==
*** Basic Information ***
==
[Create date] 2018/02/07

[Program Name] CAP V2_MP11 for eDC

[Version] 2.2.523

[PCB No.]

[Interchangeability] X / O

[Other Firmware Requirements] None

[PCB Requirements] None

[Software category] Normal Release

[Release category] Normal Release

[Program category] Firmware

Exported to(language) GEN(all)
[Firmware No.] D6021006J_forEDC
[File Information]
 File Name   D6021006J_forEDC.zip
 File Type   Module for Service
 Size   2.75 MB (2879353 byte)
[Availability of RFU] No

[Production reflection]

==
*** Note ***
==
[Note]

==
*** Important Notes ***
==
[Important Notes]

==
*** Modification History ***

===
[Modifications made:]
Rank C

Fixed:
- Setting fields that contain Unicode 6.0 characters may cause the
  device to become inoperable.
- If the user manually registers a keyboardemulating reader that is
  not registered by default via the Configuration Tool, the card
  reader is not recognized and cannot be used.

[Modification history]

Version 2.2.522
Fixed:
- The hard disk's operation time was increased due to periodic hard
  disk access.
- When a user swipes a card just before a device switches to energy
  save mode, the authentication function may become deactivated,
  allowing the user to access the device without authenticating.

Other:
- The device panel screen flow for auto card registration has been
  changed.

Version 2.2.520
Support:
1. Support for TLS1.2 has been added.
*The Java VM version on the device must support TLS1.2.
2. Support for SHA-2 has been added.
*The Java VM version on the device must support SHA-2.

Other:
1. Paper size is displayed for each print job.
2. Support for Felica security in NFC card readers has been added.
3. The color of the job list's scroll bar on the operation panel has
   been changed from gray to blue.
4. In the case of a login failure, the application name will be shown
   in the displayed error message.
5. The Configuration Tool requires .NET Framework 4.5 or later.

Fixed:
1. If a device's language is set as Italian or French and more than
   10000 billing codes are displayed, the displayed numbers are divided
   into 2 lines.
2. If AD's IP address is configured on an LP without SOP, the device
   will not be able to use Kerberos authentication.

Version 2.2.5
Fixed:
1. In the case that 2 CAP-ES v2 servers are specified in "Server Name" in the
   Configuration Tool, when both servers cannot be reached, the secondary server
   may not be reconnected.

Other:
1. In the case that 2 CAP-ES v2 servers are specified in "Server Name" in the
   Configuration Tool, if CAP v2 connects the secondary server because the primary
   server is unavailable, CAP will reconnect to the primary server not only when
   the device is restarted or reconfigured via the Configuration Tool but also when
   Scheduled Processing is performed.
2. An attribute on an external authentication server that has multiple values can be
   specified in "Attribute Name Settings" for card IDs in the Configuration Tool.
   Up to 10 values (card IDs) are supported.
3. The Deactivate Authentication function can be used if it is necessary to unlock
   a device in an emergency situation (such as a disaster).

Version 2.2.3
Support:
1. Korean language can be displayed in the embedded modules of CAP V2/
   ELP-NX V2. Supported models are Model MET-C1abcde, OR-C2, and K-C4.
2. Support for the following 12A models has been added:
   - MET-C1yz
3. Support for the following 13A model have been added:
   - Z-C2
4. Support for Windows 8.1, Windows Server 2012 R2, and Mac OS X
   Mavericks v10.9 as client OS has been added.
5. Support for OpenLDAP v2.4 has been added.

Update the Java VM to the latest version before installing this update.

Version 2.2.2
Support:
1. Support for the following 12A models has been added:
- CH-C1
- MET-C1
- OR-C2

Fixed:
1. If the Thai locale is set on the device, the date is not
   displayed correctly.

Update the Java VM to the latest version before installing this update.

Version 2.2.0
Support:

1. Support for the following 12A model has been added:
   K-C4
2. Support for Firefox ESR 10/17 and Internet Explorer 10 (desktop
   version only) has been added.
3. Support for Windows 8 and Windows Server 2012 as client OS has
   been added.

Fixed:
1. User Information may fail to import using the Web Configuration Tool.
2. "Last Date Used" indicated in the User Information may fail to
   update if a user logs in as a device administrator using an IC card.
3. CAP v2 may fail to authenticate to CAP-ES v2 during a user's
   first login.
4. If the user's DN contains "/", "\" or """", the LDAP
   authentication will fail.
5. If User Information such as "Name" or "Key Display Name"
   contains a single quotation (') mark, the User Information cannot
   be applied to the device(s).
6. If "Application Name" the Launcher Settings contains a ","
   (comma), an exception error will occur. This error occurs if
   Firefox is registered as "Application Name" in Launcher Settings.

Other:
1. Can now set whether to permit a manual log in for users who do
   not have a card.
2. Proxy User settings can now be configured for each domain.
3. Limitations for utilizing the remote fax function of a device
   have been relaxed.
4. The method of updating User Information on a device can now be selected.
5. The number of User Information records displayed in the User
   Information List can now be set.
6. The digital signature for 11A or later models is now supported.
7. Default User Permissions can now be imported/exported.

Update the Java VM to the latest version before installing this update.

Version 2.1.1
Support:
Support for the following 11A model has been added:
MT-C5
Mo-C1

Other:
Application Launcher is now the default application when a user logs out from
a device, which facilitates use of the Auto Card Registration function.

Update the Java VM to the latest version before installing this software.

Version 2.1.0
Support:
Support for the following 11A models has been added:
AP-C3, AT-C3, AL-C2

Fixed:
1. The user's normal ID card can still be used even though that user
   has been issued a temporary card (Day Card).

Other:
1. A Web Configuration Tool is now available. It provides most of
   the management functions provided by the Configuration Tool
   application. Please see the latest version of the Administrator's
   Guide for more information.
2. Authentication fails when using Kerberos authentication for
   Windows 2008 R2 Active Directory.Specification changes that
   resolve the issue are made to the following JavaVM versions:
   V4.25.07 and above
   V5.14.02 and above
   V6.09.01 and above
   V7.16.07 and above

Update the Java VM to the latest version before installing this update.

Version 2.0.0
Initial release

```
========================================================================
*** Basic Information ***
========================================================================
[Create date] 2018/02/07
------------------------------------------------------------------------
[Program Name] CAP V2_MP21  for eDC
------------------------------------------------------------------------
[Version] 2.2.523
------------------------------------------------------------------------
[PCB No.]
------------------------------------------------------------------------
[Interchangeability] X / O
------------------------------------------------------------------------
[Other Firmware Requirements] None
------------------------------------------------------------------------
[PCB Requirements] None
------------------------------------------------------------------------
[Software category] Normal Release
------------------------------------------------------------------------
[Release category] Normal Release
------------------------------------------------------------------------
[Program category] Firmware
------------------------------------------------------------------------
Exported to(language) GEN(all)
[Firmware No.] D6021016F_forEDC
[File Information]
 File Name        D6021016F_forEDC.zip
 File Type        Module for Service
 Size          2.49 MB ( 2609319 byte )
[Availability of RFU] No
------------------------------------------------------------------------
[Production reflection]
------------------------------------------------------------------------


========================================================================
*** Note ***
========================================================================
[Note]

------------------------------------------------------------------------



========================================================================
*** Important Notes ***
========================================================================
[Important Notes]

------------------------------------------------------------------------



========================================================================
*** Modification History ***
```

```
=====================================================================
```
[Modifications made:]
Rank C

Fixed:
- The hard disk's operation time was increased due to periodic hard
  disk access.
- When a user swipes a card just before a device switches to energy
  save mode, the authentication function may become deactivated,
  allowing the user to access the device without authenticating.
- Setting fields that contain Unicode 6.0 characters may cause the
  device to become inoperable.

[Modification history]

Version 2.2.520
Support:
1. Support for TLS1.2 has been added.
*The Java VM version on the device must support TLS1.2.
2. Support for SHA-2 has been added.
*The Java VM version on the device must support SHA-2.

Other:
1. Paper size is displayed for each print job.
2. Support for Felica security in NFC card readers has been added.
3. The color of the job list's scroll bar on the operation panel has
   been changed from gray to blue.
4. In the case of a login failure, the application name will be
   shown in the displayed error message.
5. The Configuration Tool requires .NET Framework 4.5 or later.

Fixed:
1. If a device's language is set as Italian or French and more than
   10000 billing codes are displayed, the displayed numbers are
   divided into 2 lines.
2. If AD's IP address is configured on an LP without SOP, the device
   will not be able to use Kerberos authentication.

Version 2.2.5
Fixed:
1. In the case that 2 CAP-ES v2 servers are specified in "Server Name" in the
   Configuration Tool, when both servers cannot be reached, the secondary server
   may not be reconnected.

Other:
1. In the case that 2 CAP-ES v2 servers are specified in "Server Name" in the
   Configuration Tool, if CAP v2 connects the secondary server because the primary
   server is unavailable, CAP will reconnect to the primary server not only when
   the device is restarted or reconfigured via the Configuration Tool but also when

Scheduled Processing is performed.
2. An attribute on an external authentication server that has multiple values can
   be specified in "Attribute Name Settings" for card IDs in the Configuration Tool.
   Up to 10 values (card IDs) are supported.
3. The Deactivate Authentication function can be used if it is necessary to unlock
   a device in an emergency situation (such as a disaster).

Version 2.2.3
Support:
1. Korean language can be displayed in the embedded modules of CAP V2/
   ELP-NX V2. Supported models are Model MET-C1abcde, OR-C2, and K-C4.

Update the Java VM to the latest version before installing this update.

Version 2.2.0
Support:
1. Support for the following 12A model has been added:
   - K-C4
2. Support for Firefox ESR 10/17 and Internet Explorer 10 (desktop
   version only) has been added.
3. Support for Windows 8 and Windows Server 2012 as client OS has
   been added.

Fixed:
1. User Information may fail to import using the Web Configuration
   Tool.
2. "Last Date Used" indicated in the User Information may fail to
   update if a user logs in as a device administrator using an IC
   card.
3. CAP v2 may fail to authenticate to CAP-ES v2 during a user's
   first login.
4. If the user's DN contains "/", "\" or """, the LDAP
   authentication will fail.
5. If User Information such as "Name" or "Key Display Name" contains
   a single quotation (') mark, the User Information cannot be
   applied to the device(s).
6. If "Application Name" the Launcher Settings contains a ","
   (comma), an exception error will occur. This error occurs if
   Firefox is registered as "Application Name" in Launcher
   Settings.

Other:
1. Can now set whether to permit a manual log in for users who do
   not have a card.
2. Proxy User settings can now be configured for each domain.
3. Limitations for utilizing the remote fax function of a device
   have been relaxed.
4. The method of updating User Information on a device can now be
   selected.
5. The number of User Information records displayed in the User
   Information List can now be set.

6. The digital signature for 11A or later models is now supported.
7. Default User Permissions can now be imported/exported.

Update the Java VM to the latest version before installing this update.

Version 2.1.0
Support:
Support for the following 11A models has been added:
AP-C3, AT-C3, AL-C2

Fixed:
1. The user's normal ID card can still be used even though that user
   has been issued a temporary card (Day Card).

Other:
1. A Web Configuration Tool is now available. It provides most of
   the management functions provided by the Configuration Tool
   application. Please see the latest version of the Administrator's
   Guide for more information.
2. Authentication fails when using Kerberos authentication for
   Windows 2008 R2 Active Directory.
   Specification changes that resolve the issue are made to the
   following JavaVM versions:
   V4.25.07 and above
   V5.14.02 and above
   V6.09.01 and above
   V7.16.07 and above

Update the Java VM to the latest version before installing this update.

Version 2.0.0
Initial release

```
================================================================================
*** Basic Information ***
================================================================================
[Create date] 2018/02/07
--------------------------------------------------------------------------
[Program Name] CAP V2_SP11  for eDC
--------------------------------------------------------------------------
[Version] 2.2.523
--------------------------------------------------------------------------
[PCB No.]
--------------------------------------------------------------------------
[Interchangeability] X / O
--------------------------------------------------------------------------
[Other Firmware Requirements] None
--------------------------------------------------------------------------
[PCB Requirements] None
--------------------------------------------------------------------------
[Software category] Normal Release
--------------------------------------------------------------------------
[Release category] Normal Release
--------------------------------------------------------------------------
[Program category] Firmware
--------------------------------------------------------------------------
Exported to(language) GEN(all)
[Firmware No.] D6021026F_forEDC
[File Information]
 File Name        D6021026F_forEDC.zip
 File Type        Module for Service
 Size          2.27 MB ( 2379166 byte )
[Availability of RFU] No
--------------------------------------------------------------------------
[Production reflection]
--------------------------------------------------------------------------


================================================================================
*** Note ***
================================================================================
[Note]

--------------------------------------------------------------------------



================================================================================
*** Important Notes ***
================================================================================
[Important Notes]

--------------------------------------------------------------------------



================================================================================
*** Modification History ***
```

==
[Modifications made:]
Rank C

Fixed:
- The hard disk's operation time was increased due to periodic hard
  disk access.
- When a user swipes a card just before a device switches to energy
  save mode, the authentication function may become deactivated,
  allowing the user to access the device without authenticating.
- Setting fields that contain Unicode 6.0 characters may cause the
  device to become inoperable.
- If the user manually registers a keyboardemulating reader that is
  not registered by default via the Configuration Tool, the card
  reader is not recognized and cannot be used.

[Modification history]

Version 2.2.520
Support:
1. Support for TLS1.2 has been added.
*The Java VM version on the device must support TLS1.2.
2. Support for SHA-2 has been added.
*The Java VM version on the device must support SHA-2.
3. Support for the following 15S model has been added:
   - Brz-P1

Other:
1. Paper size is displayed for each print job.
2. Support for Felica security in NFC card readers has been added.
3. The color of the job list's scroll bar on the operation panel has
   been changed from gray to blue.
4. In the case of a login failure, the application name will be
   shown in the displayed error message.
5. The Configuration Tool requires .NET Framework 4.5 or later.

Fixed:
1. If a device's language is set as Italian or French and more than
   10000 billing codes are displayed, the displayed numbers are
   divided into 2 lines.
2. If AD's IP address is configured on an LP without SOP, the device
   will not be able to use Kerberos authentication.

Version 2.2.5
Fixed:
1. In the case that 2 CAP-ES v2 servers are specified in "Server Name" in the
   Configuration Tool, when both servers cannot be reached, the secondary server
   may not be reconnected.

Other:

1. In the case that 2 CAP-ES v2 servers are specified in "Server Name" in the Configuration Tool, if CAP v2 connects the secondary server because the primary server is unavailable, CAP will reconnect to the primary server not only when the device is restarted or reconfigured via the Configuration Tool but also when Scheduled Processing is performed.
2. An attribute on an external authentication server that has multiple values can be specified in "Attribute Name Settings" for card IDs in the Configuration Tool. Up to 10 values (card IDs) are supported.
3. The Deactivate Authentication function can be used if it is necessary to unlock a device in an emergency situation (such as a disaster).

Version 2.2.3
Support:
Support for the following model has been added:
- Gim-P1

Version 2.2.0
Support:
1. Support for the following 12A model has been added:
   K-C4
2. Support for Firefox ESR 10/17 and Internet Explorer 10 (desktop version only) has been added.
3. Support for Windows 8 and Windows Server 2012 as client OS has been added.

Fixed:
1. User Information may fail to import using the Web Configuration Tool.
2. "Last Date Used" indicated in the User Information may fail to update if a user logs in as a device administrator using an IC card.
3. CAP v2 may fail to authenticate to CAP-ES v2 during a user's first login.
4. If the user's DN contains "/", "\" or "'", the LDAP authentication will fail.
5. If User Information such as "Name" or "Key Display Name" contains a single quotation (') mark, the User Information cannot be applied to the device(s).
6. If "Application Name" the Launcher Settings contains a "," (comma), an exception error will occur. This error occurs if Firefox is registered as "Application Name" in Launcher Settings.

Other:
1. Can now set whether to permit a manual log in for users who do not have a card.
2. Proxy User settings can now be configured for each domain.
3. Limitations for utilizing the remote fax function of a device have been relaxed.
4. The method of updating User Information on a device can now be selected.
5. The number of User Information records displayed in the User Information List can now be set.
6. The digital signature for 11A or later models is now supported.

7. Default User Permissions can now be imported/exported.

Update the Java VM to the latest version before installing this update.

Version 2.1.0
Support:
1. Support for the following 11A models has been added:
   AP-C3, AT-C3, AL-C2

2. Support for the following 12A model has been added:
   Ti-P1

Fixed:
1. The user's normal ID card can still be used even though that user
   has been issued a temporary card (Day Card).

Other:
1. A Web Configuration Tool is now available. It provides most of
   the management functions provided by the Configuration Tool application.
   Please see the latest version of the Administrator's Guide for more
   information.

2. Authentication fails when using Kerberos authentication for
   Windows 2008 R2 Active Directory.
   Specification changes that resolve the issue are made to the
   following JavaVM versions:
   V4.25.07 and above
   V5.14.02 and above
   V6.09.01 and above
   V7.16.07 and above

Update the Java VM to the latest version before installing this update.

Version 2.0.0
Initial release

```
================================================================================
*** Basic Information ***
================================================================================
[Create date] 2018/02/07
--------------------------------------------------------------------------
[Program Name] ELP NX V2_MP11  for eDC
--------------------------------------------------------------------------
[Version] 2.2.523
--------------------------------------------------------------------------
[PCB No.]
--------------------------------------------------------------------------
[Interchangeability] X / O
--------------------------------------------------------------------------
[Other Firmware Requirements] None
--------------------------------------------------------------------------
[PCB Requirements] None
--------------------------------------------------------------------------
[Software category] Normal Release
--------------------------------------------------------------------------
[Release category] Normal Release
--------------------------------------------------------------------------
[Program category] Firmware
--------------------------------------------------------------------------
Exported to(language) GEN(all)
[Firmware No.] D6021037L_forEDC
[File Information]
 File Name        D6021037L_forEDC.zip
 File Type        Module for Service
 Size          3.15 MB ( 3306344 byte )
[Availability of RFU] No
--------------------------------------------------------------------------
[Production reflection]
--------------------------------------------------------------------------


================================================================================
*** Note ***
================================================================================
[Note]

--------------------------------------------------------------------------


================================================================================
*** Important Notes ***
================================================================================
[Important Notes]

--------------------------------------------------------------------------


================================================================================
*** Modification History ***
```

```
================================================================
```
[Modifications made:]
Rank C

Fixed:
- The hard disk's operation time was increased due to periodic hard
  disk access.
- Setting fields that contain Unicode 6.0 characters may cause the
  device to become inoperable.

[Modification history]

Version 2.2.520
Support:
1. Support for TLS1.2 has been added.
*The Java VM version on the device must support TLS1.2.
2. Support for SHA-2 has been added.
*The Java VM version on the device must support SHA-2.

Other:
1. Paper size is displayed for each print job.
2. The following application information can be collected via remotely:
   - Number of jobs deleted.
   - Number of times the print number changed.
   - Number of times the printing color was changed from color to
     black/white when using conditional printing, etc.
3. RSInfo has been updated.
4. The Configuration Tool requires .NET Framework 4.5 or later.

Fixed:
1. PDF jobs cannot be printed if the device does not have PS
   emulation enabled.
2. High volume print jobs (roughly 200 pages or more) cannot be printed.
3. When printing after pressing the "Check Print" button under
   "Condition Check Print", the print job will not be cleared from
   the job list.
4. When authentication is disabled, the job list order may be incorrect.
5. If a PS print job name contains more than 256 characters, the
   print job will not be spooled on the device.
6. If a system auto-reset is run on the device in the middle of
   printing or deleting a print job, the job will not be printed or deleted.
7. If a printer name in "Storable Driver Language Exception(s)"
   contains a specific 2 byte character (0x5C), the printer cannot
   be used for printing.
8. If the "Non-stored Language Handling" setting is configured as
   "Print", the P1 command error may occur.
9. The Web Configuration Tool may not be able to display "General Settings"
   and "Options".
10. If the Analyze Logs are larger than 60MB, it may not be possible to
    store the last 60 days worth of Delete Logs.

11. Immediately after logging in, it may be possible to see the
    previous user's print job list.
12. If a document name contains a special character that is not
    supported by the device, the device will stall.

Version 2.2.5
Fixed:
1. Job list may not be updated after switching from energy save mode.

Other:
1. The Deactivate Authentication function can be used if it is necessary to unlock
   a device in an emergency situation (such as a disaster). If enabled, print jobs
   can be printed out directly without logging in to the device.
2. It is possible to enter "Display Name" when selecting "Local HDD" as the Stored
   Job Source in the Tab Name Settings in the Configuration Tool.
3. The Condition Print Setting can be configured when multiple jobs are selected
   on the device panel.

Version 2.2.3
Support:
1. Korean language can be displayed in the embedded modules of CAP
   V2/ELP-NX V2. Supported models are Model MET-C1abcde, OR-C2, and
   K-C4.
Update the Java VM to the latest version before installing this
software.

Version 2.2.2
Fixed:
1. "Display Name" items are not displayed in the Deletion Log.
2. The available quantity max value for the Condition Print Settings
   is incorrect.
3. If a PIN is set for a My Document Folder, the PIN can be set to 3
   or less digits on the My Document Folder Settings screen.
4. "Color/Black & White (at Printing)", "Quantity (at Printing)" and
   "1 Sided/2 Sided (at Printing)" items in the Deletion Log are
   displayed incorrectly when the print job is printed or deleted.
5. If the device is switched to energy saving mode, a function such
   as "Copy" or "Scanner" is changed via ELP-NX, or the Basic
   authentication user is logged out while a user is modifying their
   Display Name by using the software keyboard, the Display Name
   will be set to blank.
6. If the language setting for the device is changed when any error
   message is displayed, the error message is not displayed.
7. If a color print job is deleted from the message regarding color
   print privileges, an error message may be displayed.
8. My Document Folder information can be imported even though the
   PIN is not 4 to 8 digits.
9. If the Thai locale is set on the device, the date is not displayed
   correctly.

Other:
1. Login Differentiator function for ELP-NX v2 without CAP has been added.

Update the Java VM to the latest version before installing this software.

Version 2.2.0
Support:
1. Support for the following 12A model has been added:
   K-C4
2. Support for Firefox ESR 10/17 and Internet Explorer 10 (desktop
   version only) has been added.
3. Support for Mac OS 10.8, Windows 8 and Windows Server 2012 as
   client OS has been added.
4. Support for UTF-8 driver has been added.

Fixed:
1. Order of the print job list may be incorrect.
2. ELP-NX v2 may fail to print if the print data is generated by PS.
3. If "Stored Job Source" is set to Remote HDD and "Display Name"
   is left blank, Hostname is not displayed in the tab on the job
   list screen.
4. Once printing has failed, ELP-NX v2 may be unable to reprint.
5. The job list screen may freeze after swiping the card (this issue
   occurs if ELP-NX v2 with CAP is used).
6. Obtaining the Deletion Log may be fail (this issue occurs if ELP-NX v2
   with CAP is used).

Other:
1. The method of updating User Information on a device can now be selected.
2. The number of records displayed in the lists in the Configuration Tool
   can now be set.
3. Digital signature for 11A or later models has been supported.
4. Condition Print is now available for models with 4.3-inch
   operation panels.
5. Models with 4.3-inch operation panels can now be set as a Remote HDD.

Update the Java VM to the latest version before installing this software.

Version 2.1.2
Support:
Support for the following 11A model has been added:
MT-C5
Mo-C1

Fixed:
The device operation panel freezes when the Stored Job Source tab is
changed immediately after logging in to the device using an ID card
when CAP V2 and ELP-NX V2 are installed on a MFP.

Update the Java VM to the latest version before installing this software.

Version 2.1.1
Support:
1. Support for the following 11A models has been added:
   AP-C3, AT-C3, AL-C2
2. Support for Mac OS X 10.7 as a printing client has been added.

Fixed:
1. Attempting to print a job from a Remote HDD as a user with a
   2-byte user name results in an error.
2. All jobs from a Remote HDD are not printed if "Non-stored
   Language Handling" is set to "Discard".
3. If the following conditions are met, non-stored language print
   jobs are discarded even if the "Non-stored Language Handling"
   option in the Configuration Tool is set to "Print".
     - PS is set as a "Storable Driver Language".
     - A user ID has not been entered in the PS driver.
     - The job is submitted using the MD-P2, OR-C1 or SH-MF1 PS driver.
4. The deletion log records the user name for jobs printed from a
   Remote HDD as "<user name><1b:>".
5. PS jobs from a Remote HDD are not printed if authentication is
   disabled (ELP-NX without CAP) and the device has "Basic
   Authentication" enabled.
6. Pressing the "Print", "Delete" or "Condition Print Settings"
   buttons multiple times in a short interval can cause ELP-NX to
   freeze or cause an unexpected operation.
7. Print processing speed for large jobs was slow on WVGA devices.
8. When authentication mode is enabled (ELP-NX with CAP), changing
   the job source tab immediately after logging in causes the screen
   to freeze on the "Connecting..." dialog.
9. Attempting to view a job list on the Job Deletion Tool for a user
   whose name has an even number of characters fails.
10. When "User Name Case Sensitivity" is set to "Case Insensitive",
    the user name was not always converted to lower case characters.
11. Printing a multi-copy job without collate from a Remote HDD
    always prints the full (original) number of copies, even if
    Check Print is used or the number of copies is changed.
12. Printing a PS job on a device that does not support the original
    print settings (such as a duplex job on a simplex-only device)
    causes an error.
13. The ELP-NX Job List Settings can revert to old values in some
    situations after a device's administrator password has been changed.

Other:
1. A Web Configuration Tool is now available. It provides most of
   the management functions provided by the Configuration Tool
   application. Please see the latest version of the Administrator's
   Guide for more information.

Update the Java VM to the latest version before installing this update.

Version 2.0.2
Fixed:
1. The selected job is printed out and deleted as a normal job if
   the user switches to another device application while the Check
   Print confirmation dialog is being displayed.
2. Changes to the display information (Display Name/Label Name) of a
   My Documents Folder with a name that includes 2-byte characters
   are not saved.
3. The operation panel freezes on the "Connecting, please wait..."
   message when attempting to access a My Documents Folder if the
   following conditions are met:
 A) The My Document Folder is opened immediately after recovering
    from Energy Saving Mode.
 B) The Extended Features key is pressed immediately after opening
    the My Document Folder (while the "Connecting, please wait..."
    message is still being displayed.)
4. A NullPointerException error occurs when a user without color
   print privilages attempts to print Black & White and Color print
   jobs at the same time and then presses "delete" on the dialog
   confirming the deletion of the color job.
5. Print jobs without names cannot be printed remotely.
6. Printing, deleting or refreshing the job list when using
   the "Ascending" sort order switches the sort order to "Descending".

Changes:
1. The FR Filter application can now be installed automatically
   using eDC-i1.2 Remote Install Manager.
  Notes:
  - 08S and older models are not supported.
  - The version of JavaVM installed on the device must support
    automatic installation. The supported versions (JavaVM
    V5.14.02/ V6.09.01/ V7.16.07) are scheduled for release on
    Nov.8, 2011.
  - If using an older version of JavaVM or an unsupported device, FR
    Filter has to be installed to the device's HDD manually.
2. The device-side application icon has been changed to use a
   transparent background. This will give a better look on devices
   with an adjustable background color.

Update the Java VM to the latest version before installing this update.

Version 2.0.1
Fixed:
Pressing the Start Key when the My Document Folder list is displayed
may result in a NullPointerException error, causing the system to
freeze (restart required).

```
================================================================
*** Basic Information ***
================================================================
[Create date] 2018/02/07
----------------------------------------------------------------
[Program Name] ELP NX V2_MP21  for eDC
----------------------------------------------------------------
[Version] 2.2.523
----------------------------------------------------------------
[PCB No.]
----------------------------------------------------------------
[Interchangeability] X / O
----------------------------------------------------------------
[Other Firmware Requirements] None
----------------------------------------------------------------
[PCB Requirements] None
----------------------------------------------------------------
[Software category] Normal Release
----------------------------------------------------------------
[Release category] Normal Release
----------------------------------------------------------------
[Program category] Firmware
----------------------------------------------------------------
Exported to(language) GEN(all)
[Firmware No.] D6021047J_forEDC
[File Information]
 File Name        D6021047J_forEDC.zip
 File Type        Module for Service
 Size          3.06 MB ( 3208020 byte )
[Availability of RFU] No
----------------------------------------------------------------
[Production reflection]
----------------------------------------------------------------


================================================================
*** Note ***
================================================================
[Note]

----------------------------------------------------------------



================================================================
*** Important Notes ***
================================================================
[Important Notes]

----------------------------------------------------------------



================================================================
*** Modification History ***
```

==

[Modifications made:]
Rank C

Fixed:
- The hard disk's operation time was increased due to periodic hard
  disk access.
- Setting fields that contain Unicode 6.0 characters may cause the
  device to become inoperable.

[Modification history]

Version 2.2.520
Support:
1. Support for TLS1.2 has been added.
*The Java VM version on the device must support TLS1.2.
2. Support for SHA-2 has been added.
*The Java VM version on the device must support SHA-2.

Other:
1. Paper size is displayed for each print job.
2. The following application information can be collected via remotely:
   - Number of jobs deleted.
   - Number of times the print number changed.
   - Number of times the printing color was changed from color to
     black/white when using conditional printing, etc.
3. RSInfo has been updated.
4. The Configuration Tool requires .NET Framework 4.5 or later.

Fixed:
1. PDF jobs cannot be printed if the device does not have PS
   emulation enabled.
2. High volume print jobs (roughly 200 pages or more) cannot be printed.
3. When printing after pressing the "Check Print" button under
   "Condition Check Print", the print job will not be cleared from
   the job list.
4. When authentication is disabled, the job list order may be incorrect.
5. If a PS print job name contains more than 256 characters, the
   print job will not be spooled on the device.
6. If a system auto-reset is run on the device in the middle of
   printing or deleting a print job, the job will not be printed or deleted.
7. If a printer name in "Storable Driver Language Exception(s)"
   contains a specific 2 byte character (0x5C), the printer cannot
   be used for printing.
8. If the "Non-stored Language Handling" setting is configured as
   "Print", the P1 command error may occur.
9. The Web Configuration Tool may not be able to display "General
   Settings" and "Options".
10. If the Analyze Logs are larger than 60MB, it may not be possible
    to store the last 60 days worth of Delete Logs.

11. Immediately after logging in, it may be possible to see the
    previous user's print job list.
12. If a document name contains a special character that is not
    supported by the device, the device will stall.

Version 2.2.5
Fixed:
1. Job list may not be updated after switching from energy save mode.

Other:
1. The Deactivate Authentication function can be used if it is necessary to unlock
   a device in an emergency situation (such as a disaster). If enabled, print jobs
   can be printed out directly without logging in to the device.

Version 2.2.3
Support:
1. Korean language can be displayed in the embedded modules of CAP
   V2/ELP-NX V2. Supported models are Model MET-C1abcde, OR-C2, and
   K-C4.

Update the Java VM to the latest version before installing this
software.

Version 2.2.2
Fixed:
1. "Display Name" items are not displayed in the Deletion Log.
2. "Color/Black & White (at Printing)", "Quantity (at Printing)" and
   "1 Sided/2 Sided (at Printing)" items in the Deletion Log are
   displayed incorrectly when the print job is printed or deleted.
3. If a color print job is deleted from the message regarding color
   print privileges, an error message may be displayed.
4. My Document Folder information can be imported even though the
   PIN is not 4 to 8 digits.
5. If the Thai locale is set on the device, the date is not
   displayed correctly.
6. ELP-NX (MP21) does not record the Deletion Log correctly.

Other:
1. Login Differentiator function for ELP-NX v2 without CAP has been added.

Update the Java VM to the latest version before installing this software.

Version 2.2.0
Support:
1. Support for the following 12A model has been added:
   K-C4

2. Support for Firefox ESR 10/17 and Internet Explorer 10 (desktop
   version only) has been added.
3. Support for Mac OS 10.8, Windows 8 and Windows Server 2012 as
   client OS has been added.
4. Support for UTF-8 driver has been added.

Fixed:
1. Order of the print job list may be incorrect.
2. ELP-NX v2 may fail to print if the print data is generated by PS.
3. If "Stored Job Source" is set to Remote HDD and "Display Name" is
   left blank, Hostname is not displayed in the tab on the job list screen.
4. Once printing has failed, ELP-NX v2 may be unable to reprint.
5. The job list screen may freeze after swiping the card (this issue
   occurs if ELP-NX v2 with CAP is used).
6. Obtaining the Deletion Log may be fail (this issue occurs if ELP-NX v2
   with CAP is used).

Other:
1. The method of updating User Information on a device can now be selected.
2. The number of records displayed in the lists in the Configuration Tool
   can now be set.
3. Digital signature for 11A or later models has been supported.
4. Condition Print is now available for models with 4.3-inch
   operation panels.
5. Models with 4.3-inch operation panels can now be set as a Remote HDD.

Update the Java VM to the latest version before installing this update.

Version 2.1.1
Support:
1.Support for the following 11A models has been added:
  AP-C3, AT-C3, AL-C2
2. Support for Mac OS X 10.7 as a printing client has been added.

Fixed:
1. Attempting to print a job from a Remote HDD as a user with a
   2-byte user name results in an error.
2. All jobs from a Remote HDD are not printed if "Non-stored
   Language Handling" is set to "Discard".
3. If the following conditions are met, non-stored language print
   jobs are discarded even if the "Non-stored Language Handling"
   option in the Configuration Tool is set to "Print".
     - PS is set as a "Storable Driver Language".
     - A user ID has not been entered in the PS driver.
     - The job is submitted using the MD-P2, OR-C1 or SH-MF1 PS driver.
4. The deletion log records the user name for jobs printed from a
   Remote HDD as "<user name><1b:>".
5. PS jobs from a Remote HDD are not printed if authentication is
   disabled (ELP-NX without CAP) and the device has "Basic
   Authentication" enabled.
6. Print processing speed for large jobs was slow on WVGA devices.
7. Attempting to view a job list on the Job Deletion Tool for a user

whose name has an even number of characters fails.
8. When "User Name Case Sensitivity" is set to "Case Insensitive",
   the user name was not always converted to lower case characters.
9. The ELP-NX Job List Settings can revert to old values in some
   situations after a device's administrator password has been changed.

Other:
1. A Web Configuration Tool is now available. It provides most of
   the management functions provided by the Configuration Tool
   application. Please see the latest version of the Administrator's
   Guide for more information.

Update the Java VM to the latest version before installing this update.

Version 2.0.2
Fixed:
1. Changes to the display information (Display Name/Label Name) of a
   My Documents Folder with a name that includes 2-byte characters
   are not saved.
2. A NullPointerException error occurs when a user without color
   print privileges attempts to print Black & White and Color print
   jobs at the same time and then presses "delete" on the dialog
   confirming the deletion of the color job.

Changes:
1. The FR Filter application can now be installed automatically
   using eDC-i1.2 Remote Install Manager.
  Notes:
   - 08S and older models are not supported.
   - The version of JavaVM installed on the device must support
     automatic installation. The supported versions (JavaVM
     V5.14.02/ V6.09.01/ V7.16.07) are scheduled for release on
     Nov.8, 2011.
   - If using an older version of JavaVM or an unsupported device,
     FR Filter has to be installed to the device's HDD manually.

Version 2.0.1
Fixed:
Users without printing privileges can display and print/delete the
job list of the previously logged-in user by pressing the rightmost
Selection Key when CAP authentication is enabled on a 4-line panel device.

```
================================================================================
*** Basic Information ***
================================================================================
[Create date] 2018/02/07
--------------------------------------------------------------------------
[Program Name] ELP NX V2_SP11  for eDC
--------------------------------------------------------------------------
[Version] 2.2.523
--------------------------------------------------------------------------
[PCB No.]
--------------------------------------------------------------------------
[Interchangeability] X / O
--------------------------------------------------------------------------
[Other Firmware Requirements] None
--------------------------------------------------------------------------
[PCB Requirements] None
--------------------------------------------------------------------------
[Software category] Normal Release
--------------------------------------------------------------------------
[Release category] Normal Release
--------------------------------------------------------------------------
[Program category] Firmware
--------------------------------------------------------------------------
Exported to(language) GEN(all)
[Firmware No.] D6021057H_forEDC
[File Information]
 File Name        D6021057H_forEDC.zip
 File Type        Module for Service
 Size          3.01 MB ( 3155659 byte )
[Availability of RFU] No
--------------------------------------------------------------------------
[Production reflection]
--------------------------------------------------------------------------


================================================================================
*** Note ***
================================================================================
[Note]

--------------------------------------------------------------------------



================================================================================
*** Important Notes ***
================================================================================
[Important Notes]

--------------------------------------------------------------------------



================================================================================
*** Modification History ***
```

==
[Modifications made:]
Rank C

Fixed:
- The hard disk's operation time was increased due to periodic hard
  disk access.

[Modification history]

Version 2.2.520
Support:
1. Support for TLS1.2 has been added.
   * The Java VM version on the device must support TLS1.2.
2. Support for SHA-2 has been added.
   * The Java VM version on the device must support SHA-2.

Other:
1. Paper size is displayed for each print job.
2. The following application information can be collected via remotely:
   - Number of jobs deleted.
   - Number of times the print number changed.
   - Number of times the printing color was changed from color to
     black/white when using conditional printing, etc.
3. RSInfo has been updated.
4. The Configuration Tool requires .NET Framework 4.5 or later.

Fixed:
1. PDF jobs cannot be printed if the device does not have PS
   emulation enabled.
2. High volume print jobs (roughly 200 pages or more) cannot be printed.
3. When printing after pressing the "Check Print" button under
   "Condition Check Print", the print job will not be cleared from
   the job list.
4. When authentication is disabled, the job list order may be incorrect.
5. If a PS print job name contains more than 256 characters, the
   print job will not be spooled on the device.
6. If a system auto-reset is run on the device in the middle of printing
   or deleting a print job, the job will not be printed or deleted.
7. If a printer name in "Storable Driver Language Exception(s)"contains
   a specific 2 byte character (0x5C), the printer cannot be used for printing.
8. If the "Non-stored Language Handling" setting is configured as "Print",
   the P1 command error may occur.
9. The Web Configuration Tool may not be able to display "General Settings"
   and "Options".
10. If the Analyze Logs are larger than 60MB, it may not be possible to
    store the last 60 days worth of Delete Logs.
11. Immediately after logging in, it may be possible to see the
    previous user's print job list.
12. If a document name contains a special character that is not supported
    by the device, the device will stall.

Version 2.2.5
Fixed:
1. Job list may not be updated after switching from energy save mode.

Other:
1. The Deactivate Authentication function can be used if it is necessary to unlock
   a device in an emergency situation (such as a disaster). If enabled, print jobs
   can be printed out directly without logging in to the device.

Version 2.2.3
Support:
1. Korean language can be displayed in the embedded modules of CAP
   V2/ELP-NX V2. Supported models are Model MET-C1abcde, OR-C2, and
   K-C4.
Fixed:
1. Memory leak occurs in accordance with the increase of printing
   jobs.

Update the Java VM to the latest version before installing this
software.

Version 2.2.2
Fixed:
1. "Display Name" items are not displayed in the Deletion Log.
2. The method or operation for the deletion of a print job in the
   Deletion Log is displayed incorrectly.
3. "Color/Black & White (at Printing)", "Quantity (at Printing)" and
   "1 Sided/2 Sided (at Printing)" items in the Deletion Log are
   displayed incorrectly when the print job is printed or deleted.
4. My Document Folder information can be imported even though the
   PIN is not 4 to 8 digits.
5. If the Thai locale is set on the device, the date is not
   displayed correctly.

Other:
1. Login Differentiator function for ELP-NX v2 without CAP has been added.

Update the Java VM to the latest version before installing this software.

Version 2.2.0
Support:
1. Support for the following 12A model has been added:
   K-C4
2. Support for Firefox ESR 10/17 and Internet Explorer 10 (desktop
   version only) has been added.
3. Support for Mac OS 10.8, Windows 8 and Windows Server 2012 as
   client OS has been added.

4. Support for UTF-8 driver has been added.

Fixed:
1. Order of the print job list may be incorrect.
2. ELP-NX v2 may fail to print if the print data is generated by PS.
3. If "Stored Job Source" is set to Remote HDD and "Display Name" is
   left blank, Hostname is not displayed in the tab on the job list screen.
4. Once printing has failed, ELP-NX v2 may be unable to reprint.
5. The job list screen may freeze after swiping the card (this issue
   occurs if ELP-NX v2 with CAP is used).
6. Obtaining the Deletion Log may be fail (this issue occurs if ELP-NX v2
   with CAP is used).
7. A status check is performed every minute, even when the LP is in
   sleep mode. As a result, the LP is unable to maintain sleep mode status.

Other:
1. The method of updating User Information on a device can now be selected.
2. The number of records displayed in the lists in the Configuration
   Tool can now be set.
3. Digital signature for 11A or later models has been supported.
4. Condition Print is now available for models with 4.3-inch operation panels.
5. Models with 4.3-inch operation panels can now be set as a Remote HDD.

Version 2.1.2
Support:
1. Support for the following 12A model has been added:
   Ti-P1

Fixed:
When CAP V2 and ELP-NX V2 are installed, ELP-NX wakes the LP every
minute when the device is in sleep mode.

Update the Java VM to the latest version before installing this update.

Version 2.1.1
Support:
1. Support for the following 11A models has been added:
   AP-C3, AT-C3, AL-C2
2. Support for Mac OS X 10.7 as a printing client has been added.

Fixed:
1. All jobs from a Remote HDD are not printed if "Non-stored
   Language Handling" is set to "Discard".
2. If the following conditions are met, non-stored language print
   jobs are discarded even if the "Non-stored Language Handling"
   option in the Configuration Tool is set to "Print".
     - PS is set as a "Storable Driver Language".
     - A user ID has not been entered in the PS driver.
     - The job is submitted using the MD-P2, OR-C1 or SH-MF1 PS driver.
3. Attempting to view a job list on the Job Deletion Tool for a user

whose name has an even number of characters fails.
4. When "User Name Case Sensitivity" is set to "Case Insensitive",
   the user name was not always converted to lower case characters.
5. The ELP-NX Job List Settings can revert to old values in some
   situations after a device's administrator password has been changed.

Other:
1. A Web Configuration Tool is now available. It provides most of
   the management functions provided by the Configuration Tool
   application. Please see the latest version of the Administrator's
   Guide for more information.

Update the Java VM to the latest version before installing this update.

Version 2.0.0
Changes:
1. The FR Filter application can now be installed automatically
   using eDC-i1.2 Remote Install Manager.

Notes:
- 08S and older models are not supported.
- The version of JavaVM installed on the device must support
  automatic installation. The supported versions (JavaVM
  V5.14.02/ V6.09.01/ V7.16.07) are scheduled for release on
  Nov. 8, 2011.
- If using an older version of JavaVM or an unsupported device, FR
  Filter has to be installed to the device's HDD manually.

```
================================================================
*** Basic Information ***
================================================================
[Create date] 2018/02/07
----------------------------------------------------------------
[Program Name] CAP V2_MP31  for eDC
----------------------------------------------------------------
[Version] 2.2.523
----------------------------------------------------------------
[PCB No.]
----------------------------------------------------------------
[Interchangeability] X / O
----------------------------------------------------------------
[Other Firmware Requirements] None
----------------------------------------------------------------
[PCB Requirements] None
----------------------------------------------------------------
[Software category] Normal Release
----------------------------------------------------------------
[Release category] Normal Release
----------------------------------------------------------------
[Program category] Firmware
----------------------------------------------------------------
Exported to(language) GEN(all)
[Firmware No.] D6021096F_forEDC
[File Information]
 File Name        D6021096F_forEDC.zip
 File Type        Module for Service
 Size             2.49 MB ( 2609395 byte )
[Availability of RFU] No
----------------------------------------------------------------
[Production reflection]
----------------------------------------------------------------


================================================================
*** Note ***
================================================================
[Note]

----------------------------------------------------------------



================================================================
*** Important Notes ***
================================================================
[Important Notes]

----------------------------------------------------------------



================================================================
*** Modification History ***
```

===
[Modifications made:]
Rank C

Fixed:
- Setting fields that contain Unicode 6.0 characters may cause the
  device to become inoperable.
- If the user manually registers a keyboardemulating reader that is
  not registered by default via the Configuration Tool, the card
  reader is not recognized and cannot be used.

[Modification history]

Version 2.2.522
Fixed:
- The hard disk's operation time was increased due to periodic hard
  disk access.
- When a user swipes a card just before a device switches to energy
  save mode, the authentication function may become deactivated,
  allowing the user to access the device without authenticating.

Other:
- The device panel screen flow for auto card registration has been
  changed.

Version 2.2.520
Support:
1. Support for TLS1.2 has been added.
*The Java VM version on the device must support TLS1.2.
2. Support for SHA-2 has been added.
*The Java VM version on the device must support SHA-2.
3. Support for the following 15S model has been added:
   - MD-P3
   - VE-P1

Other:
1. Paper size is displayed for each print job.
2. Support for Felica security in NFC card readers has been added.
3. The color of the job list's scroll bar on the operation panel has
   been changed from gray to blue.
4. In the case of a login failure, the application name will be
   shown in the displayed error message.
5. The Configuration Tool requires .NET Framework 4.5 or later.

Fixed:
1. If a device's language is set as Italian or French and more than
   10000 billing codes are displayed, the displayed numbers are
   divided into 2 lines.
2. If AD's IP address is configured on an LP without SOP, the device

will not be able to use Kerberos authentication.

Version 2.2.5
Fixed:
1. In the case that 2 CAP-ES v2 servers are specified in "Server Name" in the
   Configuration Tool, when both servers cannot be reached, the secondary server
   may not be reconnected.

Other:
1. In the case that 2 CAP-ES v2 servers are specified in "Server Name" in the
   Configuration Tool, if CAP v2 connects the secondary server because the primary
   server is unavailable, CAP will reconnect to the primary server not only when
   the device is restarted or reconfigured via the Configuration Tool but also
   when Scheduled Processing is performed.
2. An attribute on an external authentication server that has multiple values can
   be specified in "Attribute Name Settings" for card IDs in the Configuration Tool.
   Up to 10 values (card IDs) are supported.
3. The Deactivate Authentication function can be used if it is necessary to unlock
   a device in an emergency situation (such as a disaster).

Version 2.2.3
Support:
1. Korean language can be displayed in the embedded modules of CAP V2/
   ELP-NX V2. Supported models are Model MET-C1abcde, OR-C2, and K-C4.

Update the Java VM to the latest version before installing this update.

Version 2.2.0
Support:
1. Support for the following 12A model has been added:
   - K-C4
2. Support for Firefox ESR 10/17 and Internet Explorer 10 (desktop
   version only) has been added.
3. Support for Windows 8 and Windows Server 2012 as client OS has
   been added.

Fixed:
1. User Information may fail to import using the Web Configuration
   Tool.
2. "Last Date Used" indicated in the User Information may fail to
   update if a user logs in as a device administrator using an IC
   card.
3. CAP v2 may fail to authenticate to CAP-ES v2 during a user's
   first login.
4. If the user's DN contains "/", "\" or "'", the LDAP
   authentication will fail.
5. If User Information such as "Name" or "Key Display Name" contains
   a single quotation (') mark, the User Information cannot be
   applied to the device(s).

```
================================================================
*** Basic Information ***
================================================================
[Create date] 2018/02/07
----------------------------------------------------------------
[Program Name] ELP NX V2_MP31  for eDC
----------------------------------------------------------------
[Version] 2.2.523
----------------------------------------------------------------
[PCB No.]
----------------------------------------------------------------
[Interchangeability] X / O
----------------------------------------------------------------
[Other Firmware Requirements] None
----------------------------------------------------------------
[PCB Requirements] None
----------------------------------------------------------------
[Software category] Normal Release
----------------------------------------------------------------
[Release category] Normal Release
----------------------------------------------------------------
[Program category] Firmware
----------------------------------------------------------------
Exported to(language) GEN(all)
[Firmware No.] D60210A7G_forEDC
[File Information]
 File Name        D60210A7G_forEDC.zip
 File Type        Module for Service
 Size            3.16 MB ( 3309288 byte )
[Availability of RFU] No
----------------------------------------------------------------
[Production reflection]
----------------------------------------------------------------


================================================================
*** Note ***
================================================================
[Note]

----------------------------------------------------------------


================================================================
*** Important Notes ***
================================================================
[Important Notes]

----------------------------------------------------------------


================================================================
*** Modification History ***
```

===

[Modifications made:]
Rank C

Fixed:
- The hard disk's operation time was increased due to periodic hard
  disk access.
- Setting fields that contain Unicode 6.0 characters may cause the
  device to become inoperable.

[Modification history]

Version 2.2.520
Support:
1. Support for TLS1.2 has been added.
*The Java VM version on the device must support TLS1.2.
2. Support for SHA-2 has been added.
*The Java VM version on the device must support SHA-2.

Other:
1. Paper size is displayed for each print job.
2. The following application information can be collected via remotely:
   - Number of jobs deleted.
   - Number of times the print number changed.
   - Number of times the printing color was changed from color to
     black/white when using conditional printing, etc.
3. RSInfo has been updated.
4. The Configuration Tool requires .NET Framework 4.5 or later.

Fixed:
1. PDF jobs cannot be printed if the device does not have PS
   emulation enabled.
2. High volume print jobs (roughly 200 pages or more) cannot be printed.
3. When printing after pressing the "Check Print" button under
   "Condition Check Print", the print job will not be cleared from the job list.
4. When authentication is disabled, the job list order may be incorrect.
5. If a PS print job name contains more than 256 characters, the
   print job will not be spooled on the device.
6. If a system auto-reset is run on the device in the middle of
   printing or deleting a print job, the job will not be printed or deleted.
7. If a printer name in "Storable Driver Language Exception(s)"
   contains a specific 2 byte character (0x5C), the printer cannot
   be used for printing.
8. If the "Non-stored Language Handling" setting is configured as
   "Print", the P1 command error may occur.
9. The Web Configuration Tool may not be able to display "General
   Settings" and "Options".
10. If the Analyze Logs are larger than 60MB, it may not be possible
    to store the last 60 days worth of Delete Logs.
11. Immediately after logging in, it may be possible to see the

previous user's print job list.
12. If a document name contains a special character that is not
    supported by the device, the device will stall.

Version 2.2.5
Fixed:
1. Job list may not be updated after switching from energy save mode.

Other:
1. The Deactivate Authentication function can be used if it is necessary to unlock
   a device in an emergency situation (such as a disaster). If enabled, print jobs
   can be printed out directly without logging in to the device.
2. It is possible to enter "Display Name" when selecting "Local HDD" as the Stored
   Job Source in the Tab Name Settings in the Configuration Tool.
3. The Condition Print Setting can be configured when multiple jobs are selected
   on the device panel.

Version 2.2.3
Support:
1. Korean language can be displayed in the embedded modules of CAP
   V2/ELP-NX V2. Supported models are Model MET-C1abcde, OR-C2, and
   K-C4.

Update the Java VM to the latest version before installing this
software.

Version 2.2.2
Fixed:
1. "Display Name" items are not displayed in the Deletion Log.
2. If a PIN is set for a My Document Folder, the PIN can be set to 3
   or less digits on the My Document Folder Settings screen.
3. "Color/Black & White (at Printing)", "Quantity (at Printing)" and
   "1 Sided/2 Sided (at Printing)" items in the Deletion Log are
   displayed incorrectly when the print job is printed or deleted.
4. The My Document Folder username may not be displayed correctly on
   the operation panel.
5. If the device is switched to energy saving mode, a function such
   as "Copy" or "Scanner" is changed via ELP-NX, or the Basic
   authentication user is logged out while a user is modifying their
   Display Name by using the software keyboard, the Display Name
   will be set to blank.
6. If the language setting for the device is changed when any error
   message is displayed, the error message is not displayed.
7. The previous login username is displayed in the job list for
   ELP-NX v2 with CAP.
8. If a color print job is deleted from the message regarding color
   print privileges, an error message may be displayed.
9. My Document Folder information can be imported even though the

PIN is not 4 to 8 digits.
10. If the Thai locale is set on the device, the date is not
    displayed correctly.

Other:
1. Login Differentiator function for ELP-NX v2 without CAP has been added.

Update the Java VM to the latest version before installing this software.

Version 2.2.0
Support:
1. Support for the following 12A model has been added:
   K-C4
2. Support for Firefox ESR 10/17 and Internet Explorer 10 (desktop
   version only) has been added.
3. Support for Mac OS 10.8, Windows 8 and Windows Server 2012 as
   client OS has been added.
4. Support for UTF-8 driver has been added.

Fixed:
1. Order of the print job list may be incorrect.
2. ELP-NX v2 may fail to print if the print data is generated by PS.
3. If "Stored Job Source" is set to Remote HDD and "Display Name"
   is left blank, Hostname is not displayed in the tab on the job
   list screen.
4. Once printing has failed, ELP-NX v2 may be unable to reprint.
5. The job list screen may freeze after swiping the card (this issue
   occurs if ELP-NX v2 with CAP is used).
6. Obtaining the Deletion Log may be fail (this issue occurs if ELP-NX v2
   with CAP is used).

Other:
1. The method of updating User Information on a device can now be selected.
2. The number of records displayed in the lists in the Configuration Tool
   can now be set.
3. Digital signature for 11A or later models has been supported.
4. Condition Print is now available for models with 4.3-inch
   operation panels.
5. Models with 4.3-inch operation panels can now be set as a Remote HDD.

Update the Java VM to the latest version before installing this update.

Version 2.1.2
Support for the following 12S models has been added:
AP-P3, AL-P2

Initial release for the 4.3-inch operation panel models.

Update the Java VM to the latest version before installing this software.

```
================================================================
*** Basic Information ***
================================================================
[Create date] 2018/02/07
----------------------------------------------------------------
[Program Name] ELP NX V2_MP12  for eDC
----------------------------------------------------------------
[Version] 2.2.523
----------------------------------------------------------------
[PCB No.]
----------------------------------------------------------------
[Interchangeability] X / O
----------------------------------------------------------------
[Other Firmware Requirements] None
----------------------------------------------------------------
[PCB Requirements] None
----------------------------------------------------------------
[Software category] Normal Release
----------------------------------------------------------------
[Release category] Normal Release
----------------------------------------------------------------
[Program category] Firmware
----------------------------------------------------------------
Exported to(language) GEN(all)
[Firmware No.] D60210D7F_forEDC
[File Information]
 File Name        D60210D7F_forEDC.zip
 File Type        Module for Service
 Size            2.65 MB ( 2776547 byte )
[Availability of RFU] No
----------------------------------------------------------------
[Production reflection]
----------------------------------------------------------------


================================================================
*** Note ***
================================================================
[Note]

----------------------------------------------------------------



================================================================
*** Important Notes ***
================================================================
[Important Notes]

----------------------------------------------------------------



================================================================
*** Modification History ***
```

==
[Modifications made:]
Rank C

Fixed:
- Setting fields that contain Unicode 6.0 characters may cause the
  device to become inoperable.

[Modification history]

Version 2.2.522
Fixed:
- The hard disk's operation time was increased due to periodic hard
  disk access.

Version 2.2.520
Support:
1. Support for TLS1.2 has been added.
*The Java VM version on the device must support TLS1.2.
2. Support for SHA-2 has been added.
*The Java VM version on the device must support SHA-2.

Other:
1. Paper size is displayed for each print job.
2. The following application information can be collected via remotely:
   - Number of jobs deleted.
   - Number of times the print number changed.
   - Number of times the printing color was changed from color to
     black/white when using conditional printing, etc.
3. RSInfo has been updated.
4. The Configuration Tool requires .NET Framework 4.5 or later.

Fixed:
1. PDF jobs cannot be printed if the device does not have PS
   emulation enabled.
2. High volume print jobs (roughly 200 pages or more) cannot be printed.
3. When printing after pressing the "Check Print" button
   under "Condition Check Print", the print job will not be cleared
   from the job list.
4. When authentication is disabled, the job list order may be incorrect.
5. If a PS print job name contains more than 256 characters, the
   print job will not be spooled on the device.
6. If a system auto-reset is run on the device in the middle of
   printing or deleting a print job, the job will not be printed or deleted.
7. If a printer name in "Storable Driver Language Exception(s)"
   contains a specific 2 byte character (0x5C), the printer cannot
   be used for printing.
8. If the "Non-stored Language Handling" setting is configured as

"Print", the P1 command error may occur.
9. The Web Configuration Tool may not be able to display "General
   Settings" and "Options".
10. If the Analyze Logs are larger than 60MB, it may not be possible
    to store the last 60 days worth of Delete Logs.
11. Immediately after logging in, it may be possible to see the
    previous user's print job list.
12. If a document name contains a special character that is not
    supported by the device, the device will stall.

Version 2.2.501
Other:
Even if one user (User A) prints a large number of jobs on the device,
another user (User B) can spool jobs from client PC without having
to wait for User A's job to print. It depends on the following
firmware module. Please be sure to update it:
- Printer firmware: v2.15 or later

Version 2.2.5
Fixed:
1. If all of the following conditions are met, "91: a job reset" error will occur
   and print jobs from a Mac client cannot be printed out directly.
   - ELP-NX v2 with CAP is installed on the device.
   - Device is a 12A or later model (except for Ti-P1).
   - The job is a PS driver job.
   - Job Authentication for Non-Stored Printing in the Configuration Tool is set as
     "Entire".
2. Job list may not be updated after switching from energy save mode.

Other:
1. The Deactivate Authentication function can be used if it is necessary to unlock
   a device in an emergency situation (such as a disaster). If enabled, print jobs
   can be printed out directly without logging in to the device.
2. It is possible to enter "Display Name" when selecting "Local HDD" as the Stored
   Job Source in the Tab Name Settings in the Configuration Tool.
3. The Condition Print Setting can be configured when multiple jobs are selected
   on the device panel.

Version 2.2.3
Support:
1. Korean language can be displayed in the embedded modules of CAP
   V2/ELP-NX V2. Supported models are Model MET-C1abcde, OR-C2, and
   K-C4.
2. Support for the following 12A models has been added:
   - MET-C1yz
3. Support for the following 13A model have been added:
   - Z-C2
4. Support for Windows 8.1 and Windows Server 2012 R2 has been added.
5. Support for PictBridge has been added.

Fixed:
1. Memory leak occurs in accordance with the increase of printing jobs.
2. RPDL through printing (Storable Driver Language Exception) job causes the data-in lamp to keep blinking.
3. Error code #91 occurs when printing a job from Mac without specifying a userID, after being stored in Windows.
4. ELP-NX FS V2's delete log file does not show the correct report if the Condition Print is made with Printplus (printing interface equipped in devices).

Other:
1. In accordance with the bug fix in PrintPlus, the following specification "ELP-NX V2 does not accept the print job, even if a error code which can be continued to print is notified." is changed.
   - After the change in specification, ELP-NX V2 does not accept the print job, only when the error code that cannot be continued to print is notified.
2. The new filter for 12A or later models reduces the time to store the jobs in ELP-NX V2.

Update the Java VM to the latest version before installing this software.

Version 2.2.2
Support:
1. Support for the following 12A models has been added:
- CH-C1
- MET-C1
- OR-C2

Other:
1. Login Differentiator function for ELP-NX v2 without CAP has been added.
2. When ELP-NX (MP12) spools a print job, ELP-NX can release the print job simultaneously.
3. If PS driver is used, all ELP-NX (MP12) Condition Print Settings can be changed.

Update the Java VM to the latest version before installing this software.

```
================================================================
*** Basic Information ***
================================================================
[Create date] 2018/02/07
----------------------------------------------------------------
[Program Name] ELP NX V2_MP32  for eDC
----------------------------------------------------------------
[Version] 2.2.523
----------------------------------------------------------------
[PCB No.]
----------------------------------------------------------------
[Interchangeability] X / O
----------------------------------------------------------------
[Other Firmware Requirements] None
----------------------------------------------------------------
[PCB Requirements] None
----------------------------------------------------------------
[Software category] Normal Release
----------------------------------------------------------------
[Release category] Normal Release
----------------------------------------------------------------
[Program category] Firmware
----------------------------------------------------------------
Exported to(language) GEN(all)
[Firmware No.] D60210F7D_forEDC
[File Information]
 File Name        D60210F7D_forEDC.zip
 File Type        Module for Service
 Size          2.65 MB ( 2779489 byte )
[Availability of RFU] No
----------------------------------------------------------------
[Production reflection]
----------------------------------------------------------------


================================================================
*** Note ***
================================================================
[Note]

----------------------------------------------------------------



================================================================
*** Important Notes ***
================================================================
[Important Notes]

----------------------------------------------------------------



================================================================
*** Modification History ***
```

```
================================================================================
```
[Modifications made:]
Rank C

Fixed:
- The hard disk's operation time was increased due to periodic hard
  disk access.
- Setting fields that contain Unicode 6.0 characters may cause the
  device to become inoperable.

[Modification history]

Version 2.2.520
Support:
1. Support for TLS1.2 has been added.
 *The Java VM version on the device must support TLS1.2.
2. Support for SHA-2 has been added.
 *The Java VM version on the device must support SHA-2.

Other:
1. Paper size is displayed for each print job.
2. The following application information can be collected via
   remotely:
   - Number of jobs deleted.
   - Number of times the print number changed.
   - Number of times the printing color was changed from color to
     black/white when using conditional printing, etc.
3. RSInfo has been updated.
4. The Configuration Tool requires .NET Framework 4.5 or later.

Fixed:
1. PDF jobs cannot be printed if the device does not have PS
   emulation enabled.
2. High volume print jobs (roughly 200 pages or more) cannot be
   printed.
3. When printing after pressing the "Check Print" button
   under "Condition Check Print", the print job will not be cleared
   from the job list.
4. When authentication is disabled, the job list order may be
   incorrect.
5. If a PS print job name contains more than 256 characters, the
   print job will not be spooled on the device.
6. If a system auto-reset is run on the device in the middle of
   printing or deleting a print job, the job will not be printed or
   deleted.
7. If a printer name in "Storable Driver Language Exception
   (s)"contains a specific 2 byte character (0x5C), the printer
   cannot be used for printing.
8. If the "Non-stored Language Handling" setting is configured
   as "Print", the P1 command error may occur.
9. The Web Configuration Tool may not be able to display "General
   Settings" and "Options".

10. If the Analyze Logs are larger than 60MB, it may not be possible
    to store the last 60 days worth of Delete Logs.
11. Immediately after logging in, it may be possible to see the
    previous user's print job list.
12. If a document name contains a special character that is not
    supported by the device, the device will stall.

Version 2.2.5
Initial release.

Other:
1. The Deactivate Authentication function can be used if it is necessary to unlock
   a device in an emergency situation (such as a disaster). If enabled, print jobs
   can be printed out directly without logging in to the device.
2. It is possible to enter "Display Name" when selecting "Local HDD" as the Stored
   Job Source in the Tab Name Settings in the Configuration Tool.
3. The Condition Print Setting can be configured when multiple jobs are selected
   on the device panel.

```
================================================================
*** Basic Information ***
================================================================
[Create date] 2018/02/07
----------------------------------------------------------------
[Program Name] ELP NX V2_SP12  for eDC
----------------------------------------------------------------
[Version] 2.2.523
----------------------------------------------------------------
[PCB No.]
----------------------------------------------------------------
[Interchangeability] X / O
----------------------------------------------------------------
[Other Firmware Requirements] None
----------------------------------------------------------------
[PCB Requirements] None
----------------------------------------------------------------
[Software category] Normal Release
----------------------------------------------------------------
[Release category] Normal Release
----------------------------------------------------------------
[Program category] Firmware
----------------------------------------------------------------
Exported to(language) GEN(all)
[Firmware No.] D60210G7C_forEDC
[File Information]
 File Name        D60210G7C_forEDC.zip
 File Type        Module for Service
 Size            2.50 MB ( 2625866 byte )
[Availability of RFU] No
----------------------------------------------------------------
[Production reflection]
----------------------------------------------------------------


================================================================
*** Note ***
================================================================
[Note]

----------------------------------------------------------------



================================================================
*** Important Notes ***
================================================================
[Important Notes]

----------------------------------------------------------------



================================================================
*** Modification History ***
```

==

[Modifications made:]
Rank C

Fixed:
- The hard disk's operation time was increased due to periodic hard
  disk access.

[Modification history]

Version 2.2.520
Support:
1. Support for TLS1.2 has been added.
*The Java VM version on the device must support TLS1.2.
2. Support for SHA-2 has been added.
*The Java VM version on the device must support SHA-2.

Other:
1. Paper size is displayed for each print job.
2. The following application information can be collected via remotely:
   - Number of jobs deleted.
   - Number of times the print number changed
   - Number of times the printing color was changed from color to
     black/white when using conditional printing, etc.
3. RSInfo has been updated.
4. The Configuration Tool requires .NET Framework 4.5 or later.

Fixed:
1. PDF jobs cannot be printed if the device does not have PS
   emulation enabled.
2. High volume print jobs (roughly 200 pages or more) cannot be printed.
3. When printing after pressing the "Check Print" button under
   "Condition Check Print", the print job will not be cleared from
   the job list.
4. When authentication is disabled, the job list order may be incorrect.
5. If a PS print job name contains more than 256 characters, the
   print job will not be spooled on the device.
6. If a system auto-reset is run on the device in the middle of
   printing or deleting a print job, the job will not be printed or deleted.
7. If a printer name in "Storable Driver Language Exception(s)"
   contains a specific 2 byte character (0x5C), the printer cannot
   be used for printing.
8. If the "Non-stored Language Handling" setting is configured as
   "Print", the P1 command error may occur.
9. The Web Configuration Tool may not be able to display "General
   Settings" and "Options".
10. If the Analyze Logs are larger than 60MB, it may not be possible
    to store the last 60 days worth of Delete Logs.
11. Immediately after logging in, it may be possible to see the
    previous user's print job list.

12. If a document name contains a special character that is not
    supported by the device, the device will stall.

Version 2.2.5
Fixed:
1. If all of the following conditions are met, "91: a job reset" error will occur
   and print jobs from a Mac client cannot be printed out directly.
   - ELP-NX v2 with CAP is installed on the device.
   - Device is a 12A or later model (except for Ti-P1).
   - The job is a PS driver job.
   - Job Authentication for Non-Stored Printing in the Configuration Tool is set as
     "Entire".
2. Job list may not be updated after switching from energy save mode.

Other:
1. The Deactivate Authentication function can be used if it is necessary to unlock
   a device in an emergency situation (such as a disaster). If enabled, print jobs
   can be printed out directly without logging in to the device.

Version 2.2.3
Initial release.

Support:
Support for the following model has been added:
- Gim-P1

Fixed:
1. Memory leak occurs in accordance with the increase of printing jobs.
2. RPDL through printing (Storable Driver Language Exception) job
   causes the data-in lamp to keep blinking.
3. Error code #91 occurs when printing a job from Mac without
   specifying a userID, after being stored in Windows.
4. ELP-NX FS V2's delete log file does not show the correct report
   if the Condition Print is made with Printplus (printing interface
   equipped in devices).

Other:
1. In accordance with the bug fix in PrintPlus (printing interface
   equipped in devices), the following specification "ELP-NX V2 does
   not accept the print job, even if an error code which can be
   continued to print is notified." is changed.
   - After the change in specification, ELP-NX V2 does not accept
     the print job, only when the error code that cannot be
     continued to print is notified.
2. When ELP-NX V2 (SP12) spools a print job, ELP-NX V2 can release
   the print job simultaneously.
3. The new filter for 12A or later models reduces the time to store
   the jobs in ELP-NX V2.

==
===

*** Basic Information ***

==
===

[Create date] 2019/04/25

[Program Name] ELP NX V2_F12 for eDC

[Version] 1.5.101

[PCB No.]

[Interchangeability] X / O

[Other Firmware Requirements] None

[PCB Requirements] None

[Software category] Normal Release

[Release category] Normal Release

[Program category] Firmware

Exported to(language) GEN(all)

[Firmware No.] D60210N7B_forEDC

transit to print job list screen.

- When the new values are set via the Configuration Tool after

  having initialized HDD, the values are not reflected on the

  device.

- If paper runs out while printing a large job, ELP downs after

  refilling papers, then the screen transits to Home.

- Unused port's number is printed to the port number on "setting

  print".

- The device fails to import the certificate from the Configuration

  Tool

- ":" is not included in timezone of "Deletion log".

- "Layout" information of "Deletion log" are recorded as "Other".

- Job's color information is not correctly displayed when the user

  scrolls down the job list.

- It fails to store specific PS data.

- By sending a large number of jobs, storing jobs fails and LED

  keeps blinking.

- By creating "My Document Folder" via the Configuration Tool, the

  last update date becomes "1970/01/01".

Other:

- Two PJL, "RPGL" and "GL2", were added to Storable Driver Language(s).

- Increased the number of setting items for " Storable Driver

  Language Exception(s)"

- A specified user's job can be viewed/printed out while Card

  Authentication Package v2 is installed on the same device.

Version 1.5.000

Rank C

Supported:

- Support for the following models has been added:

  - Metis-MF3

  - Chimay-MF1

Fixed:

- When "Print Confirmation Dialog" is set to "Do not Display"

  or "Default Job selection" to "All", classification code may not

  be recorded to job log even though the code is set before printing

  (ELP NX with CAP v2).

- When PS driver sends a print job whose name is started with "<"

  or "(" , the job name in job list is garbled.

Other:

- Thumbnail images of print jobs' first pages are displayed for

  print job list.

- Performance to display the stored jobs in the device is improved.

===
*** Basic Information ***
===
[Create date] 2018/05/07

[Program Name] CAP-ES V2 for RE

[Version] 2.5.000.0

[PCB No.]

[Interchangeability] X / O

[Other Firmware Requirements] None

[PCB Requirements] None

[Software category] Normal Release

[Release category] Normal Release

[Program category] Others

Exported to(language) EUR(en)
[Firmware No.] D592-0001P
[File Information]
 File Name   D592-0001P.exe
 File Type   Module for Service
 Size   812.08 MB (851525383 byte)
 Check Sum -8Bit Sum: EFC2
        -16Bit Sum(Little Endian): D089
        -16Bit Sum(Big Endian): E139
[Availability of RFU] No

[Production reflection]

===
*** Note ***
===
[Note]

===
*** Important Notes ***
===
[Important Notes]

----

6. If "Application Name" the Launcher Settings contains a ","
   (comma), an exception error will occur. This error occurs if
   Firefox is registered as "Application Name" in Launcher
   Settings.

Other:
1. Can now set whether to permit a manual log in for users who do
   not have a card.
2. Proxy User settings can now be configured for each domain.
3. Limitations for utilizing the remote fax function of a device
   have been relaxed.
4. The method of updating User Information on a device can now be
   selected.
5. The number of User Information records displayed in the User
   Information List can now be set.
6. The digital signature for 11A or later models is now supported.
7. Default User Permissions can now be imported/exported.

Update the Java VM to the latest version before installing this update.

Version 2.1.1
Support for the following 12S models has been added:
AP-P3, AL-P2

Initial release for the 4.3-inch operation panel models.

Update the Java VM to the latest version before installing this software.

```
================================================================
*** Modification History ***
================================================================
[Modifications made:]
Rank C

Fixed:
- If "Custom" is set to "Zoom" configuration of IE, "User property" of the
  Administrator Tool is not displayed.
- Duplicated "Cleaner.bat" logs may be recorded to Windows event log.
- The error message for job cancellation is displayed. Authentication fails if
  synchronization functions are being processed, or when CSV is being imported.
- AD/LDAP authentication fails if there are users with the same name and group,
  but in different organizations.
- After changing the Database Connection password and name via the Database Management
  Tool, the "ok" button will be disabled if the user undoes the Database Name change.
- Enterprise Server Module for CAP V1 Users will fail to install while SQL Server
  is installed in Windows Server 2016.
- The error code "E0210001" is displayed during Kerberos authentication if the
  password is incorrect.
- The User Information Acquisition Test fails if "<"or">" is included in the
  user information of  the Active Directory.
- The User Information Acquisition Test fails if "." or ";" is included in the
  group name of The Active Directory.
- An existing instance name can be entered during the SQL Server installation
  packaged with the Card Authentication Package Enterprise Server installer.
- Authentication may fail while importing a Integrated Information CSV file.
- Part of logs may be missing.
- Regarding card information registered to the Active Directory, synchronization
  will fail if user information that is linked to the card has been changed after
  the previous Synchronization.
- The synchronization process is slow while the billing code and user are linked
  via Administrator Tool.

Other:
- Changed the authentication specification for when multiple Active Directories
  have a user with the same name.
- TLS 1.2 / 1.1 / 1.0 can be enabled/disabled via the Administrator Tool.
- The signature algorithm of Server certificate can be confirmed via the
  Administrator Tool.
- The latest version of the Administrator Tool can be displayed by clicking the
  "reload" button after installation.
- JRE is upgraded to v1.8.0.151.
- Changed the error message that is displayed when AD (LDAP) authentication is
  conducted by the user unregistered in Active Directory.
- Enabled/Disabled Encryption Strength for SSL communication can be configured
  via the Administrator Tool.
- Jetty is upgraded to v9.3.19.
- SQL Server 2016 Express is packaged to the installer.
- .Net Framework 4.6 is packaged to the installer.


-------------------------------------------------------------------------
```

[Modification history]

Version 2.4.100.0
Fixed:
- The user associated billing code information may be deleted by
  task synchronization.
- User associated billing code information (.csv file) that has
  empty domain names cannot be imported.

Version 2.4.000.0
Support:
- Windows Server 2016 is supported.
- SQL Server 2016 is supported.
- Windows Server 2003/2003 R2/Windows 8 are excluded as support
  environments.

Fixed:
- Update installation from v2.3 to v2.3.100 may fail.
- Offline deactivation may fail.
- When adding a group to the Group Authorization Information List
  via the Administrative Tool, [Color Copy Mode Limitation] may not
  be displayed correctly.
- The error message may not be displayed correctly when
  adding/editing a card ID with many characters.
- Duplicated or deleted cards and errors related to them may not be
  displayed correctly.

Other:
- Billing codes can be obtained from a user attribute.
- Activation method has been changed from server license to client
  access license (CAL).
- A fix for the Apache Commons FileUpload (ACF) vulnerability has
  been added.

Version V2.3.100.0
Support:
1. Support for TLS1.2 has been added.
 *The Java VM version on the device must support TLS1.2.
2. Support for SHA-2 has been added.
 *The Java VM version on the device must support SHA-2.

Fixed:
1. When editing a card ID from lowercase characters to capital
   characters, the edited ID will be deleted after saving the data.
2. Administrator privileges are assigned to users irregularly after
   task synchronization is performed.
3. When trying to newly add an external user who belongs to an
   external group to an internal group via a CSV file import, the
   user will be deleted from the external group.
4. An authentication error will occur and no error will be recorded

in CAP-ES when Task synchronization, CSV import, and Delete All Users are executed at the same time and a user tries to authenticate.

Other:
1. RSInfo has been updated.
2. A fix for the Apache Commons Collection (ACC) vulnerability has been added.

Version V2.3.000.0
Supported:
1. Support for Fire Fox ESR 38 has been added.

Fix:
1. In SSL environment, CAP-ES may not be synchronized to external authentication server.
2. If synchronization to external authentication server is performed without proxy user, Jetty may be down and the synchronization fails.
3. When LDAP authentication is performed, E00001 or E03002 error may occur.

Other:
1. Billing Code can be registered to CAP-ES.
2. CAP-ES database can be synchronized between primary and secondary server.
3. Activation site has been changed from GMP server to eDC-i server.
4. RSInfo has been updated.
5. Java version has been updated to 8.

Version 2.2.7.0
Fixed:
1. The built-in user (admin/service) can be registered as a normal user.
2. If a login user name is searched for by using capital letters, the user will not be found in the case that "Convert to Lower Case" is specified in the Login User Name settings under Registration Method in Default Settings.
3. If authentication or synchronization is performed after modifying capital/lowercase letters in the registered user's domain name, 2 users will be registered that only differ by their domain names having capital or lowercase letters. This will cause an authentication error to occur.
4. An internal user's Identification Name can be changed by modifying and importing a Group Authorization Information .csv file.
5. After a user who belongs to an external group is registered in CAP-ES and overwrite importing is performed using an Integrated Information .csv file that does not contain the user, no name group will be registered to the user.
6. When importing an Integrated Information .csv file, the information log will be incomplete.

7. The message "Enterprise Server Module for CAP V1 Users is to be installed later" will be displayed when confirming whether "Enterprise Server Module for CAP V1 Users" is installed when installing CAP-ES v2.
8. Even if a group is deleted from CAP-ES, the Group Authorization Information List for the group will not be deleted.
9. If an Integrated Information group name is 64 characters or more, the .csv file cannot be imported.
10. The CPU usage for the CAP-ES service may become 100% because of Apache Commons File Upload library instability.
(http://mail-archives.us.apache.org/mod_mbox/www-announce/201402.mbox/%3C52F373FC.9030907@apache.org%3E).
11. If the Account Lock Threshold value set in Active Directory is the same (or less) than the domain controller number specified in the Server Settings and Active Directory (LDAP) is specified as the authentication type, an account lock will occur if the input user's password is incorrect.
12. There is a possibility that SSL 3.0 with a CBC cipher may be decrypted by using a padding-oracle attack.
(https://cve.mitre.org/cgi-bin/cvename.cgi?name=CVE-2014-3566)
13. If multiple domains are specified for "Domain Name" in the Server Settings and Active Directory (LDAP) is specified as the authentication type, an authentication error may occur.

Other:
1. CAP-ES outputs the following logs into the Windows Application Event log:
   - The results of operating a .bat file.
   - When an error occurs.
2. Delete all user information in the CAP-ES database at one time by using "UserAllDelete.bat".
3. The Card ID can be searched for via the User Display Name.
4. A message for confirming if the database is on an internal or external server will be displayed when upgrading. In the case that the database is internal, the database will be updated automatically during the CAP-ES version-up flow. In the case that the database is external, perform the "Create Database" procedure on the external server separately.
5. An attribute on an external authentication server that has multiple values can be specified in "Attribute Name Settings" for card IDs. Up to 10 values (card IDs) are supported.
6. Failover Clustering for Windows Server 2012/2012 R2 is supported.
7. The AES 128/256-bit encryption method can be used for Kerberos Authentication.
8. "SQL Server Name", "Database Instance Name", and "Database Name" can be changed via the Database Management Tool.

==
*** Basic Information ***
==
[Create date] 2018/05/07

[Program Name] CAP-ES V2 for RAC

[Version] 2.5.000.0

[PCB No.]

[Interchangeability] X / O

[Other Firmware Requirements] None

[PCB Requirements] None

[Software category] Normal Release

[Release category] Normal Release

[Program category] Others

Exported to(language) USA(en)
[Firmware No.] D592-0011P
[File Information]
 File Name   D592-0011P.exe
 File Type   Module for Service
 Size   812.08 MB (851527072 byte)
 Check Sum -8Bit Sum: D12E
         -16Bit Sum(Little Endian): 5395
         -16Bit Sum(Big Endian): AB99
[Availability of RFU] No

[Production reflection]

==
*** Note ***
==
[Note]

==
*** Important Notes ***
==
[Important Notes]

```
===============================================================================
```
*** Modification History ***
```
===============================================================================
```
[Modifications made:]
Rank C

Fixed:
- If "Custom" is set to "Zoom" configuration of IE, "User property" of the
  Administrator Tool is not displayed.
- Duplicated "Cleaner.bat" logs may be recorded to Windows event log.
- The error message for job cancellation is displayed. Authentication fails if
  synchronization functions are being processed, or when CSV is being imported.
- AD/LDAP authentication fails if there are users with the same name and group,
  but in different organizations.
- After changing the Database Connection password and name via the Database Management
  Tool, the "ok" button will be disabled if the user undoes the Database Name change.
- Enterprise Server Module for CAP V1 Users will fail to install while SQL Server
  is installed in Windows Server 2016.
- The error code "E0210001" is displayed during Kerberos authentication if the
  password is incorrect.
- The User Information Acquisition Test fails if "<"or">" is included in the
  user information of the Active Directory.
- The User Information Acquisition Test fails if "." or ";" is included in the
  group name of The Active Directory.
- An existing instance name can be entered during the SQL Server installation
  packaged with the Card Authentication Package Enterprise Server installer.
- Authentication may fail while importing a Integrated Information CSV file.
- Part of logs may be missing.
- Regarding card information registered to the Active Directory, synchronization
  will fail if user information that is linked to the card has been changed after
  the previous Synchronization.
- The synchronization process is slow while the billing code and user are linked
  via Administrator Tool.

Other:
- Changed the authentication specification for when multiple Active Directories
  have a user with the same name.
- TLS 1.2 / 1.1 / 1.0 can be enabled/disabled via the Administrator Tool.
- The signature algorithm of Server certificate can be confirmed via the
  Administrator Tool.
- The latest version of the Administrator Tool can be displayed by clicking the
  "reload" button after installation.
- JRE is upgraded to v1.8.0.151.
- Changed the error message that is displayed when AD (LDAP) authentication is
  conducted by the user unregistered in Active Directory.
- Enabled/Disabled Encryption Strength for SSL communication can be configured
  via the Administrator Tool.
- Jetty is upgraded to v9.3.19.
- SQL Server 2016 Express is packaged to the installer.
- .Net Framework 4.6 is packaged to the installer.


```
----------------------------------------------------------------------
```

[Modification history]

Version 2.4.100.0
Fixed:
- The user associated billing code information may be deleted by
  task synchronization.
- User associated billing code information (.csv file) that has
  empty domain names cannot be imported.

Version 2.4.000.0
Support:
- Windows Server 2016 is supported.
- SQL Server 2016 is supported.
- Windows Server 2003/2003 R2/Windows 8 are excluded as support
  environments.

Fixed:
- Update installation from v2.3 to v2.3.100 may fail.
- Offline deactivation may fail.
- When adding a group to the Group Authorization Information List
  via the Administrative Tool, [Color Copy Mode Limitation] may not
  be displayed correctly.
- The error message may not be displayed correctly when
  adding/editing a card ID with many characters.
- Duplicated or deleted cards and errors related to them may not be
  displayed correctly.

Other:
- Billing codes can be obtained from a user attribute.
- Activation method has been changed from server license to client
  access license (CAL).
- A fix for the Apache Commons FileUpload (ACF) vulnerability has
  been added.

Version V2.3.100.0
Support:
1. Support for TLS1.2 has been added.
 *The Java VM version on the device must support TLS1.2.
2. Support for SHA-2 has been added.
 *The Java VM version on the device must support SHA-2.

Fixed:
1. When editing a card ID from lowercase characters to capital
   characters, the edited ID will be deleted after saving the data.
2. Administrator privileges are assigned to users irregularly after
   task synchronization is performed.
3. When trying to newly add an external user who belongs to an
   external group to an internal group via a CSV file import, the
   user will be deleted from the external group.
4. An authentication error will occur and no error will be recorded

in CAP-ES when Task synchronization, CSV import, and Delete All
Users are executed at the same time and a user tries to
authenticate.

Other:
1. RSInfo has been updated.
2. A fix for the Apache Commons Collection (ACC) vulnerability has
   been added.

Version V2.3.000.0
Supported:
1. Support for Fire Fox ESR 38 has been added.

Fix:
1. In SSL environment, CAP-ES may not be synchronized to external
   authentication server.
2. If synchronization to external authentication server is performed
   without proxy user, Jetty may be down and the synchronization
   fails.
3. When LDAP authentication is performed, E00001 or E03002 error may
   occur.

Other:
1. Billing Code can be registered to CAP-ES.
2. CAP-ES database can be synchronized between primary and secondary
   server.
3. Activation site has been changed from GMP server to eDC-i server.
4. RSInfo has been updated.
5. Java version has been updated to 8.

Version 2.2.7.0
Fixed:
1. The built-in user (admin/service) can be registered as a normal user.
2. If a login user name is searched for by using capital letters,
   the user will not be found in the case that "Convert to Lower
   Case" is specified in the Login User Name settings under
   Registration Method in Default Settings.
3. If authentication or synchronization is performed after modifying
   capital/lowercase letters in the registered user's domain name,
   2 users will be registered that only differ by their domain names
   having capital or lowercase letters. This will cause an
   authentication error to occur.
4. An internal user's Identification Name can be changed by
   modifying and importing a Group Authorization Information .csv file.
5. After a user who belongs to an external group is registered in
   CAP-ES and overwrite importing is performed using an Integrated
   Information .csv file that does not contain the user, no name
   group will be registered to the user.
6. When importing an Integrated Information .csv file, the
   information log will be incomplete.

7. The message "Enterprise Server Module for CAP V1 Users is to be
   installed later" will be displayed when confirming
   whether "Enterprise Server Module for CAP V1 Users" is installed
   when installing CAP-ES v2.
8. Even if a group is deleted from CAP-ES, the Group Authorization
   Information List for the group will not be deleted.
9. If an Integrated Information group name is 64 characters or more,
   the .csv file cannot be imported.
10. The CPU usage for the CAP-ES service may become 100% because of
    Apache Commons File Upload library instability.
(http://mail-archives.us.apache.org/mod_mbox/www-
announce/201402.mbox/%3C52F373FC.9030907@apache.org%3E).
11. If the Account Lock Threshold value set in Active Directory is
    the same (or less) than the domain controller number specified
    in the Server Settings and Active Directory (LDAP) is specified
    as the authentication type, an account lock will occur if the
    input user's password is incorrect.
12. There is a possibility that SSL 3.0 with a CBC cipher may be
    decrypted by using a padding-oracle attack.
(https://cve.mitre.org/cgi-bin/cvename.cgi?name=CVE-2014-3566)
13. If multiple domains are specified for "Domain Name" in the
    Server Settings and Active Directory (LDAP) is specified as the
    authentication type, an authentication error may occur.

Other:
1. CAP-ES outputs the following logs into the Windows Application Event log:
- The results of operating a .bat file.
- When an error occurs.
2. Delete all user information in the CAP-ES database at one time by
   using "UserAllDelete.bat".
3. The Card ID can be searched for via the User Display Name.
4. A message for confirming if the database is on an internal or
   external server will be displayed when upgrading. In the case
   that the database is internal, the database will be updated
   automatically during the CAP-ES version-up flow. In the case that
   the database is external, perform the "Create Database" procedure
   on the external server separately.
5. An attribute on an external authentication server that has
   multiple values can be specified in "Attribute Name Settings" for
   card IDs. Up to 10 values (card IDs) are supported.
6. Failover Clustering for Windows Server 2012/2012 R2 is supported.
7. The AES 128/256-bit encryption method can be used for Kerberos
   Authentication.
8. "SQL Server Name", "Database Instance Name", and "Database Name"
   can be changed via the Database Management Tool.

```
================================================================
*** Basic Information ***
================================================================
[Create date] 2019/04/25
----------------------------------------------------------------
[Program Name] CAP V2_Z11 for eDC
----------------------------------------------------------------
[Version] 2.4.601
----------------------------------------------------------------
[PCB No.]
----------------------------------------------------------------
[Interchangeability] X / O
----------------------------------------------------------------
[Other Firmware Requirements] None
----------------------------------------------------------------
[PCB Requirements] None
----------------------------------------------------------------
[Software category] Normal Release
----------------------------------------------------------------
[Release category] Normal Release
----------------------------------------------------------------
[Program category] Firmware
----------------------------------------------------------------
Exported to(language) GEN(all)
[Firmware No.] D60210H6M_forEDC
[File Information]
 File Name        D60210H6M_forEDC.zip
 File Type        Module for Service
 Size            3.21 MB ( 3366845 byte )
[Availability of RFU] No
----------------------------------------------------------------
[Production reflection]
----------------------------------------------------------------


================================================================
*** Note ***
================================================================
[Note]

----------------------------------------------------------------



================================================================
*** Important Notes ***
================================================================
[Important Notes]

----------------------------------------------------------------



================================================================
*** Modification History ***
================================================================
[Modifications made:]
Rank C
```

Fixed:
- Authentication information may not be updated by scanning from
  TWAIN driver.
- Selected Billing Code may not be recorded to the joblog.
- If "Display name" of "My document folder" name or "Label name" is
  in Unicode6.0, ELP-NX goes down.
  Affected models:
  - RICOH MP C2503Z/3003Z/3503Z/4503Z/5503Z/6003Z
  - RICOH MP 3554Z/5054Z
- Scrolling function does not work in Index screen of ELP-NX if ELP-NX
  (v1.4.500) is installed in following models..
  Affected models:
  - RICOH MP C2503Z/3003Z/3503Z/4503Z/5503Z/6003Z
  - RICOH MP 3554Z/5054Z

[Modification history]

Version 2.4.500
Rank C

Fixed:
- Keyboard-emulating Reader is sometimes not recognized.
- Card login is not possible with an IC card formatted with NDEF
  (NFC Data Exchange Format).
- If Unicode 6.0 characters are included in a user registered in Card Authentication
  Package v2, user information cannot be correctly obtained via the Configuration Tool.
- Authentication device information for NFC Compliant Reader (Standard) displays
  as "Unknown" while using the Web Configuration Tool.

Other:
- The firmware version of the NFC Card Reader can be confirmed via the Configuration Tool.
- When using the application dependent user authentication function on a 10.1 inch
  Smart Operation Panel, the authentication window on the home screen can be hidden.

Version 2.4.100
Support:
- Support for the following 15S model has been added:
  - Met-C2.1

Fixed:
- Issues related to [u:ma]. ([u:ma] an NFC card reader used in
  Japan.)
- When a user swipes a card just before a device switches to energy
  save mode, the authentication function may become deactivated,
  allowing the user to access the device without authenticating.
- When a card reader is set to read blocks in the 32nd sector or
  after on a Mifare4K card, card authentication will fail.
- When a user who is related to some billing codes logs in to a
  device, the billing code selection screen may not be displayed and
  the user may log in to the device without a billing code.

Other:
- The message that is displayed on the device panel during auto card

registration has been changed.
- Compatibility feature for the Configuration Tool
Configuration Tool v2.4.100 can manage not only v2.4 embedded
applications on the device but also v2.3.x/v2.2.x.

Version 2.4.000
Support:
Support for the following models has been added:
- MET-C2z
- CH-C2 Office
- CH-C2 Pro (Only Smart Operation Panel option mounted device)
- Cor-C1.5
- GR-C3

Fixed:
- When user information on a card is changed, the change may not be
  reflected.
- When a user is deleted from the Configuration Tool while the user
  is logging in to a device, all the attributes for the user will
  become empty.
- When importing setting files to the Configuration Tool, if a user
  specifies files to all items on the [Import] screen and executes
  the import, the tool will unintentionally end and the import will
  fail.
- Double-byte characters can be registered to the "Fax Destination"
  user information.
- When the "Email Address" user information is changed, the change
  may not be reflected.
- Billing code search results may not be displayed correctly on the
  device panel.
- When a user logs in to a device, and selects a billing code from
  the search results, an incorrect billing code may be set.
- When importing a device settings file acquired from a Standard
  Operation Panel device via the Web Configuration tool to a
  Standard Operation Panel device, users will not be able to log in
  to the device.
- After importing a settings file into the Configuration Tool, the
  [Apply] button may not be selectable.

Other:
- A function for customizing a device's Login Screen Display has
  been added.
- Billing codes can be obtained from a user attribute.
- Activation method has been changed from server license to client
  access license (CAL).
- The device panel screen flow for auto card registration has been
  changed.

Version 2.3.103
Fixed:
The hard disk's operation time was increased due to periodic hard
disk access.

Version 2.3.101
Fixed:
After the auto-logout function logs a user out of the device, the
login screen will not be displayed.

Version 2.3.100
Support:
1. Support for TLS1.2 has been added.
*The Java VM version on the device must support TLS1.2.
2. Support for SHA-2 has been added.
*The Java VM version on the device must support SHA-2.
3. Support for the following 16S model has been added:
   - Gim-MF1.5dM

Other:
1. Paper size is displayed for each print job.
2. Support for Felica security in NFC card readers has been added.
3. The color of the job list's scroll bar on the operation panel has
   been changed from gray to blue.
4. In the case of a login failure, the application name will be shown
   in the displayed error message.
5. The Configuration Tool requires .NET Framework 4.5 or later.

Fixed:
1. If a device's language is set as Italian or French and more than
   10000 billing codes are displayed, the displayed numbers are
   divided into 2 lines.
2. If AD's IP address is configured on an LP without SOP, the device
   will not be able to use Kerberos authentication.

Version 2.3.000
Supported:
1. Support for the following 15S model has been added:
   - Lef-C1, Brz-MF1
2. Support for the following 16S model has been added:
   - MT-C6

Version 2.3.000
Supported:
1. Support for the following 15S model has been added:
   - MET-C2
2. Support for a NFC card reader has been added.
3. Support for Firefox ESR 38 has been added.

Fix:
1. CAP may not be able to connect to the CAP-ES secondary server.
2. In the case of using a key-stroke reader, the card reader may not
   respond.
3. In the case of the following conditions, card authentication will
   fail when the user information (user name and password input

screen) is displayed for "Change Order" or "Del. Resv." from
the "Check Status" button.
  - Authentication Type: Active Directory or LDAP Server
  - Card Login Method: Do not Enter Password

Other:
1. Billing Code function has been added.
2. The "Deactivate Authentication" function can be used if it is
   necessary to unlock a device in an emergency situation (such as a
   disaster).

Version 2.2.601
Fixed:
- After recovering energy save mode, the user who logged into the
  device before switching energy save mode logs in automatically.
  The issue is also fixed with System/Copy Ver1.06 (D1965400H).
  Please update either System/Copy firmware (v1.06 or later) or CAP
  v2.2.601.

Version 2.2.600
Support:
Support for the following 15S model (Hybrid mode) has been added:
- GR-C2

Other:
1. In the case that 2 CAP-ES v2 servers are specified in "Server
   Name" in the Configuration Tool, if CAP v2 connects the secondary
   server because the primary server is unavailable, CAP will
   reconnect to the primary server not only when the device is
   restarted or reconfigured via the Configuration Tool but also
   when Scheduled Processing is performed.
2. An attribute on an external authentication server that has
   multiple values can be specified in "Attribute Name Settings"
   for card IDs in the Configuration Tool. Up to 10 values (card
   IDs) are supported.

Version 2.2.5
Support:
Support for the following 14S Smart Operation Panel model (Hybrid mode)
has been added:
- Cor-C1 c, d, e, f, g, h

Fixed:
1. Authentication may fail if a user attempts to log in to the
   device with his or her card when the device is in energy save mode.
2. An authentication error or auto card registration screen may not
   be displayed if a user swipes a disabled or unregistered card
   when the device is in energy save mode.

Version 2.2.4
Initial Release.

Support:
The following Smart Operation Panel models are supported.
- Met-C1 abcdeyz

Fixed:
1. In the case of Smart Operation Panel, CAP cannot work with MFP
   Browser.
2. In the case of setting 2 CAP-ES v2 servers, if the primary CAP-ES
   v2 server is down, CAP v2 may not authenticate to the secondary
   CAP-ES v2 server.

Other:
1. Smart Operation Panel UI is supported.
2. In Smart Operation Panel model (Hybrid mode), both auto card
   registration and the default application setting after login can
   be used in conjunction (this is a limitation for Smart Operation
   Panel model (Compatibility mode).)

```
================================================================
*** Basic Information ***
================================================================
[Create date] 2019/04/25
----------------------------------------------------------------
[Program Name] ELP NX V2_Z12 for eDC
----------------------------------------------------------------
[Version] 2.4.600
----------------------------------------------------------------
[PCB No.]
----------------------------------------------------------------
[Interchangeability] X / O
----------------------------------------------------------------
[Other Firmware Requirements] None
----------------------------------------------------------------
[PCB Requirements] None
----------------------------------------------------------------
[Software category] Normal Release
----------------------------------------------------------------
[Release category] Normal Release
----------------------------------------------------------------
[Program category] Firmware
----------------------------------------------------------------
Exported to(language) GEN(all)
[Firmware No.] D60210I7M_forEDC
[File Information]
 File Name        D60210I7M_forEDC.zip
 File Type        Module for Service
 Size          3.51 MB ( 3684648 byte )
[Availability of RFU] No
----------------------------------------------------------------
[Production reflection]
----------------------------------------------------------------


================================================================
*** Note ***
================================================================
[Note]

----------------------------------------------------------------



================================================================
*** Important Notes ***
================================================================
[Important Notes]

----------------------------------------------------------------



================================================================
*** Modification History ***
================================================================
[Modifications made:]
Rank C
```

Fixed:
- If "Display name" of "My document folder" name or "Label name" is
  in Unicode6.0, ELP-NX goes down.
  Affected models:
  - RICOH MP C2503Z/3003Z/3503Z/4503Z/5503Z/6003Z
  - RICOH MP 3554Z/5054Z

- Scrolling function does not work in Index screen of ELP-NX if ELP-NX
  (v1.4.500) is installed in following models.
  Affected models:
  - RICOH MP C2503Z/3003Z/3503Z/4503Z/5503Z/6003Z
  - RICOH MP 3554Z/5054Z

[Modification history]

Version 2.4.501
Rank C

Fixed:
- Regarding "ELP with CAP", if the language settings are changed
  during "Deactive Authentication" mode, "Deactive Authentication"
  mode will become unavailable.
- Error code "SC997" may occur after sending a large-sized document.
- Depending on the status of the MFD, stored documents may not be
  deleted after printing.

Version 2.4.500
Rank C

Fixed:
- Job names on the operation panel are in garbled text.
- While the "Printing, Please Wait...." dialog is displayed on the operation panel,
  further operation is not possible.
- If a duplicated IP address is registered to the Remote Device Connection via
  the Configuration Tool, the ELP-NX application does not start.
- The ELP-NX application stops if the My Document Folder is opened while it contains
  a document that was retrieved from MacOS/Linux and includes a name consisting of
  256 or more characters.
- Cannot print a job sent from RICOH Smart Device Connector to the Enhanced Locked
  Print NX FlexRelease Server.
- ELP-NX sometimes fails to obtain print jobs if multiple connections are configured
  for "Remote Device Connections".

Other:
- Two PJL, "RPGL" and "GL2", were added to Storable Driver Language(s).
- Job Storage Limit (per User) is increased to 500 jobs.
- SSL communication with a device connected remotely is possible while using
  "Remote Device Connections".
- When printing a job with Color Print and/or 1 Sided Print settings, the Print
  Economizing Dialog box is displayed so that job settings can be changed to
  Black and White Print and/or 2 Sided Print.
- Not Printed and Printed jobs can be displayed separately.
- Increased the number of setting items for " Storable Driver Language Exception(s)".

- A specified user's job can be viewed/printed out while Card Authentication Package v2 is installed on the same device.

Version 2.4.100
Support:
- Support for the following 15S model has been added:
  - Met-C2.1

Fixed:
- When logging in to a device with a card, the device may take time to recover from energy save mode and display the print job list
- If a device's "Authentication priority mode" setting is set as ON, the hard disk's operation time will increased due to the periodic hard disk access for log writing.

Other:
- Compatibility feature for the Configuration Tool
Configuration Tool v2.4.100 can manage not only v2.4 embedded applications on the device but also v2.3.x/v2.2.x.

Version 2.4.000
Support:
Support for the following models has been added:
- MET-C2z
- CH-C2 Office
- CH-C2 Pro (Only Smart Operation Panel option mounted device)
- Cor-C1.5
- GR-C3

Fixed:
- When printing on a two-color printing device, changing the printing condition from two colors to monochrome is not applied and the job is printed in two colors.
- When importing setting files to the Configuration Tool, if a user specifies files to all items on the [Import] screen and executes the import, the tool will unintentionally end and the import will fail.
- Up and down keys may not work correctly on the Configuration Tool's "Job Management" screen.
- After importing a settings file into the Configuration Tool, the [Apply] button may not be selectable.

Other:
- The maximum number of connectable devices in server-less environments has been removed.
- Activation method has been changed from server license to client access license (CAL).

Version 2.3.103
Fixed:

1. When [User's Own Customization] is permitted on a device, the On-demand Print application may not be able to start correctly after the device returns from energy saving mode.
2. When printing print data that contains user information that is 9 bytes or more in size while using user code authentication with ELP-NX, a message ("Printing, Please wait...") will remain on the device screen and the job will not be printed.
3. The hard disk's operation time was increased due to periodic hard disk access.
4. When using serverless LF on a Smart Operation Panel Model device, the device will enter a high load state when obtaining the print job list, causing the on-demand print screen to occasionally freeze.

Version 2.3.101
Other:
1. When CAP authentication is activated, it is possible for a user to log out while the device is obtaining the print job list.

Fixed:
1. A user may be able to log out of the device despite being in the process of printing.
2. When a user logs in to a device, they may be able to see the previous user's print job list.
3. When a print job is spooled on the device, an error may occur and the user will not be able to spool or print additional jobs.
4. If the device enters a high load state while printing, the job's end processing will fail and additional jobs will not be able to be spooled until the device is restarted.
5. If a user double-taps the [Print] button on the print job list screen, a message will be displayed ("Printing, Please wait...") and will remain until after the user logs out of the device.
6. After the auto-logout function logs a user out of the device, the login screen will not be displayed.

Version 2.3.100
Support:
1. Support for TLS1.2 has been added.
*The Java VM version on the device must support TLS1.2.
2. Support for SHA-2 has been added.
*The Java VM version on the device must support SHA-2.
3. Support for the following 16S model has been added:
   - Gim-MF1.5dM

Other:
1. Paper size is displayed for each print job.
2. The following application information can be collected via remotely:
- Number of jobs deleted.
- Number of times the print number changed.
- Number of times the printing color was changed from color to

black/white when using conditional printing, etc.
3. RSInfo has been updated.
4. The Configuration Tool requires .NET Framework 4.5 or later.

Fixed:
1. PDF jobs cannot be printed if the device does not have PS
   emulation enabled.
2. High volume print jobs (roughly 200 pages or more) cannot be printed.
3. When printing after pressing the "Check Print" button
   under "Condition Check Print", the print job will not be cleared
   from the job list.
4. When authentication is disabled, the job list order may be incorrect.
5. If a PS print job name contains more than 256 characters, the
   print job will not be spooled on the device.
6. If a system auto-reset is run on the device in the middle of
   printing or deleting a print job, the job will not be printed or deleted.
7. If a printer name in "Storable Driver Language Exception(s)"
   contains a specific 2 byte character (0x5C), the printer cannot
   be used for printing.
8. If the "Non-stored Language Handling" setting is configured as
   "Print", the P1 command error may occur.
9. The Web Configuration Tool may not be able to display "General
   Settings" and "Options".
10. If the Analyze Logs are larger than 60MB, it may not be possible
    to store the last 60 days worth of Delete Logs.
11. Immediately after logging in, it may be possible to see the
    previous user's print job list.
12. If a document name contains a special character that is not
    supported by the device, the device will stall.

Version 2.3.000
Supported:
1. Support for the following 15S model has been added:
   - Lef-C1, Brz-MF1
2. Support for the following 16S model has been added:
   - MT-C6

Version 2.3.000
Supported:
1. Support for the following 15S model has been added:
   - MET-C2
2. Support for Firefox ESR 38 has been added.

Fix:
1. If a 2 byte character is set as the FRPRINT port, the job list
   cannot be obtained from ELP-NX FS.

Other:
1. Even if one user (User A) prints a large number of jobs on the
   device, another user (User B) can spool jobs from their client PC
   without having to wait for User A's jobs to print.
2. An information button will be displayed in the job list screen if

a spool error or communication error occurs.
3. On the Condition Print Settings screen, "Open to Left or Top" for
   the duplex setting can be selected.
4. On the Condition Print Settings screen, the current job name can
   be confirmed.
5. The "Check Print" behavior in the Condition Print Settings has
   been improved as follows:
    If multiple jobs are selected and one job is for 1 copy,
    the "Check Print" button cannot be selected. If all jobs are for
    2 or more copies, the "Check Print" button can be selected.
6. Job data size [KB] will be displayed in the job list.
7. Job name, spool date, and page number information is displayed
   when "Printing..." or "Deleting..." is displayed.
8. The "Return" key can be used. If the "Return" key is pressed
   after inputting characters from the software keyboard, the
   characters will be fixed.
9. A progress icon will be displayed instead of showing "Starting"
   or "Connecting" dialogs.
10. Login user name will be displayed in the job list, such
    as "userA's Job".
11. The following parameters are not required to restart the device
    and if the settings are applied in the configuration tool, the
    device restart will not be performed.
     - Tab Name
     - My Document Folder Name
12. The "Rtrv. Method" button has been removed and the function has
    been integrated with the "Disp. Ord." button. "Display by
    Device" has been removed from "Disp. Ord." button.

Version 2.2.600
Support:
Support for the following 15S model (Hybrid mode) has been added:
- GR-C2

Fixed:
The following bugs have been fixed.

In the case of both of ELP-NX v2 without CAP and with CAP:
- The "ELP NX" module may not be started up after installation.

In the case of only ELP-NX v2 without CAP:
- If enabling any of Administrator Authentication Management settings
  in User Tools --> System Settings --> Administrator Tools, ELP-NX v2
  may not start up.
- If the "Update" button is selected immediately after opening the
  tab selection drawer on the My Documents folder list, the home
  screen will be displayed.

Other:
The following specifications have been changed in ELP-NX v2 without CAP.
- The function to switch to the My Documents folder settings from
  the Smart Operation Panel menu key has been removed. You can
  switch to the My Documents folder settings from the ELP-NX v2 screen.
- The previously selected index will be displayed at the top of the
  My Documents folder list.

Version 2.2.502
Fixed:
1. When a booklet (magazine) print job is spooled on ELP-NX or ELP-NX FS
   and it is selected on a device, the job page order will be changed
   if the job is printed from the Condition Print Settings screen
   without condition changes.
2. If the Condition Print Settings screen is displayed while waiting for
   a preview of a print job spooled on ELP-NX FS to be shown,
   the "Check Print" and "Print" buttons cannot be selected.

Version 2.2.5
Fixed:
1. If all of the following conditions are met, "91: a job reset" error will occur
   and print jobs from a Mac client cannot be printed out directly.
   - ELP-NX v2 with CAP is installed on the device.
   - Device is a 12A or later model (except for Ti-P1).
   - The job is a PS driver job.
   - Job Authentication for Non-Stored Printing in the Configuration Tool is set as
     "Entire".
2. Even though the application on the Smart Operation Panel which uses the Login
   User Information Request API is launched on the device, the ELP-NX v2 (Hybrid mode)
   job list screen is displayed.

Version 2.2.4
Initial release.

Support:
The following Smart Operation Panel models are supported.
- Met-C1 abcdeyz

Fixed:
- None.

Other:
1. Smart Operation Panel UI is supported.
2. Up to 30 device Remote HDDs are supported.
3. Print job preview is supported.
4. In the case of setting multiple destinations, the job lists for
   each destination are merged and displayed (only ELP-NX v2 with
   CAP v2).

```
===================================================================
*** Basic Information ***
===================================================================
[Create date] 2020/01/17
-------------------------------------------------------------------
[Program Name] AE2 NFC Plugin for eDC
-------------------------------------------------------------------
[Version] 1.5.300
-------------------------------------------------------------------
[PCB No.]
-------------------------------------------------------------------
[Interchangeability] X / O
-------------------------------------------------------------------
[Other Firmware Requirements] None
-------------------------------------------------------------------
[PCB Requirements] None
-------------------------------------------------------------------
[Software category] Normal Release
-------------------------------------------------------------------
[Release category] Normal Release
-------------------------------------------------------------------
[Program category] Firmware
-------------------------------------------------------------------
Exported to(language) GEN(all)
[Firmware No.] D60210MBH_forEDC
[File Information]
 File Name        D60210MBH_forEDC.zip
 File Type        Module for Service
 Size             0.09 MB ( 89428 byte )
[Availability of RFU] No
-------------------------------------------------------------------
[Production reflection]
-------------------------------------------------------------------


===================================================================
*** Note ***
===================================================================
[Note]

-------------------------------------------------------------------



===================================================================
*** Important Notes ***
===================================================================
[Important Notes]

-------------------------------------------------------------------



===================================================================
*** Modification History ***
===================================================================
[Modifications made:]
Rank C
```

Supproted:
- CAP v1.5.300 is supported.

[Modification history]

Version 1.5.200
Rank C

Supproted:
CAP v1.5.200 is supported.

Version 1.5.100
Rank C

Support:
- None

Fixed:
- When "Authentication Device Setting" is set via the Configuration
  Tool, the configuration may not be reflected on the "Card
  Authentication Package v2".
- By selecting "Others" for the "Authentication Device Setting", the
  manual input login screen is displayed instead of the card login
  screen.
- When Web Configuration Tool obtains the user and card information,
  duplicated data is obtained.
- When the device fails to import the certificate from the
  Configuration Tool, an inappropriate error message is displayed on
  the Configuration Tool.

Other:
- None

Version 1.5.000
Rank C

Supported:
- Support for the following modele has been added:
  - Metis-MF3
  - Chimay-MF1

Fixed:
- None

Other:
- None

Version 1.4.500

Rank C

Fixed:
Card login is not possible with an IC card formatted with NDEF (NFC Data Exchange Format).

Version 1.4.100
Supported:
- Support for the following 15S model has been added:
  - Met-C2.1

Fixed:
- When a card reader is set to read blocks in the 32nd sector or
  after on a Mifare4K card, card authentication will fail.

Version 1.4.000
Support:
- Support for the following models has been added:
  MET-C2z
  CH-C2 Office
  CH-C2 Pro (Only Smart Operation Panel option mounted device)
  Cor-C1.5
  GR-C3

Version 1.3.100
Supported:
1. Support for the following 15S model has been added:
   - Lef-C1, Brz-MF1
2. Support for the following 16S model has been added:
   - MT-C6, Gim-MF1.5dM

Others:
1. Support for Felica security in NFC card readers has been added.

Version 1.3.000
 Initial release.

===
*** Basic Information ***
===
[Create date] 2019/01/31

[Program Name] CAP-ES V2 for RKR

[Version] 2.5.100.0

[PCB No.]

[Interchangeability] X / O

[Other Firmware Requirements] None

[PCB Requirements] None

[Software category] Normal Release

[Release category] Normal Release

[Program category] Others

Exported to(language) KOR(en)
[Firmware No.] D592-0031Q
[File Information]
 File Name   D592-0031Q.exe
 File Type   Module for Service
 Size   821.06 MB (860942754 byte)
 Check Sum -8Bit Sum: 5008
        -16Bit Sum(Little Endian): E299
        -16Bit Sum(Big Endian): 756F
[Availability of RFU] No

[Production reflection]

===
*** Note ***
===
[Note]

===
*** Important Notes ***
===
[Important Notes]

===
*** Modification History ***
===

[Modifications made:]
Rank C

Support:
- Windows Server 2019 is supported.

Fixed:
- Characters in log file are garbled.
- The time zone of the log is recorded in UTC, not local time.
- Task Synchronization does not reflect the card information changed
  via Active Directory to CAP-ES.
- Synchronization of the primary and secondary servers fails when it
  is executed after processing Overwrite-Import Billing Code.
- The module of" Enterprise Server Module for CAP V1 Users " is not
  deleted by uninstalling CAP-ES.
- An inadequate error message is displayed when a communication
  error occurs during authentication processes.
- Timeout error occurs for Synchronization of the primary and
  secondary servers.
- DB is not deleted even if the deletion of DB is selected
  when uninstalling CAP-ES.

Other:
- The installer includes "EncryptionTool" that outputs the file for
  the SSL certificate of the device to be imported to the web
  administrative tool.
- JRE is upgraded to v1.8.0.192.

[Modification history]

Version 2.5.000.0
Rank C

Fixed:
- If "Custom" is set to "Zoom" configuration of IE, "User property" of the
  Administrator Tool is not displayed.
- Duplicated "Cleaner.bat" logs may be recorded to Windows event log.
- The error message for job cancellation is displayed. Authentication fails if
  synchronization functions are being processed, or when CSV is being imported.
- AD/LDAP authentication fails if there are users with the same name and group,
  but in different organizations.
- After changing the Database Connection password and name via the Database Management
  Tool, the "ok" button will be disabled if the user undoes the Database Name change.
- Enterprise Server Module for CAP V1 Users will fail to install while SQL Server
  is installed in Windows Server 2016.
- The error code "E0210001" is displayed during Kerberos authentication if the
  password is incorrect.
- The User Information Acquisition Test fails if "<"or">" is included in the
  user information of the Active Directory.
- The User Information Acquisition Test fails if "." or ";" is included in the
  group name of The Active Directory.
- An existing instance name can be entered during the SQL Server installation
  packaged with the Card Authentication Package Enterprise Server installer.
- Authentication may fail while importing a Integrated Information CSV file.

- Part of logs may be missing.
- Regarding card information registered to the Active Directory, synchronization
  will fail if user information that is linked to the card has been changed after
  the previous Synchronization.
- The synchronization process is slow while the billing code and user are linked
  via Administrator Tool.

Other:
- Changed the authentication specification for when multiple Active Directories
  have a user with the same name.
- TLS 1.2 / 1.1 / 1.0 can be enabled/disabled via the Administrator Tool.
- The signature algorithm of Server certificate can be confirmed via the
  Administrator Tool.
- The latest version of the Administrator Tool can be displayed by clicking the
  "reload" button after installation.
- JRE is upgraded to v1.8.0.151.
- Changed the error message that is displayed when AD (LDAP) authentication is
  conducted by the user unregistered in Active Directory.
- Enabled/Disabled Encryption Strength for SSL communication can be configured
  via the Administrator Tool.
- Jetty is upgraded to v9.3.19.
- SQL Server 2016 Express is packaged to the installer.
- .Net Framework 4.6 is packaged to the installer.

Version 2.4.100.0
Fixed:
- The user associated billing code information may be deleted by
  task synchronization.
- User associated billing code information (.csv file) that has
  empty domain names cannot be imported.

Version 2.4.000.0
Support:
- Windows Server 2016 is supported.
- SQL Server 2016 is supported.
- Windows Server 2003/2003 R2/Windows 8 are excluded as support
  environments.

Fixed:
- Update installation from v2.3 to v2.3.100 may fail.
- Offline deactivation may fail.
- When adding a group to the Group Authorization Information List
  via the Administrative Tool, [Color Copy Mode Limitation] may not
  be displayed correctly.
- The error message may not be displayed correctly when
  adding/editing a card ID with many characters.
- Duplicated or deleted cards and errors related to them may not be
  displayed correctly.

Other:
- Billing codes can be obtained from a user attribute.
- Activation method has been changed from server license to client
  access license (CAL).

- A fix for the Apache Commons FileUpload (ACF) vulnerability has
  been added.

Version 2.2.7.0
Fixed:
1. The built-in user (admin/service) can be registered as a normal user.
2. If a login user name is searched for by using capital letters,
   the user will not be found in the case that "Convert to Lower
   Case" is specified in the Login User Name settings under
   Registration Method in Default Settings.
3. If authentication or synchronization is performed after modifying
   capital/lowercase letters in the registered user's domain name,
   2 users will be registered that only differ by their domain names
   having capital or lowercase letters. This will cause an
   authentication error to occur.
4. An internal user's Identification Name can be changed by
   modifying and importing a Group Authorization Information .csv file.
5. After a user who belongs to an external group is registered in
   CAP-ES and overwrite importing is performed using an Integrated
   Information .csv file that does not contain the user, no name
   group will be registered to the user.
6. When importing an Integrated Information .csv file, the
   information log will be incomplete.
7. The message "Enterprise Server Module for CAP V1 Users is to be
   installed later" will be displayed when confirming
   whether "Enterprise Server Module for CAP V1 Users" is installed
   when installing CAP-ES v2.
8. Even if a group is deleted from CAP-ES, the Group Authorization
   Information List for the group will not be deleted.
9. If an Integrated Information group name is 64 characters or more,
   the .csv file cannot be imported.
10. The CPU usage for the CAP-ES service may become 100% because of A
    pache Commons File Upload library instability.
(http://mail-archives.us.apache.org/mod_mbox/www-
announce/201402.mbox/%3C52F373FC.9030907@apache.org%3E).
11. If the Account Lock Threshold value set in Active Directory is
    the same (or less) than the domain controller number specified
    in the Server Settings and Active Directory (LDAP) is specified
    as the authentication type, an account lock will occur if the
    input user's password is incorrect.
12. There is a possibility that SSL 3.0 with a CBC cipher may be
    decrypted by using a padding-oracle attack.
(https://cve.mitre.org/cgi-bin/cvename.cgi?name=CVE-2014-3566)
13. If multiple domains are specified for "Domain Name" in the
    Server Settings and Active Directory (LDAP) is specified as the
    authentication type, an authentication error may occur.

Other:
1. CAP-ES outputs the following logs into the Windows Application
   Event log:
   - The results of operating a .bat file.
   - When an error occurs.
2. Delete all user information in the CAP-ES database at one time by
   using "UserAllDelete.bat".
3. The Card ID can be searched for via the User Display Name.

4. A message for confirming if the database is on an internal or external server will be displayed when upgrading. In the case that the database is internal, the database will be updated automatically during the CAP-ES version-up flow. In the case that the database is external, perform the "Create Database" procedure on the external server separately.
5. An attribute on an external authentication server that has multiple values can be specified in "Attribute Name Settings" for card IDs. Up to 10 values (card IDs) are supported.
6. Failover Clustering for Windows Server 2012/2012 R2 is supported.
7. The AES 128/256-bit encryption method can be used for Kerberos Authentication.
8. "SQL Server Name", "Database Instance Name", and "Database Name" can be changed via the Database Management Tool.

```
================================================================
*** Basic Information ***
================================================================
[Create date] 2019/07/17
----------------------------------------------------------------
[Program Name] CAP User Config for eDC
----------------------------------------------------------------
[Version] 1.5.200
----------------------------------------------------------------
[PCB No.]
----------------------------------------------------------------
[Interchangeability] X / O
----------------------------------------------------------------
[Other Firmware Requirements] None
----------------------------------------------------------------
[PCB Requirements] None
----------------------------------------------------------------
[Software category] Normal Release
----------------------------------------------------------------
[Release category] Normal Release
----------------------------------------------------------------
[Program category] Firmware
----------------------------------------------------------------
Exported to(language) GEN(all)
[Firmware No.] D60210JAG_forEDC
[File Information]
 File Name        D60210JAG_forEDC.zip
 File Type        Module for Service
 Size          0.31 MB ( 327321 byte )
[Availability of RFU] No
----------------------------------------------------------------
[Production reflection]
----------------------------------------------------------------


================================================================
*** Note ***
================================================================
[Note]

----------------------------------------------------------------


================================================================
*** Important Notes ***
================================================================
[Important Notes]

----------------------------------------------------------------


================================================================
*** Modification History ***
================================================================
[Modifications made:]
Rank C
```

Supproted:
CAP v1.5.200 is supported.

[Modification history]

Version 1.5.100
Rank C

Support:
- None

Fixed:
- When "Authentication Device Setting" is set via the Configuration
  Tool, the configuration may not be reflected on the "Card
  Authentication Package v2".
- By selecting "Others" for the "Authentication Device Setting", the
  manual input login screen is displayed instead of the card login
  screen.
- When Web Configuration Tool obtains the user and card information,
  duplicated data is obtained.
- When the device fails to import the certificate from the
  Configuration Tool, an inappropriate error message is displayed on
  the Configuration Tool.

Other:
- None

Version 1.5.000
Rank C

Supported:
- Support for the following models has been added:
   - Metis-MF3
   - Chimay-MF1

Fixed:
- None

Other:
- None

Version 1.4.000
Support:
Support for the following models has been added:
- MET-C2z
- CH-C2 Office
- CH-C2 Pro (Only Smart Operation Panel option mounted device)
- Cor-C1.5
- GR-C3

Version 1.3.000
Supported:
Support for the following 15S model has been added:
- MET-C2

Version 1.2.600
Support:
Support for the following 15S model (Hybrid mode) has been added:
- GR-C2

Version 1.2.5
Support:
Support for the following 14S Smart Operation Panel model (Hybrid mode) has been added:
- Cor-C1 c, d, e, f, g, h

Version 1.2.4
Initial release

===
===

*** Basic Information ***

===
===

[Create date] 2019/07/17

[Program Name] ELP NX V2_F12 for eDC

[Version] 1.5.200

[PCB No.]

[Interchangeability] X / O

[Other Firmware Requirements] None

[PCB Requirements] None

[Software category] Normal Release

[Release category] Normal Release

[Program category] Firmware

Exported to(language) GEN(all)

[Firmware No.] D60210N7D_forEDC

[File Information]

 File Name   D60210N7D_forEDC.zip

 File Type   Module for Service

 Size   5.69 MB (5963692 byte)

[Availability of RFU] No

[Production reflection]

===
===

*** Note ***

===
===

[Note]

===
===

*** Important Notes ***

===
===

[Important Notes]

==
===

*** Modification History ***

==
===

[Modifications made:]

Rank C

Supproted:

- IM 550/600/600SR

- IM 2702

Fixed:

- Login to the application via Job Detection Tool may fail.(ELP NX

  with CAP v2).

- An unexpected error may occur if a user logs in to My Document

  Folder in device and displays the setting change window after

  logging in to My Document Folder in remote device and changing the

  settings.

- After logging in to My Document Folder at a remote device by the

  user with PIN, the document list in the My Document Folder at

  local device may not be displayed correctly.

- When a large amount of jobs is stored in ELP-NX, an error may

  occur by obtaining jobs via Job Management of Configuration Tool.

- The application name displayed on Remote Install Manager is not

  ELP-NX V2 but ELP-NX.

- ELP-NX downs by conducting a periodical process while a storage

  error is occurring at th ELP-NX.

- While 〝Authentication Deactivation〟 is set, jobs spooled in the

device may be stored instead of being processed through printing.

- If parameters are set via Configuration Tool while ELP-NX

  information screen is displayed, the parameters are not reflected

  onto ELP-NX.

- Job list of the previous user may be displayed if the next user

  logs in within a very short period after the previous user logs

  out.(ELP NX with CAP v2).

- Communication error occurs by conducting a communication test with

  the following settings: "Ciphertext priorty" is set for "Permit

  SSL/TLS Communication" of device and "OFF" is set for SSL

  Communication Settings of "Configuration Tool".

- Connection error may occur when Configuration Tool conducts

  Connection Test to the device which "Remote HDD" is set with FQDN.

- The user can logout while print jobs are still being deleted.

- Even if the user prints/deletes jobs in My document Folder in the

  remote device, the last access time record of My document folder

  in the remote device is not updated.

Other:

- Added the function to detect the access from an unauthorized

  client to prevent the unauthorized information collections.

   Note: This function is supported from CAP/ELP-NX/CAP-ES/ELP-NX FS

      v2.5.200. This function is not supported in the environment

      where v2.5.200 or earlier also exists.

[Modification history]

Version 1.5.101

Rank C

Fixed:

- Regarding "ELP with CAP", by imputing Billing Code and print

  RPGL/GL2 job, ELP-NX goes down.

- "The language is not compliant for preview." may be displayed.

Version 1.5.100

Rank C

Support:

- macOS 10.14 is supported.

Fixed:

- After changing the password for Configuration Tool, it fails to

  access to the device via the User Management Tool.

- By setting a host name in "Host Name" in Configuration Tool, it

  takes long to connect to device.

- After printing/deleting multiple jobs, it may take long time to

  transit to print job list screen.

- When the new values are set via the Configuration Tool after

  having initialized HDD, the values are not reflected on the

  device.

- If paper runs out while printing a large job, ELP downs after

  refilling papers, then the screen transits to Home.

- Unused port's number is printed to the port number on "setting

  print".

- The device fails to import the certificate from the Configuration

  Tool

- ":" is not included in timezone of "Deletion log".

- "Layout" information of "Deletion log" are recorded as "Other".

- Job's color information is not correctly displayed when the user

  scrolls down the job list.

- It fails to store specific PS data.

- By sending a large number of jobs, storing jobs fails and LED

  keeps blinking.

- By creating "My Document Folder" via the Configuration Tool, the

  last update date becomes "1970/01/01".

Other:

- Two PJL, "RPGL" and "GL2", were added to Storable Driver Language(s).

- Increased the number of setting items for " Storable Driver

  Language Exception(s)"

- A specified user's job can be viewed/printed out while Card

  Authentication Package v2 is installed on the same device.

Version 1.5.000

Rank C

Supported:

- Support for the following models has been added:

  - Metis-MF3

- Chimay-MF1

Fixed:

- When "Print Confirmation Dialog" is set to "Do not Display"

  or "Default Job selection" to "All", classification code may not

  be recorded to job log even though the code is set before printing

  (ELP NX with CAP v2).

- When PS driver sends a print job whose name is started with "<"

  or "(" , the job name in job list is garbled.

Other:

- Thumbnail images of print jobs' first pages are displayed for

  print job list.

- Performance to display the stored jobs in the device is improved.

==
===

*** Basic Information ***

==
===

[Create date] 2020/01/17

[Program Name] CAP V2_F12 for eDC

[Version] 1.5.300

[PCB No.]

[Interchangeability] X / O

[Other Firmware Requirements] None

[PCB Requirements] None

[Software category] Normal Release

[Release category] Normal Release

[Program category] Firmware

Exported to(language) GEN(all)

[Firmware No.] D60210P6G_forEDC

[File Information]

 File Name   D60210P6G_forEDC.zip

 File Type   Module for Service

 Size   8.54 MB (8957659 byte)

[Availability of RFU] No

[Production reflection]

==
===

*** Note ***

==
===

[Note]

==
===

*** Important Notes ***

==
===

[Important Notes]

===
===

*** Modification History ***

===
===

[Modifications made:]

Rank C

Supproted:

- Windows 10 Pro for Workstations is supported.

- Windows 10 ver.1909 is supported.

Fixed:

- When a large amount of jobs is spooled in the printer queue of the

  device, it fails to print "Device setting" via Configuration Tool.

Other:

- The folder path information used in "Scan to Folder" can be

  synchronized to the address book during the authentication process.

[Modification history]

Version 1.5.201

Rank C

Supproted:

- None

Fixed:

- "Obtain" may fail if it is operated from Configuration Tool to the

  device with CAPv2.500 or later.

- When the logout process by IC card fails, auto login may occur

  after the auto logout of the device.

Other:

- None

Version 1.5.200

Rank C

 Supproted:

- IM 550/600/600SR

- IM 2702

Fixed:

- Login / Logout takes time due to the shortage of the memory used

  for Smart Operation panel.

- Error message "CAP: Cannot connect from the configuration tool.

  Please wait" may be displayed although the connection

  between "Configuration Tool" and "CAP" has been established.

- When an user logs in to the device after switching the device

  languages, authentication may fail because the device cannot

  distinguish lowercase and uppercase characters.

- Login to the application via Job Detection Tool may fail. (ELP NX

  with CAP v2).

- While ″Authentication Deactivation″ is set, jobs spooled in the

  device may be stored instead of being processed through printing

  (ELP NX with CAP v2).

- Job list of the previous user may be displayed if the next user

  logs in within a very short period after the previous user logs

  out. (ELP NX with CAP v2).

Other:

- Added the function to detect the access from an unauthorized

  client to prevent the unauthorized information collections.

  Note: This function is supported from CAP/ELP-NX/CAP-ES/ELP-NX FS

      v2.5.200. This function is not supported in the environment

      where v2.5.200 or earlier also exists.

Version 1.5.100

Rank C

Support:

- None

Fixed:

- When "Authentication Device Setting" is set via the Configuration

  Tool, the configuration may not be reflected on the "Card

  Authentication Package v2".

- By selecting "Others" for the "Authentication Device Setting", the

  manual input login screen is displayed instead of the card login

  screen.

- When Web Configuration Tool obtains the user and card information,

  duplicated data is obtained.

- When the device fails to import the certificate from the

  Configuration Tool, an inappropriate error message is displayed on

  the Configuration Tool.

Other:

- None

Version 1.5.000

Rank C

Initial release.

Supported:

- Support for the following models has been added:

  - Metis-MF3

  - Chimay-MF1

Fixed:

- When "Print Confirmation Dialog" is set to "Do not Display"

  or "Default Job selection" to "All", billing code may not be

  recorded to job log even though the code is set before printing.

  (ELP NX with CAP v2).

Other:

- None

```
================================================================
*** Basic Information ***
================================================================
[Create date] 2019/07/17
----------------------------------------------------------------
[Program Name] CAP Java Card Plug-in for eDC
----------------------------------------------------------------
[Version] 1.5.200
----------------------------------------------------------------
[PCB No.]
----------------------------------------------------------------
[Interchangeability] X / O
----------------------------------------------------------------
[Other Firmware Requirements] None
----------------------------------------------------------------
[PCB Requirements] None
----------------------------------------------------------------
[Software category] Normal Release
----------------------------------------------------------------
[Release category] Normal Release
----------------------------------------------------------------
[Program category] Firmware
----------------------------------------------------------------
Exported to(language) GEN(all)
[Firmware No.] D60210QDA_forEDC
[File Information]
 File Name        D60210QDA_forEDC.zip
 File Type        Module for Service
 Size             0.05 MB ( 54436 byte )
[Availability of RFU] No
----------------------------------------------------------------
[Production reflection]
----------------------------------------------------------------


================================================================
*** Note ***
================================================================
[Note]

----------------------------------------------------------------



================================================================
*** Important Notes ***
================================================================
[Important Notes]

----------------------------------------------------------------



================================================================
*** Modification History ***
================================================================
[Modifications made:]
Rank C
```

Supproted:
CAP v1.5.200 is supported.

[Modification history]

Version 1.5.000
Rank C

Initial release.

Supported:
- Support for the following models has been added:
  - Metis-MF3
  - Chimay-MF1

Fixed:
- None

Other:
- None

```
================================================================================
*** Basic Information ***
================================================================================
[Create date] 2020/01/17
--------------------------------------------------------------------------
[Program Name] CAP-ES V2 for RE
--------------------------------------------------------------------------
[Version] 2.5.300.0
--------------------------------------------------------------------------
[PCB No.]
--------------------------------------------------------------------------
[Interchangeability] X / O
--------------------------------------------------------------------------
[Other Firmware Requirements] None
--------------------------------------------------------------------------
[PCB Requirements] None
--------------------------------------------------------------------------
[Software category] Normal Release
--------------------------------------------------------------------------
[Release category] Normal Release
--------------------------------------------------------------------------
[Program category] Others
--------------------------------------------------------------------------
Exported to(language) EUR(en)
[Firmware No.] D592-0001S
[File Information]
 File Name        D592-0001S.exe
 File Type        Module for Service
 Size           747.98 MB ( 784315855 byte )
 Check Sum -8Bit Sum: AC6E
        -16Bit Sum(Little Endian): F539
        -16Bit Sum(Big Endian): 2535
[Availability of RFU] No
--------------------------------------------------------------------------
[Production reflection]
--------------------------------------------------------------------------


================================================================================
*** Note ***
================================================================================
[Note]

--------------------------------------------------------------------------



================================================================================
*** Important Notes ***
================================================================================
[Important Notes]

--------------------------------------------------------------------------



================================================================================
*** Modification History ***
================================================================================
```

[Modifications made:]
Rank C

Supproted:
- Windows 10 Pro for Workstations is supported.
- Windows 10 ver.1909 is supported.

Fixed:
- It fails to delete "SQL Server 2008" database when uninstalling "CAP-ES"
- By pressing "OK" button on "Default Setting" screen, there is a
  case that processing does not transition to the "Maintenance screen"
  immediately and is waiting for processing.
- With Windows Server2016 or later, the port number that is specified
  by the installer may not be set to the Firewall's "Inbound Rules".
- "Available Functions" of the user information may be automatically
  unchecked when user change the own's login password on MFP.

Other:
- Amazon Corretto is upgraded to 8u222-b10.

[Modification history]

Version 2.5.200.0
Rank C

Supproted:
- None

Fixed:
- It fails to import the Integrated Information CSV file.
- Although the option to delete the database is selected during the
  uninstallation, the database may not be deleted.
- The user information will not be rolled back even if an error
  occurs during task synchronization.

Other:
- Changed the Java Runtime Environment to Amamzon Corretto Open JDK.
- Added the function to detect the access from an unauthorized
  client to prevent the unauthorized information collections.
  Note: This function is supported from CAP/ELP-NX/CAP-ES/ELP-NX FS
      v2.5.200. This function is not supported in the environment
      where v2.5.200 or earlier also exists.
- Updated Jetty version to 9.3.26.

Version 2.5.100.0
Rank C

Support:
- Windows Server 2019 is supported.

Fixed:
- Characters in log file are garbled.
- The time zone of the log is recorded in UTC, not local time.

- Task Synchronization does not reflect the card information changed
  via Active Directory to CAP-ES.
- Synchronization of the primary and secondary servers fails when it
  is executed after processing Overwrite-Import Billing Code.
- The module of" Enterprise Server Module for CAP V1 Users " is not
  deleted by uninstalling CAP-ES.
- An inadequate error message is displayed when a communication
  error occurs during authentication processes.
- Timeout error occurs for Synchronization of the primary and
  secondary servers.
- DB is not deleted even if the deletion of DB is selected
  when uninstalling CAP-ES.

Other:
- The installer includes "EncryptionTool" that outputs the file for
  the SSL certificate of the device to be imported to the web
  administrative tool.
- JRE is upgraded to v1.8.0.192.

Version 2.5.000.0
Rank C

Fixed:
- If "Custom" is set to "Zoom" configuration of IE, "User property" of the
  Administrator Tool is not displayed.
- Duplicated "Cleaner.bat" logs may be recorded to Windows event log.
- The error message for job cancellation is displayed. Authentication fails if
  synchronization functions are being processed, or when CSV is being imported.
- AD/LDAP authentication fails if there are users with the same name and group,
  but in different organizations.
- After changing the Database Connection password and name via the Database Management
  Tool, the "ok" button will be disabled if the user undoes the Database Name change.
- Enterprise Server Module for CAP V1 Users will fail to install while SQL Server
  is installed in Windows Server 2016.
- The error code "E0210001" is displayed during Kerberos authentication if the
  password is incorrect.
- The User Information Acquisition Test fails if "<"or">" is included in the
  user information of the Active Directory.
- The User Information Acquisition Test fails if "." or ";" is included in the
  group name of The Active Directory.
- An existing instance name can be entered during the SQL Server installation
  packaged with the Card Authentication Package Enterprise Server installer.
- Authentication may fail while importing a Integrated Information CSV file.
- Part of logs may be missing.
- Regarding card information registered to the Active Directory, synchronization
  will fail if user information that is linked to the card has been changed after
  the previous Synchronization.
- The synchronization process is slow while the billing code and user are linked
  via Administrator Tool.

Other:
- Changed the authentication specification for when multiple Active Directories
  have a user with the same name.
- TLS 1.2 / 1.1 / 1.0 can be enabled/disabled via the Administrator Tool.

- The signature algorithm of Server certificate can be confirmed via the
  Administrator Tool.
- The latest version of the Administrator Tool can be displayed by clicking the
  "reload" button after installation.
- JRE is upgraded to v1.8.0.151.
- Changed the error message that is displayed when AD (LDAP) authentication is
  conducted by the user unregistered in Active Directory.
- Enabled/Disabled Encryption Strength for SSL communication can be configured
  via the Administrator Tool.
- Jetty is upgraded to v9.3.19.
- SQL Server 2016 Express is packaged to the installer.
- .Net Framework 4.6 is packaged to the installer.

Version 2.4.100.0
Fixed:
- The user associated billing code information may be deleted by
  task synchronization.
- User associated billing code information (.csv file) that has
  empty domain names cannot be imported.

Version 2.4.000.0
Support:
- Windows Server 2016 is supported.
- SQL Server 2016 is supported.
- Windows Server 2003/2003 R2/Windows 8 are excluded as support
  environments.

Fixed:
- Update installation from v2.3 to v2.3.100 may fail.
- Offline deactivation may fail.
- When adding a group to the Group Authorization Information List
  via the Administrative Tool, [Color Copy Mode Limitation] may not
  be displayed correctly.
- The error message may not be displayed correctly when
  adding/editing a card ID with many characters.
- Duplicated or deleted cards and errors related to them may not be
  displayed correctly.

Other:
- Billing codes can be obtained from a user attribute.
- Activation method has been changed from server license to client
  access license (CAL).
- A fix for the Apache Commons FileUpload (ACF) vulnerability has
  been added.

Version V2.3.100.0
Support:
1. Support for TLS1.2 has been added.
 *The Java VM version on the device must support TLS1.2.
2. Support for SHA-2 has been added.
 *The Java VM version on the device must support SHA-2.

Fixed:
1. When editing a card ID from lowercase characters to capital
   characters, the edited ID will be deleted after saving the data.
2. Administrator privileges are assigned to users irregularly after
   task synchronization is performed.
3. When trying to newly add an external user who belongs to an
   external group to an internal group via a CSV file import, the
   user will be deleted from the external group.
4. An authentication error will occur and no error will be recorded
   in CAP-ES when Task synchronization, CSV import, and Delete All
   Users are executed at the same time and a user tries to
   authenticate.

Other:
1. RSInfo has been updated.
2. A fix for the Apache Commons Collection (ACC) vulnerability has
   been added.

Version V2.3.000.0
Supported:
1. Support for Fire Fox ESR 38 has been added.

Fix:
1. In SSL environment, CAP-ES may not be synchronized to external
   authentication server.
2. If synchronization to external authentication server is performed
   without proxy user, Jetty may be down and the synchronization
   fails.
3. When LDAP authentication is performed, E00001 or E03002 error may
   occur.

Other:
1. Billing Code can be registered to CAP-ES.
2. CAP-ES database can be synchronized between primary and secondary
   server.
3. Activation site has been changed from GMP server to eDC-i server.
4. RSInfo has been updated.
5. Java version has been updated to 8.

Version 2.2.7.0
Fixed:
1. The built-in user (admin/service) can be registered as a normal user.
2. If a login user name is searched for by using capital letters,
   the user will not be found in the case that "Convert to Lower
   Case" is specified in the Login User Name settings under
   Registration Method in Default Settings.
3. If authentication or synchronization is performed after modifying
   capital/lowercase letters in the registered user's domain name, 2
   users will be registered that only differ by their domain names
   having capital or lowercase letters. This will cause an
   authentication error to occur.
4. An internal user's Identification Name can be changed by
   modifying and importing a Group Authorization Information .csv file.

5. After a user who belongs to an external group is registered in CAP-ES and overwrite importing is performed using an Integrated Information .csv file that does not contain the user, no name group will be registered to the user.
6. When importing an Integrated Information .csv file, the information log will be incomplete.
7. The message "Enterprise Server Module for CAP V1 Users is to be installed later" will be displayed when confirming whether "Enterprise Server Module for CAP V1 Users" is installed when installing CAP-ES v2.
8. Even if a group is deleted from CAP-ES, the Group Authorization Information List for the group will not be deleted.
9. If an Integrated Information group name is 64 characters or more, the .csv file cannot be imported.
10. The CPU usage for the CAP-ES service may become 100% because of Apache Commons File Upload library instability. (http://mail-archives.us.apache.org/mod_mbox/www-announce/201402.mbox/%3C52F373FC.9030907@apache.org%3E).
11. If the Account Lock Threshold value set in Active Directory is the same (or less) than the domain controller number specified in the Server Settings and Active Directory (LDAP) is specified as the authentication type, an account lock will occur if the input user's password is incorrect.
12. There is a possibility that SSL 3.0 with a CBC cipher may be decrypted by using a padding-oracle attack. (https://cve.mitre.org/cgi-bin/cvename.cgi?name=CVE-2014-3566)
13. If multiple domains are specified for "Domain Name" in the Server Settings and Active Directory (LDAP) is specified as the authentication type, an authentication error may occur.

Other:
1. CAP-ES outputs the following logs into the Windows Application Event log:
   - The results of operating a .bat file.
   - When an error occurs.
2. Delete all user information in the CAP-ES database at one time by using "UserAllDelete.bat".
3. The Card ID can be searched for via the User Display Name.
4. A message for confirming if the database is on an internal or external server will be displayed when upgrading. In the case that the database is internal, the database will be updated automatically during the CAP-ES version-up flow. In the case that the database is external, perform the "Create Database" procedure on the external server separately.
5. An attribute on an external authentication server that has multiple values can be specified in "Attribute Name Settings" for card IDs. Up to 10 values (card IDs) are supported.
6. Failover Clustering for Windows Server 2012/2012 R2 is supported.
7. The AES 128/256-bit encryption method can be used for Kerberos Authentication.
8. "SQL Server Name", "Database Instance Name", and "Database Name" can be changed via the Database Management Tool.

```
================================================================
*** Basic Information ***
================================================================
[Create date] 2020/01/17
----------------------------------------------------------------
[Program Name] CAP-ES V2 for RAC
----------------------------------------------------------------
[Version] 2.5.300.0
----------------------------------------------------------------
[PCB No.]
----------------------------------------------------------------
[Interchangeability] X / O
----------------------------------------------------------------
[Other Firmware Requirements] None
----------------------------------------------------------------
[PCB Requirements] None
----------------------------------------------------------------
[Software category] Normal Release
----------------------------------------------------------------
[Release category] Normal Release
----------------------------------------------------------------
[Program category] Others
----------------------------------------------------------------
Exported to(language) USA(en)
[Firmware No.] D592-0011S
[File Information]
 File Name        D592-0011S.exe
 File Type        Module for Service
 Size           747.99 MB ( 784319257 byte )
 Check Sum -8Bit Sum: 1020
        -16Bit Sum(Little Endian): 0C9B
        -16Bit Sum(Big Endian): 2385
[Availability of RFU] No
----------------------------------------------------------------
[Production reflection]
----------------------------------------------------------------


================================================================
*** Note ***
================================================================
[Note]

----------------------------------------------------------------



================================================================
*** Important Notes ***
================================================================
[Important Notes]

----------------------------------------------------------------



================================================================
*** Modification History ***
================================================================
```

[Modifications made:]
Rank C

Supproted:
- Windows 10 Pro for Workstations is supported.
- Windows 10 ver.1909 is supported.

Fixed:
- It fails to delete "SQL Server 2008" database when uninstalling "CAP-ES"
- By pressing "OK" button on "Default Setting" screen, there is a
  case that processing does not transition to the "Maintenance screen"
  immediately and is waiting for processing.
- With Windows Server2016 or later, the port number that is specified
  by the installer may not be set to the Firewall's "Inbound Rules".
- "Available Functions" of the user information may be automatically
  unchecked when user change the own's login password on MFP.

Other:
- Amazon Corretto is upgraded to 8u222-b10.

[Modification history]

Version 2.5.200.0
Rank C

Supproted:
- None

Fixed:
- It fails to import the Integrated Information CSV file.
- Although the option to delete the database is selected during the
  uninstallation, the database may not be deleted.
- The user information will not be rolled back even if an error
  occurs during task synchronization.

Other:
- Changed the Java Runtime Environment to Amamzon Corretto Open JDK.
- Added the function to detect the access from an unauthorized
  client to prevent the unauthorized information collections.
  Note: This function is supported from CAP/ELP-NX/CAP-ES/ELP-NX FS
       v2.5.200. This function is not supported in the environment
       where v2.5.200 or earlier also exists.
- Updated Jetty version to 9.3.26.

Version 2.5.100.0
Rank C

Support:
- Windows Server 2019 is supported.

Fixed:
- Characters in log file are garbled.
- The time zone of the log is recorded in UTC, not local time.

- Task Synchronization does not reflect the card information changed
  via Active Directory to CAP-ES.
- Synchronization of the primary and secondary servers fails when it
  is executed after processing Overwrite-Import Billing Code.
- The module of" Enterprise Server Module for CAP V1 Users " is not
  deleted by uninstalling CAP-ES.
- An inadequate error message is displayed when a communication
  error occurs during authentication processes.
- Timeout error occurs for Synchronization of the primary and
  secondary servers.
- DB is not deleted even if the deletion of DB is selected
  when uninstalling CAP-ES.

Other:
- The installer includes "EncryptionTool" that outputs the file for
  the SSL certificate of the device to be imported to the web
  administrative tool.
- JRE is upgraded to v1.8.0.192.

Version 2.5.000.0
Rank C

Fixed:
- If "Custom" is set to "Zoom" configuration of IE, "User property" of the
  Administrator Tool is not displayed.
- Duplicated "Cleaner.bat" logs may be recorded to Windows event log.
- The error message for job cancellation is displayed. Authentication fails if
  synchronization functions are being processed, or when CSV is being imported.
- AD/LDAP authentication fails if there are users with the same name and group,
  but in different organizations.
- After changing the Database Connection password and name via the Database Management
  Tool, the "ok" button will be disabled if the user undoes the Database Name change.
- Enterprise Server Module for CAP V1 Users will fail to install while SQL Server
  is installed in Windows Server 2016.
- The error code "E0210001" is displayed during Kerberos authentication if the
  password is incorrect.
- The User Information Acquisition Test fails if "<"or">" is included in the
  user information of the Active Directory.
- The User Information Acquisition Test fails if "." or ";" is included in the
  group name of The Active Directory.
- An existing instance name can be entered during the SQL Server installation
  packaged with the Card Authentication Package Enterprise Server installer.
- Authentication may fail while importing a Integrated Information CSV file.
- Part of logs may be missing.
- Regarding card information registered to the Active Directory, synchronization
  will fail if user information that is linked to the card has been changed after
  the previous Synchronization.
- The synchronization process is slow while the billing code and user are linked
  via Administrator Tool.

Other:
- Changed the authentication specification for when multiple Active Directories
  have a user with the same name.
- TLS 1.2 / 1.1 / 1.0 can be enabled/disabled via the Administrator Tool.

- The signature algorithm of Server certificate can be confirmed via the
  Administrator Tool.
- The latest version of the Administrator Tool can be displayed by clicking the
  "reload" button after installation.
- JRE is upgraded to v1.8.0.151.
- Changed the error message that is displayed when AD (LDAP) authentication is
  conducted by the user unregistered in Active Directory.
- Enabled/Disabled Encryption Strength for SSL communication can be configured
  via the Administrator Tool.
- Jetty is upgraded to v9.3.19.
- SQL Server 2016 Express is packaged to the installer.
- .Net Framework 4.6 is packaged to the installer.

Version 2.4.100.0
Fixed:
- The user associated billing code information may be deleted by
  task synchronization.
- User associated billing code information (.csv file) that has
  empty domain names cannot be imported.

Version 2.4.000.0
Support:
- Windows Server 2016 is supported.
- SQL Server 2016 is supported.
- Windows Server 2003/2003 R2/Windows 8 are excluded as support
  environments.

Fixed:
- Update installation from v2.3 to v2.3.100 may fail.
- Offline deactivation may fail.
- When adding a group to the Group Authorization Information List
  via the Administrative Tool, [Color Copy Mode Limitation] may not
  be displayed correctly.
- The error message may not be displayed correctly when
  adding/editing a card ID with many characters.
- Duplicated or deleted cards and errors related to them may not be
  displayed correctly.

Other:
- Billing codes can be obtained from a user attribute.
- Activation method has been changed from server license to client
  access license (CAL).
- A fix for the Apache Commons FileUpload (ACF) vulnerability has
  been added.

Version V2.3.100.0
Support:
1. Support for TLS1.2 has been added.
 *The Java VM version on the device must support TLS1.2.
2. Support for SHA-2 has been added.
 *The Java VM version on the device must support SHA-2.

Fixed:
1. When editing a card ID from lowercase characters to capital
   characters, the edited ID will be deleted after saving the data.
2. Administrator privileges are assigned to users irregularly after
   task synchronization is performed.
3. When trying to newly add an external user who belongs to an
   external group to an internal group via a CSV file import, the
   user will be deleted from the external group.
4. An authentication error will occur and no error will be recorded
   in CAP-ES when Task synchronization, CSV import, and Delete All
   Users are executed at the same time and a user tries to
   authenticate.

Other:
1. RSInfo has been updated.
2. A fix for the Apache Commons Collection (ACC) vulnerability has
   been added.

Version V2.3.000.0
Supported:
1. Support for Fire Fox ESR 38 has been added.

Fix:
1. In SSL environment, CAP-ES may not be synchronized to external
   authentication server.
2. If synchronization to external authentication server is performed
   without proxy user, Jetty may be down and the synchronization
   fails.
3. When LDAP authentication is performed, E00001 or E03002 error may
   occur.

Other:
1. Billing Code can be registered to CAP-ES.
2. CAP-ES database can be synchronized between primary and secondary
   server.
3. Activation site has been changed from GMP server to eDC-i server.
4. RSInfo has been updated.
5. Java version has been updated to 8.

Version 2.2.7.0
Fixed:
1. The built-in user (admin/service) can be registered as a normal user.
2. If a login user name is searched for by using capital letters,
   the user will not be found in the case that "Convert to Lower
   Case" is specified in the Login User Name settings under
   Registration Method in Default Settings.
3. If authentication or synchronization is performed after modifying
   capital/lowercase letters in the registered user's domain name,
   2 users will be registered that only differ by their domain names
   having capital or lowercase letters. This will cause an
   authentication error to occur.
4. An internal user's Identification Name can be changed by
   modifying and importing a Group Authorization Information .csv file.

5. After a user who belongs to an external group is registered in
   CAP-ES and overwrite importing is performed using an Integrated
   Information .csv file that does not contain the user, no name
   group will be registered to the user.
6. When importing an Integrated Information .csv file, the
   information log will be incomplete.
7. The message "Enterprise Server Module for CAP V1 Users is to be
   installed later" will be displayed when confirming
   whether "Enterprise Server Module for CAP V1 Users" is installed
   when installing CAP-ES v2.
8. Even if a group is deleted from CAP-ES, the Group Authorization
   Information List for the group will not be deleted.
9. If an Integrated Information group name is 64 characters or more,
   the .csv file cannot be imported.
10. The CPU usage for the CAP-ES service may become 100% because of
    Apache Commons File Upload library instability.
(http://mail-archives.us.apache.org/mod_mbox/www-
announce/201402.mbox/%3C52F373FC.9030907@apache.org%3E).
11. If the Account Lock Threshold value set in Active Directory is
    the same (or less) than the domain controller number specified
    in the Server Settings and Active Directory (LDAP) is specified
    as the authentication type, an account lock will occur if the
    input user's password is incorrect.
12. There is a possibility that SSL 3.0 with a CBC cipher may be
    decrypted by using a padding-oracle attack.
(https://cve.mitre.org/cgi-bin/cvename.cgi?name=CVE-2014-3566)
13. If multiple domains are specified for "Domain Name" in the
    Server Settings and Active Directory (LDAP) is specified as the
    authentication type, an authentication error may occur.

Other:
1. CAP-ES outputs the following logs into the Windows Application Event log:
- The results of operating a .bat file.
- When an error occurs.
2. Delete all user information in the CAP-ES database at one time by
   using "UserAllDelete.bat".
3. The Card ID can be searched for via the User Display Name.
4. A message for confirming if the database is on an internal or
   external server will be displayed when upgrading. In the case
   that the database is internal, the database will be updated
   automatically during the CAP-ES version-up flow. In the case that
   the database is external, perform the "Create Database" procedure
   on the external server separately.
5. An attribute on an external authentication server that has
   multiple values can be specified in "Attribute Name Settings" for
   card IDs. Up to 10 values (card IDs) are supported.
6. Failover Clustering for Windows Server 2012/2012 R2 is supported.
7. The AES 128/256-bit encryption method can be used for Kerberos
   Authentication.
8. "SQL Server Name", "Database Instance Name", and "Database Name"
   can be changed via the Database Management Tool.

===
*** Basic Information ***
===
[Create date] 2020/01/17

[Program Name] CAP-ES V2 for RA

[Version] 2.5.300.0

[PCB No.]

[Interchangeability] X / O

[Other Firmware Requirements] None

[PCB Requirements] None

[Software category] Normal Release

[Release category] Normal Release

[Program category] Others

Exported to(language) ASI(en)
[Firmware No.] D592-0021S
[File Information]
 File Name   D592-0021S.exe
 File Type   Module for Service
 Size   747.97 MB (784308033 byte)
 Check Sum -8Bit Sum: 9B70
         -16Bit Sum(Little Endian): D028
         -16Bit Sum(Big Endian): 3B48
[Availability of RFU] No

[Production reflection]

===
*** Note ***
===
[Note]

===
*** Important Notes ***
===
[Important Notes]

===
*** Modification History ***
===

[Modifications made:]
Rank C

Supproted:
- Windows 10 Pro for Workstations is supported.
- Windows 10 ver.1909 is supported.

Fixed:
- It fails to delete "SQL Server 2008" database when uninstalling "CAP-ES"
- By pressing "OK" button on "Default Setting" screen, there is a
  case that processing does not transition to the "Maintenance screen"
  immediately and is waiting for processing.
- With Windows Server2016 or later, the port number that is specified
  by the installer may not be set to the Firewall's "Inbound Rules".
- "Available Functions" of the user information may be automatically
  unchecked when user change the own's login password on MFP.

Other:
- Amazon Corretto is upgraded to 8u222-b10.

[Modification history]

Version 2.5.200.0
Rank C

Supproted:
- None

Fixed:
- It fails to import the Integrated Information CSV file.
- Although the option to delete the database is selected during the
  uninstallation, the database may not be deleted.
- The user information will not be rolled back even if an error
  occurs during task synchronization.

Other:
- Changed the Java Runtime Environment to Amamzon Corretto Open JDK.
- Added the function to detect the access from an unauthorized
  client to prevent the unauthorized information collections.
  Note: This function is supported from CAP/ELP-NX/CAP-ES/ELP-NX FS
       v2.5.200. This function is not supported in the environment
       where v2.5.200 or earlier also exists.
- Updated Jetty version to 9.3.26.

Version 2.5.100.0
Rank C

Support:
- Windows Server 2019 is supported.

Fixed:
- Characters in log file are garbled.

- The time zone of the log is recorded in UTC, not local time.
- Task Synchronization does not reflect the card information changed
  via Active Directory to CAP-ES.
- Synchronization of the primary and secondary servers fails when it
  is executed after processing Overwrite-Import Billing Code.
- The module of" Enterprise Server Module for CAP V1 Users " is not
  deleted by uninstalling CAP-ES.
- An inadequate error message is displayed when a communication
  error occurs during authentication processes.
- Timeout error occurs for Synchronization of the primary and
  secondary servers.
- DB is not deleted even if the deletion of DB is selected when
  uninstalling CAP-ES.

Other:
- The installer includes "EncryptionTool" that outputs the file for
  the SSL certificate of the device to be imported to the web
  administrative tool.
- JRE is upgraded to v1.8.0.192.

Version 2.5.000.0
Rank C

Fixed:
- If "Custom" is set to "Zoom" configuration of IE, "User property" of the
  Administrator Tool is not displayed.
- Duplicated "Cleaner.bat" logs may be recorded to Windows event log.
- The error message for job cancellation is displayed. Authentication fails if
  synchronization functions are being processed, or when CSV is being imported.
- AD/LDAP authentication fails if there are users with the same name and group,
  but in different organizations.
- After changing the Database Connection password and name via the Database Management
  Tool, the "ok" button will be disabled if the user undoes the Database Name change.
- Enterprise Server Module for CAP V1 Users will fail to install while SQL Server
  is installed in Windows Server 2016.
- The error code "E0210001" is displayed during Kerberos authentication if the
  password is incorrect.
- The User Information Acquisition Test fails if "<"or">" is included in the
  user information of the Active Directory.
- The User Information Acquisition Test fails if "." or ";" is included in the
  group name of The Active Directory.
- An existing instance name can be entered during the SQL Server installation
  packaged with the Card Authentication Package Enterprise Server installer.
- Authentication may fail while importing a Integrated Information CSV file.
- Part of logs may be missing.
- Regarding card information registered to the Active Directory, synchronization
  will fail if user information that is linked to the card has been changed after
  the previous Synchronization.
- The synchronization process is slow while the billing code and user are linked
  via Administrator Tool.

Other:
- Changed the authentication specification for when multiple Active Directories
  have a user with the same name.
- TLS 1.2 / 1.1 / 1.0 can be enabled/disabled via the Administrator Tool.

- The signature algorithm of Server certificate can be confirmed via the
  Administrator Tool.
- The latest version of the Administrator Tool can be displayed by clicking the
  "reload" button after installation.
- JRE is upgraded to v1.8.0.151.
- Changed the error message that is displayed when AD (LDAP) authentication is
  conducted by the user unregistered in Active Directory.
- Enabled/Disabled Encryption Strength for SSL communication can be configured
  via the Administrator Tool.
- Jetty is upgraded to v9.3.19.
- SQL Server 2016 Express is packaged to the installer.
- .Net Framework 4.6 is packaged to the installer.

Version 2.4.100.0
Fixed:
- The user associated billing code information may be deleted by
  task synchronization.
- User associated billing code information (.csv file) that has
  empty domain names cannot be imported.

Version 2.4.000.0
Support:
- Windows Server 2016 is supported.
- SQL Server 2016 is supported.
- Windows Server 2003/2003 R2/Windows 8 are excluded as support
  environments.

Fixed:
- Update installation from v2.3 to v2.3.100 may fail.
- Offline deactivation may fail.
- When adding a group to the Group Authorization Information List
  via the Administrative Tool, [Color Copy Mode Limitation] may not
  be displayed correctly.
- The error message may not be displayed correctly when
  adding/editing a card ID with many characters.
- Duplicated or deleted cards and errors related to them may not be
  displayed correctly.

Other:
- Billing codes can be obtained from a user attribute.
- Activation method has been changed from server license to client
  access license (CAL).
- A fix for the Apache Commons FileUpload (ACF) vulnerability has
  been added.

Version V2.3.100.0
Support:
1. Support for TLS1.2 has been added.
 *The Java VM version on the device must support TLS1.2.
2. Support for SHA-2 has been added.
 *The Java VM version on the device must support SHA-2.

Fixed:
1. When editing a card ID from lowercase characters to capital
   characters, the edited ID will be deleted after saving the data.
2. Administrator privileges are assigned to users irregularly after
   task synchronization is performed.
3. When trying to newly add an external user who belongs to an
   external group to an internal group via a CSV file import, the
   user will be deleted from the external group.
4. An authentication error will occur and no error will be recorded
   in CAP-ES when Task synchronization, CSV import, and Delete All
   Users are executed at the same time and a user tries to
   authenticate.

Other:
1. RSInfo has been updated.
2. A fix for the Apache Commons Collection (ACC) vulnerability has
   been added.

Version V2.3.000.0
Supported:
1. Support for Fire Fox ESR 38 has been added.

Fix:
1. In SSL environment, CAP-ES may not be synchronized to external
   authentication server.
2. If synchronization to external authentication server is performed
   without proxy user, Jetty may be down and the synchronization
   fails.
3. When LDAP authentication is performed, E00001 or E03002 error may
   occur.

Other:
1. Billing Code can be registered to CAP-ES.
2. CAP-ES database can be synchronized between primary and secondary
   server.
3. Activation site has been changed from GMP server to eDC-i server.
4. RSInfo has been updated.
5. Java version has been updated to 8.

Version 2.2.7.0
Fixed:
1.The built-in user (admin/service) can be registered as a normal user.
2. If a login user name is searched for by using capital letters,
   the user will not be found in the case that "Convert to Lower
   Case" is specified in the Login User Name settings under
   Registration Method in Default Settings.
3. If authentication or synchronization is performed after modifying
   capital/lowercase letters in the registered user's domain name,
   2 users will be registered that only differ by their domain names
   having capital or lowercase letters. This will cause an
   authentication error to occur.
4. An internal user's Identification Name can be changed by
   modifying and importing a Group Authorization Information .csv file.

5. After a user who belongs to an external group is registered in
   CAP-ES and overwrite importing is performed using an Integrated
   Information .csv file that does not contain the user, no name
   group will be registered to the user.
6. When importing an Integrated Information .csv file, the
   information log will be incomplete.
7. The message "Enterprise Server Module for CAP V1 Users is to be
   installed later" will be displayed when confirming
   whether "Enterprise Server Module for CAP V1 Users" is installed
   when installing CAP-ES v2.
8. Even if a group is deleted from CAP-ES, the Group Authorization
   Information List for the group will not be deleted.
9. If an Integrated Information group name is 64 characters or more,
   the .csv file cannot be imported.
10. The CPU usage for the CAP-ES service may become 100% because of
    Apache Commons File Upload library instability.
(http://mail-archives.us.apache.org/mod_mbox/www-
announce/201402.mbox/%3C52F373FC.9030907@apache.org%3E).
11. If the Account Lock Threshold value set in Active Directory is
    the same (or less) than the domain controller number specified
    in the Server Settings and Active Directory (LDAP) is specified
    as the authentication type, an account lock will occur if the
    input user's password is incorrect.
12. There is a possibility that SSL 3.0 with a CBC cipher may be
    decrypted by using a padding-oracle attack.
(https://cve.mitre.org/cgi-bin/cvename.cgi?name=CVE-2014-3566)
13. If multiple domains are specified for "Domain Name" in the
    Server Settings and Active Directory (LDAP) is specified as the
    authentication type, an authentication error may occur.

Other:
1. CAP-ES outputs the following logs into the Windows Application
   Event log:
   - The results of operating a .bat file.
   - When an error occurs.
2. Delete all user information in the CAP-ES database at one time by
   using "UserAllDelete.bat".
3. The Card ID can be searched for via the User Display Name.
4. A message for confirming if the database is on an internal or
   external server will be displayed when upgrading. In the case
   that the database is internal, the database will be updated
   automatically during the CAP-ES version-up flow. In the case that
   the database is external, perform the "Create Database" procedure
   on the external server separately.
5. An attribute on an external authentication server that has
   multiple values can be specified in "Attribute Name Settings" for
   card IDs. Up to 10 values (card IDs) are supported.
6. Failover Clustering for Windows Server 2012/2012 R2 is supported.
7. The AES 128/256-bit encryption method can be used for Kerberos
   Authentication.
8. "SQL Server Name", "Database Instance Name", and "Database Name"
   can be changed via the Database Management Tool.

```
================================================================
*** Basic Information ***
================================================================
[Create date] 2020/01/17
----------------------------------------------------------------
[Program Name] CAP-ES V2 for RKR
----------------------------------------------------------------
[Version] 2.5.300.0
----------------------------------------------------------------
[PCB No.]
----------------------------------------------------------------
[Interchangeability] X / O
----------------------------------------------------------------
[Other Firmware Requirements] None
----------------------------------------------------------------
[PCB Requirements] None
----------------------------------------------------------------
[Software category] Normal Release
----------------------------------------------------------------
[Release category] Normal Release
----------------------------------------------------------------
[Program category] Others
----------------------------------------------------------------
Exported to(language) KOR(en)
[Firmware No.] D592-0031S
[File Information]
 File Name        D592-0031S.exe
 File Type        Module for Service
 Size           747.99 MB ( 784322477 byte )
 Check Sum -8Bit Sum: 4B23
        -16Bit Sum(Little Endian): 773F
        -16Bit Sum(Big Endian): F6E4
[Availability of RFU] No
----------------------------------------------------------------
[Production reflection]
----------------------------------------------------------------


================================================================
*** Note ***
================================================================
[Note]

----------------------------------------------------------------



================================================================
*** Important Notes ***
================================================================
[Important Notes]

----------------------------------------------------------------



================================================================
*** Modification History ***
================================================================
```

[Modifications made:]
Rank C

Supproted:
- Windows 10 Pro for Workstations is supported.
- Windows 10 ver.1909 is supported.

Fixed:
- It fails to delete "SQL Server 2008" database when uninstalling "CAP-ES"
- By pressing "OK" button on "Default Setting" screen, there is a
  case that processing does not transition to the "Maintenance screen"
  immediately and is waiting for processing.
- With Windows Server2016 or later, the port number that is specified
  by the installer may not be set to the Firewall's "Inbound Rules".
- "Available Functions" of the user information may be automatically
  unchecked when user change the own's login password on MFP.

Other:
- Amazon Corretto is upgraded to 8u222-b10.

[Modification history]

Version 2.5.200.0
Rank C

Supproted:
- None

Fixed:
- It fails to import the Integrated Information CSV file.
- Although the option to delete the database is selected during the
  uninstallation, the database may not be deleted.
- The user information will not be rolled back even if an error
  occurs during task synchronization.

Other:
- Changed the Java Runtime Environment to Amamzon Corretto Open JDK.
- Added the function to detect the access from an unauthorized
  client to prevent the unauthorized information collections.
  Note: This function is supported from CAP/ELP-NX/CAP-ES/ELP-NX FS
      v2.5.200. This function is not supported in the environment
      where v2.5.200 or earlier also exists.
- Updated Jetty version to 9.3.26.

Version 2.5.100.0
Rank C

Support:
- Windows Server 2019 is supported.

Fixed:
- Characters in log file are garbled.
- The time zone of the log is recorded in UTC, not local time.

- Task Synchronization does not reflect the card information changed
  via Active Directory to CAP-ES.
- Synchronization of the primary and secondary servers fails when it
  is executed after processing Overwrite-Import Billing Code.
- The module of" Enterprise Server Module for CAP V1 Users " is not
  deleted by uninstalling CAP-ES.
- An inadequate error message is displayed when a communication
  error occurs during authentication processes.
- Timeout error occurs for Synchronization of the primary and
  secondary servers.
- DB is not deleted even if the deletion of DB is selected
  when uninstalling CAP-ES.

Other:
- The installer includes "EncryptionTool" that outputs the file for
  the SSL certificate of the device to be imported to the web
  administrative tool.
- JRE is upgraded to v1.8.0.192.

Version 2.5.000.0
Rank C

Fixed:
- If "Custom" is set to "Zoom" configuration of IE, "User property" of the
  Administrator Tool is not displayed.
- Duplicated "Cleaner.bat" logs may be recorded to Windows event log.
- The error message for job cancellation is displayed. Authentication fails if
  synchronization functions are being processed, or when CSV is being imported.
- AD/LDAP authentication fails if there are users with the same name and group,
  but in different organizations.
- After changing the Database Connection password and name via the Database Management
  Tool, the "ok" button will be disabled if the user undoes the Database Name change.
- Enterprise Server Module for CAP V1 Users will fail to install while SQL Server
  is installed in Windows Server 2016.
- The error code "E0210001" is displayed during Kerberos authentication if the
  password is incorrect.
- The User Information Acquisition Test fails if "<"or">" is included in the
  user information of the Active Directory.
- The User Information Acquisition Test fails if "." or ";" is included in the
  group name of The Active Directory.
- An existing instance name can be entered during the SQL Server installation
  packaged with the Card Authentication Package Enterprise Server installer.
- Authentication may fail while importing a Integrated Information CSV file.
- Part of logs may be missing.
- Regarding card information registered to the Active Directory, synchronization
  will fail if user information that is linked to the card has been changed after
  the previous Synchronization.
- The synchronization process is slow while the billing code and user are linked
  via Administrator Tool.

Other:
- Changed the authentication specification for when multiple Active Directories
  have a user with the same name.
- TLS 1.2 / 1.1 / 1.0 can be enabled/disabled via the Administrator Tool.

- The signature algorithm of Server certificate can be confirmed via the
  Administrator Tool.
- The latest version of the Administrator Tool can be displayed by clicking the
  "reload" button after installation.
- JRE is upgraded to v1.8.0.151.
- Changed the error message that is displayed when AD (LDAP) authentication is
  conducted by the user unregistered in Active Directory.
- Enabled/Disabled Encryption Strength for SSL communication can be configured
  via the Administrator Tool.
- Jetty is upgraded to v9.3.19.
- SQL Server 2016 Express is packaged to the installer.
- .Net Framework 4.6 is packaged to the installer.

Version 2.4.100.0
Fixed:
- The user associated billing code information may be deleted by
  task synchronization.
- User associated billing code information (.csv file) that has
  empty domain names cannot be imported.

Version 2.4.000.0
Support:
- Windows Server 2016 is supported.
- SQL Server 2016 is supported.
- Windows Server 2003/2003 R2/Windows 8 are excluded as support
  environments.

Fixed:
- Update installation from v2.3 to v2.3.100 may fail.
- Offline deactivation may fail.
- When adding a group to the Group Authorization Information List
  via the Administrative Tool, [Color Copy Mode Limitation] may not
  be displayed correctly.
- The error message may not be displayed correctly when
  adding/editing a card ID with many characters.
- Duplicated or deleted cards and errors related to them may not be
  displayed correctly.

Other:
- Billing codes can be obtained from a user attribute.
- Activation method has been changed from server license to client
  access license (CAL).
- A fix for the Apache Commons FileUpload (ACF) vulnerability has
  been added.

Version 2.2.7.0
Fixed:
1. The built-in user (admin/service) can be registered as a normal user.
2. If a login user name is searched for by using capital letters,
   the user will not be found in the case that "Convert to Lower
   Case" is specified in the Login User Name settings under

Registration Method in Default Settings.
3. If authentication or synchronization is performed after modifying
   capital/lowercase letters in the registered user's domain name,
   2 users will be registered that only differ by their domain names
   having capital or lowercase letters. This will cause an
   authentication error to occur.
4. An internal user's Identification Name can be changed by
   modifying and importing a Group Authorization Information .csv file.
5. After a user who belongs to an external group is registered in
   CAP-ES and overwrite importing is performed using an Integrated
   Information .csv file that does not contain the user, no name
   group will be registered to the user.
6. When importing an Integrated Information .csv file, the
   information log will be incomplete.
7. The message "Enterprise Server Module for CAP V1 Users is to be
   installed later" will be displayed when confirming
   whether "Enterprise Server Module for CAP V1 Users" is installed
   when installing CAP-ES v2.
8. Even if a group is deleted from CAP-ES, the Group Authorization
   Information List for the group will not be deleted.
9. If an Integrated Information group name is 64 characters or more,
   the .csv file cannot be imported.
10. The CPU usage for the CAP-ES service may become 100% because of A
    pache Commons File Upload library instability.
(http://mail-archives.us.apache.org/mod_mbox/www-
announce/201402.mbox/%3C52F373FC.9030907@apache.org%3E).
11. If the Account Lock Threshold value set in Active Directory is
    the same (or less) than the domain controller number specified
    in the Server Settings and Active Directory (LDAP) is specified
    as the authentication type, an account lock will occur if the
    input user's password is incorrect.
12. There is a possibility that SSL 3.0 with a CBC cipher may be
    decrypted by using a padding-oracle attack.
(https://cve.mitre.org/cgi-bin/cvename.cgi?name=CVE-2014-3566)
13. If multiple domains are specified for "Domain Name" in the
    Server Settings and Active Directory (LDAP) is specified as the
    authentication type, an authentication error may occur.

Other:
1. CAP-ES outputs the following logs into the Windows Application
   Event log:
   - The results of operating a .bat file.
   - When an error occurs.
2. Delete all user information in the CAP-ES database at one time by
   using "UserAllDelete.bat".
3. The Card ID can be searched for via the User Display Name.
4. A message for confirming if the database is on an internal or
   external server will be displayed when upgrading. In the case
   that the database is internal, the database will be updated
   automatically during the CAP-ES version-up flow. In the case that
   the database is external, perform the "Create Database" procedure
   on the external server separately.
5. An attribute on an external authentication server that has
   multiple values can be specified in "Attribute Name Settings" for
   card IDs. Up to 10 values (card IDs) are supported.
6. Failover Clustering for Windows Server 2012/2012 R2 is supported.
7. The AES 128/256-bit encryption method can be used for Kerberos

Authentication.
8. "SQL Server Name", "Database Instance Name", and "Database Name"
   can be changed via the Database Management Tool.

```
================================================================
*** Basic Information ***
================================================================
[Create date] 2020/01/17
----------------------------------------------------------------
[Program Name] CAP-ES V2(EXP) for RCN
----------------------------------------------------------------
[Version] 2.5.300.0
----------------------------------------------------------------
[PCB No.]
----------------------------------------------------------------
[Interchangeability] X / O
----------------------------------------------------------------
[Other Firmware Requirements] None
----------------------------------------------------------------
[PCB Requirements] None
----------------------------------------------------------------
[Software category] Normal Release
----------------------------------------------------------------
[Release category] Normal Release
----------------------------------------------------------------
[Program category] Others
----------------------------------------------------------------
Exported to(language) ASI_CHN(en)
[Firmware No.] D592-0041S
[File Information]
 File Name        D592-0041S.exe
 File Type        Module for Service
 Size            747.97 MB ( 784308089 byte )
 Check Sum -8Bit Sum: C218
        -16Bit Sum(Little Endian): A617
        -16Bit Sum(Big Endian): 3401
[Availability of RFU] No
----------------------------------------------------------------
[Production reflection]
----------------------------------------------------------------


================================================================
*** Note ***
================================================================
[Note]

----------------------------------------------------------------



================================================================
*** Important Notes ***
================================================================
[Important Notes]

----------------------------------------------------------------



================================================================
*** Modification History ***
================================================================
```

[Modifications made:]
Rank C

Supproted:
- Windows 10 Pro for Workstations is supported.
- Windows 10 ver.1909 is supported.

Fixed:
- It fails to delete "SQL Server 2008" database when uninstalling "CAP-ES"
- By pressing "OK" button on "Default Setting" screen, there is a
  case that processing does not transition to the "Maintenance screen"
  immediately and is waiting for processing.
- With Windows Server2016 or later, the port number that is specified
  by the installer may not be set to the Firewall's "Inbound Rules".
- "Available Functions" of the user information may be automatically
  unchecked when user change the own's login password on MFP.

Other:
- Amazon Corretto is upgraded to 8u222-b10.

[Modification history]

Version 2.5.200.0
Rank C

Supproted:
- None

Fixed:
- It fails to import the Integrated Information CSV file.
- Although the option to delete the database is selected during the
  uninstallation, the database may not be deleted.
- The user information will not be rolled back even if an error
  occurs during task synchronization.

Other:
- Changed the Java Runtime Environment to Amamzon Corretto Open JDK.
- Added the function to detect the access from an unauthorized
  client to prevent the unauthorized information collections.
  Note: This function is supported from CAP/ELP-NX/CAP-ES/ELP-NX FS
        v2.5.200. This function is not supported in the environment
        where v2.5.200 or earlier also exists.
- Updated Jetty version to 9.3.26.

Version 2.5.100.0
Rank C

Support:
- Windows Server 2019 is supported.

Fixed:
- Characters in log file are garbled.

- The time zone of the log is recorded in UTC, not local time.
- Task Synchronization does not reflect the card information changed
  via Active Directory to CAP-ES.
- Synchronization of the primary and secondary servers fails when it
  is executed after processing Overwrite-Import Billing Code.
- The module of" Enterprise Server Module for CAP V1 Users " is not
  deleted by uninstalling CAP-ES.
- An inadequate error message is displayed when a communication
  error occurs during authentication processes.
- Timeout error occurs for Synchronization of the primary and
  secondary servers.
- DB is not deleted even if the deletion of DB is selected
  when uninstalling CAP-ES.

Other:
- The installer includes "EncryptionTool" that outputs the file for
  the SSL certificate of the device to be imported to the web
  administrative tool.
- JRE is upgraded to v1.8.0.192.

Version 2.5.000.0
Rank C

Fixed:
- If "Custom" is set to "Zoom" configuration of IE, "User property" of the
  Administrator Tool is not displayed.
- Duplicated "Cleaner.bat" logs may be recorded to Windows event log.
- The error message for job cancellation is displayed. Authentication fails if
  synchronization functions are being processed, or when CSV is being imported.
- AD/LDAP authentication fails if there are users with the same name and group,
  but in different organizations.
- After changing the Database Connection password and name via the Database Management
  Tool, the "ok" button will be disabled if the user undoes the Database Name change.
- Enterprise Server Module for CAP V1 Users will fail to install while SQL Server
  is installed in Windows Server 2016.
- The error code "E0210001" is displayed during Kerberos authentication if the
  password is incorrect.
- The User Information Acquisition Test fails if "<"or">" is included in the
  user information of the Active Directory.
- The User Information Acquisition Test fails if "." or ";" is included in the
  group name of The Active Directory.
- An existing instance name can be entered during the SQL Server installation
  packaged with the Card Authentication Package Enterprise Server installer.
- Authentication may fail while importing a Integrated Information CSV file.
- Part of logs may be missing.
- Regarding card information registered to the Active Directory, synchronization
  will fail if user information that is linked to the card has been changed after
  the previous Synchronization.
- The synchronization process is slow while the billing code and user are linked
  via Administrator Tool.

Other:
- Changed the authentication specification for when multiple Active Directories
  have a user with the same name.

- TLS 1.2 / 1.1 / 1.0 can be enabled/disabled via the Administrator Tool.
- The signature algorithm of Server certificate can be confirmed via the
  Administrator Tool.
- The latest version of the Administrator Tool can be displayed by clicking the
  "reload" button after installation.
- JRE is upgraded to v1.8.0.151.
- Changed the error message that is displayed when AD (LDAP) authentication is
  conducted by the user unregistered in Active Directory.
- Enabled/Disabled Encryption Strength for SSL communication can be configured
  via the Administrator Tool.
- Jetty is upgraded to v9.3.19.
- SQL Server 2016 Express is packaged to the installer.
- .Net Framework 4.6 is packaged to the installer.

```
===========================================================================
*** Basic Information ***
===========================================================================
[Create date] 2020/01/17
---------------------------------------------------------------------
[Program Name] ELP-NX FS V2 for RE
---------------------------------------------------------------------
[Version] 2.5.300.0
---------------------------------------------------------------------
[PCB No.]
---------------------------------------------------------------------
[Interchangeability] X / O
---------------------------------------------------------------------
[Other Firmware Requirements] None
---------------------------------------------------------------------
[PCB Requirements] None
---------------------------------------------------------------------
[Software category] Normal Release
---------------------------------------------------------------------
[Release category] Normal Release
---------------------------------------------------------------------
[Program category] Others
---------------------------------------------------------------------
Exported to(language) EUR(en)
[Firmware No.] D602-0068V
[File Information]
 File Name       D602-0068V.exe
 File Type       Module for Service
 Size          679.56 MB ( 712571491 byte )
 Check Sum -8Bit Sum: 3C52
        -16Bit Sum(Little Endian): 4F10
        -16Bit Sum(Big Endian): 3F42
[Availability of RFU] No
---------------------------------------------------------------------
[Production reflection]
---------------------------------------------------------------------


===========================================================================
*** Note ***
===========================================================================
[Note]

---------------------------------------------------------------------



===========================================================================
*** Important Notes ***
===========================================================================
[Important Notes]

---------------------------------------------------------------------



===========================================================================
*** Modification History ***
===========================================================================
```

[Modifications made:]
Rank C

Supproted:
- Windows 10 Pro for Workstations is supported.
- Windows 10 ver.1909 is supported.
- macOS 10.15 is supported.

Fixed:
- Index may be set to "Not Set" by importing CSV file via "My Document
  Folder Maintenance" screen.
- The sort orders of My Document folder are different between "Local HDD"
  and "Remote FS" tabs.

Other:
- Added the setting for specifying the format to obtain "My Document Folder ID".
- Amazon Corretto is upgraded to 8.222.10.3.

[Modification history]

Version 2.5.200.0
Rank C

Supproted:
- None

Fixed:
- When 8in1 is set in the print job, information for the spooled job
  is blank in job list.
- Top and bottom of characters are cut on the list box of some
  FireFox.
- In FireFoxESR 60.4.0, import process will not be completed if
  incorrect operation is conducted while CSV file is imported on "My
  Document Folder Maintenance" screen.

Other:
- Changed the Java Runtime Environment to Amamzon Corretto Open JDK.
- Added the function to detect the access from an unauthorized
  client to prevent the unauthorized information collections.
  Note: This function is supported from CAP/ELP-NX/CAP-ES/ELP-NX FS
      v2.5.200. This function is not supported in the environment
      where v2.5.200 or earlier also exists.
- Updated GhostScript/GhostPCL version to 9.26.
- Updated Jetty version to 9.3.26.

Version 2.5.100.0
Rank C

Support:
- Windows Server 2019(Standard/Datacenter Edition) is supported.
- macOS 10.14 is supported.

Fixed:
- ELP-NX FS hangs up while creating print data's previews and
thumbnails from specific PCL data.
- It fails to store specific PS data.

Other:
- Add the characters that can be used for administrator password.
- Add the setting to specify the user name to be obtained from PS data.
- The installer includes "EncryptionTool" that outputs the file for
the SSL certificate of the device to be imported to the web
administrative tool.

Version V2.5.000.0
Rank C

Supported:
- None

Fixed:
- None

Other:
- Thumbnail images of print jobs' first pages are displayed for print job list.

Version 2.4.500.0
Rank C

Support:
- Mac OS X 10.13 is supported.
Fixed:
- Job names on the operation panel are displayed in garbled text.
- Cannot print a locked print job that was sent from MacOS to the Enhanced Locked
  Print NX FlexRelease Server. However, the job is stored in the device.
- Print failure occurs if a large volume of PS data is sent.

Other:
- It is now possible to output print data with PJL that is RPGL.
- SQL Server 2016 Express is packaged to the installer.
- Jetty is upgraded to 9.3.19.
- TLS 1.2 / 1.1 / 1.0 can be enabled/disabled via Administrator Tool.
- Signature algorithm for the Server certificate can be confirmed via Administrator Tool.

Version 2.4.000.0
Support:
- Windows Server 2016/MacOS X 10.12 is supported.
- SQL Server 2016 is supported.
- Windows Server 2003/2003 R2/Windows 8 are excluded as support
  environments.

Fixed:
- If using My Document Folders and the authentication mode on the
  device is set to user code authentication, users cannot print.
- After changing the DB Server Name/Database Name in the Database
  Management Tool, they cannot be returned to the value set before
  the change.
- ELP-NX FS may not work correctly after an update installation.

Other:
- Activation method has been changed from server license to client
  access license (CAL).
- A fix for a vulnerability regarding Click Jacking has been added.

Version 2.3.101.0
Fixed:
When using multiple LF servers, the print job may not be displayed
in the job list.

Version 2.3.100.0
Support:
1. Support for TLS1.2 has been added.
 *The Java VM version on the device must support TLS1.2.
2. Support for SHA-2 has been added.
 *The Java VM version on the device must support SHA-2.

Other:
1. Paper size is displayed for each print job.
2. RSInfo has been updated.
3. A fix for the Apache Commons Collection (ACC) vulnerability has
   been added.

Version 2.3.000.0
Supported:
1. Support for Fire Fox ESR 38 has been added.
2. Citrix XenApp 7.5 and 7.6 are supported.

Fix:
1. Cannot print small file size PS jobs that are spooled in ELP-NX
   FS.
2. If 2 byte character is set as FRPRINT port, job list cannot be
   obtained from ELP-NX FS.

Other:
1. Primary and Secondary CAP-ES servers can be specified in ELP-NX
   FS Web UI.
2. Activation site has been changed from GMP server to eDC-i server.
3. Java version has been updated to 8.

Version 2.2.503.0

Fixed:
- Fails to display the print job preview if "Do not Prepare" is set
  for the "Preview Create" setting in ELP-NX FS v2.
- A job from Mac client via LPR may not be spooled.

Version 2.2.502.0
Support:
None.

Fixed:
None.

Other:
- Preview settings (enable/disable the preview function, preview
  image creation timing, etc.) have been added.

Version 2.2.501.0
Fixed:
1. CPU usage rates become high when multiple print jobs are spooled
   on the ELP-NX FS server at the same time. Because in v2.2.4 and
   2.2.5, preview data is created when spooling the jobs on ELP-NX FS
   and up to 3 previews are created at the same time. To avoid this,
   there are 2 modifications in v2.2.501.
   - Preview data is created when selecting the preview button on a device.
   - Only 1 preview is created during the creation process.

```
================================================================================
*** Basic Information ***
================================================================================
[Create date] 2020/01/17
--------------------------------------------------------------------
[Program Name] ELP-NX FS V2 for RA
--------------------------------------------------------------------
[Version] 2.5.300.0
--------------------------------------------------------------------
[PCB No.]
--------------------------------------------------------------------
[Interchangeability] X / O
--------------------------------------------------------------------
[Other Firmware Requirements] None
--------------------------------------------------------------------
[PCB Requirements] None
--------------------------------------------------------------------
[Software category] Normal Release
--------------------------------------------------------------------
[Release category] Normal Release
--------------------------------------------------------------------
[Program category] Others
--------------------------------------------------------------------
Exported to(language) ASI_CHN(en)
[Firmware No.] D602-0078V
[File Information]
 File Name        D602-0078V.exe
 File Type        Module for Service
 Size          679.56 MB ( 712571975 byte )
 Check Sum -8Bit Sum: 6D3C
        -16Bit Sum(Little Endian): B8D7
        -16Bit Sum(Big Endian): F065
[Availability of RFU] No
--------------------------------------------------------------------
[Production reflection]
--------------------------------------------------------------------


================================================================================
*** Note ***
================================================================================
[Note]

--------------------------------------------------------------------



================================================================================
*** Important Notes ***
================================================================================
[Important Notes]

--------------------------------------------------------------------



================================================================================
*** Modification History ***
================================================================================
```

[Modifications made:]
Rank C

Supproted:
- Windows 10 Pro for Workstations is supported.
- Windows 10 ver.1909 is supported.
- macOS 10.15 is supported.

Fixed:
- Index may be set to "Not Set" by importing CSV file via "My Document
  Folder Maintenance" screen.
- The sort orders of My Document folder are different between "Local HDD"
  and "Remote FS" tabs.

Other:
- Added the setting for specifying the format to obtain "My Document
  Folder ID".
- Amazon Corretto is upgraded to 8.222.10.3.

[Modification history]

Version 2.5.200.0
Rank C

Supproted:
- None

Fixed:
- When 8in1 is set in the print job, information for the spooled job
  is blank in job list.
- Top and bottom of characters are cut on the list box of some
  FireFox.
- In FireFoxESR 60.4.0, import process will not be completed if
  incorrect operation is conducted while CSV file is imported on "My
  Document Folder Maintenance" screen.

Other:
- Changed the Java Runtime Environment to Amamzon Corretto Open JDK.
- Added the function to detect the access from an unauthorized
  client to prevent the unauthorized information collections.
  Note: This function is supported from CAP/ELP-NX/CAP-ES/ELP-NX FS
       v2.5.200. This function is not supported in the environment
       where v2.5.200 or earlier also exists.
- Updated GhostScript/GhostPCL version to 9.26.
- Updated Jetty version to 9.3.26.

Version 2.5.100.0
Rank C

Support:
- Windows Server 2019(Standard/Datacenter Edition) is supported.
- macOS 10.14 is supported.

Fixed:
- ELP-NX FS hangs up while creating print data's previews and
thumbnails from specific PCL data.
- It fails to store specific PS data.

Other:
- Add the characters that can be used for administrator
password.
- Add the setting to specify the user name to be obtained from PS data.
- The installer includes "EncryptionTool" that outputs the file for
the SSL certificate of the device to be imported to the web
administrative tool.

Version V2.5.000.0
Rank C

Supported:
- None

Fixed:
- None

Other:
- Thumbnail images of print jobs' first pages are displayed for print job list.

Version 2.4.500.0
Rank C

Support:
- Mac OS X 10.13 is supported.
Fixed:
- Job names on the operation panel are displayed in garbled text.
- Cannot print a locked print job that was sent from MacOS to the Enhanced Locked
  Print NX FlexRelease Server. However, the job is stored in the device.
- Print failure occurs if a large volume of PS data is sent.

Other:
- It is now possible to output print data with PJL that is RPGL.
- SQL Server 2016 Express is packaged to the installer.
- Jetty is upgraded to 9.3.19.
- TLS 1.2 / 1.1 / 1.0 can be enabled/disabled via Administrator Tool.
- Signature algorithm for the Server certificate can be confirmed via Administrator Tool.

Version 2.4.000.0
Support:
- Windows Server 2016/MacOS X 10.12 is supported.
- SQL Server 2016 is supported.
- Windows Server 2003/2003 R2/Windows 8 are excluded as support
  environments.

Fixed:

- If using My Document Folders and the authentication mode on the
  device is set to user code authentication, users cannot print.
- After changing the DB Server Name/Database Name in the Database
  Management Tool, they cannot be returned to the value set before
  the change.
- ELP-NX FS may not work correctly after an update installation.

Other:
- Activation method has been changed from server license to client
  access license (CAL).
- A fix for a vulnerability regarding Click Jacking has been added.

Version 2.3.101.0
Fixed:
When using multiple LF servers, the print job may not be displayed
in the job list.

Version 2.3.100.0
Support:
1. Support for TLS1.2 has been added.
   *The Java VM version on the device must support TLS1.2.
2. Support for SHA-2 has been added.
   *The Java VM version on the device must support SHA-2.

Other:
1. Paper size is displayed for each print job.
2. RSInfo has been updated.
3. A fix for the Apache Commons Collection (ACC) vulnerability has
   been added.

Version 2.3.000.0
Supported:
1. Support for Fire Fox ESR 38 has been added.
2. Citrix XenApp 7.5 and 7.6 are supported.

Fix:
1. Cannot print small file size PS jobs that are spooled in ELP-NX
   FS.
2. If 2 byte character is set as FRPRINT port, job list cannot be
   obtained from ELP-NX FS.

Other:
1. Primary and Secondary CAP-ES servers can be specified in ELP-NX
   FS Web UI.
2. Activation site has been changed from GMP server to eDC-i server.
3. Java version has been updated to 8.

Version 2.2.503.0

Fixed:
- Fails to display the print job preview if "Do not Prepare" is set
  for the "Preview Create" setting in ELP-NX FS v2.
- A job from Mac client via LPR may not be spooled.

Version 2.2.502.0
Support:
None.

Fixed:
None.

Other:
- Preview settings (enable/disable the preview function, preview
  image creation timing, etc.) have been added.

Version 2.2.501.0
Fixed:
1. CPU usage rates become high when multiple print jobs are spooled
   on the ELP-NX FS server at the same time. Because in v2.2.4 and 2.2.5,
   preview data is created when spooling the jobs on ELP-NX FS and
   up to 3 previews are created at the same time. To avoid this,
   there are 2 modifications in v2.2.501.
   - Preview data is created when selecting the preview button on a device.
   - Only 1 preview is created during the creation process.

===
*** Basic Information ***
===
[Create date] 2020/01/17

[Program Name] ELP-NX FS V2 for RAC

[Version] 2.5.300.0

[PCB No.]

[Interchangeability] X / O

[Other Firmware Requirements] None

[PCB Requirements] None

[Software category] Normal Release

[Release category] Normal Release

[Program category] Others

Exported to(language) USA(en)
[Firmware No.] D602-0088V
[File Information]
 File Name   D602-0088V.exe
 File Type   Module for Service
 Size   679.53 MB (712541088 byte)
 Check Sum -8Bit Sum: 06E2
       -16Bit Sum(Little Endian): 8F91
       -16Bit Sum(Big Endian): 5951
[Availability of RFU] No

[Production reflection]

===
*** Note ***
===
[Note]

===
*** Important Notes ***
===
[Important Notes]

===
*** Modification History ***
===

[Modifications made:]
Rank C

Supproted:
- Windows 10 Pro for Workstations is supported.
- Windows 10 ver.1909 is supported.
- macOS 10.15 is supported.

Fixed:
- Index may be set to "Not Set" by importing CSV file via "My Document
  Folder Maintenance" screen.
- The sort orders of My Document folder are different between "Local HDD"
  and " Remote FS" tabs.

Other:
- Added the setting for specifying the format to obtain "My Document Folder ID".
- Amazon Corretto is upgraded to 8.222.10.3.

[Modification history]

Version 2.5.200.0
Rank C

Supproted:
- None

Fixed:
- When 8in1 is set in the print job, information for the spooled job
  is blank in job list.
- Top and bottom of characters are cut on the list box of some
  FireFox.
- In FireFoxESR 60.4.0, import process will not be completed if
  incorrect operation is conducted while CSV file is imported on "My
  Document Folder Maintenance" screen.

Other:
- Changed the Java Runtime Environment to Amamzon Corretto Open JDK.
- Added the function to detect the access from an unauthorized
  client to prevent the unauthorized information collections.
  Note: This function is supported from CAP/ELP-NX/CAP-ES/ELP-NX FS
      v2.5.200. This function is not supported in the environment
      where v2.5.200 or earlier also exists.
- Updated GhostScript/GhostPCL version to 9.26.
- Updated Jetty version to 9.3.26.

Version 2.5.100.0
Rank C

Support:
- Windows Server 2019(Standard/Datacenter Edition) is supported.
- macOS 10.14 is supported.

Fixed:
- ELP-NX FS hangs up while creating print data's previews and
thumbnails from specific PCL data.
- It fails to store specific PS data.

Other:
- Add the characters that can be used for administrator
password.
- Add the setting to specify the user name to be obtained from PS data.
- The installer includes "EncryptionTool" that outputs the file for
the SSL certificate of the device to be imported to the web
administrative tool.

Version V2.5.000.0
Rank C

Supported:
- None

Fixed:
- None

Other:
- Thumbnail images of print jobs' first pages are displayed for print job list.

Version 2.4.500.0
Rank C

Support:
- Mac OS X 10.13 is supported.
Fixed:
- Job names on the operation panel are displayed in garbled text.
- Cannot print a locked print job that was sent from MacOS to the Enhanced Locked
  Print NX FlexRelease Server. However, the job is stored in the device.
- Print failure occurs if a large volume of PS data is sent.

Other:
- It is now possible to output print data with PJL that is RPGL.
- SQL Server 2016 Express is packaged to the installer.
- Jetty is upgraded to 9.3.19.
- TLS 1.2 / 1.1 / 1.0 can be enabled/disabled via Administrator Tool.
- Signature algorithm for the Server certificate can be confirmed via Administrator Tool.

Version 2.4.000.0
Support:
- Windows Server 2016/MacOS X 10.12 is supported.
- SQL Server 2016 is supported.
- Windows Server 2003/2003 R2/Windows 8 are excluded as support
  environments.

Fixed:
- If using My Document Folders and the authentication mode on the
  device is set to user code authentication, users cannot print.
- After changing the DB Server Name/Database Name in the Database
  Management Tool, they cannot be returned to the value set before
  the change.
- ELP-NX FS may not work correctly after an update installation.

Other:
- Activation method has been changed from server license to client
  access license (CAL).
- A fix for a vulnerability regarding Click Jacking has been added.

Version 2.3.101.0
Fixed:
When using multiple LF servers, the print job may not be displayed
in the job list.

Version 2.3.100.0
Support:
1. Support for TLS1.2 has been added.
 *The Java VM version on the device must support TLS1.2.
2. Support for SHA-2 has been added.
 *The Java VM version on the device must support SHA-2.

Other:
1. Paper size is displayed for each print job.
2. RSInfo has been updated.
3. A fix for the Apache Commons Collection (ACC) vulnerability has
   been added.

Version 2.3.000.0
Supported:
1. Support for Fire Fox ESR 38 has been added.
2. Citrix XenApp 7.5 and 7.6 are supported.

Fix:
1. Cannot print small file size PS jobs that are spooled in ELP-NX
   FS.
2. If 2 byte character is set as FRPRINT port, job list cannot be
   obtained from ELP-NX FS.

Other:
1. Primary and Secondary CAP-ES servers can be specified in ELP-NX
   FS Web UI.
2. Activation site has been changed from GMP server to eDC-i server.
3. Java version has been updated to 8.

Version 2.2.503.0

Fixed:
- Fails to display the print job preview if "Do not Prepare" is set
  for the "Preview Create" setting in ELP-NX FS v2.
- A job from Mac client via LPR may not be spooled.

Version 2.2.502.0
Support:
None.

Fixed:
None.

Other:
- Preview settings (enable/disable the preview function, preview
  image creation timing, etc.) have been added.

Version 2.2.501.0
Fixed:
1. CPU usage rates become high when multiple print jobs are spooled
   on the ELP-NX FS server at the same time. Because in v2.2.4 and 2.2.5,
   preview data is created when spooling the jobs on ELP-NX FS and
   up to 3 previews are created at the same time. To avoid this,
   there are 2 modifications in v2.2.501.
- Preview data is created when selecting the preview button on a device.
- Only 1 preview is created during the creation process.

```
================================================================
*** Basic Information ***
================================================================
[Create date] 2020/01/17
----------------------------------------------------------------
[Program Name] ELP-NX FS V2 for RCN
----------------------------------------------------------------
[Version] 2.5.300.0
----------------------------------------------------------------
[PCB No.]
----------------------------------------------------------------
[Interchangeability] X / O
----------------------------------------------------------------
[Other Firmware Requirements] None
----------------------------------------------------------------
[PCB Requirements] None
----------------------------------------------------------------
[Software category] Normal Release
----------------------------------------------------------------
[Release category] Normal Release
----------------------------------------------------------------
[Program category] Others
----------------------------------------------------------------
Exported to(language) CHN(en)
[Firmware No.] D602-0098V
[File Information]
 File Name        D602-0098V.exe
 File Type        Module for Service
 Size          679.56 MB ( 712571997 byte )
 Check Sum -8Bit Sum: 6F7C
        -16Bit Sum(Little Endian): 9B33
        -16Bit Sum(Big Endian): 5049
[Availability of RFU] No
----------------------------------------------------------------
[Production reflection]
----------------------------------------------------------------


================================================================
*** Note ***
================================================================
[Note]

----------------------------------------------------------------



================================================================
*** Important Notes ***
================================================================
[Important Notes]

----------------------------------------------------------------



================================================================
*** Modification History ***
================================================================
```

[Modifications made:]
Rank C

Supproted:
- Windows 10 Pro for Workstations is supported.
- Windows 10 ver.1909 is supported.
- macOS 10.15 is supported.

Fixed:
- Index may be set to "Not Set" by importing CSV file via "My Document
  Folder Maintenance" screen.
- The sort orders of My Document folder are different between "Local HDD"
  and "Remote FS" tabs.

Other:
- Added the setting for specifying the format to obtain "My Document Folder ID".
- Amazon Corretto is upgraded to 8.222.10.3.

[Modification history]

Version 2.5.200.0
Rank C

Supproted:
- None

Fixed:
- When 8in1 is set in the print job, information for the spooled job
  is blank in job list.
- Top and bottom of characters are cut on the list box of some
  FireFox.
- In FireFoxESR 60.4.0, import process will not be completed if
  incorrect operation is conducted while CSV file is imported on "My
  Document Folder Maintenance" screen.

Other:
- Changed the Java Runtime Environment to Amamzon Corretto Open JDK.
- Added the function to detect the access from an unauthorized
  client to prevent the unauthorized information collections.
  Note: This function is supported from CAP/ELP-NX/CAP-ES/ELP-NX FS
       v2.5.200. This function is not supported in the environment
         where v2.5.200 or earlier also exists.
- Updated GhostScript/GhostPCL version to 9.26.
- Updated Jetty version to 9.3.26.

Version 2.5.100.0
Rank C

Support:
- Windows Server 2019(Standard/Datacenter Edition) is supported.
- macOS 10.14 is supported.

Fixed:
- ELP-NX FS hangs up while creating print data's previews and
thumbnails from specific PCL data.
- It fails to store specific PS data.

Other:
- Add the characters that can be used for administrator
password.
- Add the setting to specify the user name to be obtained from PS data.
- The installer includes "EncryptionTool" that outputs the file for
the SSL certificate of the device to be imported to the web
administrative tool.

Version V2.5.000.0
Rank C

Supported:
- None

Fixed:
- None

Other:
- Thumbnail images of print jobs' first pages are displayed for print job list.

Version 2.4.500.0
Rank C

Support:
- Mac OS X 10.13 is supported.
Fixed:
- Job names on the operation panel are displayed in garbled text.
- Cannot print a locked print job that was sent from MacOS to the Enhanced Locked
  Print NX FlexRelease Server. However, the job is stored in the device.
- Print failure occurs if a large volume of PS data is sent.

Other:
- It is now possible to output print data with PJL that is RPGL.
- SQL Server 2016 Express is packaged to the installer.
- Jetty is upgraded to 9.3.19.
- TLS 1.2 / 1.1 / 1.0 can be enabled/disabled via Administrator Tool.
- Signature algorithm for the Server certificate can be confirmed via Administrator Tool.

```
================================================================
*** Basic Information ***
================================================================
[Create date] 2020/01/17
----------------------------------------------------------------
[Program Name] ELP-NX FS V2 for RKR
----------------------------------------------------------------
[Version] 2.5.300.0
----------------------------------------------------------------
[PCB No.]
----------------------------------------------------------------
[Interchangeability] X / O
----------------------------------------------------------------
[Other Firmware Requirements] None
----------------------------------------------------------------
[PCB Requirements] None
----------------------------------------------------------------
[Software category] Normal Release
----------------------------------------------------------------
[Release category] Normal Release
----------------------------------------------------------------
[Program category] Others
----------------------------------------------------------------
Exported to(language) KOR(en)
[Firmware No.] D602-00A8V
[File Information]
 File Name       D602-00A8V.exe
 File Type       Module for Service
 Size          680.93 MB ( 714006641 byte )
 Check Sum -8Bit Sum: D03E
        -16Bit Sum(Little Endian): 60EB
        -16Bit Sum(Big Endian): AD53
[Availability of RFU] No
----------------------------------------------------------------
[Production reflection]
----------------------------------------------------------------


================================================================
*** Note ***
================================================================
[Note]

----------------------------------------------------------------



================================================================
*** Important Notes ***
================================================================
[Important Notes]

----------------------------------------------------------------



================================================================
*** Modification History ***
================================================================
```

[Modifications made:]
Rank C

Supproted:
- Windows 10 Pro for Workstations is supported.
- Windows 10 ver.1909 is supported.
- macOS 10.15 is supported.

Fixed:
- Index may be set to "Not Set" by importing CSV file via "My Document
  Folder Maintenance" screen.
- The sort orders of My Document folder are different between "Local HDD"
  and "Remote FS" tabs.

Other:
- Added the setting for specifying the format to obtain "My Document Folder ID".
- Amazon Corretto is upgraded to 8.222.10.3.

[Modification history]

Version 2.5.200.0
Rank C

Supproted:
- None

Fixed:
- When 8in1 is set in the print job, information for the spooled job
  is blank in job list.
- Top and bottom of characters are cut on the list box of some
  FireFox.
- In FireFoxESR 60.4.0, import process will not be completed if
  incorrect operation is conducted while CSV file is imported on "My
  Document Folder Maintenance" screen.

Other:
- Changed the Java Runtime Environment to Amamzon Corretto Open JDK.
- Added the function to detect the access from an unauthorized
  client to prevent the unauthorized information collections.
  Note: This function is supported from CAP/ELP-NX/CAP-ES/ELP-NX FS
      v2.5.200. This function is not supported in the environment
      where v2.5.200 or earlier also exists.
- Updated GhostScript/GhostPCL version to 9.26.
- Updated Jetty version to 9.3.26.

Version 2.5.100.0
Rank C

Support:
- Windows Server 2019(Standard/Datacenter Edition) is supported.
- macOS 10.14 is supported.

Fixed:
- ELP-NX FS hangs up while creating print data's previews and
thumbnails from specific PCL data.
- It fails to store specific PS data.

Other:
- Add the characters that can be used for administrator password.
- Add the setting to specify the user name to be obtained from PS data.
- The installer includes "EncryptionTool" that outputs the file for
the SSL certificate of the device to be imported to the web
administrative tool.

Version V2.5.000.0
Rank C

Supported:
- None

Fixed:
- None

Other:
- Thumbnail images of print jobs' first pages are displayed for print job list.

Version 2.4.500.0
Rank C

Support:
- Mac OS X 10.13 is supported.
Fixed:
- Job names on the operation panel are displayed in garbled text.
- Cannot print a locked print job that was sent from MacOS to the Enhanced Locked
  Print NX FlexRelease Server. However, the job is stored in the device.
- Print failure occurs if a large volume of PS data is sent.

Other:
- It is now possible to output print data with PJL that is RPGL.
- SQL Server 2016 Express is packaged to the installer.
- Jetty is upgraded to 9.3.19.
- TLS 1.2 / 1.1 / 1.0 can be enabled/disabled via Administrator Tool.
- Signature algorithm for the Server certificate can be confirmed via Administrator Tool.

Version 2.4.000.0
Support:
- Windows Server 2016/MacOS X 10.12 is supported.
- SQL Server 2016 is supported.
- Windows Server 2003/2003 R2/Windows 8 are excluded as support
  environments.

Fixed:

- If using My Document Folders and the authentication mode on the
   device is set to user code authentication, users cannot print.
 - After changing the DB Server Name/Database Name in the Database
   Management Tool, they cannot be returned to the value set before
   the change.
 - ELP-NX FS may not work correctly after an update installation.

Other:
 - Activation method has been changed from server license to client
   access license (CAL).
 - A fix for a vulnerability regarding Click Jacking has been added.

Version 2.2.3.0
Fixed:
1. CPU usage rates become high when multiple print jobs are spooled
   on the ELP-NX FS server at the same time. Because in v2.2.4 and 2.2.5,
   preview data is created when spooling the jobs on ELP-NX FS and
   up to 3 previews are created at the same time. To avoid this,
   there are 2 modifications in v2.2.501.
   - Preview data is created when selecting the preview button on a device.
   - Only 1 preview is created during the creation process.

```
================================================================
===

*** Basic Information ***

================================================================
===

[Create date] 2020/01/17

-----------------------------------------------------------------------

[Program Name] ELP NX V2_F12 for eDC

-----------------------------------------------------------------------

[Version] 1.5.300

-----------------------------------------------------------------------

[PCB No.]

-----------------------------------------------------------------------

[Interchangeability] X / O

-----------------------------------------------------------------------

[Other Firmware Requirements] None

-----------------------------------------------------------------------

[PCB Requirements] None

-----------------------------------------------------------------------

[Software category] Normal Release

-----------------------------------------------------------------------

[Release category] Normal Release

-----------------------------------------------------------------------

[Program category] Firmware

-----------------------------------------------------------------------

Exported to(language) GEN(all)

[Firmware No.] D60210N7F_forEDC
```

[File Information]

 File Name   D60210N7F_forEDC.zip

 File Type   Module for Service

 Size   5.69 MB (5970601 byte)

[Availability of RFU] No

[Production reflection]

==
===

*** Note ***

==
===

[Note]

==
===

*** Important Notes ***

==
===

[Important Notes]

```
================================================================
===

*** Modification History ***

================================================================
===

[Modifications made:]

Rank C


Supproted:

- Windows 10 Pro for Workstations is supported.

- Windows 10 ver.1909 is supported.

- macOS 10.15 is supported.


Fixed:

- "ELP-NX" shuts down by starting another application while the

  "Printing..." dialog is displayed if "Storage on OnDemand Print"

  is set to "Do not Permit".

- After conducting "Obtain" from CMY-MF1 via "Configuration Tool",

  "Last Date used" of "My Document Folder list" is displayed as " "(blank).

- The "Printing..." dialog is displayed and the user cannot logout.

- "ELP-NX" may be initialized at startup if memory is exhausted.

- When a large amount of jobs is spooled in the printer queue of the

  device, it fails to print "Device setting" via "Configuration Tool".

- User Name of the job that was deleted by Scheduled Processing may

  not be displayed correctly in "DeleteLog".

- "Application not set " error may occur by connecting to the device

  via "Configuration Tool" after upgrading "ELP-NX" by "ARFU".
```

[Modification history]

Version 1.5.202

Rank A

Supproted:

- None

Fixed:

- The following phenomenon may occur if all the occurrence

  conditions listed below are met.

  - Documents stored via Remote Device/Server cannot be printed out.

  - The job output by the user is not printed out and an unexpected

    job is printed out.

  Occurrence condition:

  - Package ALL V2.22/2.23 applied to Metis-MF3.

  - ELP-NX V1.5.000 or later is installed.

  - The delay of more than 15 seconds occurs during the communication

    with Remote Device/Server.

Other:

- None

Version 1.5.200

Rank C

Supproted:

- IM 550/600/600SR

- IM 2702

Fixed:

- Login to the application via Job Detection Tool may fail.(ELP NX

  with CAP v2).

- An unexpected error may occur if a user logs in to My Document

  Folder in device and displays the setting change window after

  logging in to My Document Folder in remote device and changing the

  settings.

- After logging in to My Document Folder at a remote device by the

  user with PIN, the document list in the My Document Folder at

  local device may not be displayed correctly.

- When a large amount of jobs is stored in ELP-NX, an error may

  occur by obtaining jobs via Job Management of Configuration Tool.

- The application name displayed on Remote Install Manager is not

  ELP-NX V2 but ELP-NX.

- ELP-NX downs by conducting a periodical process while a storage

  error is occurring at th ELP-NX.

- While ″Authentication Deactivation″ is set, jobs spooled in the

  device may be stored instead of being processed through printing.

- If parameters are set via Configuration Tool while ELP-NX

  information screen is displayed, the parameters are not reflected

  onto ELP-NX.

- Job list of the previous user may be displayed if the next user

  logs in within a very short period after the previous user logs

out.(ELP NX with CAP v2).

- Communication error occurs by conducting a communication test with

  the following settings: "Ciphertext priorty" is set for "Permit

  SSL/TLS Communication" of device and "OFF" is set for SSL

  Communication Settings of "Configuration Tool".

- Connection error may occur when Configuration Tool conducts

  Connection Test to the device which "Remote HDD" is set with FQDN.

- The user can logout while print jobs are still being deleted.

- Even if the user prints/deletes jobs in My document Folder in the

  remote device, the last access time record of My document folder

  in the remote device is not updated.

Other:

- Added the function to detect the access from an unauthorized

  client to prevent the unauthorized information collections.

   Note: This function is supported from CAP/ELP-NX/CAP-ES/ELP-NX FS

       v2.5.200. This function is not supported in the environment

       where v2.5.200 or earlier also exists.

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Fixed:

- Regarding "ELP with CAP", by imputing Billing Code and print

  RPGL/GL2 job, ELP-NX goes down.

- "The language is not compliant for preview." may be displayed.

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Rank C

Support:

- macOS 10.14 is supported.

Fixed:

- After changing the password for Configuration Tool, it fails to

  access to the device via the User Management Tool.

- By setting a host name in "Host Name" in Configuration Tool, it

  takes long to connect to device.

- After printing/deleting multiple jobs, it may take long time to

  transit to print job list screen.

- When the new values are set via the Configuration Tool after

  having initialized HDD, the values are not reflected on the

  device.

- If paper runs out while printing a large job, ELP downs after

  refilling papers, then the screen transits to Home.

- Unused port's number is printed to the port number on "setting

  print".

- The device fails to import the certificate from the Configuration

  Tool

- ":" is not included in timezone of "Deletion log".

- "Layout" information of "Deletion log" are recorded as "Other".

- Job's color information is not correctly displayed when the user

  scrolls down the job list.

- It fails to store specific PS data.

- By sending a large number of jobs, storing jobs fails and LED

  keeps blinking.

- By creating "My Document Folder" via the Configuration Tool, the

  last update date becomes "1970/01/01".

Other:

- Two PJL, "RPGL" and "GL2", were added to Storable Driver Language(s).

- Increased the number of setting items for " Storable Driver

  Language Exception(s)"

- A specified user's job can be viewed/printed out while Card

  Authentication Package v2 is installed on the same device.

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Rank C

Supported:

- Support for the following models has been added:

  - Metis-MF3

  - Chimay-MF1

Fixed:

- When "Print Confirmation Dialog" is set to "Do not Display"

  or "Default Job selection" to "All", classification code may not

  be recorded to job log even though the code is set before printing

  (ELP NX with CAP v2).

- When PS driver sends a print job whose name is started with "<"

  or "(" , the job name in job list is garbled.

Other:

- Thumbnail images of print jobs' first pages are displayed for

  print job list.

- Performance to display the stored jobs in the device is improved.