvements

- Smartcard module firmware update for Duali ABCM5 (where applicable).
  - Fixes failure of 'Select Applet ID / Select AID' commands with certain cards.
- Improved AutoPPS smartcard functionality.
- Updated embosser firmware to decrease embosser 127 errors.
- Updated laminator firmware to decrease 197 errors while running cleaning cards.
- New electronic component support.
  - Updated RFID transceiver part in Tactile Impression Module (TIM).
  - Updated internal printer temperature sensor part.
- Added support for 4k RSA keys to custom TLS certificate with private key workflow.

Security

- Updated printer operating system and patch level to apply recent security updates.
- Updated Multi-Hopper and Impresser module operating systems and patch levels to apply recent security updates.