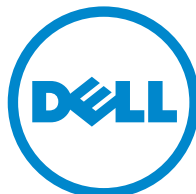


# Dell™ C7765dn/Dell™ C5765dn Security Function Supplementary Guide

Regulatory Model: C7765dn/C5765dn



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The printer software uses some of the codes defined by the Independent JPEG Group.



SD Logo is a trademark of SD-3C, LLC.

## As for RSA BSAFE



This printer includes RSA® BSAFE® Cryptographic software from EMC Corporation.

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# Before Using the Security Features

This section describes the security features and items to be confirmed.

## Preface

This guide describes the setup procedures related to security.

This guide is mainly intended for the manager and system administrator of the organization where the machine is installed.

This guide also describes useful information for general users about the operations related to security features.

For other product information, refer to the following documents:

| Model   | Guide  | Manual Part# |
|---|--|--------------|
| Dell C7765dn<br>Color Multifunction Printer       | User's Guide   | KB3206EN0-5  |
|   | Smart Card Reader Installation and Configuration Guide | KE3037EN0-3  |
| Dell C5765dn<br>Color Laser Multifunction Printer | User's Guide   | KB3211EN0-4  |
|   | Smart Card Reader Installation and Configuration Guide | KE3038EN0-2  |

- Note**
- The hash values of the PDF files are described in the Security Target disclosed at the Dell (<http://www.dell.com/support/home/us/en/04/Products/>) and JISEC ([http://www.ipa.go.jp/security/jisec/jisec\\_e/](http://www.ipa.go.jp/security/jisec/jisec_e/)) websites. Please check that the hash values of the respective manuals are correct.
  - The Manual Part# may be updated when the manual content is updated.

The security features of the Dell C7765dn Color Multifunction Printer are supported by the following ROM versions.

- Controller ROM: Ver. 2.205.5
- IOT ROM: Ver. 41.1.0
- ADF ROM: Ver. 12.5.0

The security features of the Dell C5765dn Color Laser Multifunction Printer are supported by the following ROM versions.

- Controller ROM: Ver. 2.205.1
- IOT ROM: Ver. 3.0.2
- ADF ROM: Ver. 11.1.0
- Fax ROM: Ver. 100.19.0

- Important**
- The machine has obtained IT security certification for Common Criteria EAL3. This certifies that the target of evaluation has been evaluated based on the certain evaluation criteria and methods, and that it conforms to the security assurance requirements. Your ROM and guidance may not be the certified version because they may have been updated along with machine improvements.

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## Security Features

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Dell C7765dn and C5765dn have the following security features:

- Hard Disk Data Overwrite
- Hard Disk Data Encryption
- User Authentication
- System Administrator's Security Management
- Customer Engineer Operation Restriction
- Security Audit Log
- Internal Network Data Protection
- Self Test
- FAX Flow Security

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## Settings for the Secure Operation

---

For the effective use of the security features, the System Administrator (Machine Administrator) must configure settings by referring to the following sections.

- Settings for the Secure Operation 1 (Initial Settings Procedures Using Control Panel) (P.11)
- Settings for the Secure Operation 2 (Initial Settings Procedures Using Dell Printer Configuration Web Tool) (P.15)
- Settings for the Secure Operation 3 (Regular Review by Audit Log) (P.22)

Below is the list of setting items and their values that need to be set.

- Passcode Entry for Control Panel Login (For Dell C7765dn)/  
Passcode Entry from Control Panel (For Dell C5765dn)  
Set to [On].
- Overwrite Hard Disk  
Set to [1 Overwrite] or [3 Overwrites].
- Data Encryption  
Set to [On], and then enter an encryption key of 12 characters.
- Authentication  
Set to [Login to Local Accounts] or [Login to Remote Accounts].
- Private Print  
Set to [According to Print Accounting] or [Save as Private Charge Print Job].
- Store & Send Link  
Set to disabled.
- Direct Fax  
Set to [Disabled] when remote authentication is used.
- Self Test  
Set to [On].
- Software Download  
Set to [Disabled].
- System Administrator Passcode  
Change the default passcode to another passcode of 9 or more characters.

- Maximum Login Attempts  
Set to [5] times.
- Access Control  
Set to [Locked] for [Device Access] and [Lock All] for [Service Access].
- User Passcode Minimum Length  
Set to [9] characters.
- SMB  
Set to disabled for [NetBEUI].
- WebDAV  
Set to disabled (when remote authentication is used).
- IPP  
Set to enabled.
- SSL/TLS  
Set to enabled.
- Service Representative Restricted Operation  
Set to [Enabled], and enter a passcode of 9 or more characters.
- Audit Log  
Set to enabled.
- IPSec  
Set to enabled.
- SNMP v1/v2c  
Set to enabled.
- SNMP v3  
Set to enabled.
- S/MIME  
Set to enabled.
- WSD (Scan)  
Set to disabled.
- LDAP Server  
Set the LDAP Server information.
- Kerberos Server  
Set the Kerberos Server information.

- Important**
- Security will not be assured if the above settings are not properly configured.
  - The Fax Flow Security feature requires no special setting.
  - When you set Data Encryption to [On], enter an encryption key of 12 characters.

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## For Optimized Performance of Security Features

---

The management organization needs to follow the instructions below:

- Assign appropriate personnel as machine and system administrators, provide training, and ensure proper oversight.
- The manager and system administrators need to train users about the TOE operation and precautions according to the policies of their organization and the product guidance.
- The machine needs to be placed in a secure or monitored area where the machine is protected from unmanaged physical access.

- 
- If the machine is on the internal network that connects to external networks, configure the network properly to block any unauthorized external access.
  - Set passcode and encryption key according to the following rules.
    - Do not use an easily guessable passcode.
    - A passcode needs to contain both numeric and alphabetic characters.
  - Administrators need to set the account policies on the remote authentication server as follows.
    - Set password policy to 9 or more characters.
    - Set account lockout policy to 5 times.
  - Users need to set a user ID and a passcode in [Accounting Configuration] via the printer driver.
  - For secure operation, all of the remote trusted IT products that communicate with the machine must implement the communication protocol in accordance with industry standard practice with respect to RFC/other standard compliance (SSL/TLS, IPSec, SNMP v3, S/MIME) and must work as advertised.

### SSL/TLS

For the SSL client (Web browser) and the SSL server that communicate with the machine, select a data encryption suite from the following:

- SSL\_RSA\_WITH\_RC4\_128\_SHA
- SSL\_RSA\_WITH\_3DES\_EDE\_CBC\_SHA
- TLS\_RSA\_WITH\_AES\_128\_CBC\_SHA
- TLS\_RSA\_WITH\_AES\_256\_CBC\_SHA
- TLS\_RSA\_WITH\_AES\_128\_CBC\_SHA256
- TLS\_RSA\_WITH\_AES\_256\_CBC\_SHA256  
(The recommended browser is Microsoft® Internet Explorer® 6/7/8/9)

### S/MIME

For the machine and E-mail clients, select an Encryption Method/Message Digest Algorithm from the following:

- 3Key Triple-DES/168bit, AES/128bit, AES/192bit, AES/256bit
- SHA1, SHA256

### IPSec

For the IPSec host that communicates with the machine, select an Encryption Method/ Message Digest Algorithm from the following:

- AES(128bit)/SHA1
- 3Key Triple-DES(168bit)/SHA1

### SNMP v3

The encryption method of SNMPv3 is DES/56bit or AES 128bit. Set [Message Digest Algorithm] to [SHA1].



**Important**

- While you are using Dell Printer Configuration Web Tool, do not access other web sites, and do not use other applications.
- When you change [Authentication Type] or prior to disposing the machine, initialize the hard disk by resetting [Data Encryption] and changing [encryption key].
- For preventing SSL vulnerability, set the machine address in the proxy exclusion list of browser.

With this setting, you can prevent man-in-the-middle attack because the machine will communicate directly with the remote browser bypassing the proxy server.

## Confirm the Machine ROM Version and the System Clock

Before making initial settings, the System Administrator (Machine Administrator) needs to check the machine ROM version and system clock.

To check from the Control Panel

- 1** Press the <Machine Status> button on the control panel.
- 2** Select [Software Version] on the [Machine Information] screen.  
You can identify the software versions of the components of the machine on the screen.

To check from the Print Report

- 1** Press the <Machine Status> button on the control panel.
- 2** Select [Print Reports] on the [Machine Information] screen.
- 3** Select [Printer Reports].
- 4** Select [Configuration Report].
- 5** Press the <Start> button on the control panel.

To check the System Clock

- 1** Press the <Log In/Out> button on the control panel.
- 2** Enter the System Administrator's ID and the passcode if prompted.
- 3** Select [Enter].
- 4** Select [Tools].
- 5** Select [System Settings].
- 6** Select [Common Service Settings].
- 7** Select [Machine Clock/Timers].

If you need to change the time and date, follow the remaining steps:

- 8** Select the required option.
- 9** Select [Change Settings].
- 10** Change the required setting.

---

**11** Select [Save].

**12** To exit the [Tools] screen, select [Close] twice.

## Settings for the Secure Operation 1 (Initial Settings Procedures Using Control Panel)

---

This section describes the initial settings related to security features, and how to set them on the machine's control panel.

### Authentication for entering System Administration mode

---

To change or customize the system settings, enter the System Administration mode.

- 1** Press the <Log In/Out> button on the control panel.
- 2** Enter the System Administrator's ID with the displayed keypad.
- 3** Select [Next].
- 4** Enter the System Administrator's passcode.
- 5** Select [Enter].
- 6** Select [Tools].

### Set Use Passcode Entry for Control Panel Login

---

Follow the procedure below to require a passcode to use the machine.

- 1** Select [Authentication/Security Settings] on the [Tools] screen.
- 2** Select [Authentication].
- 3** Select [Passcode Policy].
- 4** For C7765dn: Select [Passcode Entry for Control Panel Login].  
For C5765dn: Select [Passcode Entry from Control Panel].
- 5** Select [Change Settings].
- 6** Select [On].
- 7** Select [Save].
- 8** To exit the [Tools] screen, select [Close] twice.

### Set Overwrite Hard Disk

---

Follow the procedure below to change the hard disk overwrite setting. You can select whether to overwrite once or three times.

- 1** Select [Authentication/Security Settings] on the [Tools] screen.
- 2** Select [Overwrite Hard Disk].
- 3** Select [Number of Overwrites].
- 4** Select [1 Overwrite] or [3 Overwrites].
- 5** Select [Save].

---

## Set Data Encryption

---

Follow the procedure below to encrypt data recorded on the machine's hard disk.

- 1** Select [System Settings] on the [Tools] screen.
- 2** Select [Common Service Settings].
- 3** Select [Other Settings].
- 4** On the [Other Settings] screen, select [Data Encryption].
- 5** Select [Change Settings].
- 6** Select [On].
- 7** Select [New Encryption Key].
- 8** Enter a new 12 character encryption key, and then select [Save].
- 9** Select [Re-enter Encryption Key].
- 10** Enter the same passcode, and then select [Save].
- 11** Select [Save].
- 12** Select [Yes] to make the change.
- 13** Select [Yes] to reboot.

---

## Set Authentication

---

Follow the procedure below to configure the authentication settings.

- 1** Select [Authentication/Security Settings] on the [Tools] screen.
- 2** Select [Authentication].
- 3** Select [Login Type].
- 4** Select [Login to Local Accounts] or [Login to Remote Accounts].
- 5** Select [Save].  
When [Login to Remote Accounts] is selected in step 4, proceed to steps 6 to 12.
- 6** Select [System Settings] on the [Tools] screen.
- 7** Select [Connectivity & Network Setup].
- 8** Select [Remote Authentication/Directory Service].
- 9** Select [Authentication System Setup].
- 10** Select [Authentication System].
- 11** Select [Change Settings].
- 12** Select [LDAP], [Kerberos(Windows 2000)], or [Kerberos(Solaris)].
- 13** Select [Save].
- 14** To exit the [Remote Authentication/Directory Service] screen, select [Close] twice.

## Set Private Print

---

Follow the procedure below to configure the Private Print settings.

- 1** Select [Authentication/Security Settings] on the [Tools] screen.
- 2** Select [Authentication].
- 3** Select [Charge/Private Print Settings].
- 4** Select [Receive Control].
- 5** Select [Change Settings].

When [Login to Local Accounts] is selected

- 1) Select [According to Print Accounting].
- 2) Select [Save as Private Charge Print Job] for [Job Login Success].
- 3) Select [Delete Job] for [Job Login Failure].
- 4) Select [Delete Job] for [Job without User ID].

When [Login to Remote Accounts] is selected

- 1) Select [Save As Private Charge Print Job].
- 6** Select [Save].
- 7** To exit the [Charge/Private Print Settings] screen, select [Close].

## Set Store & Send Link

---

For the secure operation of the machine, follow the procedure below to set [Store & Send Link] to [Disabled].

- 1** Select [System Settings] on the [Tools] screen.
- 2** Select [Common Service Settings].
- 3** Select [Screen/Button Settings].
- 4** Select [Home].
- 5** Select [Change Settings].
- 6** Select [Store & Send Link].
- 7** Select [(Not Assigned)].
- 8** Select [Save] twice.
- 9** To exit the [Screen/Button Settings] screen, select [Close].

---

## Set Direct Fax

---

When remote authentication is used, follow the procedure below to set [Direct Fax] to [Disabled].

- 1** Select [System Settings] on the [Tools] screen.
- 2** Select [Fax Service Settings].
- 3** Select [Fax Control].
- 4** Select [Direct Fax].
- 5** Select [Change Settings].
- 6** Select [Disabled].
- 7** Select [Save].
- 8** To exit the [Fax Control] screen, select [Close].

---

## Set Self Test

---

Follow the procedure below to configure the Self Test settings.

- 1** Select [System Settings] on the [Tools] screen.
- 2** Select [Common Service Settings].
- 3** Select [Maintenance].
- 4** Select [Power on Self Test].
- 5** Select [On].
- 6** Select [Save].
- 7** To exit the [Maintenance] screen, select [Close].

---

## Set Software Download

---

For the secure operation of the machine, follow the procedure below to set [Software Download] to [Disabled].

- 1** Select [System Settings] on the [Tools] screen.
- 2** Select [Common Service Settings].
- 3** Select [Other Settings].
- 4** Select [Software Download].
- 5** Select [Change Settings].
- 6** Select [Disabled].
- 7** Select [Save].
- 8** To exit the [Tools] screen, select [Close] twice.
- 9** Select [Reboot now] on the confirmation screen.

## Settings for the Secure Operation 2 (Initial Settings Procedures Using Dell Printer Configuration Web Tool)

---

This section describes the initial settings related to security features, and how to set them on Dell Printer Configuration Web Tool.

### Preparations for settings on the Dell Printer Configuration Web Tool

---

To use Dell Printer Configuration Web Tool, the administrator will need a computer with TCP/IP support and a browser that satisfies "SSL/TLS" (P.8) conditions.

- 1 Open your Web browser, enter the machine's TCP/IP address in the Address or Location field, and press the <Enter> key.
- 2 Enter the System Administrator's ID and the passcode if prompted.
- 3 Display the [Properties] screen by clicking the [Properties] tab.

### Change the System Administrator's Passcode

---

- 1 Click [Security] on the [Properties] screen.
- 2 Click [System Administrator Settings].
- 3 Enter the System Administrator's ID in the [Administrator's Login ID] box.
- 4 Enter a new System Administrator's passcode of 9 or more characters in the [Administrator's Passcode] box.
- 5 Enter the new System Administrator's passcode in the [Retype Administrator's Passcode] box.
- 6 Click [Apply].

### Set Maximum Login Attempts

---

Follow the procedure below to specify maximum login attempts.

- 1 Click [Security] on the [Properties] screen.
- 2 Click [System Administrator Settings].
- 3 Enter the System Administrator's ID in the [Administrator's Login ID] box.
- 4 Enter [5] in the [Maximum Login Attempts] box.
- 5 Click [Apply].

### Set Access Control

---

Follow the procedure below to restrict access to the machine.

- 1 Click [Security] on the [Properties] screen.
- 2 Click [Authentication Configuration].

- 
- 3** Click [Next].
  - 4** Click [Configure] for [Device Access].
  - 5** Select [Locked] for [Device Access].
  - 6** Click [Apply].
  - 7** Click [Authentication Configuration].
  - 8** Click [Next].
  - 9** Click [Configure] for [Service Access].
  - 10** Click [Lock All].
  - 11** Click [Apply].
  - 12** Click [Reboot Machine].

## Set User Passcode Minimum Length

---

Follow the procedure below to specify the minimum number of digits allowed for a passcode.

This feature is only applicable to Local Authentication mode.

- 1** Click [Security] on the [Properties] screen.
- 2** Click [User Details Setup].
- 3** Set [9] for [Minimum Passcode Length].
- 4** Click [Apply].
- 5** Click [Reboot Machine].

## Set SMB

---

For the secure operation of the machine, follow the procedure below to set [NetBEUI] to [Disabled].

- 1** Click [Connectivity] on the [Properties] screen.
- 2** Click [Port Settings].
- 3** Uncheck the [NetBEUI] box for [SMB].
- 4** Click [Apply].

## Set WebDAV

---

When remote authentication is used, follow the procedure below to set [WebDAV] to [Disabled].

- 1** Click [Connectivity] on the [Properties] screen.
- 2** Click [Port Settings].
- 3** Uncheck the [Enabled] box for [WebDAV].



- 4 Click [Apply].

## Set IPP

---

Follow the procedure below to configure the IPP settings.

- 1 Click [Connectivity] on the [Properties] screen.
- 2 Click [Port Settings].
- 3 Check the [Enabled] box for [IPP].
- 4 Click [Apply].

## Set SSL/TLS

---

Dell Configuration Web Tool requires SSL/TLS communication between a network-connected computer and the machine.

- 1 Click [Security] on the [Properties] screen.
- 2 Click [Machine Digital Certificate Management].
- 3 Click [Create New Certificate].  
**Note** • If [Create New Self Signed Certificate] is displayed, click it and go to step 5.
- 4 Select [Self-Signed Certificate] and click [Continue].
- 5 Set [Public Key Size] as necessary.
- 6 Set [Issuer] as necessary.
- 7 Click [Apply].
- 8 Click [SSL/TLS Settings].
- 9 Select the [Enabled] check box for [HTTP - SSL / TLS Communication] and [LDAP - SSL / TLS Communication].
- 10 Click [Apply].
- 11 Click [Reboot Machine].

**Note** • For secure operation, select [Enabled] check box for [Verify Remote Server Certificate] and import the CA certificate according to the same procedure as "Configuring Machine Certificates" (P.18). If SMTP server has SSL/TLS function and if you want to use secure e-mail, configure [SMTP-SSL/TLS Communication].

## Set Service Representative Restricted Operation

---

Follow the procedure below to restrict the operation of service representatives.

- 1 Click [Security] on the [Properties] screen.
- 2 Click [Service Representative Restricted Operation].
- 3 Check the [Enabled] box for [Restricted Operation].
- 4 Enter a passcode in the [Maintenance Passcode] box.
- 5 Enter the passcode in the [Retype Maintenance Passcode] box.

- 
- 6 Click [Apply].

## Set Audit Log

---

Follow the procedure below to configure the Audit Log settings.

- 1 Click [Security] on the [Properties] screen.
- 2 Click [Audit Log].
- 3 Check the [Enabled] box for [Audit Log].
- 4 Click [Apply].

## Configuring Machine Certificates

---

Import the Certificates for SSL, IPSec, S/MIME.

- 1 Click [Security] on the [Properties] screen.
- 2 Click [Machine Digital Certificate Management].
- 3 Click [Upload Signed Certificate].
- 4 Enter a file name for the file you want to import, or select the file to be imported by clicking [Browse].
- 5 Enter [Password], and enter [Retype Password].
- 6 Click [Import].

## Set IPSec

---

Before setting [Digital Signature] for [IKE Authentication Method], import an IPSec certificate according to the same procedure as "Configuring Machine Certificates" (P.18).

- 1 Click [Security] on the [Properties] screen.
- 2 Configure the [Preshared Key] settings or [Digital Signature] settings using the following procedures.

### To use Preshared Key

- 1) Click [IPSec].
- 2) Check the [Enabled] box for [Protocol].
- 3) Select [Preshared Key] for [IKE Authentication Method].  
This is used to ensure secure communication between the machine and a client computer or server.
- 4) Enter a Pre-Shared Key in the [Shared Key] and [Verify Shared Key] boxes.  
Make sure the IPSec address is correct.

### To use Digital Signature

- 1) Click [Certificate Management].
- 2) Select [IPSec] for [Certificate Purpose].
- 3) Click [Display the list], and check a desirable Certificate.

- 4) Click [Certificate Details].
- 5) Click [Use this certificate].
- 6) Click [IPSec] under [Security].
- 7) Check the [Enabled] box for [Protocol].
- 8) Select [Digital Signature] for [IKE Authentication Method].  
Make sure the IPSec address is correct.

### Set IPSec Address

- 1** Enter the IP Address in the [Specify Destination IPv4 Address] box on the [IPSec] screen.
- 2** Enter the IP Address in the [Specify Destination Ipv6 Address] box.
- 3** Select [Enabled] or [Disabled] from the [Communicate with Non-IPSec Device] drop-down list.
- 4** Click [Apply].
- 5** Click [Reboot Machine].

### Set SNMPv3

---

Follow the procedure below to configure the SNMPv3 (Simple Network Management Protocol, version 3) settings.

- 1** Click [Connectivity] on the [Properties] screen.
- 2** Click [Protocols].
- 3** Click [SNMP Configuration].
- 4** Check the [Enable SNMP v3 Protocol] box.
- 5** Uncheck the [Enable SNMP v1/v2c Protocols] box.
- 6** Click [Apply].
- 7** Click [SNMP Configuration].
- 8** Click [Edit SNMP v3 Properties] and check [Account Enabled] for [Administrator Account].
- 9** Enter a new Authentication Password (minimum 8 characters).
- 10** Enter the Confirm Authentication Password.
- 11** Enter a new Privacy Password (minimum 8 characters).
- 12** Enter the Confirm Privacy Password.
- 13** Check [Account Enabled] for [Print Drivers/Remote Clients Account].
- 14** Click [Apply].

- Note**
- Be sure to change Authentication Password and Privacy Password from the default password.
  - When using SNMP v3, use the IPSec protocol simultaneously. Set the IP address of the clients for SNMP v3 according to the procedures in "Set IPSec Address" (P.19), and enter the IP Address in the [Specify Destination IPv4 Address] or [Specify Destination IPv6 Address] box.

- 
- Since the machine cannot communicate by SNMP v1/v2c, you need to uncheck [SNMP status Enabled] for the port setting on the client's printer driver.

## Set S/MIME

---

Enable the S/MIME communication to use the e-mail encryption and digital signature features.

To use E-mail with this machine, the E-mail function needs to be enabled and configured as described in the User's Guide's "18 E-mail Environment Settings".

Before making the S/MIME setting, import an S/MIME certificate according to the same procedure as "Configuring Machine Certificates" (P.18).

- 1** Click [Configuration Overview] on the [Properties] screen.
- 2** Click [Settings] for [E-mail].
- 3** Click [Configure] for [E-mail Settings], and enter the machine's E-mail address in the [From Address] box.
- 4** Click [Apply].
- 5** Click [Security] on the [Properties] screen.
- 6** Click [Certificate Management].
- 7** Select [S/MIME] for [Certificate Purpose].
- 8** Click [Display the list], and check a desirable certificate.
- 9** Click [Certificate Details].
- 10** Click [Use this certificate].
- 11** Click [SSL/TLS Settings].
- 12** Check the [Enabled] box for [S/MIME Communication].
- 13** Click [Apply].
- 14** Click [Reboot Machine].
- 15** After the machine is restarted, refresh the browser and click the [Properties] tab.
- 16** Click [Security].
- 17** Click [S/MIME Settings].
- 18** Uncheck the [Enabled] check box for [Receive Untrusted E-mail].
- 19** Select [Always add signature] for [Signature].
- 20** Uncheck the [Enabled] check box for [Receive Untrusted Internet Fax].
- 21** Select [Always add signature] for [Signature].
- 22** Click [Apply].

## Set WSD (Scan)

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For the secure operation of the machine, follow the procedure below to set [WSD (Scan)] to [Disabled].

- 1 Click [Connectivity] on the [Properties] screen.
- 2 Click [Port Settings].
- 3 Uncheck the [Enabled] box for [WSD (Scan)].
- 4 Click [Apply].

## Set LDAP Server

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Configure the LDAP server settings for directory service.

- 1 Click [Connectivity] on the [Properties] screen.
- 2 Click [Protocols].
- 3 Click [LDAP].
- 4 Select [LDAP Server].
- 5 On each menu, set the LDAP Server information.
- 6 Click [Apply].

## Set Kerberos Server

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Configure the Kerberos server settings for authentication.

- 1 Click [Security] on the [Properties] screen.
- 2 Click [Remote Authentication Servers].
- 3 Select [Kerberos Server].
- 4 On each menu, set the Kerberos Server information.
- 5 Click [Apply].

- Note**
- When a Kerberos server is used as a remote authentication server, register users who are given the privileges of System Administrator by setting [System Administrator Access Group] on the LDAP server.

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## Settings for the Secure Operation 3 (Regular Review by Audit Log)

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This section describes the Audit Log feature and the settings available via Dell Printer Configuration Web Tool.

The Audit Log is regularly reviewed by the Security Administrator, often with the aid of third party analyzing tools. The audit log helps to assess attempted security breaches, identify actual breaches, and prevent future breaches.

The important events of the machine such as device failure, configuration change, and user operation are traced and recorded based on when and who operated what function.

Auditable events are stored with time stamps into NVRAM. When the number of stored events reaches 50, the 50 entries on NVRAM are stored into one file ("audit log file") on the internal HDD. Up to 15,000 events can be stored. When the number of recorded events exceeds 15,000, the oldest audit log file is overwritten and a new audit event is stored.

There is no delete function.

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### Import the Audit Log

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The following describes methods for importing the Audit Log.

The audit logs are only available to System Administrators and can be downloaded via Dell Printer Configuration Web Tool.

The downloaded audit logs can be viewed with a text editor.

**Note** • SSL/TLS communication must be enabled in order to access the logged data.

- 1** Open your Web browser and enter the machine's TCP/IP address in the Address or Location field, press the <Enter> key.
- 2** Enter the System Administrator's ID and Password if prompted.
- 3** Click the [Properties] tab.
- 4** Click [Security].
- 5** Click [Audit Log].
- 6** Click [Export as text file] for [Export Audit Log].

The following information is recorded in the audit log:

- Log ID: Consecutive number as an audit log identifier
- Date/Time: The date and time when an event was recorded
- Logged Events: Various features and tasks
- User Name: User name
- Description: Description of the events
- Status: Status or result of event
- Optionally Logged Items: Additional information recorded to audit log (except common record items)

e.g.: Sample audit log when someone tried to login as User1 and failed due to an invalid password.

| Item                    | Description               |
|-------------------------|---------------------------|
| Log ID                  | 1                         |
| Date                    | 01/01/2014                |
| Time                    | 10:00:00                  |
| Logged Events           | Login/Logout              |
| User Name               | User1                     |
| Description             | Login                     |
| Status                  | Failed (Invalid Password) |
| Optionally Logged Items | -                         |

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# User Authentication

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This section describes the operation of user authentication.

Before using all services and configuring settings, a user must be authenticated with an ID and a passcode.

- 1 Press the <Log In/Out> button on the control panel.
- 2 Enter the "User ID" from keypad.
- 3 Select [Next] on the touch screen.
- 4 Enter the "Passcode" from keyboard.
- 5 Select [Enter] on the touch screen.

All features on the control panel will be available.

**Important** • When another user interrupts the machine in the interrupt mode, the user needs to logout before canceling the interrupt mode.

Example:

User A is authenticated → interrupt mode → User B login → job complete  
→ User B logout → cancel the interrupt mode

- Note**
- When remote authentication is used, select "Registered User" or "System Administrator." Thereafter, enter the User ID and the password.
  - When using [Login to Local Accounts], only the System Administrator's ID is pre-registered on the machine. Other user IDs are not registered. For details on how to register User IDs, refer to "15 Tools" > "Authentication / Security Settings" > "Authentication" > "Create / View User Accounts" in the User's Guide.
  - When using [Login to Remote Accounts]. The User IDs are on a remote authentication server. The System Administrator's ID on the machine is not registered on the remote authentication server.



## Appendix

### List of Operation Procedures

| Item   | Using Control Panel   | Using Dell Printer Configuration Web Tool    | Default |
|--|---|--|---------|
| Check the machine's Clock                      | [System Settings] > [Common Service Settings] > [Machine Clock/Timers]  | -  | -       |
| Set Use Passcode Entry for Control Panel Login | [Authentication/Security Settings] > [Authentication] > [Passcode Policy] > [Passcode Entry for Control Panel Login] or [Passcode Entry from Control Panel] | -  | Off     |
| Set Overwrite Hard Disk                        | [Authentication/Security Settings] > [Overwrite Hard Disk]  | -  | 3       |
| Set Data Encryption                            | [System Settings] > [Common Service Settings] > [Other Settings] > [Data Encryption]  | -  | Off     |
| Set Authentication                             | [Authentication/Security Settings] > [Authentication] > [Login Type]  | [Security] > [Authentication Configuration]  | Off     |
| Set Private Print                              | [Authentication/Security Settings] > [Authentication] > [Charge/Private Print Settings]   | -  | Off     |
| Set Store & Send Link                          | [System Settings] > [Common Service Settings] > [Screen/ Button Settings] > [Services Home]   | -  | On      |
| Set Direct Fax                                 | [System Settings] > [Fax Service Settings] > [Fax Control] > [Direct Fax]   | -  | On      |
| Set Self Test                                  | [System Settings] > [Common Service Settings] > [Maintenance] > [Power on Self Test]  | -  | Off     |
| Set Software Download                          | [System Settings] > [Common Service Settings] > [Other Settings] > [Software Download]  | -  | On      |
| Change the System Administrator Passcode       | [Authentication/Security Settings] > [System Administrator Settings] > [System Administrator's Passcode]  | [Security] > [System Administrator Settings] | -       |
| Set Maximum Login Attempts                     | [Authentication/Security Settings] > [Authentication] > [Maximum Login Attempts By System Administrator]  | [Security] > [System Administrator Settings] | 5       |

| Item  | Using Control Panel   | Using Dell Printer Configuration Web Tool   | Default |
|---|---|---|---------|
| Set Access Control                              | [Authentication/Security Settings] > [Authentication] > [Access Control]  | [Security] > [Authentication Configuration]   | Off     |
| Set User Passcode Minimum Length                | [Authentication/Security Settings] > [Authentication] > [Passcode Policy] > [Minimum Passcode Length]                                     | [Security] > [User Details Setup] > [Minimum Passcode Length]   | 0       |
| Set SMB   | -   | [Connectivity] > [Port Settings]  | On      |
| Set WebDAV                                      | [System Settings] > [Connectivity & Network Setup] > [Port Settings]  | [Connectivity] > [Port Settings]  | On      |
| Set IPP   | [System Settings] > [Connectivity & Network Setup] > [Port Settings]  | [Connectivity] > [Port Settings]  | Off     |
| Set SSL/TLS                                     | [System Settings] > [Connectivity & Network Setup] > [Security Settings] > [SSL/TLS Settings]   | [Security] > [Machine Digital Certificate Management] > [Create New Self Signed Certificate] > [SSL/TLS Settings] | Off     |
| Set Service Representative Restricted Operation | [System Settings] > [Common Service Settings] > [Other Settings] > [Service Rep.Restricted Operation].                                    | [Security] > [Service Representative Restricted Operation]  | Off     |
| Set Audit Log/<br>Import the Audit Log File     | -   | [Security] > [Audit Log]  | Off     |
| Configuring Machine Certificates                | -   | [Security] > [Machine Digital Certificate Management] > [Upload Signed Certificate].                              | -       |
| Set IPSec                                       | [System Settings] > [Connectivity & Network Setup] > [Security Settings] > [IPSec Settings]   | [Security] > [IPSec]  | Off     |
| Set SNMPv3                                      | -   | [Connectivity] > [Protocols] > [SNMP Configuration]   | Off     |
| Set S/MIME                                      | [System Settings] > [Connectivity & Network Setup] > [Security Settings] > [S/MIME Settings]  | [Security] > [SSL/TLS Settings] > [S/MIME Communication]  | Off     |
| Set WSD (Scan)                                  | -   | [Connectivity] > [Port Settings]  | On      |
| Set LDAP Server                                 | [System Settings] > [Connectivity & Network Setup] > [Remote Authentication/Directory Service] > [LDAP Server/Directory Service Settings] | [Connectivity] > [Protocols] > [LDAP] > [LDAP Server]   | -       |
| Set Kerberos Server                             | [System Settings] > [Connectivity & Network Setup] > [Remote Authentication/Directory Service] > [Kerberos Server Settings]               | [Security] > [Remote Authentication Servers] > [Kerberos Server]  | -       |

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