

Moxa CLI Configuration Tool User's Manual

Edition 2.0, December 2018

www.moxa.com/product



© 2018 Moxa Inc. All rights reserved.

Moxa CLI Configuration Tool User's Manual

The software described in this manual is furnished under a license agreement and may be used only in accordance with the terms of that agreement.

Copyright Notice

© 2018 Moxa Inc. All rights reserved.

Trademarks

The MOXA logo is a registered trademark of Moxa Inc.
All other trademarks or registered marks in this manual belong to their respective manufacturers.

Disclaimer

Information in this document is subject to change without notice and does not represent a commitment on the part of Moxa.

Moxa provides this document as is, without warranty of any kind, either expressed or implied, including, but not limited to, its particular purpose. Moxa reserves the right to make improvements and/or changes to this manual, or to the products and/or the programs described in this manual, at any time.

Information provided in this manual is intended to be accurate and reliable. However, Moxa assumes no responsibility for its use, or for any infringements on the rights of third parties that may result from its use.

This product might include unintentional technical or typographical errors. Changes are periodically made to the information herein to correct such errors, and these changes are incorporated into new editions of the publication.

Technical Support Contact Information

www.moxa.com/support

Moxa Americas

Toll-free: 1-888-669-2872
Tel: +1-714-528-6777
Fax: +1-714-528-6778

Moxa Europe

Tel: +49-89-3 70 03 99-0
Fax: +49-89-3 70 03 99-99

Moxa India

Tel: +91-80-4172-9088
Fax: +91-80-4132-1045

Moxa China (Shanghai office)

Toll-free: 800-820-5036
Tel: +86-21-5258-9955
Fax: +86-21-5258-5505

Moxa Asia-Pacific

Tel: +886-2-8919-1230
Fax: +886-2-8919-1231

Table of Contents

1. Introduction	1-1
System Requirements	1-2
Supported Platforms	1-2
Supported Models	1-2
Installing MCC_Tool on Windows	1-2
Installing MCC_Tool on Linux	1-6
2. Getting Started	2-1
Overview	2-2
Supported Functions and Command Structure	2-2
Device List	2-3
Support Product Series	2-3
Function Support Table	2-3
Usage Examples of Supported Functions	2-4
Report Firmware Versions	2-4
Upgrade Firmware and Restart the Device	2-5
Export/Import Device's Configuration	2-5
Restart Specific Serial Ports or the Whole Devices	2-7
Change User's Password on the Device	2-8
Show Support Model List	2-9
Update Plugin	2-9
Error Code Explanation	2-9

Introduction

Moxa CLI Configuration Tool (MCC_Tool) is a command line tool that provides the following functions to manage field devices.

- Report firmware versions
- Upgrade firmware
- Import/export configuration files
- Password changes

Management tasks can be performed according to a desired scale (1 for single device or 1 for multiple devices) and across different subnet networks.

The following topics are covered in this chapter:

❑ **System Requirements**

- Supported Platforms
- Supported Models

❑ **Installing MCC_Tool on Windows**

❑ **Installing MCC_Tool on Linux**

System Requirements

Supported Platforms

- Windows 7 and later versions.
- Linux kernel 2.6 and later versions.

Supported Models

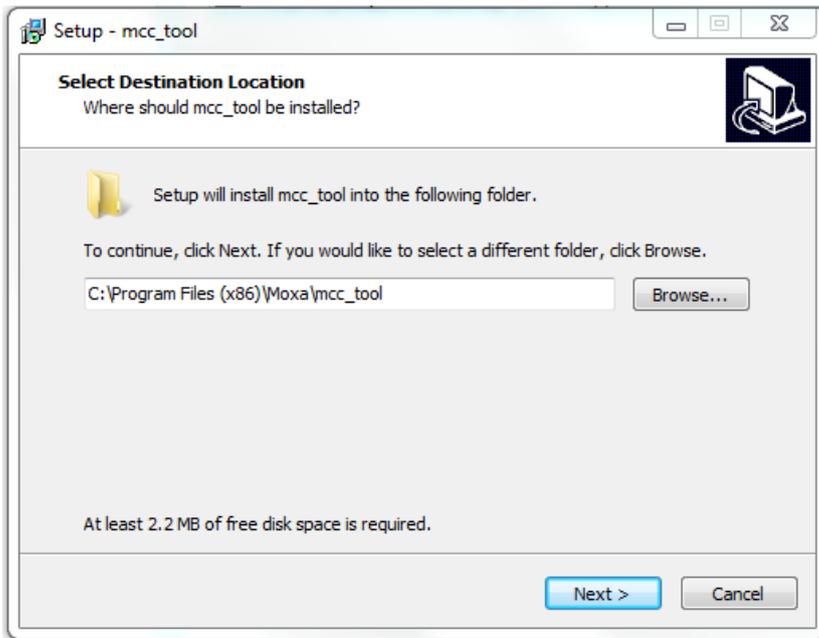
- **NPort 5100A Series:** 5110A, 5130A, 5150A, P5150A (Firmware v1.4 and later versions)
- **NPort 5200A Series:** 5210A, 5230A, 5250A (Firmware v1.4 and later versions)
- **NPort IA5000A Series:** IA5150A, IA5150AI, IA5250A, IA5250AI (Firmware v1.3 and later versions); IA5450A, IA5450AI (Firmware 1.4 and later versions)
- **NPort 5000A-M12 Series:** 5150AI-M12, 5250AI-M12, 5450AI-M12 (Firmware v1.3 and later versions)
- **NPort 6000 Series:** 6150, 6250, 6250-M-SC, 6250-S-SC, 6450, 6610-8, 6610-16, 6610-32, 6650-8, 6650-16, 6650-32 (Firmware v1.6 and later versions)
- **MGate MB3x80 Series:** MB3180, MB3280, MB3480 (Firmware v2.0 and later versions)
- **MGate MB3x70 Series:** MB3170, MB3170I, MB3170-M-SC, MB3170-M-ST, MB3170-S-SC, MB3170I-M-SC, MB3170I-S-SC, MB3270, MB3270I (Firmware v3.0 and later versions)
- **MGate 3660 Series:** MB3660-8-AC, MB3660-8-2AC, MB3660-8-DC, MB3660-8-2DC, MB3660I-8-2AC, MB3660-8-J-2AC, MB3660-16-AC, MB3660I-16-AC, MB3660-16-2AC, MB3660-16-J-2AC, MB3660I-16-2AC, MB3660-16-DC, MB3660-16-2DC, MB3660I-8-AC (Firmware v2.0 and later versions)
- **ioLogik E1200 Series:** E1210, E1211, E1212, E1213, E1214, E1240, E1241, E1242, E1260, E1262 (Firmware v2.4 and later versions)
- **ioThinX 4500 Series:** ioThinX 4510, ioThinX 4510-T (Firmware v1.0 and later versions)

Installing MCC_Tool on Windows

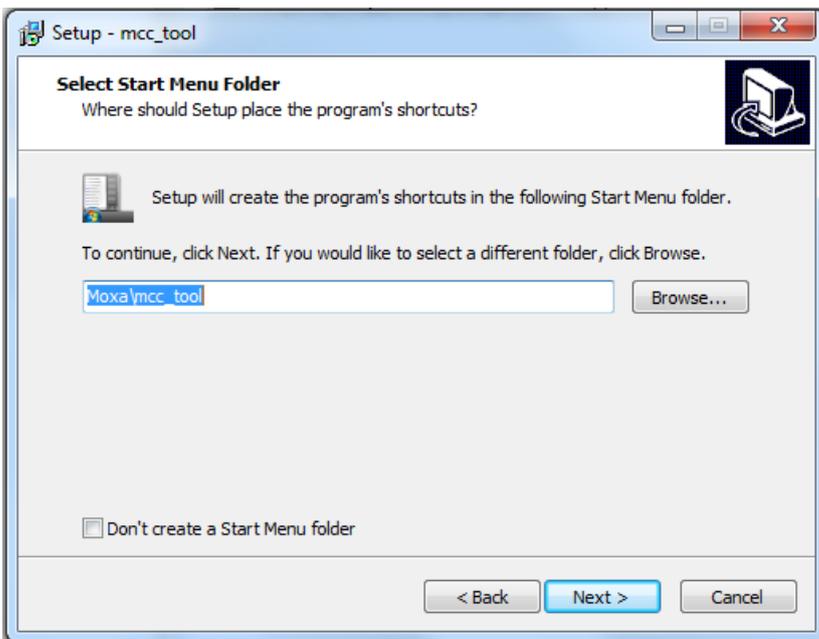
Step 1: Download MCC_Tool for Windows on URL:

<https://www.moxa.com/support/download.aspx?type=support&id=15923>. Unzip the folder and execute the .exe file. The setup wizard will pop up to direct you to the next steps.

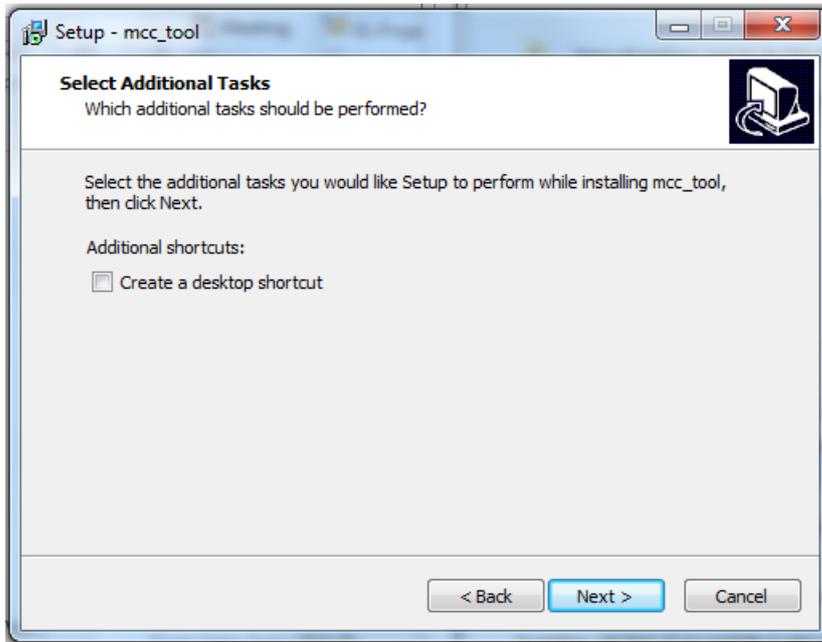
Step 2: Select destination location of where MCC_Tool should be installed.



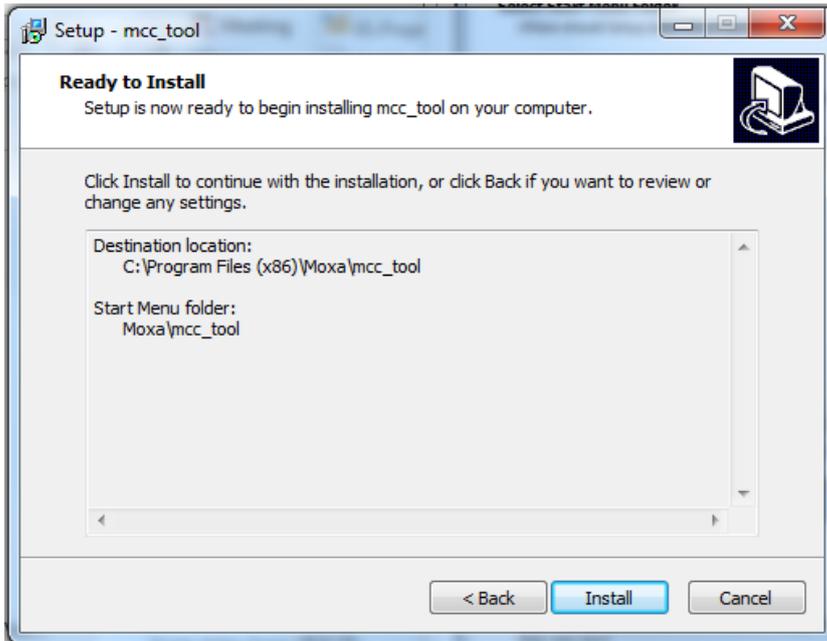
Step 3: Select **Start Menu Folder** to create the program's shortcuts.



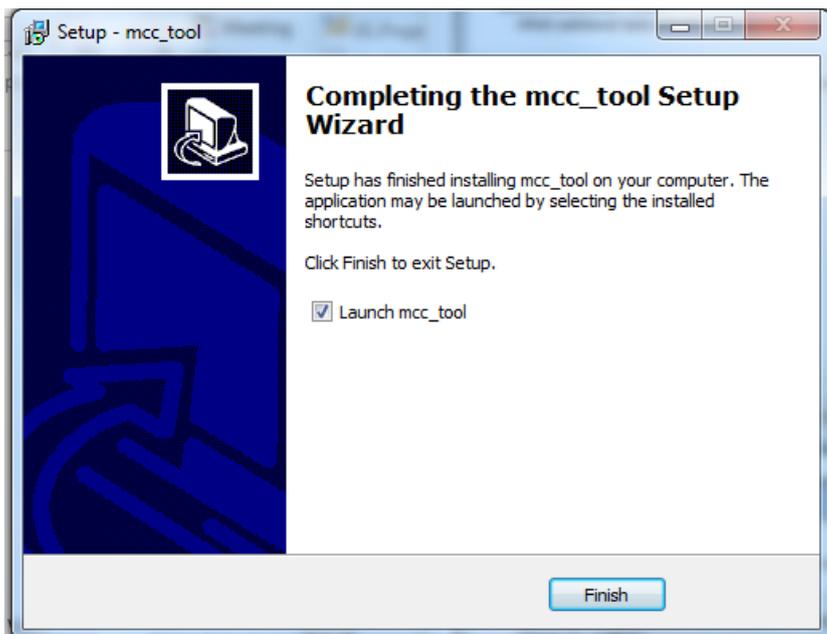
Step 4: Select Additional Tasks if any and click **Next**.



Step 5: Confirm previous selection and prepare to install.



Step 6: Complete setup and check **Launch mcc_tool** if you want to use MCC_Tool after exiting the setup wizard.



Step 7: Use `-h` command to prompt help information.

```
Administrator: C:\windows\system32\cmd.exe
MCC_Tool 1.1 Copyright: Moxa Inc.

Usage: ./mcc_tool [function] [options]
Function:
  -fw: Execute "Firmware related" action.
  -cfg: Execute "Configuration related" action.
  -pw: Execute "Password related" action.
  -re: Execute "Restart related" action.
  -ver: Show mcc library and model list version.
  -ml: Show supported models.
  -install: Install plugin.
  -help: Display version of MCC_Tool and help information.
Options:
  -r: Report firmware version.
  -up: Upgrade firmware.
  -ex: Export the configuration file.
  -im: Import the configuration file.
  -ch: Change password.
  -de: Restart device.
  -sp: Restart port.
  -i: Device IP address.
  -il: IP address list containing 1 IP address per line.
  -d: Device list.
  -f: File to be imported or upgraded.
  -nd: The Device list with new password settings.
  -u: Device's user account for login.
  -p: Device's password for login.
  -npw: The new password for the specific user.
  -dk: Secret key for import/export configuration.
  -ps: Specific serial ports to be restarted.
  -o: Output file name.
  -l: Export result log file.
  -n: Keep network settings for configuration import.
  -nr: Don't reboot device after finishing executing command.
  -print: Print process message for upgrade firmware command.
  -t: Timeout(sec).
```

Installing MCC_Tool on Linux

Step 1: Download MCC_Tool for Linux on URL:

<https://www.moxa.com/support/download.aspx?type=support&id=15925> (Linux x86) and

<https://www.moxa.com/support/download.aspx?type=support&id=15924> (Linux x64). Versions for x86 and x64 OS are available.

Step 2: Access the location where you save the downloaded file and unzip it. For example:

```
moxa@moxa-virtual-machine:~$ cd Desktop/

moxa@moxa-virtual-machine:~/Desktop$ tar -xvzf
mcc_tool_x64_ver1.0_build_17111618.tar.gz
mcc_tool_x64_ver1.0_build_17111618/
mcc_tool_x64_ver1.0_build_17111618/dsci_mcc.so
mcc_tool_x64_ver1.0_build_17111618/mxio_mcc.so
mcc_tool_x64_ver1.0_build_17111618/mcc_tool
mcc_tool_x64_ver1.0_build_17111618/mgci_mcc.so

moxa@moxa-virtual-machine:~/Desktop$ cd mcc_tool_x64_ver1.0_build_17111618/
```

Step 3: Execute MCC_Tool in the unzipped folder and use **-h** command to get all the available functions and option commands of the tool.

```
moxa@moxa-virtual-  
machine:~/Desktop/mcc_tool_x64_ver1.0_build_17111618$ ./mcc_tool -h  
MCC_Tool ver1.0 Copyright: Moxa Inc.  
  
Usage: ./mcc_tool [function] [options]  
Function:  
-fw:      Execute "Firmware related" action.  
-cfg:     Execute "Configuration related" action.  
-pw:     Execute "Password related" action.  
-re:     Execute "Restart related" action.  
-ver:    Show mcc library version.  
-help:   Display version of MCC_Tool and help information.  
Options:  
-r:      Report firmware version.  
-up:     Upgrade firmware.  
-ex:     Export the configuration file.  
-im:     Import the configuration file.  
-ch:     Change password.  
-de:     Restart device.  
-sp:     Restart port.  
-i:      Device IP address.  
-il:     IP address list containing 1 IP address per line.  
-d:      Device list.  
-f:      File to be imported or upgraded.  
-nd:     The Device list with new password settings.  
-u:      Device's user account for login.  
-p:      Device's password for login.  
-npw:    The new password for the specific user.  
-dk:     Secret key for import/export configuration.  
-ps:     Specific serial ports to be restarted.  
-o:      Output file name.  
-l:      Export result log file.  
-n:      Keep network settings for configuration import.  
-nr:     Don't reboot device after finishing executing command.  
-print:  Print process message for upgrade firmware command.  
-t:      STimeout(sec).  
  
** NOTICE **  
If devices can't be found, you can try again with root privilege.  
moxa@moxa-virtual-machine:~/Desktop/mcc_tool_x64_ver1.0_build_17111618$
```

Getting Started

This chapter covers what functions are supported by MCC_Tool and how users could use a combination of main and optional functions to manage Moxa's edge devices.

The following topics are covered in this chapter:

□ **Overview**

- Supported Functions and Command Structure
- Device List
- Support Product Series
- Function Support Table

□ **Usage Examples of Supported Functions**

- Report Firmware Versions
- Upgrade Firmware and Restart the Device
- Export/Import Device's Configuration
- Restart Specific Serial Ports or the Whole Devices
- Change User's Password on the Device
- Show Support Model List
- Update Plugin
- Error Code Explanation

Overview

Supported Functions and Command Structure

Users will be able to achieve the following tasks by executing a set of command lines.

1. Report firmware version through a device's IP address or a range of devices specified by IP addresses.
2. Upgrade firmware to a device through a device's IP address or a range of devices specified by IP addresses.
3. Export/Import device's configuration through an IP address and or a range of devices specified by IP addresses.
4. Restart command for:
 - 4.1. Restart a list of specific ports of multiple devices
 - 4.2. Restart a device through a device's IP address or a range of devices specified by IP addresses.
5. Change password for an existing user of a device through the device's IP address or a range of devices specified by IP addresses.

NOTE Due to model and firmware differences, the following functions may NOT work:

1. Restart multiple ports of a device
2. Change the password for an existing user (expect the user "admin")
3. Export configuration file with pre-shared key parameters

You may refer to page 2-3 for Function Support Table to learn more details.

The **main functions** are defined as below:

Command	Function
-fw	Execute "Firmware related" action.
-cfg	Execute "Configuration related" action.
-pw	Execute "Password related" action.
-re	Execute "Restart related" action.

Main functions must be used in conjunction with optional commands in order to perform management tasks.

Optional commands are listed in the table below:

Command	Function
-r	Report firmware version.
-up	Upgrade firmware.
-ex	Export the configuration file.
-im	Import the configuration file.
-ch	Change password.
-de	Restart device.
-sp	Restart port.
-i	Device IP address.
-il	IP address list containing 1 IP address per line.
-d	Device list.
-f	File to be imported or upgraded.
-nd	The Device list with new password settings.
-u	Device's user account for login.
-p	Device's password for login.
-npw	The new password for the specific user.
-dk	Secret key for import/export configuration.
-ps	Specific serial ports to be restarted.
-o	Output file name.

Command	Function
-l	Export result log file.
-n	Keep network settings for configuration import.
-nr	Don't reboot device after finishing executing command.
-print	Print process message for upgrade firmware command
-t	Timeout(sec).

Device List

As mentioned in a previous section, MCC_Tool supports management tasks to a device or a range of devices. Managing multiple devices via MCC_Tool requires device list(s). MCC_Tool includes an example file of a device list, named DeviceList under Linux and DeviceList.txt under Windows. The format of the device list is:

Model	ServerName	IP	MAC	FwVer	User	PWD	CfgFile	Key	FwFile	Port
NPort6650;	NPort6650_123;	192.168.1.1;	00:90:e8:01:02:03;	1.3;	;	moxa;	;	moxa;	;	;

- NOTE**
1. To import configuration, please identify the CfgFile and Key column.
 2. To export configuration, please input the pre-shared key under Key column (This function only works on NPort products).
 3. To upgrade firmware, please input the firmware name under FwFile column.
 4. To restart a specific port, please input the specific port under Port column (This function only works on the NPort device server products).

Support Product Series

Because of easy maintenance, MCC Tool separates the device support list by independent product line plugin, which includes the E1200_model, I4500_model, MGate model, and NPort_model since version 1.1. In the future, you may update the plugin to support new product models.

Function Support Table

Due to firmware differences, some functions are not available for certain models; user may refer to the table below for function support coverage.

	NPort 6000 Series	NPort IA5000A/5000A Series	MGate 3000 Series	ioLogik E1200 Series	ioThinX 4500 Series
Report firmware versions	✓	✓	✓	✓	✓
Upgrade firmware	✓	• Does not support account management (-u)			
Export device's configuration	✓	• Does not support account management (-u) • Does not support file decryption (-dk)			
Import device's configuration	✓	• Does not support account management (-u) • Does not support file decryption (-dk)	• Does not support account management (-u) • Does not support file decryption (-dk) • Does not allow device to reject to restart (-nr)		
Restart specific serial port(s)	✓	• Does not support account management (-u)	• Does not support this command		

Restart the devices	✓	• Does not support account management (-u)	•
Set password	✓	• Does not support account management (-u)	• Does not support account management (-u) • Does not allow device to reject to restart (-nr)

Usage Examples of Supported Functions

Report Firmware Versions

Report firmware version of an individual device or a range of devices specified through an IP address list. Output is directed to the screen, unless an output file is specified.

```
MCC_Tool -fw -r -i [ip_address] -o [output_file]
MCC_Tool -fw -r -il [IP_address_list] -o [output_file]
MCC_Tool -fw -r -il [IP_address_list] -o [output_file] -t [timeout_value]
```

Example of the IP address list file of Moxa devices:

```
192.168.1.1;
192.168.1.2;
192.168.1.3;
```

Parameters Description:

Command	Function
-fw	Execute actions for firmware related
-r	Report firmware version
-i	Device's IP address (192.168.1.1)
-il	IP address list containing 1 IP address per line
-o	Output file name (can generate the Device List file)
-l	Export result log file
-t	Timeout (1~120 seconds) Default value: 10 seconds

Example: Obtain firmware version of devices at IP.list and output to DeviceList file

```
MCC_Tool -fw -r -il IP.list -o DeviceList
```

The result log should include the items below:

Model	ServerName	IP	MAC	FwVer	User	PWD	CfgFile	Key	FwFile	Port
NPort6650;	NPort6650_123;	192.168.1.1;	00:90:e8:01:02:03;	1.3;	;	moxa;	;	moxa;	;	;
NPort6150;	NPort6150_456;	192.168.1.2;	00:90:e8:04:05:06;	1.3;	;	moxa;	;	moxa;	;	;

NOTE You may use this command to generate the Device List for other function usage. The output value under the PWD and Key columns are dummy values, where user will need to input the password and key information of the device when executing other function commands with the device list. Other columns highlighted will need to be assigned values when executing specific commands, such as import configuration file or firmware upgrade.

Upgrade Firmware and Restart the Device

The password(s) must be specified by a command parameter or by the DeviceList file before upgrading the firmware and restarting a specific device (or multiple devices at the same time). After upgrading firmware, users should use search the command to check whether the device reboots successfully or not.

```
MCC_Tool -fw -up -i [ip_address] -u [user] -p [password] -f [firmware_file] -l [result_log]
MCC_Tool -fw -up -d [device_list] -l [result_log]
MCC_Tool -fw -up -d [device_list] -l [result_log] -t [timeout_value]
```

Parameters Description:

Command	Function	Remark
-fw	Execute actions for firmware related	
-up	Upgrade firmware version	
-i	Device's IP address (192.168.1.1)	
-u	Device's user account for login. <i>*This option may only work with the models that have user account management.</i>	Only the NPort 6000 Series supports this command function.
-p	Device's password for login	
-d	Device list	
-f	Firmware file to be upgraded	
-l	Export result log file	
-t	Timeout (1~1200 seconds) Default value: 800 seconds	
-print	Print upgrade process status message	

Example: Upgrade firmware using a device list and capture the results in an import log

```
MCC_Tool -fw -u -d DeviceList -l result_log
```

The result_log should include the items below:

Model	ServerName	IP	MAC	FwFile	ErrCode
NPort6650;	NPort6650_123;	192.168.1.1;	00:90:e8:01:02:03;	NP6000_V1.3.rom;	0;
NPort6150;	NPort6150_456;	192.168.1.2;	00:90:e8:04:05:06;	NP6000_V1.3.rom;	0;

Export/Import Device's Configuration

Export/Import the device configuration for a specific device or a range of devices through the device list file. The password must be specified by parameter or by the device list file. Device configurations are stored in individual files, using device type, IP address, and file create date as the filename. The result log is directly printed on the screen, or the user can specify a result_log file for it.

```
MCC_Tool -cfg -ex -i [ip_address] -u [user] -p [password] -dk [key] -l [result_log]
MCC_Tool -cfg -ex -d [device_list] -l [result_log]
MCC_Tool -cfg -ex -d [device_list] -l [result_log] -t [timeout_value]
MCC_Tool -cfg -im -i [ip_address] -u [user] -p [password] -dk [key] -f [cfg_file] -l [result_log] -n -nr
MCC_Tool -cfg -im -d [device_list] -l [result_log] -n -nr
MCC_Tool -cfg -im -d [device_list] -l [result_log] -t [timeout_value]
```

Parameters Description:

Command	Function	Remark
-cfg	Execute actions for configuration related	

-ex	Export the configuration file	
-im	Import the configuration file	
-i	Device IP address (192.168.1.1)	
-d	Device list	
-u	Device's user account for login <i>*This option may only work with the models that have user account management.</i>	Only the NPort 6000 Series supports this command function.
-p	Device's password for login	
-dk	<p>When Exporting configuration: The command decrypts the exported file with the pre-shared key.</p> <ul style="list-style-type: none"> If this parameter is not used, the exported file will be encrypted by the pre-shared key set on the firmware of the device. If this parameter is used, the exported file will be decrypted to a clear-txt file for editing. <p>When Importing configuration: If the configuration file that needs to be imported is encrypted, the command is needed with pre-shared key.</p> <ul style="list-style-type: none"> If the import configuration file is without -n, mcc tool will ignore -dk (won't return -11). If the import configuration file is with -n, mcc tool will use pre-shared key to decrypt the encrypted file. Therefore, if the key is wrong for decrypting the file, mcc tool will return -10. However, if the file is in plain text, and user inputs pre-shared key, it will ignore the key (won't return -10).* <p>(by parameter -dk or the key column in the device list file) <i>*This option may only work with the models that support encrypted configuration files.</i></p>	Only the NPort 6000 Series supports this command function.
-f	The configuration file to be imported	Only for import configuration function
-n	Keep original network parameters (includes IP, subnet mask, gateway, and DNS)	Only for import configuration function
-nr	Do not reboot the device after importing the configuration file	Only for import configuration function. MGate, ioLogik, and ioThinX devices do not support this command.
-l	Export result log file	
-t	Timeout (1~120 seconds) Export function Default value: 30 seconds Import function Default value: 60 seconds	

Example: Export the configuration using a device list and export the results to a result log

```
MCC_Tool -cfg -ex -d DeviceList -l result_log
```

The result_log should include the following items:

Model	ServerName	IP	MAC	FwVer	ExportCfgFile	Key	ErrCode
NPort6650;	NPort6650_123;	192.168.1.1;	00:90:e8:01:02:03;	1.3;	NP6650_192_168_1_1_20170622.ini;	moxa;	0;
NPort6150;	NPort6150_456;	192.168.1.2;	00:90:e8:04:05:06;	1.3;	NP6650_192_168_1_2_20170622.ini;	moxa;	0;

Example: Import the configuration to a device list (with restart the units) and export the results to a result log

```
MCC_Tool -cfg -im -d DeviceList -l result_log
```

The result_log should include the items below:

Model	ServerName	IP	MAC	FwVer	CfgFile	Key	ErrCode
NPort6650;	NPort6650_123;	192.168.1.1;	00:90:e8:01:02:03;	1.3;	NP6650_192_168_1_1_20170622.ini	moxa;	0;
NPort6150;	NPort6150_456;	192.168.1.2;	00:90:e8:04:05:06;	1.3;	NP6650_192_168_1_2_20170622.ini	moxa;	0;

Example: Import the configuration to a device list without restarting the units and export the results to a result log

```
MCC_Tool -cfg -im -d DeviceList -nr -l result_log
```

Restart Specific Serial Ports or the Whole Devices

Restart the specific port(s) or the device itself for an individual device or a range of devices specified by the device list file. The password must be specified by a parameter or by the device list file. Device configurations are stored in individual files, using device type, IP address, and file create date as the filename. The result log is directly printed on the screen, or users can specify a result_log file for it.

```
MCC_Tool -re -sp -ps [1-4,7] -I [ip_address] -u [user] -p [password]-l [result_log]
```

```
MCC_Tool -re -sp -d [device_list] -l [result_log]
```

```
MCC_Tool -re -sp -d [device_list] -l [result_log] -t [timeout_value]
```

```
MCC_Tool -re -de -I [ip_address] -u [user] -p [password] -l [result_log]
```

```
MCC_Tool -re -de -d [device_list] -l [result_log]
```

```
MCC_Tool -re -de -d [device_list] -l [result_log] -t [timeout_value]
```

Parameters Description:

Command	Function	Remark
-re	Execute actions related to restart.	
-sp	Restart specific serial ports of the device. This option may only work with the models that support restart ports	MGate and ioLogik devices do not support restart specific port functions.
-de	Restart Device	
-ps	Used for restarting specific ports that assign which serial ports should be restarted	MGate and ioLogik devices do not support restart specific port functions.
-i	Device IP address (192.168.1.1)	
-u	Device's user account for login <i>*This option may only work with the models that have user account management</i>	Only the NPort 6000 Series supports this command function.
-p	Device's password for login	
-d	Device list	
-l	Export result log file	
-t	Timeout (1~120 seconds) Restart device, the default value is 15 seconds Restart port, the default value is 10 seconds	

Example: Restart port using a device list and export the results to a result log

```
MCC_Tool -re -sp -d DeviceList -l result_log
```

The result_log should include items below:

Model	ServerName	IP	MAC	FwVer	Port	ErrCode
NPort6650;	NPort6650_123;	192.168.1.1;	00:90:e8:01:02:03;	1.3;	2-5, 8, 10;	0;
NPort6150;	NPort6150_456;	192.168.1.2;	00:90:e8:04:05:06;	1.3;	1,2,3;	0;

The serial ports 2-5, 8 and 10 of device 1 (NPort 6650) have been restarted.

Example: Restart device using a device list and export the results to a result log

```
MCC_Tool -re -de -d DeviceList -l result_log
```

The result_log should include the following items:

Model	ServerName	IP	MAC	FwVer	ErrCode
NPort6650;	NPort6650_123;	192.168.1.1;	00:90:e8:01:02:03;	1.3;	0;
NPort6150;	NPort6150_456;	192.168.1.2;	00:90:e8:04:05:06;	1.3;	0;

Change User's Password on the Device

Set the password of the target device specified by an IP address. The current password must be specified by a parameter or by the Device List file.

```
MCC_Tool -pw -ch -i [ip_address] -u [user] -p [old_password] -npw [new_password]
MCC_Tool -pw -ch -d [device_list] -nd [device_list_new_password] -l [result_log]
MCC_Tool -pw -ch -d [device_list] -nd [device_list_new_password] -l [result_log]
-t [timeout_value]
```

Parameters' Description:

Command	Function	Remark
-pw	Execute actions for password related	
-ch	Change password	
-npw	The new password for the specific user	
-i	Device's IP address (192.168.1.1)	
-u	Device's user account for login <i>*This option may only work with the models that have user account management</i>	Only the NPort 6000 Series supports this command function.
-p	Device's password for login (old password)	
-d	Device list	
-nd	The Device list with new password settings	The user will need to assign a new password in the Device List when using -nd command.
-l	Export result log file	
-nr	Don't reboot device after changing password.	MGate and ioLogik devices do not support this command.
-t	Timeout (1~120 seconds) Default value: 60 seconds	

Example: Set new password as "5678" then restart the device to make it effective, and print the result on the screen

```
MCC_Tool -pw 5678 -i 192.168.1.1 -u admin -p moxa
```

Example: Set new password from a device list and then restart the device to make it effective, and export the results to a result log

```
MCC_Tool -pw DeviceList_New -d DeviceList -l result_log
```

The result_log should include the items below:

Model	ServerName	IP	MAC	FwVer	User	PWD	ErrCode
NPort6650;	NPort6650_123;	192.168.1.1;	00:90:e8:01:02:03;	1.3;	admin;	5678;	0;
NPort6150;	NPort6150_456;	192.168.1.2;	00:90:e8:04:05:06;	1.3;	admin;	moxa;	0;

Show Support Model List

Show the supported models of the MCC Tool.

```
MCC_Tool -ml
```

Update Plugin

Users may update the Plugin for the MCC Tool to support new models, which may not be included in the current version. The command is as follow below. This function is supported by MCC_Tool version 1.1 and later.

```
MCC_Tool -install "path of the plugin"
```

Error Code Explanation

The MCC_Tool has the same error code for all the command options, please refer to below sheet for all the details:

Return Value	Description
0	Successful
-1	Device not found
-2	Password or username does not match
-3	Exceeds the length of the password
-4	Failed to open the file If the target file path exists, please make sure you have the privilege to the target path
-5	The action timed out
-6	Import failed
-7	Firmware upgrade failed
-8	Exceeds the length of the new password
-9	Fail to set restart port index
-10	Cipher key for decrypting the configuration file is mismatched
-11	Invalid parameter E.g., 1. Input parameters are not described above 2. The parameters do not work for some devices (e.g., -u for the MGate MB3000 Series, which does not support user account function, or -dk for the NPort 5000A Series, which does not support pre-shared key function) 3. Using device list file should not input -i, -u, -p, or -npw
-12	Unsupported command E.g., execute restart specific port command (MCC_Tool -re -sp) for the MGate MB3000 Series will get error code -12
-13	A lack of information in the device list If a specific NPort only exists in the device_list_new_password but not in the device_list (original device list with old password), then an error will occur.

-14	A lack of information in the new password list If there is no new password in the device_list_new_password but the device exists in the original device list, then an error will occur.
-15	Not executable due to an error of other devices in the list
-16	The MCC_Tool does not support the firmware version of the device. Please upgrade the device to the supported firmware version (reference to the "Support Models" section)
Other value	Contact Moxa