

Mass Deployment Tool

User's Guide

Copyright

© 2022 Brother Industries, Ltd. All rights reserved.

Information in this document is subject to change without notice. The software described in this document is furnished under a license agreement. The software may be used or copied only in accordance with the terms of those agreements. No part of this publication can be reproduced in any form or by any means without prior written permission of Brother Industries, Ltd.

Trademark

Brother is either a trademark or a registered trademark of Brother Industries, Ltd.

Any trade names and product names of companies appearing on Brother products, related documents and any other materials are all trademarks or registered trademarks of those respective companies.

Important Notes

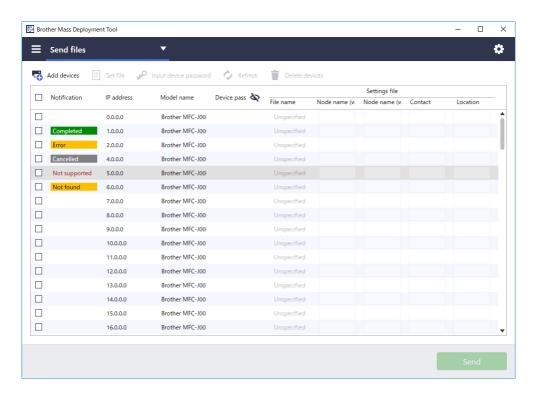
- The screens or images in this User's Guide are for illustration purposes only and may differ from those of the actual products.
- The contents of this document and the specifications of this product are subject to change without notice.

Table of Contents

1 Introduction	1
1.1 Overview	1
1.2 System Requirements	2
1.3 Preparation	2
2 Main Functions of the Mass Deployment Tool (GUI)	3
2.1 Update the Device List	3
2.2 Check Device Notifications	5
2.3 Use Deployment Profiles	
2.3.1 Import Deployment Profiles	
2.3.2 Export Deployment Profiles	
2.4 Open the Setting File Editor	
2.5 Send Files	
2.6 Back Up Settings	
2.7 Set Password	
Send Custom User Interface (UI) File	
3 Additional Functions of the Mass Deployment Tool (GUI)	
3.1 Application Settings	
3.1.1 Configure the Network Settings	
3.1.2 Configure the Device Discovery Settings	
3.1.3 Link the Mass Deployment Tool to BRAdmin Professional 4	
3.1.4 Application Information	
3.2 Activate Solutions	
4 Command Line Interface (CLI)	
4.1 Use CLI in the Mass Deployment Tool	
4.2 Commands and Options	
4.2.1 Commands	
4.2.2 Device Identifiers	
4.2.3 Options	
4.2.4 Deployment Profile	
4.2.5 Deploy Key File	
4.2.6 Create the ETKN File	. 29
5 Create Settings Files	. 30
5.1 Settings Files	
5.2 JSON Files	
5.3 Create JSON Files	. 31
6 Setting File Editor	. 32
7 Troubleshooting	. 35
Appendix	37

1 Introduction

1.1 Overview



The Mass Deployment Tool provides a configuration interface to help you manage a variety of Brother device settings, and allows users to install and manage multiple USB-connected or network-connected devices, without having to install any additional software. The tool has two independent interfaces:

- Graphical User Interface (GUI)
- Command Line Interface (CLI)

The main functions of this tool are:

- Manage multiple devices using a deployment profile that consists of device information or settings
- Deploy settings files to the target devices
- · Retrieve settings from target devices



If you are also using BRAdmin Professional 4, you can link the Mass Deployment Tool to BRAdmin Professional 4 and use its device information and application settings:

- During the first launch of the Mass Deployment Tool
- In the Mass Deployment Tool's Application settings > Operation mode

For more information, see 3.1 Application Settings.

The intended users of this tool are:

- Pre-sales and post-sales engineers
- Installation engineers who install devices in customer environments
- Channel engineers who manage customer devices remotely
- IT administrators at end-user companies with their own device administration systems

1.2 System Requirements

	Windows 10 (32-bit and 64-bit)
Operating Systems	Windows 11 (64-bit)
	Windows Server 2012 or later (64-bit)
Additional Software	.NET Framework 4.8 or later

1.3 Preparation

- 1. Download the latest version of the Mass Deployment Tool from the Brother support website at support.brother.com.
- 2. Copy the contents of the downloaded file into the folder you want.



Make sure you know which schema file is supported by your Brother model. For a list of available schema files and applicable models, double-click the README.url file in the "Schema" folder to open the README website. You will need this information later.

- 3. To run the tool, do one of the following:
 - For the Graphical User Interface (GUI)

 Double-click the MassDeploymentTool.exe file in the "MassDeploymentTool" folder.

For BRAdmin Professional 4 users

- To link the Mass Deployment Tool to BRAdmin and use its device information and application settings, select Import the device list database and application settings from BRAdmin Professional 4. in the dialog box that appears when you first launch the Mass Deployment Tool. To link it later, go to Application settings > Operation mode.
- If your BRAdmin application is password-protected, you must type the password.
- For the Command Line Interface (CLI)
 At your Command Prompt, run the settingcmd.exe file in the "SettingCommand" folder.



We recommend changing the default login password to protect your machine from unauthorized access and to use the Mass Deployment Tool securely.

For more information about changing your password, see 2.7 Set Password.

2 Main Functions of the Mass Deployment Tool (GUI)

Use the Mass Deployment Tool's Graphical User Interface (GUI) to:

- Prepare and manage deployment profiles for multiple Brother devices.
- Deploy settings or send instructions to multiple Brother devices using deployment profiles.
- Change the Mass Deployment Tool's settings.

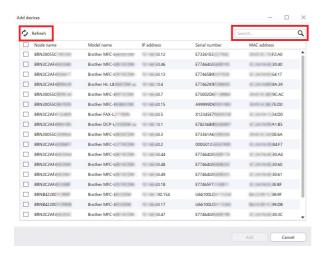
2.1 Update the Device List

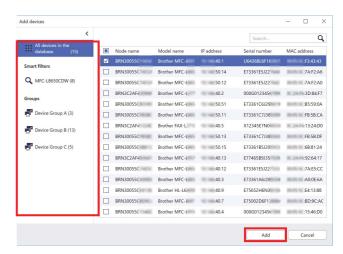
No devices are displayed upon startup. Search for target devices first, and then add them to the list:

Click the Add devices button to display the list of devices on the Add devices screen.
 If you are using the BRAdmin database, its Device list appears with Smart filters (containing the devices that meet your filtering criteria) and Groups (containing the devices you specified) in the left pane. For more information about Smart filters, see the BRAdmin Professional 4 User's Guide.

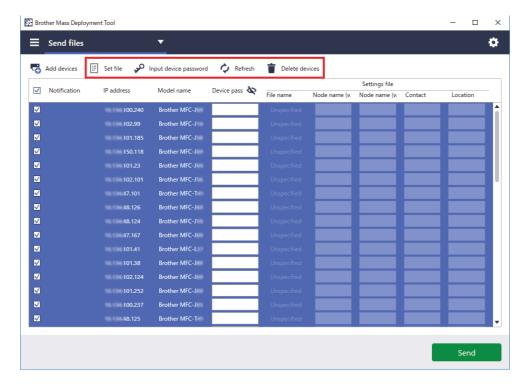
Without using the BRAdmin database







- 2. Type a keyword in the search box or click the **Refresh** button, if needed. (The **Refresh** button is not available if you are using the BRAdmin database.)
- 3. Select the check boxes of the devices you want to add. If you are using the BRAdmin database, you can also select the target Smart filter or Group in the left pane.
- 4. Click the Add button. The list of devices you selected appears in the tool's main window.



The following functions are available in the tool's main window.

- Select the Setting File

Select one or more devices, click the Set file button, and then select the file you want.

- Enter a Password for Password-Protected Devices

Select one or more devices that use the same password, click the **Input device password** button, type the password, and then click **OK**.

- Refresh the Device List

Select one or more devices and then click the **Refresh** button.

- Delete Devices from the Device List

Select one or more devices and click the **Delete devices** button.

- Sort the Device List

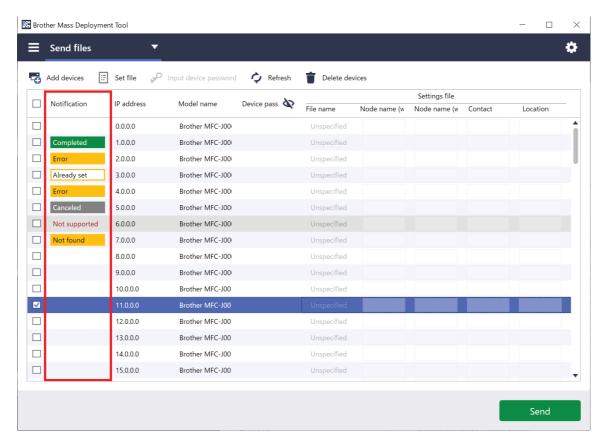
Click the column heading containing the sort criteria you want.



To select multiple devices, press and hold the Shift or Ctrl key on your keyboard, and left-click the devices you want.

2.2 Check Device Notifications

The **Notification** column of the Device List notifies you of the results of the last-performed task of the listed devices.



The following notifications are available:

Not found	This device was offline when the deployment profile was imported into the tool. Check the device's connection status. (For more information, see 2.3.1 Import Deployment Profiles.)
Completed	This device completed the last-performed task successfully.
Error	This device did not complete the last-performed task successfully. See the log details, and perform the function again if needed.
	To check the log, click > Information > click the Open button under Application log:.
Not supported	This device does not support this function.
Cancelled	The last-performed function has been cancelled in this device.
Already set	The default login password has already been changed.
Solution not supported/ already activated	All the last-performed functions have been enabled. *
Partially complete	The last-performed functions have been partially activated. *
Solution not supported	The last-performed function has not been activated as it is not supported. *
(blank)	There are no notifications for this device.

^{*} Available only for Activate Solutions. For more information, see 3.2 Activate Solutions.

2.3 Use Deployment Profiles

Deployment profiles contain paths to settings files, such as JSON files, and let you assign specific settings files to multiple Brother devices. This feature allows you to:

- Import deployment profiles to restore specific settings files for specific devices.
- Export and save deployment profiles to let others use them to import settings from multiple Brother devices and then send them to other devices.

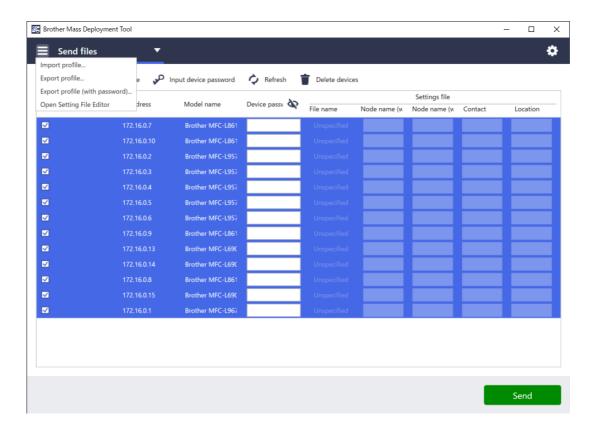


Deployment profiles contain only the relative paths for settings files. To pass a set of deployment profiles and settings files to others, you must copy both the deployment profile and any necessary settings files to ensure that the relative path is correct.

2.3.1 Import Deployment Profiles

Import customized deployments and use them to manage multiple devices.

1. Click in the upper left and select Import profile...



- 2. Select the CSV file or the encrypted ZIP archive you want.
- 3. The tool imports the selected file and deploys the profiles it contains.
- 4. Make sure the device list contains all the devices you want. Add more devices if needed.

2.3.2 Export Deployment Profiles

Create and export customized deployments and use them to manage multiple devices.

- 1. Make sure the device list contains all the devices you want. Add more devices if needed.
- 2. Click and select Export profile..., or Export profile (with password)...



If you select **Export Profile...** and any of the target devices is password-protected, the tool notifies you that the profile will be saved without encryption.

Click OK to continue, or click Cancel to go back and select Export profile (with password)...

- 3. Select the destination folder, enter the file name, and then click the **Save** button. If prompted, enter the password and click the **OK** button.
- 4. The tool exports the file and saves it in CSV format.

2.4 Open the Setting File Editor

Adjust the backed-up setting files.

1. Click and select Open Setting File Editor.



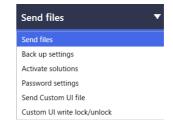
To launch the Setting File Editor successfully, make sure both MassDeploymentTool.exe and SettingFileEditor.exe have not been moved from the installation folder. For more information, see 6 Setting File Editor.

2.5 Send Files

To send specific files (PJL, DJF, PRN files) or to deploy settings files (DPK, EDPK, JSON files) for managing multiple target devices, do the following:

(For more information about creating settings files, see 5.3 Create JSON Files.)

- 1. Make sure the device list contains all the devices you want.
- 2. Select **Send files** from the drop-down list.
- 3. Set the file you want to send to the target devices:
 - a) Click the Set file button, or right-click one of the target devices and select Set file.
 - b) Select the file you want and click the **Open** button. (When you select a file from a USB flash drive, or if you select an EDPK file, you must enter the password for the file.) The selected file is set, and the name of the file appears in the **File name** column.





While a settings file (JSON, DPK, or EDPK) is set and its details appear on the **Send files** screen, you can enter or edit the information in the text boxes of the **Node name (wired)**, **Node name (wireless)**, **Contact**, or **Location** column.

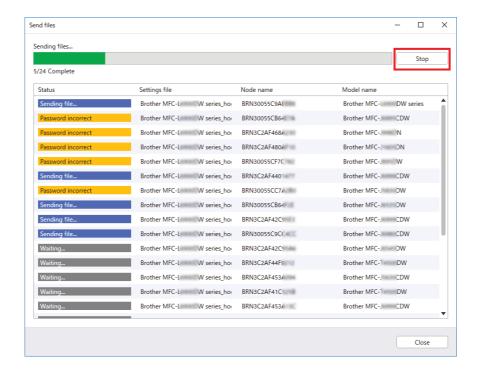
4. Click the **Send** button in the lower right corner of the screen.



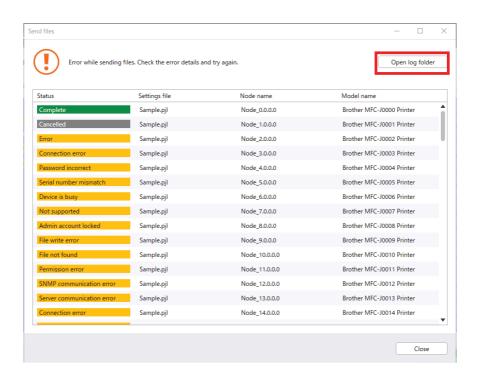
Alternatively, you can use a USB flash drive to deploy settings to a device.

- 1. Rename your file: "write_xxxx.edpk", where xxxx is your original file's name. The EDPK file password and the device password must be the same.
- 2. Copy it onto a USB flash drive.
- 3. Insert the USB flash drive into the Brother device's USB port.
 - HL/DCP/MFC devices
 - a Select Direct Print.
 - b The USB flash drive details appear. Select the "write_xxx.edpk" file.

- c * For monochrome devices: Press Start.
 - * For color devices: Press either Black Start or Color Start.
- Scanners
 - a Select Program Update.
 - b The USB flash drive details appear. Select the "write_xxx.edpk" file.
- 4. Your selected settings will be applied to the device. The output log file will be automatically created.
- 5. The **Send files** dialog box shows the sending progress. To stop this operation, click the **Stop** button.



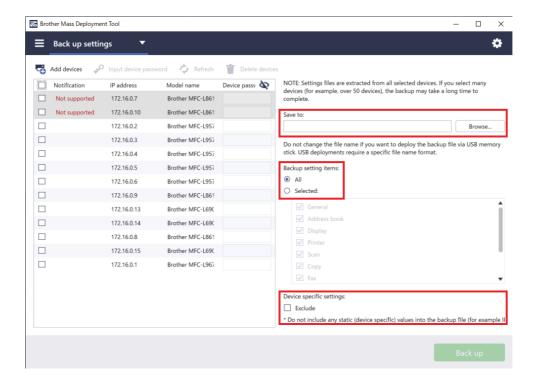
When completed, the summary results appear.
 If unsuccessful, the error status is also listed in the results. Click the Open log folder button, check the log details, and try again.



2.6 Back Up Settings

You can retrieve Brother device settings to back them up and use them later for applying the same settings to a different device.

- 1. Make sure the device list contains all the devices you want.
- 2. Select Back up settings from the drop-down list on the upper left.
- The Back up settings screen appears. The devices whose settings cannot be retrieved are shown as "Not supported".



- 4. Enter the device password in the **Device password** column, if needed.
- 5. Enter the path into the **Save to:** field or click the **Browse...** button to select the destination folder of the backed-up settings file.
- 6. In the Backup setting items: field, select either All or Selected: to specify the necessary items.
- 7. Select the **Exclude** check box to not include the device-specific settings, such as the IP address, node name, in the backed-up file if needed.



To remove the device-specific setting items, you can also use the Setting File Editor. For more information, see 6 Setting File Editor.

8. Click the **Back up** button.

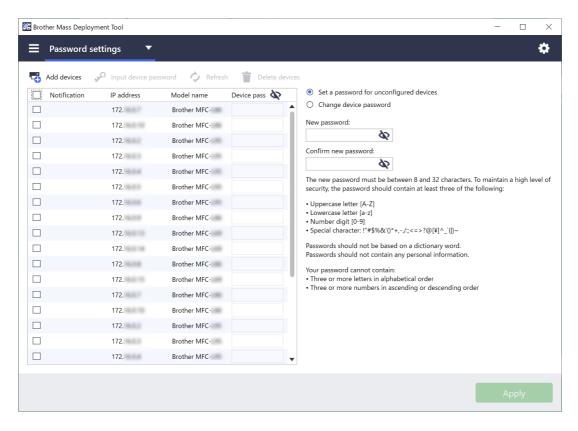


Alternatively, you can use a USB flash drive to back up device settings.

- Prepare an EDPK file that contains the settings you want to back up.
 For instructions on how to create an EDPK file, see 5 Create Settings Files.
- 2. Rename your file: "read_xxxx.edpk", where xxxx is your original file's name. The EDPK file password and the device password must be the same.
- 3. Copy the renamed file onto a USB flash drive.
- 4. Insert the USB flash drive into the Brother device's USB port.
 - HL/DCP/MFC devices
 - a Select Direct Print.
 - b The USB flash drive details appear. Select the "read xxx.edpk" file.
 - c * For monochrome devices: Press Start.
 - * For color devices: Press either Black Start or Color Start.

- Scanners
 - a Select Program Update.
 - b The USB flash drive details appear. Select the "read_xxx.edpk" file.
- 5. The settings you want will be extracted from the device and saved as a new file in the following format: [settings file name]_[model name]_[serial number]_[index].edpk
 The output log file will be automatically created.
- The Back up Settings dialog box shows the backup progress.To stop this operation, click the Stop button.
- 10. When completed, the summary results appear. To check the destination folder of the backup file, click the **Open folder** button. If unsuccessful, the error status is also listed in the results. Click the **Open log folder** button, check the backup log details, and then try again.

2.7 Set Password



To change your default login password or current password.

- 1. Select Password settings from the drop-down list on the upper left.
- 2. Do one of the following:
 - Change the default login password
 - a) Select the target devices in the list, and then select the **Set a password for unconfigured devices** radio button.
 - b) Type the password you want in the New password: and Confirm new password: fields.
 - c) Click Apply.
 - Change the current password
 - a) Select the target devices in the list, and then select the Change device password radio button.
 - b) Click Input device password and type the current password in the Password: field.
 OR
 - Type the current password directly in the **Device password** field in the list.
 - c) Type the new password in the New password: and Confirm new password: fields.

d) Click Apply.



- When you select the Set a password for unconfigured devices menu, the Input device password button and the Device password fields are disabled.
- Avoid using the following passwords as your administrator password:
 - access
 - · initpass
 - The "Pwd" located on the back of your machine
- It can also be used with USB-connected devices.
- 3. The **Password settings** dialog box shows the password setting progress. To stop this operation, click the **Stop** button.
- 4. When completed, the summary results appear.
 If unsuccessful, the error status is also listed in the results. Click the **Open log folder** button, check the password setting result log details, and then try again.

2.8 Send Custom User Interface (UI) File



The Custom UI file (DJF file) is a customized home screen file created using the Brother Custom UI Tool. For more information, see the *Custom UI Tool User's Guide*.

To send customized home screens to multiple Brother devices, follow these steps.

- 1. Make sure the device list contains all target devices.
- 2. Select the **Send Custom UI file** option from the drop-down list in the top left corner.
- 3. The **Send Custom UI file** screen appears.
- 4. Type the device password in the **Device password** column, if needed.
- 5. Type the path into the **Custom UI file**: field or click the **Browse...** button to select the Custom UI file (DJF file)'s destination folder.
- 6. Type the Custom UI write lock password in the **Custom UI write lock password** column.

 Make sure you set a write lock password for the customized data, to restrict access to the data and prevent unauthorized editing of home screens.
- 7. Click the **Send** button.
- 8. When finished, the device will automatically reboot to display your customized home screens.



- Before sending the updated Custom UI file to the devices, the Custom UI write lock must be unlocked.
- Make sure the Custom UI software solution is activated on the target devices.

2.9 Lock or Unlock the Custom UI Write Lock

- 1. Make sure the device list contains all the devices you want.
- 2. Select the Custom UI write lock/unlock option from the drop-down list in the top left corner.
- 3. The Custom UI write lock/unlock screen appears.
- 4. Type the device password in the **Device password** column, if needed.
- 5. Select the **Lock** or **Unlock** radio button and type the Custom UI write lock password in the **Custom UI write** lock password column.
- 6. Click the **Apply** button.

3 Additional Functions of the Mass Deployment Tool (GUI)

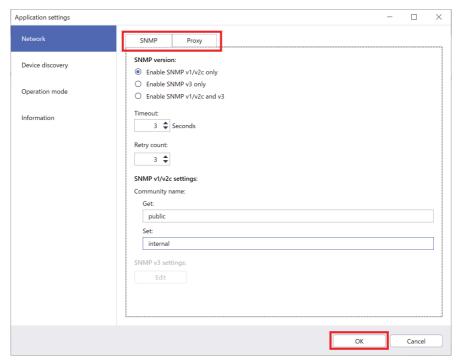
Additional advanced functions are available to help you manage your devices.

3.1 Application Settings

Click in the top bar to configure the tool's settings.

3.1.1 Configure the Network Settings

To configure the device's **Network** settings, do the following:



- 1. Click Network.
- 2. Click the SNMP tab.
- 3. Select the settings you want.
- 4. (Optional) Click the **Proxy** tab and configure proxy settings.
 - The default setting is Auto.
 - If you select Manual:, specify the items in the Server name:, Port:, User name:, and Password: fields.
- 5. When finished, click the **OK** button.

3.1.2 Configure the Device Discovery Settings

To discover the target devices you want, configure the **Device discovery** settings below:

To search for devices on your network

- 1. Select Device discovery.
- 2. Select the IP broadcast: check box or the IP unicast: check box in the Network: tab.
- 3. Click + to add a new address.
- 4. When finished, click the **OK** button.

To search for devices on a different local network

- 1. Select **Device discovery**.
- Select the Agent broadcast: check box.
 The Agent Broadcast feature uses the software called BRAgent. BRAgent runs on a computer on a different LAN from your computer, discovers devices, and then passes the discovery results to your Mass Deployment
- 3. Click + to enter the Agent's IP address: or Agent's node name: field, and then click the OK button.
- 4. Specify the Agent server port.
- 5. When finished, click the **OK** button.

To search for USB-connected devices

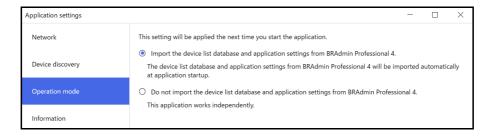
- 1. Select the USB: check box.
- 2. Click the **OK** button.



- To edit the specified setting items, select the item and click .
- To delete the specified setting items, select the item and click $\dot{\mathbf{r}}$.

3.1.3 Link the Mass Deployment Tool to BRAdmin Professional 4

From the main screen, go to Application settings > Operation mode, and select Import the device list database and application settings from BRAdmin Professional 4 to link the Mass Deployment Tool to BRAdmin and use its device information and application settings. When this setting is enabled, you cannot change the Network and Device discovery settings from the Mass Deployment Tool.



3.1.4 Application Information

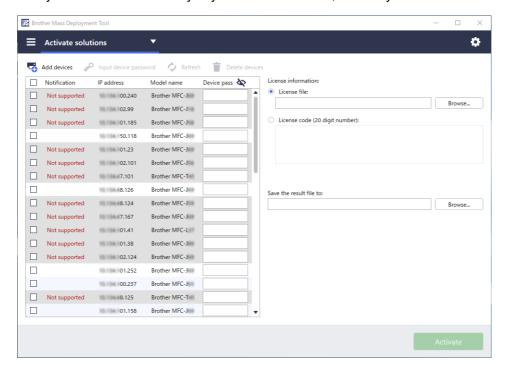
The following Mass Deployment Tool information is available:

- To check the tool's Application log in the case of errors, click the **Open** button from the **Application log:** menu.
- To view the version information, click the **Version** button from the **About this application:** menu.
- To check the application version, click the **Check for software updates** button. You can update the software if a newer version is available.
- To check the license information, click the **License** button.

3.2 Activate Solutions

You can send license files to activate custom software solutions on the target devices.

A valid license file is necessary for this task. A license file can contain many activation codes, allowing solutions to be activated on many devices simultaneously. If you do not have one, contact your local Brother office.



- 1. Make sure the device list contains all the devices you want.
- 2. Select **Activate solutions** from the drop-down list in the top bar.
- 3. The **Activate solutions** screen appears. The devices you cannot send the license to are shown as "Not supported".
- 4. Enter the device password in the **Device password** column, if needed.
- 5. Do one of the following:
- <u>If you have a license file:</u> Select the **License file:** radio button, and then type the file name in the field below, or click the **Browse...** button to select the license file.
- <u>If you have license codes:</u> Select the **License code (20 digit number):** radio button, and then type the license codes in the field below.
 - Multiple codes can be entered, one license code per line.
- 6. Click the **Browse...** button next to the **Save the result file to:** field and specify where to save the result file. You can also copy and paste folder paths into this field.
- 7. Click the Activate button.
- 8. The **Activate solutions** dialog box shows the activation progress. You can also stop the operation by clicking the **Stop** button.
- When completed, the summary results appear.
 If unsuccessful, the error status is also listed in the results. Click the Open log folder button, check the log details, and then try again.

4 Command Line Interface (CLI)

The tool's Command Line Interface (CLI) allows you to configure devices remotely using the Command Prompt. The CLI automatically converts settings files to an appropriate format and sends them to the device you want. It then retrieves the settings data and verifies whether the settings have been applied correctly.

4.1 Use CLI in the Mass Deployment Tool

To use the tool's CLI, you must run the Command Prompt in Windows, and then enter the correct commands and options to execute specific instructions. The CLI uses the following syntax:

settingcmd.exe command option option

Where:

Command: performs a specific task and displays the result Option: modifies the operation of a command

Examples

Applying settings files:

```
settingcmd.exe apply --ip IP_address --file your_file_name.json
--password your password
```

Retrieving settings files:

```
settingcmd.exe retrieve --ip IP_address --file your_file_name.json
--output your_file_name.edpk --password your_password
```



Only English can be used in the Command Line Interface.

The Settingcmd.exe file is stored in the "SettingCommand" folder.

4.2 Commands and Options

4.2.1 Commands

The following commands can be combined with one or more options to perform specific device configuration tasks.

Command	Option	Description
send	Either "Device identifier"* or "profile" is required. 1	Allows you to send the specified file to the device. PRN, PJL, DJF, PJLF, and PCLF files are supported.
	Device identifierRequired:file	PJFL and PCLF are filter files used by filter functions supported by some devices.
	Optional:	<pre>Example: settingcmd.exe sendip IP_addressfile your_file_name.prn</pre>
	resultOptional:profilepasswordcsydelim	<pre>settingcmd.exe sendprofile your_profile_name.csvresult your_filename.csv</pre>
	Available in both, if needed: networksettingpath dkeypassword dkeyfile log communitynameset communitynameget For more information, see 4.2.2 Device Identifiers.	Confirm the result for each device in the results file (CSV). The results file contains all items in your deployment profile along with the following items: Result Detail Start time Finish time
read	Required: Device identifier file Optional: output password networksettingpath dkeypassword dkeyfile log communitynameset communitynameget	Allows you to send the specified file to the device and to read the response. Only PJL files are supported. Example: settingcmd.exe readip IP_addressfile your_file_name.pjloutput our_file_name.txt

Command	Option	Description
apply	Either "Device identifier" or "profile" is required. Device identifier Required:	Allows you to send and apply the specified settings file and confirms the result. JSON, DPK, and EDPK files are supported.
	file Optional:	If used with the "outputdir" option, the tool will save each device's intermediate files to the designated folder.
	 password skipvalidate profile Required: result 	If used with both the "createfileonly" and the "outputdir" options, the tool will only save each device's intermediate files to the designated folder and will not apply the files to each device.
	Optional: profilepassword csvdelim createfileonly outputdir (*)	<pre>Example: settingcmd.exe applyip IP_addressfile your_file_name.jsonpassword your_password</pre>
	Available in both, if needed:	settingcmd.exe applyprofile your_profile_name.csvresult your_filename.csv
	ignorepjlerrorskipverifynetworksettingpathdkeypassword	Confirm the result for each device in the results file (CSV). The results file contains all items in your deployment profile along with the following items: - Result
	 dkeyfile log communitynameset communitynameget forcehttps *If you use "createfileonly", you must also use "outputdir". 	 Detail Start time Finish time (Optional) Output: If you use the "apply" command with the "outputdir" option, the path for saving the intermediate file appears here.
retrieve	Required:	Allows you to retrieve specific settings data from the specified device. The tool sends a request to the specified target device and stores the retrieved settings data, which includes all the settings in the JSON schema based on the specified file path.
	logcommunitynamesetcommunitynamegetforcehttps	To download only specific settings, use the "file" option to specify the settings file that includes the items you want.
		Example: settingcmd.exe retrieveip IP_addressfile your_file_name.jsonoutput your_file_name.edpkpassword your_password

Command	Option	Description
activate	Either "Device identifier" or "profile" is required. Device identifier Required: networksettingpath activateresult licensecode Optional: password profile Required: networksettingpath activateresult Optional: profilepassword csvdelim Available in both, if needed: dkeypassword dkeyfile log communitynameset communitynameget	Allows you to activate a custom software solution for the specified target device. Example: settingcmd.exe activateip IP_addressnetworksettingpath (network communications settings file name)licensecode your_license_codeactivateresult your_result_path settingcmd.exe activateprofile your_profile_name.csvnetworksettingpath (network communications settings file name)activateresult your_result_path
setpassword	Either "Device identifier" or "profile" is required. Device identifier Optional: newpassword profile Required: result Optional: profilepassword csvdelim Available in both, if needed: networksettingpath dkeypassword dkeyfile log communitynameset communitynameget	Allows you to change the administrator password from the default login password to a different password. Example: settingcmd.exe setpasswordip IP_addressnewpassword your_new_password settingcmd.exe setpasswordprofile your_profile_name.csvresult your_filename.csv Confirm the result for each device in the results file (CSV). The results file contains all items in your deployment profile along with the following items: Result Detail Start time Finish time
pack	Required: output packfiles Optional: password log	Creates a settings package file from JSON settings files and their resource files or certificate files. If you use the "—password" option, the package file will be encrypted. Example: settingcmd.exe packpackfiles your_file_name.json your_file_name.xml your_file_name_2.ceroutput your_file_name.edpkpassword your_password

Command	Option	Description
unpack	Required: file unpackdir Optional: password log	Extracts the settings file from the specified settings package file. If the package file is password-protected, it is decrypted with the password specified by the "password" option and the setting file is extracted. Example: settingcmd.exe unpackfile your_file_name.edpkunpackdir your_output_folderpassword your_password
convertsetting	Required:	Converts schema files created in an earlier version to a format compatible with the specified version. If you do not specify the version, the tool uses the latest one. Example: settingcmd.exe convertsettingsource your_file_namedestination your_file_nameversion schema_revision_version_number
license		Displays the license information about Open Source Software. Example: settingcmd.exe license
version		Displays the tool's version information. Example: settingcmd.exe version
eula	Optional: • agree	An agreement to the EULA (End-user license agreement) is required to use this tool. When the tool is run for the first time, the user will be prompted to agree to the EULA. By running the "eula" command, the tool will display the EULA confirmation message. If commands other than "eula" are included, this tool will instruct you to run it with the "eula" command first. If the "eula" command is used with the "agree" option, the tool will automatically accept the EULA without displaying any prompt. (This option is intended for silent execution of this tool.) Example: settingcmd.exe eulaagree

Command	Option	Description
listactivefunc	Either "Device identifier" or "profile" is required. 1 Device identifier profile Required: result Optional: profilepassword csvdelim Available in both, if needed: networksettingpath log communitynameset communitynameget	Displays all solutions enabled for the specified device. Example: settingcmd.exe listactivefuncip IP_addressresult your_filename.csv settingcmd.exe listactivefuncprofile your_profile_name.csvresult your_filename.csvnetworksettingpath (network communications settings file name) Confirm the result for each device in the results file (CSV). The results file contains all items in your deployment profile along with the following items: - Result - Detail - Start time - Finish time
exportprofile	Required: output Optional: file profilepassword networksettingpath log csvdelim	Search for target devices and generate the discovery results as a deployment profile. The search criteria can be specified with an export profile settings file (TXT). The settings for each section in the export profile settings file are as follows: [ip]: IP Address or IP Address Range [nodename]: Node Name [mac]: MAC Address [serial_number]: Serial Number If either [ip] or [nodename] is specified, devices are searched for in IP unicast. If [ip] or [nodename] is not specified, the devices are searched for in IP broadcast. If either [mac] or [serial_number] is specified, devices that do not match them are removed from the search results. Output: - Screen display (Standard output) If the devices specified by [nodename], [mac], [serial_number] are not found, the number of devices that match the search criteria and notfound_list file (TXT) path are displayed. - Deployment profile (CSV file) Output file name specified after the "output" option. If the "password" option is specified, zip the file with the specified password. - notfound_list.txt Output to the same folder as the file specified after the "output" option. Generate only those factors that do not match the search results among all factors in the specified section. Example: settingcmd.exe exportprofilefile export_profile_settings.txtoutput result_profile.csv

Command	Option	Description
applyup	Required: profile result Optional: networksettingpath dkeypassword dkeyfile log communitynameset communitynameget profilepassword csvdelim	Allows you to register the target devices specified using a deployment profile for Microsoft Universal Print. When you set Microsoft Universal Print registration, the device connects to the Microsoft Azure Portal and registers itself for Microsoft Universal Print. The deployment profile must contain the path to the ETKN file and its password. Only ETKN files are supported. For more information about creating the ETKN file, see 4.2.6 Create the ETKN File. After registration, assign the printer permissions and share the printer in Azure Active Directory (Azure AD). You can also use the Azure API commands to assign printer permissions and share the printers. Firmware Application ID must be allowed once per tenant in Azure AD. For more information, see Microsoft's website. Example: settingcmd.exe applyupprofile your profile_name.csvresult your_filename.csvcsvdelim semicolon Confirm the result for each device in the results file (CSV). The results file contains all items in your deployment profile along with the following items: Result Detail Start time Finish time
confirmup	Required: profile result Optional: networksettingpath log communitynameset communitynameget profilepassword csvdelim	Allows you to confirm the Microsoft Universal Print registration status for each device using the deployment profile. Example: settingcmd.exe confirmupprofile your profile_name.csvresult your_filename.csvcsvdelim semicolon Confirm the result for each device in the results file (CSV). The results file contains all items in your deployment profile along with the following items: Result Detail Start time Finish time
dkeycreate	Required: output devicepassword dkeypassword Optional: edpkpassword	Creates a DKEY file that contains the device password and the password for the package file (EDPK). The DKEY file is encrypted with the DKEY password. Example: settingcmd.exe dkeycreatedevicepassword initpassedpkpassword your_passworddkeypassword your_passwordoutput our_file_name.dkey

Command	Option	Description
listfilter	Either "Device identifier" or "profile" is required. Device identifier profile Required: result Optional: profilepassword csvdelim Available in both, if needed: networksettingpath communitynameset communitynameget	Allows you to display the registered filter names for the specified device. Example: settingcmd.exe listfilterip IP_addressnetworksettingpath (network communications settings file name) settingcmd.exe listfilterprofile your_profile_name.csvnetworksettingpath (network communications settings file name) Confirm the result for each device in the results file (CSV). The results file contains all items in your deployment profile along with the following items: Result Detail Start time Finish time
cuilock	Either "Device identifier" or "profile" is required. Device identifier Required: cuilockpassword Optional: password profile Required: result Optional: profilepassword csvdelim Available in both, if needed: networksettingpath dkeypassword dkeyfile log communitynameset communitynameget	Locks writing Custom UI to the specified device. Example: settingcmd.exe cuilockip IP_addressnetworksettingpath setting.inipassword your_passwordcuilockpassword your_Custom_UI_lock_password Confirm the result for each device in the results file (CSV). The results file contains all items in your deployment profile along with the following items: - Result - Detail - Start time - Finish time
cuiunlock	Either "Device identifier" or "profile" is required. Device identifier Required: cuilockpassword Optional: password profile Required: result Optional: profilepassword csvdelim Available in both, if needed: networksettingpath dkeypassword dkeyfile log communitynameset communitynameget	Unlocks writing Custom UI to the specified device. Example: settingcmd.exe cuiunlockprofile your_profile_name.csvresult your_filename.csvnetworksettingpath setting.inipassword your_password Confirm the result for each device in the results file (CSV). The results file contains all items in your deployment profile along with the following items: - Result - Detail - Start time - Finish time

Command	Option	Description
managecacertificate	Either "listonly" or "inputdir" is required. Iistonly inputdir Required: result period password Available in both, if needed: file networksettingpath log communitynameset communitynameget csvdelim emailresult (*) emailto emailfrom emailtitle addnewcertificate *If you use "emailresult", you must also use "emailto" and "emailfrom".	Allows you to retrieve a CA certificate list from the specified devices, or to distribute CA certificates from a specified folder to the specified devices. CA Certificate matching is checked by "CommonName". Example: • Retrieve only CA certificate list settingcmd.exe managecacertificate —listonly —period number —password your_password —result result.csv —file export_profile_settings.txt —emailresult —networksettingpath setting.ini —emailto email_addressl email_adress2 —emailfrom email_address —emailtitle email_title • Update installed CA certificates settingcmd.exe managecacertificate —inputdir ca_certificatedir —period number —password your_password —result result.csv —file export_profile_settings.txt —emailresult —networksettingpath setting.ini —emailto email_addressl email_adress2 —emailfrom email_addressl email_adress2 —emailfrom email_addressl email_adress2 —emailfrom email_address —emailtitle email_title • Distribute all CA certificates in the CA certificate folder settingcmd.exe managecacertificate —inputdir ca_certificatedir —period number —password your_password —result result.csv —file export_profile_settings.txt —emailresult —networksettingpath setting.ini —emailto email_address1 email_adress2 —emailfrom email_address1 emailcate emailcate emailcate export profile cate Confirm the result for each CA certificate in the results file (CSV). Result items: IP Address: IP addresses of devices with CA certificates = Common Name: CA certificate expiration date before distribution New Expiry Date: CA certificate expiration date after distribution

¹ The "Device identifier" option can only run on a single device, while the "--profile" option can run on multiple devices, or a single device.

The results appear as follows:

- If execution is successful: "Result: Success"
- If executions fails: "Error and error details"



If a solution is not supported, the activation status reads "LsSolutionNotSupported".

4.2.2 Device Identifiers

Device identifiers specify the device you want to send the commands to.

Device Identifier	Description
ip address	The IP address of the target device (Network-connected devices only).
mac address	The MAC address of the target device (Network-connected devices only).
node <i>name</i>	The node name of the target device (Network-connected devices only).
usb	Specifying a USB-connected device (Multiple USB-connected devices not supported).
model <i>name</i>	The model name of the target device (USB-connected devices only).
serial <i>number</i>	The serial number of the target device (Network-connected devices only).

4.2.3 Options

Options can be used together with commands to modify their operation. See each command description in section *4.2.1 Commands* to learn which options you can use.

Option	Description
file filename	Specify the file you want to use.
output filename	Specify the path to save the acquired settings file.
password <i>password</i>	Specify the administrator password for the target device.
newpassword <i>password</i>	Specify a new administrator password for the target device.
schema filename	Specify an external JSON schema file.
pjltable <i>filename</i>	Specify an external PJL conversion table.
enumtable <i>filename</i>	Specify an external Enum conversion table.
ignorepjlerror	Skip PJL conversion warnings even if no conversion definition is stated in the PJL conversion table.
skipvalidate	Skip verifying the validity for the settings using schema file before sending setting file.
skipverify	Skip verifying if the settings are applied to printer correctly after applying settings.
packfiles filename filename filename	Specify the files you want to pack (separated with spaces or commas).
unpackdir destination	Specify the path to extract the package contents to.
log filename	Specify the path to the log output file.
communitynameget community name	Community name set in "GET" in SNMP communication.
communitynameset community name	Community name set in "SET" in SNMP communication.
agree	Specify the agreement to EULA.
networksettingpath networksettingpath	Specify the reference destination to the external file that contains the network communication settings (SNMP v3, proxy). Use the setting.INI file as an external file after you configure the network settings by using the GUI.
source filename	Specify the file before conversion using the "convertsetting" command.
destination filename	Specify the destination for saving the file after conversion using the "convertsetting" command.
version	Specify the version after conversion using the "convertsetting" command.
licensecode license code	Specify a 20-digit license code to activate a custom software solution.
activateresult activate result folder path	Specify the destination for saving the activation results of the "activate" command.

Option	Description
forcehttps	Force the https communication.
profile	Specify the deployment profile's file path. The relative path to the settingcmd.exe is also supported. The devices in the file are network connection only.
csvdelim	Specify one of the following as a CSV delimiter: - colon - comma - equal - semicolon - space - tab If you do not specify a delimiter, the delimiter will be based on your region or location.
createfileonly	Create the intermediate file without applying it to the target device when using the "apply" command with the profile. If you use this option, you must also use the "outputdir" option.
result	Specify the path for saving the executing result.
outputdir	Specify the output path for the files created when executing the command.
devicepassword password	Specify the device password to include in the DKEY file.
edpkpassword <i>password</i>	Specify the EDPK file password to include in the DKEY file.
dkeypassword <i>password</i>	Specify the DKEY file encryption and decryption password.
dkeyfile <i>filename</i>	Specify the path to save the DKEY file.
profilepassword <i>password</i>	Specify the password for the zipped deployment profile.
listonly	Retrieve only the device CA certificate list without distributing CA certificates using the "managecacertificate" command.
inputdir	Specify the path to the CA certificate folder using the "managecacertificate" command. Not required if you use the "listonly" option.
period	Specify the number of days considered close to expiration retrieving the CA certificate list using the "managecacertificate" command.
emailresult	Email the results file after execution using the "managecacertificate" command. Use values from the SMTPSettings section of the setting.INI file for server settings. If you use this option, you must also use the "emailto" and "emailfrom" option.
emailto	Specify the destination address when emailing the results file of the "managecacertificate" command. Specify multiple addresses separated by spaces.
emailfrom	Specify the source address when emailing the results file of the "managecacertificate" command.
emailtitle	Specify the title when emailing the results file of the "managecacertificate" command.
addnewcertificate	Distribute all CA certificates in the folder specified by "inputdir" option using the "managecacertificate" command.
cuilockpassword custom ui lock password	Specify the Custom UI write lock password.

4.2.4 Deployment Profile

A deployment profile contains device information, setting files, and the unique setting value for each device, if needed.

The first line of a deployment profile file (CSV) must list the following items (these can be in any order):

 \circ Required item \triangle Optional item – Unsupported item

Item	send	apply	applyup	activate	setpassword	listactivefunc	confirmup	listfilter	cuilock/ cuiunlock
Model Name		_							
Serial Number					Δ	7			
Interface (USB/ NETWORK_IPV4)					_				
MAC Address/ Vendor ID					Δ	7			
Node Name/ Product ID					0	1			
IP Address					0	1			
Protected by password		_							
Password			03			_			○3
Json Schema					=	-			
File Path		0		04			_		
Package Password	_	△2	0			-			
Json File		•			_	•			
Extra LAN Node Name		-							
Extra WLAN Node Name		_							
Extra Location		-							
Extra Contact		-							
New Password	- O ³ -								
CUI Lock Password		_ 0				0			
User Defined Value	_	Δ				_			

¹ You must specify the target device's IP Address or Node Name to discover the device.

Required with the specified EDPK in the File Path. When a Deploy KEY file is specified, the "Package Password" is not required.

When a Deploy KEY file is specified, the "New Password" or "Password" is not required.

⁴ If the license file is not the same for all lines, an error will occur.

Deployment Item Definitions:

Item	Definition
Serial Number	The serial number of the device. If the number you type into this field does not match the serial number identified using the IP Address or Node Name, the "Serial number mismatch error" occurs.
Interface (USB/ NETWORK_IPV4)	Connection Interface. This is generated by the "exportprofile" command, and is ignored if you use any command other than the "exportprofile" command with a profile that contains this item. Its value is "USB" or "NETWORK_IPV4".
MAC Address/ Vendor ID	MAC address (Network connected devices) or Vendor ID (USB connected devices). This is generated by the "exportprofile" command, and is ignored if you use any command other than the "exportprofile" command with a profile that contains this item.
IP Address	The device's IP Address.
Node Name/Product ID	The device's Node Name (Network connected devices) or Product ID (USB connected devices).
Protected by password	If a password is set on the devices. Its value is "TRUE" or "FALSE".
Password	The device administrator password.
File Path	The file's path (relative or absolute).
Json Schema	The version of the device's JSON schema. Its value is a number.
Package Password	The password for the file specified in the File Path.
Json File	If the file specified in the File Path is a setting file (JSON, DPK, EDPK). Its value is "TRUE" or "FALSE".
Extra LAN Node Name/ Extra WLAN Node Name/Extra Location/ Extra Contact	The value to rewrite the node name (LAN/WLAN/Location/Contact) in the JSON file.
New Password	The new device administrator password.
CUI Lock Password	The Custom UI write lock password.
User Defined Value	You can define a unique value for a certain device by using your own item in "#XXXXXXX#" format. Any characters except "#" can be used in XXXXXXX. This allows you to set different values for each device within a single profile. This also applies to the "createfileonly" option.



Any items that are neither required nor optional are ignored and do not result in an error.

Examples of files used by the apply command:

- Deployment profile

A CSV file containing the following information:

IP Address, Serial Number, Password, File Path, Package Password, #CONTACT#, #LOCATION#, #AUTO_POWER_OFF#

10.1.2.146,E75868F7F173334,initpass,C:\tmp\brother.edpk,package1,Brother A,5F,hour8

 $10.1.4.146, A 99999A7H000511, in it pass, C: \verb|\tmp\brother.edpk, package1, Brother B, 4F, hour 4, and the control of the co$

 $10.1.7.179, C25312A1G553212, in it pass, C: \verb|\true| brother.edpk|, package1|, Brother C, 3F, of fine the context of the con$



Delimiter (",") in the above example you can specify a using the "--csvdelim" option.

- Setting file

A JSON file located in C:\tmp\brother.edpk:

```
{
    "attributes": {
        "software_id": "pns_firmware",
        "setting_version": "",
        "schema_revision": 4
    },
    "settings": {
        "general": {
        "contact_and_location": {
              "contact": "#CONTACT#",
              "location": "#LOCATION#"
    },
        "auto_power_off_mode": {
              "auto_power_off_time": "#AUTO_POWER_OFF#"
    }
    }
}
```

- Intermediate file

The 00001_10.1.2.146.json file for the device 10.1.2.146, where 00001 is the line number in your CSV file where the target device is listed with one subtracted (five digits, zero padding):

```
{
  "software_id": "pns_firmware",
  "setting_version": "",
  "schema_revision": 4
},
  "settings": {
  "general": {
   "contact_and_location": {
      "contact": "Brother A",
      "location": "5F"
   },
   "auto_power_off_mode": {
      "auto_power_off_time": "hour8"
   }
}
```

4.2.5 Deploy Key File

A Deploy KEY file (DKEY file) is used for encrypting and using passwords related to device settings. DKEY file contains the encrypted device password and the EDPK file password (the EDPK file password is optional).

When you use each command with the "--dkeyfile" option:

- · The device password in the DKEY file is passed to the target device.
- · If the "--password" option is specified at the same time, it will be ignored.
- · For "apply" command:
 - If an EDPK file is specified, the EDPK file password in the DKEY file is used to derypt the EDPK file.
 - Password and package password in deployment profile specified in "--profile" option are ignored.
- · For "setpassword" command:
 - The device password in the DKEY file is used to set on the target device as the new device password.
 - New password in the deployment profile that is specified with the "--profile" option will be ignored.

4.2.6 Create the ETKN File

Create an ETKN file from the Microsoft Azure portal, using the UniversalPrintTokenGenerator.exe file.

At your Command Prompt, run the UniversalPrintTokenGenerator.exe file in the "UniversalPrintTokenGenerator" folder.

The ETKN file is encrypted with the password specified in the "--filepass" option and saved to the file specified in the "--output" option. You can specify if you want to sign out of the Microsoft Azure Portal after getting the token.

Example:

UniversalPrintTokenGenerator.exe --output your_file_name.edpk --filepass
your file password --signout

Option	Description
Required:	
 output 	File path to save the ETKN file acquired from Microsoft Azure.
filepass	The password for the ETKN file to save.
Optional:	
• signout	Sign out after running this command.



- The ETKN files generated expires after one hour. To extend the deadline, see Microsoft's website.
- Make sure permission is granted for UniversalPrintTokenGenerator.exe in the Microsoft Azure AD.
- One of the following permissions (in the Microsoft Azure AD) is required to generate the ETKN file:
 - Global administrator
 - Printer administrator
 - Printer technician

5 Create Settings Files

Refer to this section when creating settings files used by this tool.

5.1 Settings Files

The settings files are model-independent. If a customer replaces an existing device, settings files may be reused if they are compatible with the new device. The tool uses the following file types and extensions to store device settings:

JSON Files

JSON (JavaScript Object Notation) files allow you to configure device settings without having to understand PCL or PJL commands. For more information, see 5.2 JSON Files and 5.3 Create JSON Files.

Package Files

Package files can include a JSON-based settings file and any required external resources.

Package File Type	Encryption
DPK	No
EDPK	Yes

Settings Files

Settings files consist of one or more JSON-based settings.

5.2 JSON Files

JSON (JavaScript Object Notation) files are used to configure device settings. JSON is an open standard that allows you to specify your own settings using a JSON editor, without having to understand PCL or PJL commands.

- For more information about JSON, see www.json.org.
- For more information about JSON schema file structure and setting types, see json-schema.org.

```
JSON file format (Example)

{
    "attributes": {
        "software_id": "pns_firmware", <-- fixed value "pns_firmware"
        "schema_revsion": 1, <-- current schema version is 1
        "setting_version": "v0100", <-- version (operators can use this field for tracking)
},
    "settings": {
        "contact_and_location": {
            "contact': "store_manager",
            "location": "store01"
        },
        "sleep_mode": {
            "auto_power_off_mode": {
                  "auto_power_off_time": "off"
        }
    }
}

Red Green
Setting Value

}
</pre>
```



The structure of JSON settings files and the placement of individual setting entries are described in JSON schema files. For example, the "sleep time" setting must be located at

\$.settings.general.sleep_mode.sleep_time and will accept only numerical values.

There are three ways to create and edit JSON settings files:

Method	Description
Using text editors	Edit the settings files you want in a text editor. We recommend using JSON-supported text editors such as Notepad++, because they allow for greater control when viewing, editing, and formatting JSON files.
Using JSON-schema supported JSON editors	Edit settings files using a third-party editor that supports JSON-schemas. The interface of such editors allows changing setting values based on a schema-defined structure.
Using scripts/programs	Create settings files using scripts or other software. You can construct a JSON file from scratch, or parse the base JSON file and then modify its setting values.

5.3 Create JSON Files

Any JSON-supported text editor can be used to create and edit settings files. To use JSON settings files, you need a JSON schema file containing all the configurable elements on Brother devices.

Prepare the JSON schema file.
 Default schema files can be found in the "Schema" folder in the Mass Deployment Tool's folder on your computer.



Before you proceed, make sure you have the correct schema file for your model. For a list of available schema files and applicable models, double-click the README.url file in the "Schema" folder to open the README website. You will need this information later.

- 2. Edit the JSON settings file in a text editor file.
- 3. You can now use the Mass Deployment Tool to apply the settings remotely or use a USB flash drive to apply the settings on the device.

Creating and editing settings files using an online JSON editor (example)

- 1. In your web browser, go to www.jeremydorn.com/json-editor.
- 2. Open the Brother JSON schema file in a text editor file and copy and paste its contents into the "Schema" field on the web page.
 - The attributes section appears at the top of the page.
- 3. Scroll down to the **settings** section, and select "object" from the **general** drop-down list. The **General settings** options appear.
- 4. Select "object" from the contact_and_location drop-down list.
- 5. Enter the contact and location details you want.
- 6. Scroll up to the **JSON Output** area at the top of the page, and then click the **Update Form** button.
- 7. The updated code appears in the preview field. Copy the JSON output and paste it into the text editor.
- 8. Use the Mass Deployment Tool to apply the settings remotely or use a USB flash drive to apply the settings on the device.

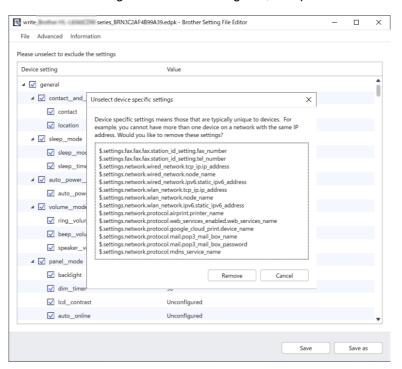
6 Setting File Editor

Use the Setting File Editor to:

- Remove all device-specific settings from the settings file (.json, .dpk, .edpk) at once, or remove only
 unnecessary device settings, and save them.
- Create the setting files (.json, .dpk, .edpk) and profiles (.csv) necessary to run the "apply" command with profile.
 - Add dynamic (Mapply) keywords to the settings file (.json, .dpk, .edpk) and save them.
 - Use an existing profile or create a new profile (.csv) with a field for the dynamic (Mapply) keywords added to the currently open setting file.
- 1. Open the Setting File Editor.



- Double-click SettingFileEditor.exe in the "MassDeploymentTool" folder. OR
- Select Open Setting File Editor on the Mass Deployment Tool's interface.
- When using the Setting File Editor for the first time after installation, launch the Mass Deployment Tool first.
- 2. To open the settings file, do one of the following:
 - Click the File menu and then select Open file.
 - Click the Open file button in the center of the screen, and then click the settings file.
 - Navigate to the folder with the settings file, and then drag and drop the settings file directly into the designated area.
- 3. A dialog box appears, to confirm if you want to remove the device-specific settings. Click **Remove** to deselect all the settings listed in the dialog box, if required.



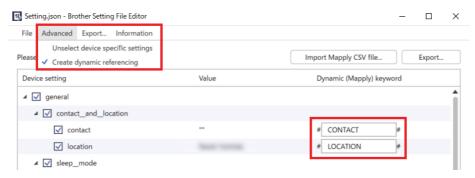
- 4. Do one of the following:
 - a) Remove items from the settings tree.

After saving the settings file, the deselected items are deleted from the file and are no longer displayed on the settings tree.

b) Use dynamic (Mapply) keywords.

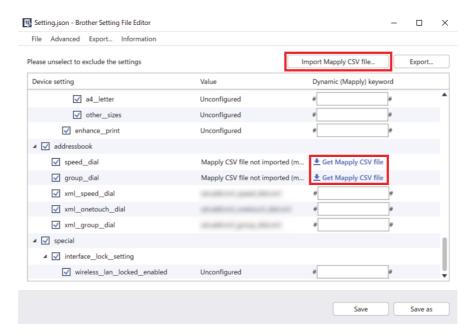
Change or add a value in the settings file to a dynamic (mapply) keyword by selecting **Create dynamic referencing** in the **Advanced** menu.

Type the keyword in the **Dynamic (Mapply) keyword** field.



- c) Set a dynamic (Mapply) keyword for keys in an array.
 - 1. Click the **Get Mapply CSV file** button to download the Mapply CSV template.
 - 2. Edit the downloaded Mapply CSV template and add the dynamic keyword.
 - 3. Import the Mapply CSV file that you have created.

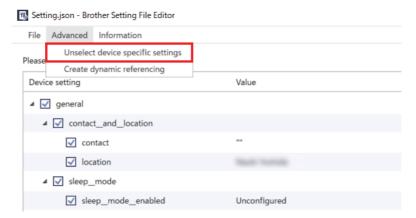
Click Import Mapply CSV file... button, and then click Save.



- d) Export dynamic keywords using the **Export...** menu or the **Export...** button in the upper right corner of the screen.
 - Select **Apply dynamic (Mapply) keywords to the deployment profile** to add the dynamic keywords to an existing deployment profile (CSV or ZIP file).
 - Select Create a new deployment (Mapply) profile template to create a new deployment profile (CSV file).



Remove all device-specific settings at once by selecting **Unselect device specific settings** in the **Advanced** menu.



- A settings file with the Mapply keywords can be used only with the "apply" command with profile. For more information, see *4.2 Commands and Options*.
- The **Export...** menu and button appear when **Create dynamic referencing** is selected. For more information about deployment profiles, see *4.2.4 Deployment Profile*.

7 Troubleshooting

If you have any problems using the Mass Deployment Tool, check the table below. If the problem persists, contact your local Brother office's technical support team.

Error	Solution
Admin account locked	The admin password for the target device was entered incorrectly too many times. Wait until the password lock of the target device is released.
Already activated	The function you want to activate on the device has already been activated.
Already set	The device password has already been changed from the default login password. Make sure that the password is the default login password.
Cannot convert to PJL	Make sure you use a PJL conversion table compatible with the input data.
Cannot convert to Setting file	Make sure you use a PJL conversion table compatible with the settings file you want.
Connection error	Make sure the target device is connected and available to transfer the data.
	One or more settings in the settings file have not been applied. Check the log file for more information.
Deploy results mismatch	Sleep time and auto power off settings: if you want to set a value that exceeds 20 minutes, or to change the setting to OFF, try changing it from your machine's control panel.
Device internal error	Reboot the target device and try again.
Device is busy	Wait until the target device finishes its current job.
File not found	Make sure you specify the file path correctly, and then try again.
File write error	Make sure that there is enough space in the destination folder, or that the files in the destination folder can be overwritten.
Firmware Update required	The schema version of the target device is older than the schema version of the JSON settings file. Update the device's firmware.
Internal error	Make sure all settings are correct and then try again.
Invalid deploy setting file	Make sure the content and structure of the settings file are correct, and then try again.
Invalid file error	Make sure you select the correct DJF file or the correct target device.
License error	Make sure you enter the correct license code (20 digits).
New version schema required	The schema version of the JSON settings file is older than the schema version of the target device. Execute the "convertsetting" command in the tool's Command Line Interface (CLI).
Not supported	Make sure all the target devices support the function/command you want, or select the target devices that support that function/command.
Partially complete	Some of the deployed solutions have been activated, and some are either already activated or not supported by the target devices. Check the CSV file stored at the path specified in Save the result file to: on the Activate solutions screen for more information.
Password incorrect	Make sure you enter the correct password.
Permission error	Make sure you have the permission to access the specified folder or output folder.
Serial number mismatch	When specifying the device identifier, make sure you specify the serial number that matches the serial number of the target device.
Server communication error	Make sure your network connection is active so that you can update the tool to the latest version.
Session timeout	This activation session has expired after more than 24 hours of inactivity. Try to activate the solution or function you want again.
SNMP communication error	Make sure you specify the SNMP settings correctly.

Error	Solution	
SNMP v3 security error	Make sure your SNMP settings are correct. Try again when the target device is unlocked.	
Solution not supported	Make sure the target devices support the solutions you want to deploy.	
Solution not supported/already activated	Some of the deployed solutions are either not supported or are already activated. Check the CSV file stored at the path specified in Save the result file to: on the Activate solutions screen for more information.	
Unauthorized access error	The license code was entered incorrectly too many times.	
	Wait until the lock of the license server is released.	
	Make sure your license code is in the correct format (20 digits) and has not been used yet.	

Appendix

The exit codes provided by the Mass Deployment Tool (CLI) allow you to identify deployment errors.

GUI/CLI Errors

For more information and help, see section 7 Troubleshooting.

GUI: Error	CLI: Exit Code	Description
Admin account locked	80009	The administrator password for the target device was entered incorrectly too many times.
Already activated	80023	The device has already been activated.
Already set	80054	The password has already been changed.
Cannot convert to PJL	80030	Cannot convert the setting file to the PJL file.
Cannot convert to Setting file	80031	Cannot convert the PJL file to the setting file.
Connection error	80015	Connection error.
Deploy results mismatch	80032	The setting file deployment results do not match.
Device internal error	80035	Device internal error.
Device is busy	80007	Device is busy.
File not found	80011	File not found.
File write error	80010	File write error.
Firmware Update required	80033	Firmware update required.
Internal error	80052	Internal error in the application.
Invalid deploy setting file	80029	Invalid deploy setting file.
Invalid file error	80026	Invalid file error.
License error	80022	License error.
New version schema required	80034	New version schema required.
Not supported	80008	Not supported.
Package password incorrect	80071	Incorrect package password.
Partially complete	80067	The license activation is only partially complete.
Password incorrect	80005	Incorrect password.
Permission error	80012	Access denied.
Serial number mismatch	80006	The serial number entered does not match the serial number identified.
Server communication error	80014	Server communication error.
Session timeout	80021	Session timeout.
SNMP communication error	80013	SNMP communication error.
SNMP v3 security error	80055	SNMP v3 security error.
Solution not supported	80068	Not all features are supported by this license.
Unauthorized access error	80020	The maximum number of password attempts has been exceeded.
Universal Print Internal error	80203	Microsoft Universal Print Internal error.
Universal Print Internal error – Length excess	80205	The token size exceeds the limit.
Universal Print Internal error – Unready	80201	The device is not yet ready to register for Microsoft Universal Print.

GUI: Error	CLI: Exit Code	Description
Universal Print Internal error – Unsupported	80204	The device is not supported by Microsoft Universal Print.
Universal Print Registration Refused	80202	The device is unable to register for Microsoft Universal Print.
Initial Password Error	80071	You must change the default password to change the device settings.
Initial Password Reboot Error	80083	Failed to reboot after resetting back to the default password.
Write lock error	80027	Custom UI write lock failure.
Write lock password error	80028	The Custom UI write lock password is incorrect.

CLI Errors

Exit Code	Description
70001	Agreement to the EULA is required.
70002	Failed to convert due to the wrong file or version.
70003	Failed to create the package.
70004	Failed to extract the package.
70007	Failed to read the network setting file.
70009	Invalid parameter.
70010	Failed to execute the functions using the deployment profile in one or more devices.
70011	Wrong deployment profile.
70012	Wrong delimiter.
70013	The new administrator password has fewer than eight characters.
70014	The new administrator password is weak.
70015	Failed to decrypt the DKEY file.
70016	Failed to decrypt the deployment profile.
70017	Failed to apply filter.

Universal Print Token Generator Errors

Exit Code	Description
70001	Incorrect user account.
70004	"output" option is not specified.
70005	"filepass" option is not specified.
70006	Failed to save the ETKN file.
70007	Connection error
70008	Session timeout
70009	Not authenticated by the Microsoft Azure AD.
70010	Invalid parameter.
70011	Internal error
70012	The account does not have permission to register printers.

