

Using the MobiControl Stage Barcode Generator: Android Platform

Contents

- [Overview](#)
- [Step 1: Project Info](#)
- [Step 2: Settings](#)
 - [Configure Settings](#)
 - [APN](#)
 - [Device Agent Setting](#)
 - [Date & Time Synchronization](#)
 - [File Download](#)
 - [Set Fixed Date](#)
 - [Time Zone](#)
 - [WiFi](#)
 - [WEP](#)
 - [WPA-PSK and WPA2-PSK](#)
 - [802.1x Enterprise](#)
 - [WiFiConfig.apk Settings](#)
- [Done: Barcode Generated](#)
 - [Settings](#)

Overview

The MobiControl Stage Barcode Generator is a utility for creating barcodes that enable you to quickly and easily enroll mobile devices in MobiControl. In the MobiControl Stage Barcode Generator you create a configuration profile containing various configuration settings that are then encoded into barcodes. When scanned later using the MobiControl Stage app on the mobile device, these barcodes instruct the mobile device to do one or more of the following:

- Set basic configuration settings that enable the device to connect to the MobiControl Services (e.g., WiFi, APN, date and time, enrollment ID)
- Download files from FTP/HTTP servers
- Connect to the MobiControl Deployment Server and download and install the MobiControl Device Agent

The MobiControl Stage Barcode Generator presents a series of panels and dialog boxes in which you specify the configuration settings that make up your configuration profile and that you want encoded into the barcodes. You can also save the configuration profile to a file for later modification and reuse. This document describes what information you need to specify in each panel and dialog box.

Step 1: Project Info

In this panel you specify basic information about the configuration profile you are creating. You can also load an existing profile, or clear the current profile.

Load Profile	Click this button to load an existing configuration profile. Configuration profiles are saved as .cp files.
Clear Profile	Click this button to clear the current configuration profile.
Profile Name	Enter the name you want to give the configuration profile.
Version	Enter a version number for the configuration profile. (Optional)
Comment	Enter a description for the configuration profile. (Optional)
Platform	Select the operating system of the mobile device the barcodes will be used to provision: <ul style="list-style-type: none">• Android• Windows Mobile/CE
Encryption Type	Select the barcode encryption type: <ul style="list-style-type: none">• Simple: Uses a proprietary algorithm to encrypt the data during the generation of barcodes. This option creates the smallest footprint for the barcode. It is the default option and recommended if enhanced security is not required.• AES256 Fixed Password: Encrypts data with AES 256 algorithm. This option uses a fixed password known only to the MobiControl Stage app. As a result, the barcodes can be read by any device that has the MobiControl Stage app installed.• AES256: Encrypts data with AES 256 algorithm. When using this option, you must enter a password to generate barcodes. This password will then be required by the end user to decrypt the barcodes and configure the device.

Password	If AES256 encryption is specified as the encryption type, enter a password to generate barcodes. This password will then be required by the end user to decrypt the barcodes.
Show Password	If AES256 encryption is specified as the encryption type, select this option to display the password in plaintext.

Step 2: Settings

In this panel you add configuration settings to the configuration list, or remove settings from the list. You can also select a setting in the list and edit it.

Generally, configuration settings will be applied to the mobile device in the order they appear in the list. (The only exception to this rule is connectivity settings, which are always applied first regardless of where they appear in the list.) You can move a setting up or down in the list by selecting it and using the **Up Arrow** or **Down Arrow** buttons to the right of the list.

Add	Click this button to open the Configure Settings dialog box, from which you can specify configuration settings and add them to the settings list. See Configure Settings .
Edit	Click this button to open the Configure Settings dialog box, from which you can edit the configuration setting that is currently selected in the settings list. See Configure Settings .
Remove	Click this button to remove the configuration setting that is currently selected in the settings list.
Up Arrow	Click this button to move the selected configuration setting higher in the settings list.
Down Arrow	Click this button to move the selected configuration setting lower in the settings list.

Configure Settings

In this dialog box you specify the type, name, and details of the configuration setting you want to add to the configuration settings list.

Once you have selected a configuration setting type from the list, additional fields specific to that type appear in the dialog box. The fields for each setting type are described in the following sections.

Setting Type	Select a configuration setting type from the list.
---------------------	--

Setting Name	Enter the name you want to give the configuration setting.
---------------------	--

APN

Complete these fields to configure Access Point Name (APN) settings on the mobile device.

Display Name of APN	Enter a name for the APN. The name will identify the APN on the device.
Access Point Name (APN)	Enter the name or the web address of the access point provided by your wireless carrier.
Mobile Country Code (MCC)	Select the three-digit country code that corresponds to the network's country of origin.
Mobile Network Code (MNC)	Select the three-digit code that corresponds to your wireless carrier.
Access Point Type	Select the access point type.
Default Connection	Select this option to make this the default connection for the device.
Access Point Connection Username	Enter the APN username provided by your wireless carrier. (Optional)
Access Point Connection Password	Enter the APN password provided by your wireless carrier. (Optional)
Server Address	Enter the server address or the IP address of the server provided by your wireless carrier. (Optional)
Port	Enter the port number of the server. (Optional)
Proxy Server Address	Enter the proxy server address provided by your wireless carrier. (Optional)
Port	Enter the port number of the proxy server. (Optional)
MMS Proxy Server Address	Enter the MMS proxy server address provided by your wireless carrier. (Optional)
MMS Server Address	Enter the MMS server address provided by your wireless carrier. (Optional)
Port	Enter the port number of the MMS server. (Optional)

Authentication Type	<p>Select the type of authentication for your APN setting:</p> <ul style="list-style-type: none"> • None • PAP (Password Authentication Protocol): An authentication protocol that uses a password. Not the strongest authentication protocol. • CHAP (Challenge-Handshake Authentication Protocol): Authenticates a user or network host to an authenticating entity (e.g., an internet service provider). Stronger than PAP. • PAP/CHAP: Allow either PAP or CHAP.
----------------------------	--

Device Agent Setting

You can configure the MobiControl Device Agent and enroll the device into management services. There are two options for configuring Device Agent settings:

- Enrollment ID
- Deployment server settings (server address, site name, etc.)

Note: Only one of the above options can be used; when you select an option the other option becomes disabled.

Enrollment ID	Enter the 8-character ID used to enroll devices into MobiControl Management Services.
Server Address	Enter the MobiControl Deployment Server address or IP address for the device to connect to directly.
Site Name	Enter the MobiControl Site Name which is available in MobiControl Web Console.
Rule Tag	Enter the rule tag ID that is generated as part of the add device rule on MobiControl Add Device Rule.
User Cert. File	Upload the MobiControl trust certificate to allow devices to connect to MobiControl servers seamlessly.

Date & Time Synchronization

This setting enables you to specify an SNTP/NTP server to configure date and time on the device.

Default SNTP/NTP Server	Enter a default SNTP/NTP server to be used for date and time synchronization of your devices.
--------------------------------	---

Secondary SNTP/NTP Server	Enter a secondary SNTP/NTP server to be used for date and time synchronization of your devices in case the primary server fails.
----------------------------------	--

File Download

This setting enables you to specify a file to be downloaded from an FTP or HTTP server onto the device.

Protocol	Select the protocol to be used for downloading the file.
URL	Enter the URL from which to download the file.
File Name	Enter the name of the file or files to be downloaded. For multiple files, each filename must appear on its own line in the list.
Download Destination	Enter a destination to which the file will be downloaded. The default is the device's SD card. Note: Macros can be used to specify generic locations on the device.
User Name	For FTP downloads, enter the username with which to log onto the FTP server.
Password	For FTP downloads, enter the password with which to log onto the FTP server.
Show Password	Select this option to display the FTP password in plaintext.

Set Fixed Date

This setting enables you to set a fixed date on the device in order to validate certificates in the event that no internet connection is available to set the exact date on the device.

Date	Select the date to be set on the device.
-------------	--

Time Zone

This setting enables you to set a time zone on the device.

Set Time Zone	Select the time zone to be set on the device.
----------------------	---

WiFi

This setting enables you to configure a WiFi profile on the device.

Once you have selected a WiFi security type in the **Security Type** list, additional fields specific to that type appear in the dialog box. The fields for each security type are described in the following sections.

Action	This list provides options to turn the WiFi radio on or off.
Network Name (SSID)	Enter the access point network name the device will connect to, also known as the SSID.
Security Type	Select the security type of the WiFi network.
Enable Proxy	Select this option to enable WiFi proxy settings.
Server Address	Enter the proxy server address the device will use.
Port	Enter the port number of the server. (Optional)

WEP

Password	Enter the WEP password required to connect to the WiFi network.
Show Network Key	Select this option to display the WEP password in plaintext.

WPA-PSK and WPA2-PSK

Password	Enter the WPA passphrase required to connect to the WiFi network. The passphrase must be from 8 to 63 characters in length.
Show Network Key	Select this option to display the WPA passphrase in plaintext.

802.1x Enterprise

Authentication	Enter the authentication protocol which will be configured on the device.
Phase 2 Authentication	Select the phase 2 authentication.

Server Root Certificate	Click the Import button to upload the certificate used for authentication.
Anonymous ID	Enter an externally visible identification (for TTLS, PEAP, and EAP-FAST).
Prompt for Credentials	Select this option to let the device user be prompted for a username and password. If you do not select this option, you must specify the username and password.
User Name	Enter the authentication username.
Password	Enter the authentication password.
Show Network Key	Select this option to display the authentication password in plaintext.

WiFiConfig.apk Settings

This setting enables you to configure additional WiFi settings on the device, such as enabling/disabling the 802.11d option and WiFi sleep policy, that are specific to Motorola devices. The extra WiFi settings must be saved in a valid XML file.

XML File	Click the Import button to upload a valid XML file that contains additional WiFi settings.
-----------------	---

Documentation on available WiFi settings you can set via XML can be obtained from Motorola Solutions.

Example XML File

The following shows an example of a valid XML file you can use to configure additional WiFi settings:

```
<?xml version="1.0"?>
<wap-provisioningdoc>
  <characteristic type="Wi-Fi">
    <parm-query name="Version"/>
    <characteristic type="Regulatory">
      <parm name="Country" value="US"/>
    </characteristic>
    <characteristic type="System">
      <parm name="WifiAction" value="Enable"/>
    </characteristic>
  </characteristic>
</wap-provisioningdoc>
```

Done: Barcode Generated

This is the final panel in the MobiControl Stage Barcode Generator. In this panel, you can see a preview of the barcodes that have been generated based on the configuration profile settings you specified in the previous panels.

This panel provides options to print the barcodes or to save the configuration profile to a file. You can also click the **Settings** button to open the [Settings](#) dialog box, in which you can specify settings that control how the barcodes are generated, including the barcode type.

Print	Click this button to print the barcodes.
Save As	Click this button to save the barcodes in one of the following formats: <ul style="list-style-type: none">• Configuration Profile: Saves the configuration profile to a (.cp) file that can later be reloaded into the Barcode Generator.• Raw Data: Saves the configuration profile to a raw data (.dat) file.• SMS: Saves the barcodes to an SMS chunk (.txt) file. The information in this file is used when sending barcode data to the MobiControl Stage app via another application on the device.• PDF: Saves the barcodes to a PDF (.pdf) file.
Settings	Click this button to open the Settings dialog box, in which you can modify various settings that control how the barcodes are generated. For more information, see Settings .
Left Arrow	Click this button to display the previous page of barcodes, if there are multiple pages.
Right Arrow	Click this button to display the next page of barcodes, if there are multiple pages.
Fit Page	Click this button to display the whole barcode page within the Barcode Generator window.
Actual Size	Click this button to display the barcode page at actual size. If you select this option, scrollbars appear in the Barcode Generator window so you can scroll over the barcode page.

Settings

This dialog box enables you to specify settings that control how the barcodes are generated, including the barcode type.

Project Information	Select this option to display the project information on the barcode page.
----------------------------	--

Additional Settings	Select this option to display information about the configuration settings on the barcode page.
Page Background	Select this option to display a background color on the barcode page.
Barcodes	Select this option to display the barcode on the barcode page.
Barcode Spacing	Select a value in this list to increase or decrease the spacing (in pixels) between the barcodes if you have more than one barcode on the page.
Barcode Length	Select a value in this list to increase or decrease the amount of data (that is, the number of characters) stored in each barcode. More information stored in each barcode will result in fewer barcodes being generated.
Symbology	Select an item in this list to specify the type of barcode you want to generate: <ul style="list-style-type: none"> • Code 128: 1D or linear barcode • QR Code • PDF417: 2D barcode
Add	Click this button to add an escape character to the list.
Delete	Click this button to delete the selected escape character from the list.