MDM Mass Configuration Tool User's Manual

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www.moxa.com/product



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Table of Contents

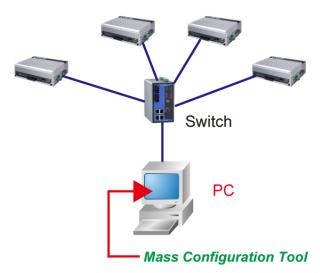
| 1. | Introduction | 1-1 |
|----|--------------------------------------|-----|
| 2. | Getting Started | 2-1 |
| | Preparing the Environment | 2-1 |
| | Installation | 2-1 |
| | Installing MDM Agent | 2-1 |
| | Starting MDM Agent | 2-2 |
| | Stopping MDM Agent | 2-2 |
| | Uninstalling MDM Agent | |
| | Installing Mass Configuration Tool | |
| | Uninstalling Mass Configuration Tool | |
| | Launching Mass Configuration Tool | 2-7 |
| 3. | Configuring Mass Configuration Tool | 3-1 |
| | Creating a Configuration | 3-1 |
| | Configuring Network Settings | |
| | Selecting the Upload Files | |
| | Updating the Auto Launch List | |
| | Synchronizing System Time | |
| | Opening a Configuration File | |
| | Starting the Configuration | |
| | | |

1 Introduction

Moxa Mass Configuration Tool is a convenient tool that helps users simultaneously deploy multiple tasks to Moxa's embedded computers. Mass Configuration Tool is particularly helpful when configuring several computers of the same product model. Users can configure the settings in the control center, and then deploy the settings to all the computers at once. This saves a lot of time in the system configuration and program setting process. As soon as the computers are configured with the Mass Configuration Tool, they can be taken out to the remote field site for installation. This section describes how to set up the environment and install the programs required to use Mass Configuration Tool.

Preparing the Environment

We recommend that you use a PC or laptop to use Mass Configuration Tool. Connect the embedded computers to an Ethernet switch so that they can be monitored by the PC or the laptop. **Please make sure that all the computers are on the same local network and same subnet**.



Moxa Embedded Computers

Installation

Installing MDM Agent

Take the following steps to install MDM Agent on the embedded computers that you would like to deploy:

- 1. Download the version of MDM Agent for your embedded computer model from Moxa's website.
- 2. Unzip the archive first, and then use FTP to upload the file to the embedded computer.
- 3. Log in to the embedded computer as Administrator.
- 4. Unzip MDM2_Agent-V24XX_V21XX-XPe.zip to the folder of your choice (e.g., C:\mdm)
 - a. Open a Command window
 - b. Type: cd C:/mdm
 - c. Execute Autolaunch.exe to install the AutoLaunch service.
 - d. Start AutoLaunch from the following path:
 Start menu → Control Panel → Administrative Tools → Services → Auto Launch → Start Service

5. View the file list in folder C:\mdm. You should see the files listed below:

| File | Description |
|----------------|----------------------|
| AutoLaunch.exe | Auto-launch service |
| mdm-main.exe | MDM Agent executable |

Starting MDM Agent

Double-click **mdm-main.exe** to start MDM Agent manually.

Stopping MDM Agent

You may use the following methods to stop MDM Agent.

- 1. Use Task Manager to stop mdm-main.exe manually.
- 2. You may also shut down or power off the computer to stop MDM Agent.

Uninstalling MDM Agent

Follow the steps below to uninstall MDM Agent.

- 1. Stop mdm-main.exe.
- Stop the AutoLaunch.exe service by clicking:
 Start menu → Control Panel → Administrative Tools → Services → Auto Launch → stop
- 3. Remove the MDM Agent installation folder (**C:\mdm**).

Installing Mass Configuration Tool

The Mass Configuration Tool software can be downloaded from Moxa's support webpage. You may also contact Moxa's technical support staff for assistance.

Mass Configuration Tool should be installed on a computer at the control center. Once installed, the computer can be used to configure embedded computers connected to the same Intranet.

The files will be packaged in zip format. Unzip the files and then run **setup.exe** or **Mass Configuration Tool.msi** if your computer has been pre-installed with Microsoft Installer.

1. Double click **setup.exe** to start the installation procedure.



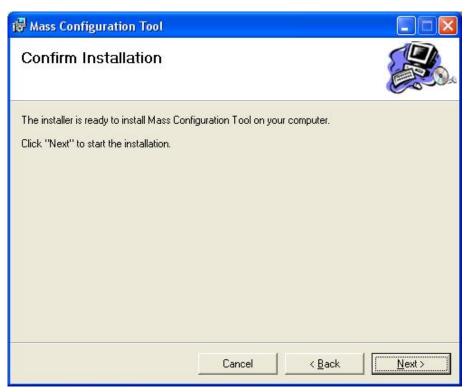
2. Click **Next** to continue.



3. Next, select Browse if you would like Mass Configuration Tool to be installed in a different folder. Click **Next** to continue.

| 🖟 Mass Configuration Tool | | |
|--|--------------------------------------|------------------------|
| Select Installation Folde | PL | |
| The installer will install Mass Configuration To install in this folder, click "Next". To ir <u>F</u> older: | | low or click "Browse". |
| C:\Program Files\MOXA\ | | Browse |
| | | Disk Cost |
| Install Mass Configuration Tool for you | rself, or for anyone who uses this c | omputer: |
| | Cancel < Back | <u>N</u> ext > |

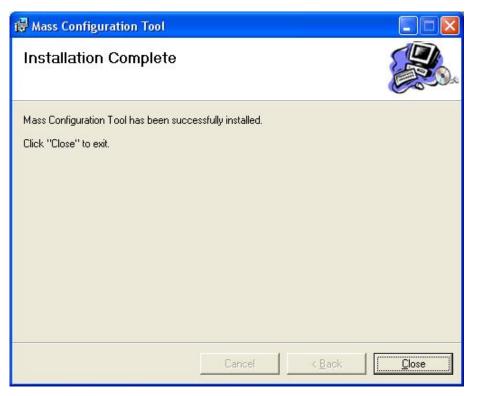
4. Click **Next** to confirm the installation.



5. Wait until the installation has finished.

| 🖓 Mass Configuration Tool | |
|--|---------------|
| Installing Mass Configuration Tool | |
| Mass Configuration Tool is being installed. Please wait | |
| Cancel | < Back Next > |

6. Click **Close** to complete the installation procedure.



Uninstalling Mass Configuration Tool

To uninstall Mass Configuration Tool, click **Uninstall** from **Start** \rightarrow **Programs** \rightarrow **MOXA** \rightarrow **Mass Configuration Tool**, and then click **Yes**.

| | | Set Program Access and Defaults | | | | | - | |
|--------------|-------------|---------------------------------|-----|------------------------|-----|--------------------------|---|-------------------------|
| | E 13 | Windows Catalog | | | | | | |
| | 4 | Windows Update | | | | | | |
| | | HP Photosmart Premier | | | | | 1 | |
| | Ø | HP Solution Center | 100 | | | | | |
| | Г | Programs | • | | : | | | |
| | 0 | Documents | • | | 5 | | | |
| nal | - | Settings | | Adobe Reader 9 MOXA | | Mass Configuration Tool | | Mass Configuration Tool |
| ssio | P | Search | • | ¥ | 181 | Mass Configuration Poor | | Uninstall |
| Professional | 0 | Help and Support | | | | C. Manufacture de la res | | |
| | | Run | | | | | | |
| Windows XP | P | Log Off Bruce | | | | Although a | | |
| Wir | 0 | Turn Off Computer | | | | | | |
| | 🖌 sta | rt 🛛 🙆 🕼 🖾 🚳 🔍 | | 1 | | | | |

Alternatively, you may use the following method to uninstall Mass Configuration Tool.

1. Select Add or Remove Programs from Start \rightarrow Settings \rightarrow Control Panel.

2. Select **Mass Configuration Tool** from the program list, and then click **Remove** to continue.

| 5 | Currently installed programs: | Show updates | Sort by: Name | |
|-----------------------------|--|---------------------------------|---------------|---------------|
| hange or Remove | 🔂 HP Document Viewer 7.0 | | Size | 3.09MB |
| Programs | B HP Imaging Device Functions 7.0 | | Size | 3.09MB |
| Ch. | 🐻 HP Photosmart Premier Software 6.5 | | Size | 263.00MB |
| dd New | 🐻 HP Scanjet G3010 7.0 | | Size | 15.78MB |
| rograms | B HP Solution Center 7.0 | | Size | 3.09MB |
| - | 🐺 HP Update | | Size | 2.97MB |
| 9 | Mass Configuration Tool | | Size | 5.10MB |
| d/Remove <u>/</u> indows | Click here for support information. | | Used | <u>rarely</u> |
| mponents | To change this program or remove it from your co | mputer, click Change or Remove. | Change | Remove |
| () | 🔀 Microsoft .NET Framework 1.1 | | | |
| Program | 🛃 Microsoft .NET Framework 1.1 Hotfix (KB928366) | | | |
| cess and efaults | 🔀 Microsoft .NET Framework 2.0 Service Pack 2 | | Size | 185.00MB |
| | 🕞 Microsoft .NET Framework 2.0 | | Size | 72.11MB |
| | 🛃 Microsoft .NET Framework 3.0 Service Pack 2 | | Size | 179.00MB |
| | 🛃 Microsoft .NET Framework 3.5 SP1 | | Size | 28.04MB |
| | 🔀 MSXML 4.0 SP2 (KB954430) | | Size | 2.67MB |
| | at Nero 6 Ultra Edition | | Size | 39.26MB |

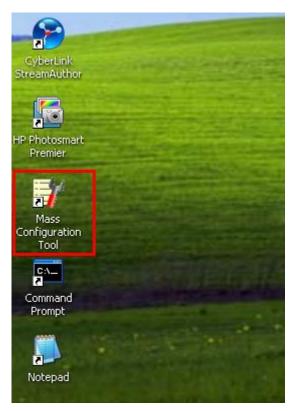
3. Click **Yes** to start **removing** Mass Configuration Tool from your computer.

| Add or | Remove Programs 🛛 🕅 |
|--------|---|
| ? | Are you sure you want to remove Mass Configuration Tool from your computer? |

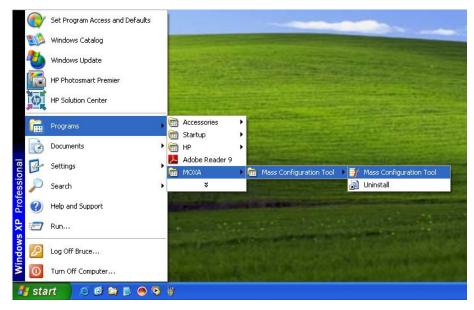
Launching Mass Configuration Tool

There are two ways to launch Mass Configuration Tool:

1. Double-click the Mass Configuration Tool icon on your desktop.



2. Click Start → Programs → MOXA → Mass Configuration Tool → Mass Configuration Tool.



Once launched, the Mass Configuration Tool interface will appear.

| Device Connected | Mass Configuration Tool | | | | × |
|--|-------------------------|-----------|-------|----------|---|
| 192.168.27.40:16888 192.168.27.25:1128 192.168.27.23:49159 | Profile (New) | | | | |
| | # Device MAC | Device IP | Start | Duration | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
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| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

The left panel indicates the IP of the service gateway (your PC or laptop where Mass Configuration Tool is installed) that the computers are connected to.

Configuring Mass Configuration Tool

Creating a Configuration

1. Click the first icon on the tool bar of the configuration dialog.

2. Provide a name for this configuration file. When finished, click **Next** to continue.

| Configuration Name | |
|--------------------------|---------------|
| Name this configuration: | Files_01 |
| | |
| | |
| | |
| < <u>B</u> ack | Next > Cancel |

Configuring Network Settings

First, configure the network settings for the embedded computers. For products with multiple LAN ports, you may configure the settings for LAN1, LAN2, or more. You may configure these ports as either DHCP or fixed IP Address.

| DHCP LAN2 Fixed IP IP Address: 192.168.30.208 | | LAN1 LAN1 | |
|---|-------------|-------------------|-----|
| | | LAN2 | |
| IP Address: 192,168.30.208 |) Fixed IP | | |
| | IP Address: | 192,168,30,208 | ~ |
| Net Mask: 255 . 255 . 255 . 0 | Net Mask: | 255 . 255 . 255 . | 0 |
| Gateway: 192 , 168 , 30 , 254 | Gateway: | 192 . 168 . 30 . | 254 |

In fixed IP mode, there are two additional policies to select in addition to the default IP, **Auto Incremental** and **Take DHCP assigned IP**. These functions are described below:

- 1. **Default IP** (may be the IP segment of the connected devices): you can configure the net mask or gateway without changing their IP addresses.
- 2. **Auto Incremental**: you can configure a list of IP addresses; these IP addresses will be assigned to the connected devices sequentially.
- 3. **Take DHCP assigned IP**: this policy retrieves the current DHCP assigned IP address and sets it as the fixed IP address.

| Configure Network | ing Interfaces 🛛 🛛 🕅 |
|-------------------|---|
| | P server. Otherwise, click the "Fixed IP" blicy for configuring IPs. |
| Interface name: | LAN1 💌 |
| | |
| • Fixed IP | |
| IP Address: | 192.168.30.208 |
| Net Mask: | 192,168,30,208 Take DHCP assigned IP Auto Incremental |
| Gateway: | 192 . 168 . 30 . 254 |
| | (Back Next > Cancel |

- 4. When finished, click **Next** to continue.
- Next, you may edit the DNS server values for each LAN port. These LAN ports may use the same or different DNS. When finished, click Next to continue.

| Configure DNS | | |
|--------------------------|-------------------------|------|
| Edit DNS servers for eac | h interface. | |
| Interface name: | LAN1 | |
| DNS Server | | - |
| Primary DNS: | 192 . 168 . 1 . 91 | |
| Secondary DNS: | 192 . 168 . 1 . 97 | |
| | | |
| | | |
| | | |
| | | |
| | <u>Back Next> Ca</u> | ncel |

Selecting the Upload Files

After the network settings are ready, select the file you wish to upload from your computer to the remote device. You may select several files to upload, or the specific files can be uploaded to the different folders of the remote device. For example, you may upload one file to the A folder, and another file to the B folder. Simply drag the files from the PC to the folders of the Device.

| | PC | | | | Device |
|---|---|---|----------|---|--|
| Name | | Modified | <u> </u> | Name | Modified |
| My Cor My Net Recycle Interne Adobe CyberL | work Places e Bin et Explorer Reader 9 ink Stream tosmart Pr | 03/05/10 15:43:05 10/11/10 11:09:24 05/08/09 15:29:05 02/02/09 18:44:42 10/15/10 17:26:48 | | My Documents Network NORFlash Program Files Temp Windows | 2003/01/01 12:00:00 1998/01/01 12:00:00 1998/01/01 12:00:00 2003/01/01 12:00:00 2003/01/01 12:00:00 2003/01/01 12:00:00 |
| < | 1111 | > | 00000 | | |
| Se | rvice Gatew | ay File Path | | Device | File Path |
| | | | | | |

When finished, click **Next** to continue.

Updating the Auto Launch List

You may update the Auto Launch program list from the following page. Drag and drop the program you would like to add into the auto launch list shown below. Use the **Delete** button to delete the selected programs from the auto launch list, or use the **Move Up** or **Move Down** buttons to adjust the launch sequence of the selected programs.

| | De | evice | |
|---------------------------------|---------------------|----------------|-------------------|
| Name | Modified | | |
| My Documents | 2003/01/01 12:00:00 | D | |
| Detwork 🔁 | 1998/01/01 12:00:00 | D | |
| DORFlash 🔁 | 1998/01/01 12:00:00 | D | |
| Program Files | 2003/01/01 12:00:00 | D | |
| 🚞 Temp | 2003/01/01 12:00:00 | D | |
| | | | |
| i Windows | 2003/01/01 12:00:00 | D | |
| | | | |
| Program | n |) Arguments | Delete |
| Program norflash\mdmagent.ex | n | | Delete Move Up |
| Program | n Ke nain.exe | | |

Synchronizing System Time

If you would like to synchronize the system time of the embedded computers with the service gateway (in this case, your PC), click **Yes**.

|)thers | | |
|---|------------------------------|--------------|
| Time Synchro Synchronize of service g | the RTC/system time of devic | es with that |
| | O No | |
| | | |
| | | |
| | < <u>B</u> ack Finish | Cancel |

When finished, click **Finish** to complete the configuration. **Once you click Finish, the deployment process** will start immediately, and a deployment record will be displayed.

| 🔁 🚔 🖪 | | | | |
|-------------------|---------------|---------------------|----------|--|
| 01 | | | | |
| Device MAC | Device IP | Start | Duration | |
| 00:90:E8:10:E7:32 | 192.168.27.25 | 2010-10-15 17:35:46 | 00:00 | |
| 00:90:E8:7C:D5:66 | 192.168.27.23 | 2010-10-15 17:35:46 | 00:00 | |

Opening a Configuration File

There are four icons on the dialog toolbar. See the following figure for detailed descriptions.

| | nfiguration Tool | |
|--------|------------------|-----------|
| 1 | a 🛓 | |
| (null) | | |
| * | Device MAC | Device IF |

To create a new configuration file, click the **New** icon and follow the steps outlined in the previous chapter.

To open the configuration file, click the **Open** icon. Select the configuration file, and then click **Next** to continue.

| Configuratio | n List | | X |
|-------------------------|------------------------|--------------------|------|
| Select a confi <u>c</u> | uration and click an o | operation button. | |
| | | | |
| | Files_01 | ~ | |
| Operation | Files 01 test | | |
| | wce-test | | |
| 01 | /iew 🔿 Update | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | < <u>B</u> ack | <u>N</u> ext > Car | ncel |

You may also choose to view, update, or delete the configuration file.

View: View the configured settings by selecting this option.

Update: Change the settings by selecting this option. All configurations can be updated. Follow the steps in the previous chapter and update the configurations. After you click the **Finish** button, the updated configurations will be immediately deployed to the embedded computers.

Delete: Delete the selected configuration file by selecting the option; click **Finish** to begin the delete procedure.

Starting the Configuration

Once you finish configuring the network settings, upload file settings, auto launch list settings, and time synchronization settings, the deployment will begin immediately. Or, you may open the configuration and select **Update** to restart the deployment with the updated settings.

Viewing the Configuration Record

On the Mass Configuration Tool page, you can view the configuration file status, such as the MAC addresses, IP addresses, the start time and the duration of the deployment.

|] es | | | | | |
|---------|-------------------|----------------|---------------------|----------|--|
| | Device MAC | Device IP | Start | Duration | |
| | 00:90:E8:10:E7:32 | 192.168.30.89 | 2010-09-16 14:38:36 | 00:00 | |
| | 00:90:E8:7C:D5:66 | 192.168.30.217 | 2010-09-16 14:38:36 | 00:00 | |

If you would like to the view the details of the configuration records, click the **Retrieve Record** icon on the toolbar.

The record file will be downloaded from the service gateway (in this case, your PC) and executed immediately. The record is stored in CSV format; we recommend viewing the record with Microsoft Excel.

| _ | Al | fx | 00:90:E8:7C:D5:66 | | | |
|---|-------------------|----|----------------------|-----------------|---|---|
| | A | В | С | D | E | F |
| 1 | 00:90:E8:7C:D5:66 | Y | 192.168.30.217:49303 | 2010/9/16 17:35 | 0 | |
| 2 | | Y | IP setting | 0 LAN1 | | |
| 3 | | Y | time sync | (null) | | |
| 4 | 00:90:E8:10:E7:32 | Y | 192.168.30.89:1237 | 2010/9/16 17:35 | 0 | |
| 5 | | Y | IP setting | 0 LAN1 | | |
| 6 | | Y | time sync | (null) | | |
| 7 | | | | | | |

00.00 F0.70 DE.66

In this record, you may view the MAC addresses (column A) as the index; configured items are below the MAC address. Column B indicates whether or not the deployment was successful (Y=successful deployment, N=not successful) or not. You may also check the IP addresses of the embedded computers, and the deployment tasks in column C, and you can view the starting time (column D) and duration in seconds (column E) of the deployment. The format of the configuration items are as follows:

| Item | Content | |
|---------------------|--|--|
| IP setting | <mode> <lan></lan></mode> | |
| | <mode> <lan> <ip address=""> <net mask=""> <gateway></gateway></net></ip></lan></mode> | |
| | <mode>: 0 for DHCP and 1 for fixed IP</mode> | |
| file upload | <file device="" in="" path=""></file> | |
| time sync | | |
| DNS setting | <primary dns=""> <secondary dns=""></secondary></primary> | |
| change mode | <file path=""> <file mode=""></file></file> | |
| auto launch | <program path=""> <arguments></arguments></program> | |
| trigger auto launch | | |