MobiOne User's Guide

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1 Introduction

The MobiOne program handles downloading of firmware files and Java byte code as well as configuration data, for Ericsson developed radio modems used in the Mobitex network. Currently MobiOne supports radio modems of types M10x0, M20x0, M21x0 M30x0 and M40x0.

MobiOne is delivered with two different functionality profiles depending on the intended users.

The profile for Security Level 1 offers the ability to alter the MAN. The profile for Security Level 2 lacks this functionality.

This manual describes how to use MobiOne and describes use cases for downloading of configuration data, firmware files and Java byte code.

1.1 Who Should Read this Manual?

This manual is intended for all users of MobiOne. Some concepts and abbreviations assume that the user is familiar with the radio modems used in a Mobitex network.

1.2 Updates Since Last Revision

A number of minor corrections and clarifications has been made, as well as format and layout changes.

1.3 Terminology

GUI	Graphical User Interface
MAN	Mobitex subscription number

2 System Requirements

2.1 PC Card Radio Modems

- Windows 95, Windows 98 or Windows NT/2000 platforms
- Installation requires 2 MB of hard disk space
- Minimum configuration: 133MHz Pentium, 24 MB RAM
- PC Card slot of type III.

2.1.1 Software

• PC Card handling device driver (preferably the original 32-bit drivers included in Windows 95).

2.2 Other Radio Modem Types

- Window 95, 98, NT/2000 platforms
- Installation requires 2 MB of hard disk space
- Minimum configuration: 133MHz Pentium, 24 MB RAM
- Recommended configuration: 350MHz Pentium II, 64 MB RAM.

3 Installation

MobiOne is distributed in a self-extracting package that installs the application. The following steps are needed to install MobiOne:

- 1. Start Windows 95, Windows 98 or Windows NT/2000.
- 2. Double-click on the *setup.exe* self-extracting MobiOne installation file.
- 3. Follow instructions given by the setup program.

During the installation the destination path will have to be specified. The default path is ... *Program Files Ericsson MobiOne* on the disk where Windows is installed, normally C:

The following files are copied into the installation directory:

Binprotocol.dll	32-bit Device Driver DLL for M30x0 serial radio modems
Bootpcm.ram	System file for the support software
Bootser.ram	System file for the support software
Dsystpcm	System file for the support software
Dsystser	System file for the support software
Flashload.axf	System file for the support software
M21drv32.dll	32-bit Device Driver DLL for M21x0 Wireless PC Card
M21vdd95.vxd	Virtual Device Driver for M21x0 Wireless PC Card
MobiOne.exe	Executable for MobiOne
Mobione.ico	Icon picture for MobiOne
Mobitex.inf	PC-Card driver setup information file
Readme.txt	General installation and product information
Uninst.isu	Uninstall information for MobiOne

The installation will create a new Program Group, "MobiOne" in the start menu, to which the two elements MobiOne and Readme.txt are added.

4. The program may need to store files temporarily in C:\Temp\. If this directory does not already exist, create a *C*:*Temp* directory on the hard drive.

4 Uninstallation

To remove MobiOne, use the *Add/Remove Programs* feature in Windows 95, Windows 98 or Windows NT/2000, from the Control Panel. Select MobiOne from the list and click the *Remove* button.

5 Application Versions

The application is produced in two different versions designed for different sets of users.

5.1 Security Level 1

The application version Security Level 1 allows the user to set the MAN for the radio modems.

5.2 Security Level 2

The application version Security Level 2 does not allow its user to change the MAN.

6 Graphical User Interface

The MobiOne GUI is described below.

- The first row in the *Modem* section shows whether a radio modem is connected. This can alter between a red cross (No modem connected) and a green tick (Serial modem connected or Serial modem M30x0 connected).
- The *Port drop-down-list* contains the COM ports available, COM1, COM2, COM3 and COM4 (and PC-Card for laptops).
- The *Prepare/Retry new modem* button is used for re-establishing the connected modem.
- The *Select configuration* button in the *Download* section is used to browse for configuration files. The chosen file are then shown in the box to the left.
- The *Select firmware* button in the *Download* section is used to browse for firmware files or Java byte code. The chosen file are then shown in the box to the left.
- In the *MAN number* box the MAN of the radio modem should be written. The default value is 0 for all radio modems, except for M30x0 where the actual MAN is presented.

📣 MobiOne	
No radio modem conne	ERICSSON S
 Download	Select configuration
	Select firmware
MAN number:	Download
	254 75 401 192 82

Figure 1 GUI for Security Level 1, no modem connected

🗸 MobiOne	
No radio modem co	ERICSSON
Port:	Prepare/Retry new modem
Download	
	Select configuration
	Select firmware
	Download

Figure 2 GUI for Security Level 2, no modem connected

The following figures in this document will be snapshots of Security Level 1 only.

7 Use Cases

There are three major use cases for MobiOne:

- Downloading of configuration data.
- Downloading of firmware.
- Downloading of Java byte code.

The common parts of these use cases are described in 7.1 "Connecting Radio Modem".

7.1 Connecting Radio Modem

- Start MobiOne and connect the radio modem to the COM-port.
- Select the used COM-port from the select list

MobiOne will now detect the radio modem and change the GUI depending on what kind of radio modem is connected.

The progress status field will display the states "Detecting modem", "Booting modem", "Preparing modem" and finally "Finished".

If no radio modem is connected to the selected COM-port, the GUI will look like this:

	🔏 MobiOne	
	Modem	ERICSSON 🗲
Error		×
	The radio modem could not be opened!	
<u>•</u>	No radio modem was found on the selec	cted COM port.
	Possible reasons could be * The default baud rate for MASC (9600 * Radio modem could be in an undefine * Radio modem is not connected to the * Faulty cables	I) have been changed d state, toggle power to modem and try again correct COM port
	<u>OK</u>	
		Detecting modem 28/LZE 401 182 R3

Figure 3 No radio modem connected to the selected COM-port

If an M3000 radio modem is connected it will display a dialog box describing the mode the radio modem is currently in, and how to change mode.

Informati	on 🔀
٩	The M30x0 is currently connected in firmware download mode. To enter configuration download mode for M30x0, set the system connector pin 26 to floating or a logical 1 at power on for the radio modem, and press the "Prepeare/Retry new modem" button.
□ Do	not show this message again
	27/LZE 401 182 R2

Figure 4 M30x0 radio modem connected in firmware download mode



Figure 5 M30x0 radio modem connected in configuration download mode

실 MobiOne	
Radio modem M30	ERICSSON 📁
Port: COM 2 💌	Prepare/Retry new modem
Download	
	Select configuration
	Select firmware
MAN number: 670012	Download
,	
	Finished

After the dialog boxes have been dismissed, the GUI will look like this:

Figure 6 M30x0 radio modem, in firmware download mode, connected to COM-port 2

The radio modem is in firmware download mode, thus the *Select firmware* button is enabled, while the *Select configuration* button is disabled.

📣 MobiOne	_ 🗆 ×
-Modem Radio modem M30+	ERICSSON 💋
Port: COM 2	Prepare/Retry new modem
Download	
	Select configuration
	Select firmware
MAN number: 670012	Download
	Finished

Figure 7 M30x0 radio modem, in configuration download mode, connected to COM-port 2

The radio modem is in configuration download mode, thus the *Select configuration* button is enabled and the MAN number is editable and has been set to its default value. The *Select firmware* button is disabled.

If the radio modem is not an M3000, the GUI will look similar to the ones above, except that the text regarding what radio modem is connected would differ. The

d.

📣 MobiOne	_ 🗆 ×
Modem	ERICSSON 불
Port: COM 2 Prep	are/Retry new modem
Download	
	Select configuration
	Select firmware
MAN number:	Download
	Finished
	51/LZE 401 182 R1

Figure 8 Radio modem (not an M30x0) connected to COM-port 2

7.2 Download Configuration Data

Follow the steps described in 7.1 "Connecting Radio Modem" before continuing with this section.

• Click the Select configuration button, which launches a file selection window.

Gelect an M1	TX file	?	I
Look <u>i</u> n:	🔄 Temp	- 🗈 🖆 📰	
📃 Binprotoco	olR1B03		
🚞 Source			
🚞 test			
🚞 Vbe			
📓 Configurat	ionD ata.mtx		
File <u>n</u> ame:	ConfigurationData.mtx	<u>O</u> pen	
Files of type:	MTX files (* mtx)	▼ Canaal	
	[
		31/LZE 401 1	18

Figure 9 Dialog for selecting configuration files.

- After selecting the file, check if MAN is correct (only for Security Level 1 users).
- Click the *Download* button.
- A warning message dialog box is shown. Click Yes to continue downloading.

₩arning	×
8	WARNING!
	You are about to erase the current settings in the radio modem! Proceed to download?
	Yes No
🗖 Dor	ot show this warning again
	33/LZE 401 182 R2

Figure 10 Warning dialog before erasing data from the radio modem

• Wait until download is finished.

This is shown in the bottom right-hand corner of the window, after the progress bar has reached 100% and the progress status text changes from "Writing configuration" to "Finished".

📣 MobiOne	
Modem	ERICSSON 🔰
Port: COM 2 Prep.	are/Retry new modem
1060o2160o3090.mtx	Select configuration
	Select firmware
MAN number: 15641467	Download
	Finished
	32/LZE 401 182 R3

Figure 11 Download of configuration file completed

7.3 Download Firmware

Follow the steps described in 7.1 "Connecting Radio Modem" before continuing with this section.

• Click the *Select Firmware* button, which launches a file selection window.

Select an FL	A or JAR file		? ×
Look jn:	🔄 Temp	- 🗈 🖻	• 📰 📰
Binprotoce	olR1B03		
test			
Vbe	lafadul 2000m a dam fila		
	leioimisosoniodeni.na		
l File <u>n</u> ame:	FirmwarefileforM3090modem.fla	[<u>O</u> pen
Files of <u>type</u> :	FLA files (*.fla)	•	Cancel
			34/LZE 401 182 RI

Figure 12 Dialog for selecting configuration files.

- Select a file.
- Click the *Download* button
- A warning message dialog box is shown. Click Yes to continue downloading.



Figure 13 Warning dialog before erasing data from the radio modem.

• Wait until download is finished.

The progress status text changes when the stages change. "Erasing flash memory" is shown when old data is erased before new data is downloaded. "Writing firmware" is shown when the next stage is started, and the is started. "Finish" is displayed when the progress bar has reached 100%.

🖑 MobiOne			
Radio modem M30x0 con	ERICSSON 🔰		
Port: COM 2 Prep	COM 2 Prepare/Retry new modem		
Download			
1060o2160o3090.mtx	Select configuration		
FirmwarefileforM3090modem.	Select firmware		
MAN number:	Download		
	Finished		
	35/LZE 401 182 R3		

Figure 14 Download of firmware file completed

7.4 Download Java Byte Code

First follow the steps described in 7.1 "Connecting Radio Modem"

• Click the *Select Firmware* button which launches a file selection window.

Select an FL	A or JAR file		? ×
Look jn:	🔁 Temp	- 🗈 🖻	* 🔳
📃 Binprotoce	olR1B03		
🚞 Source			
📃 test			
Vbe			
📓 MyJavaCo	ode.jar		
-			
File <u>n</u> ame:	[MyJavaLode.jar		<u>U</u> pen
Files of type:	JAR files (*.jar)	-	Cancel
	,	_	
			37/1 75 401 182 81

Figure 15 Dialog for selecting configuration files

• Select Files of type: JAR files (*.jar).

- Select file. •
- Click the Download button.
- A warning message dialog box will be launched. Click Yes to continue • downloading.

Warning	2	<
8	WARNING! You are about to erase the current settings in the radio modem!	
	Proceed to download?	
🗖 Don	not show this warning again	
	33/LZE 401 182 R	2

Figure 16 Warning dialog before erasing data from the radio modem.

Wait until download is finished.

The progress status text changes when the stages change. "Erasing flash memory"is shown when old data is erased before new data is downloaded. "Writing Java Code" is shown when the next stage is started, and the is started. "Finish" is displayed when the progress bar has reached 100%.

📣 MobiOne		
Modem V Serial modem M30x	:0 conn	ERICSSON ≶
Port: COM 2	Prepa	are/Retry new modem
Download		
		Select configuration
MyJavaCode.jar		Select firmware
MAN number:	~	Download
)%	Finished

E 401 182 R3

Figure 17 Download of Java byte code file completed.

8 Error Messages

Error messages are displayed as pop-up dialog boxes. For example, this is the dialog box that indicates that the radio modem COM-port is busy.



Figure 18 Example of error dialog

If MobiOne still does not work properly after trying the troubleshooting suggestion (if one exists), try restarting the radio modem and MobiOne.

Should the problem still persist, please contact your radio modem supplier.