



Upgrade Tools

User Guide

Produced by SAGEM Défense Sécurité

Copyright ©2006 SAGEM Défense Sécurité

www.sagem.com

Table of content

INTRODUCTION	3
MA1XX DOWNLOADER	4
INTRODUCTION	4
CONNECTION	4
CONNECTION CAUTION NOTE	5
FIRMWARE FILE SELECTION	6
FILE SELECTION CAUTION NOTES	7
UPGRADE TERMINAL PROCESS	8
UPGRADE PROCESS CAUTION NOTES	10
MA1XX BIOLOADER	11
INTRODUCTION	11
CONNECTION	11
CONNECTION CAUTION NOTE	12
BIOMETRIC SOFTWARE UPGRADE PROCESS	13
UPGRADE PROCESS CAUTION NOTES	14

INTRODUCTION

This present document describes the tools used to upgrade your MA1xx terminal. In fact, there are two applications :

- **Downloader.exe** : this application allows upgrading all the embedded software (application, drivers, etc.) except the biometric software (that will be done by the next application).
- **MA1xx_BioLoader_VXX.YY.z.exe** : this application allows upgrading the biometric embedded software to the revision VXX.YY.z.

The biometric software is a specific firmware and is also loaded into a particular part of the terminal. As a result, load this firmware requires a specific application.

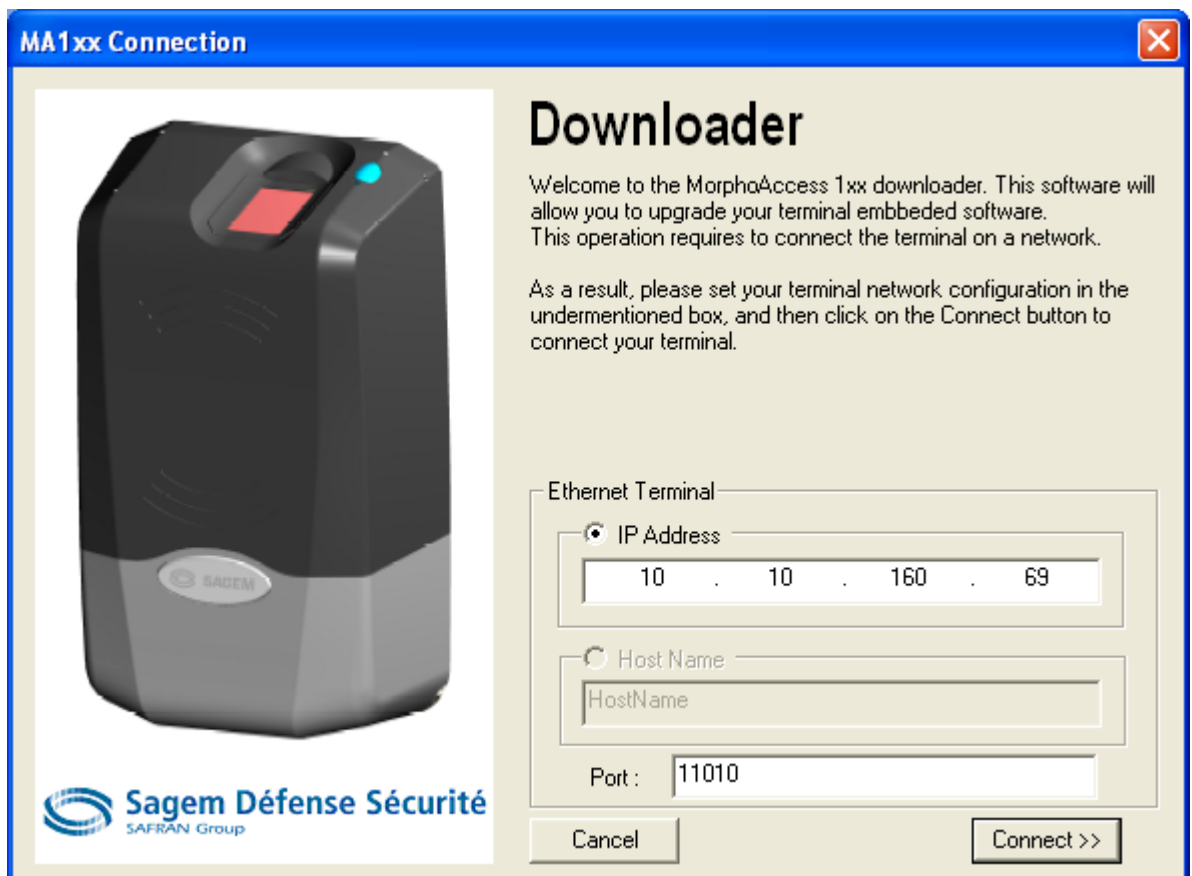
MA1XX DOWNLOADER

Introduction

Downloader.exe is an application which allows loading all the embedded software (drivers, application, etc...) except the biometric software.

Connection

Launch the *Downloader.exe* application. The *MA1xx Connection* dialog window displays :

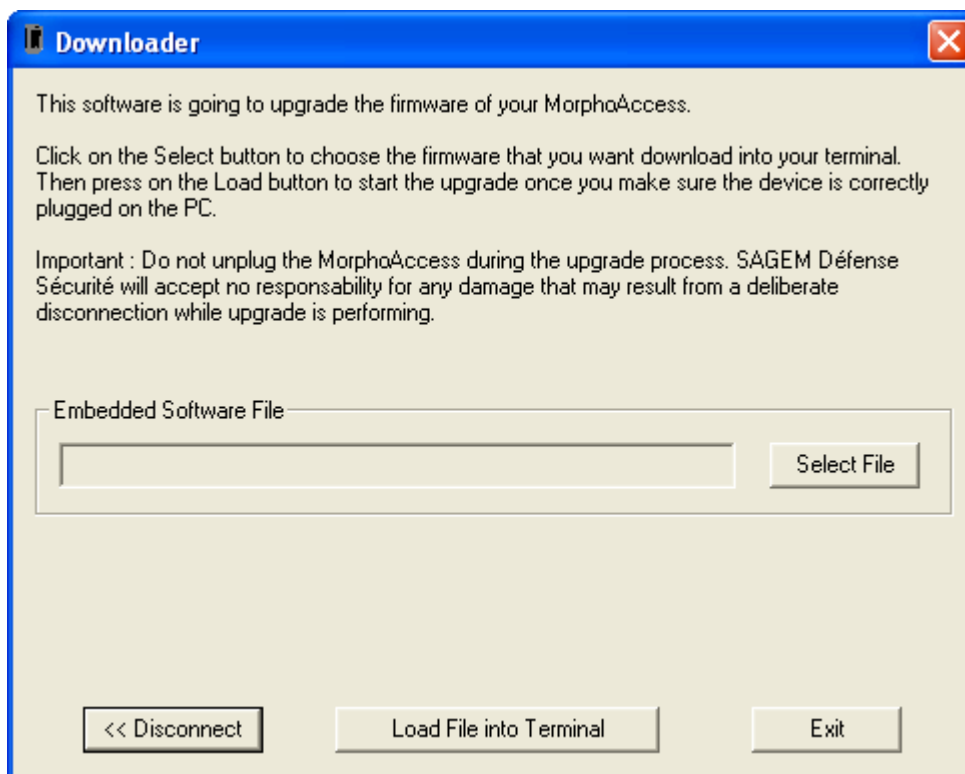


This step consist in connecting to your terminal on a network and it is required before performing any operation.

The process is the following :

- Connect physically your terminal on a network,
- Set the terminal IP address in the IP address field,
- Set the remote management TCP Port in the Port field,
- Click on the *Connect >>* button.

If the process succeeds, the *Downloader* main dialog window appears on your screen :

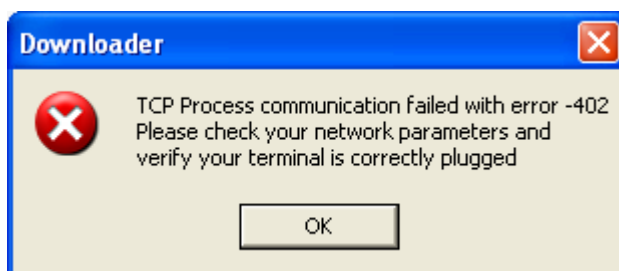


You can now select the firmware file.

Connection caution note

Take notes the remote management TCP Port if you change its value. In fact, there is no tool to reset this value, so if you do not remember the right value, you could not connect your terminal later.

If the TCP port value is wrong, you obtain the following message :



The set IP address must be the actual address of your terminal. If you have previously changed this address by this tool or by an other, you must enter this last address. If these conditions are not respected, the following message displays on your screen :



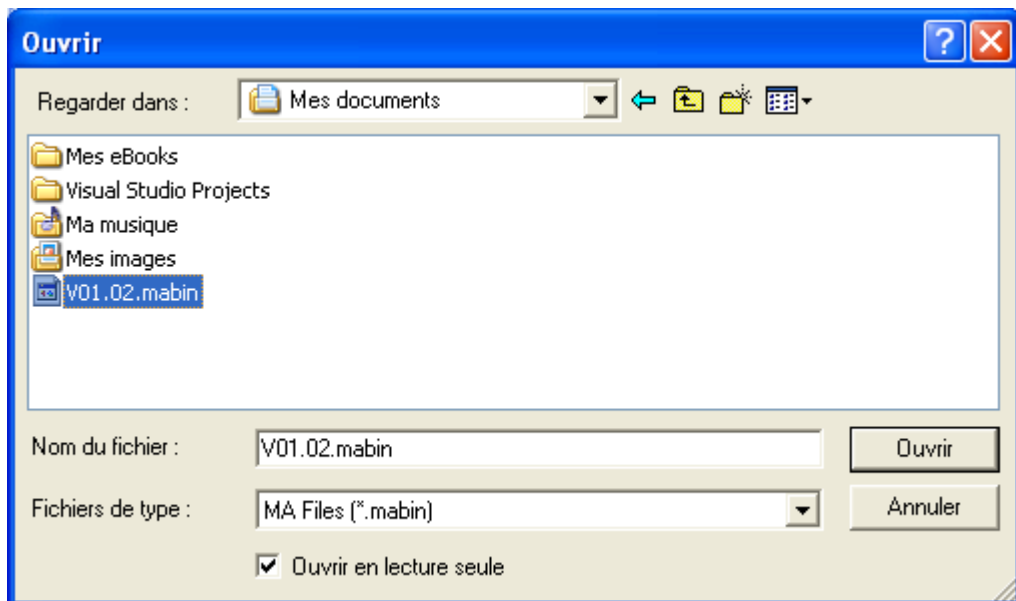
This same message also appears if your terminal is not connected on a network.

In all these cases, the application is still active and you can retry to connect your terminal on a network.

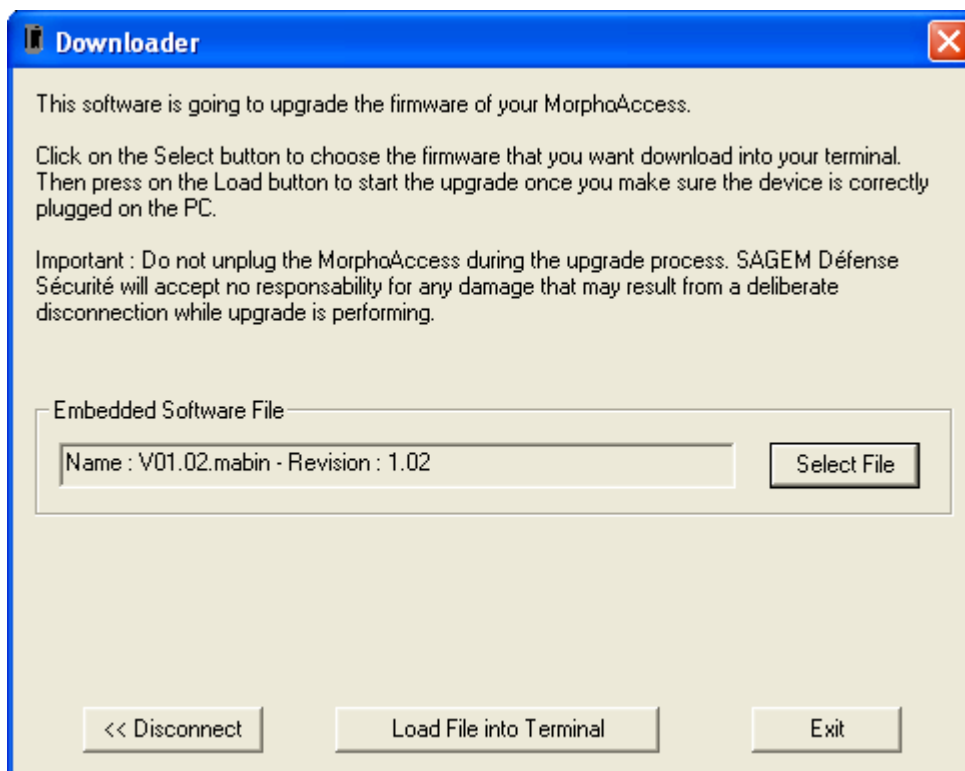
Firmware file selection

Before starting the upgrade process, you need choose the firmware that you want load into the terminal.

First, click on the *Select File* button. Then, select the firmware file. The current file extension is .mabin.



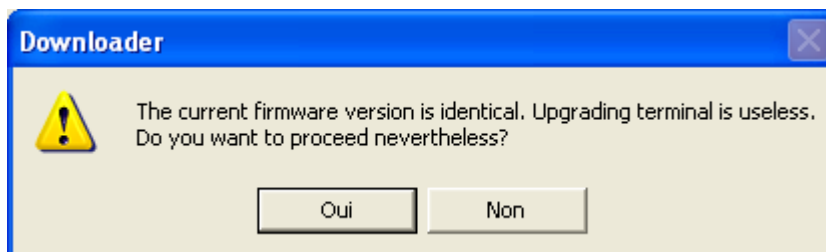
Finally click on the “open button” (the name of this button depends on your PC language). The file name and the revision display on the main window :



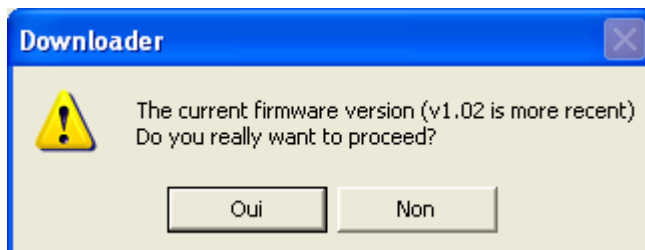
You can now start the firmware terminal upgrade.

File selection caution notes

If the current firmware is identical than the version you want to download, the following message box appears on your screen :



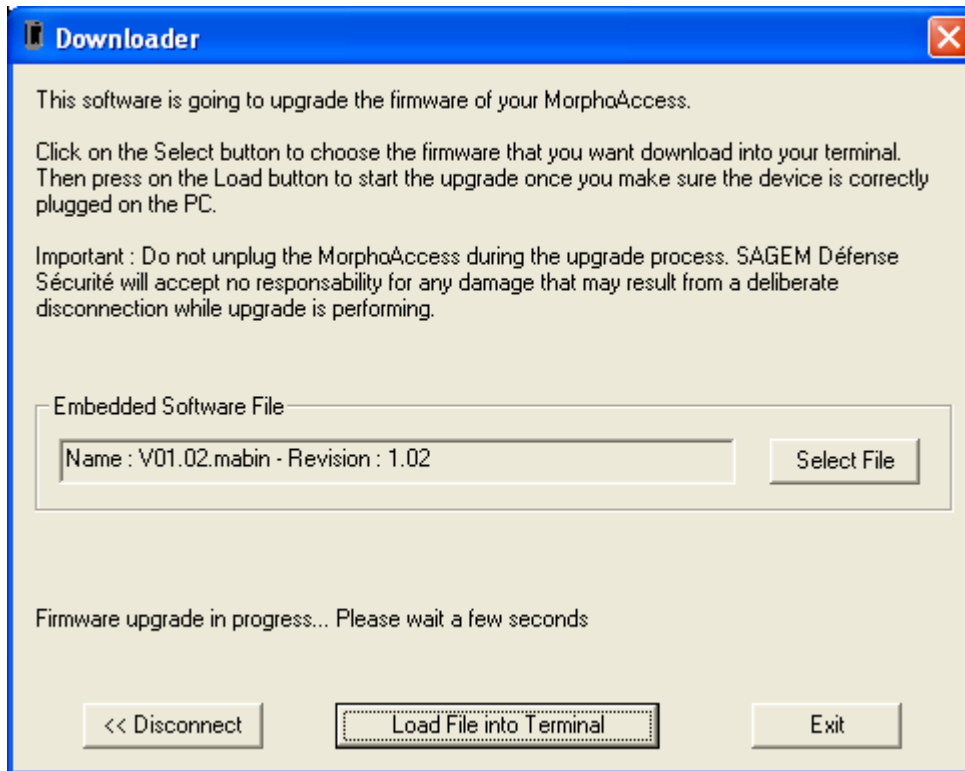
If the current firmware is more recent than the version you want to download, the following message box appears on your screen :



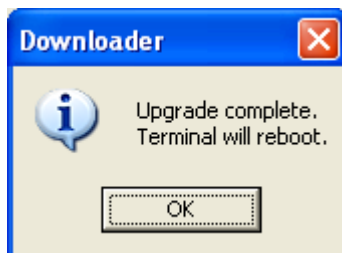
In both cases, you can keep the selected file or choose an other firmware file.

Upgrade terminal process

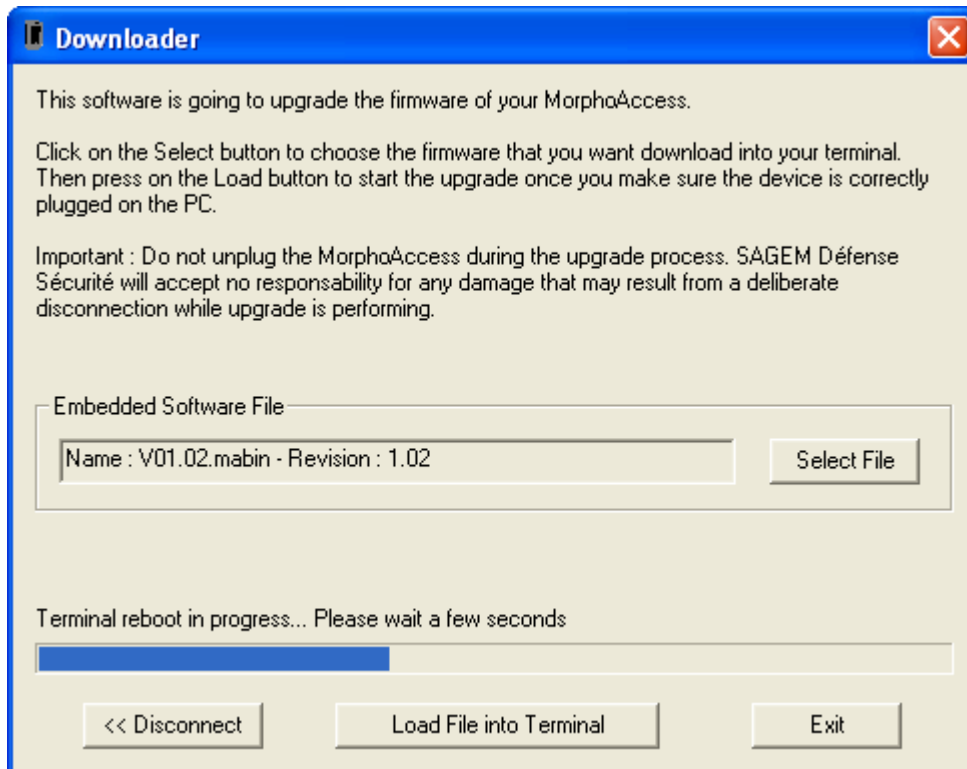
To start the upgrade, click on the Load File into Terminal button. The firmware upgrade process can perform now. During this process, the following message displays on the main window :



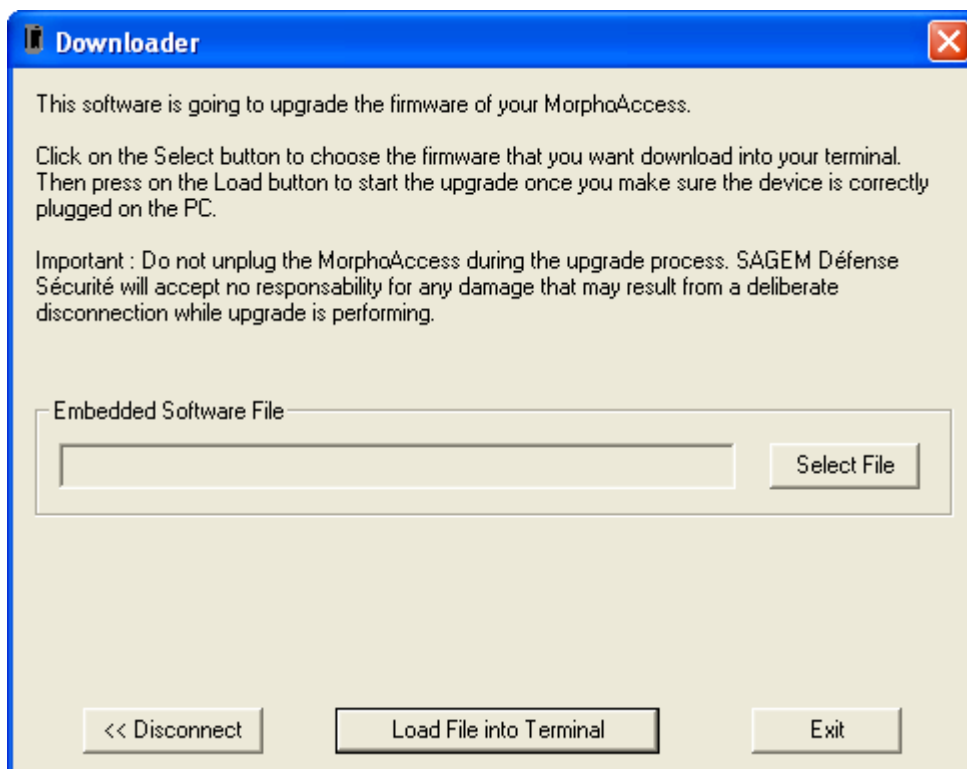
Once the upgrade finish, the following message box displays if the upgrade succeed :



Then, the terminal is going to reboot. During the reboot process, the following message displays on the main window :

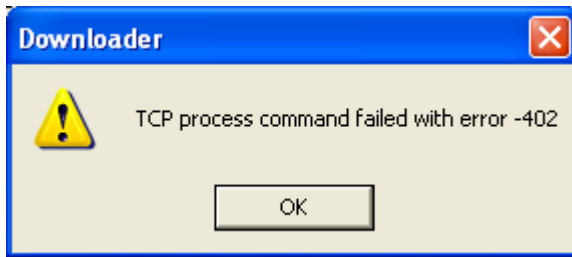


Finally, the main window is refreshed to its initial display :



Upgrade process caution notes

If an error occurs during the upgrade process, you obtain a specific message. Example of communication error :



As a result, the upgrade stops. However, you can retry to download the firmware by pressing the *Load File into Terminal* button.

MA1XX BIOLOADER

Introduction

MA1xx_BioLoader_VXX.YY.z.exe is an application which :

- contains a biometric embedded software whose the revision is given by the VXX.YY.z string
- allows loading this biometric firmware into the terminal.

! Warning ! Before using the *MA1xx_BioLoader_VXX.YY.z.exe* application, ensure that the MA1xx firmware v1.02 or a later version is present into your terminal. Otherwise, you should previously download the MA1xx firmware v1.02 or a later version with the Downloader.exe application.

Connection

Launch the *MA1xx_BioLoader_VXX.YY.z.exe* application. The *MA1xx Connection* dialog window displays :



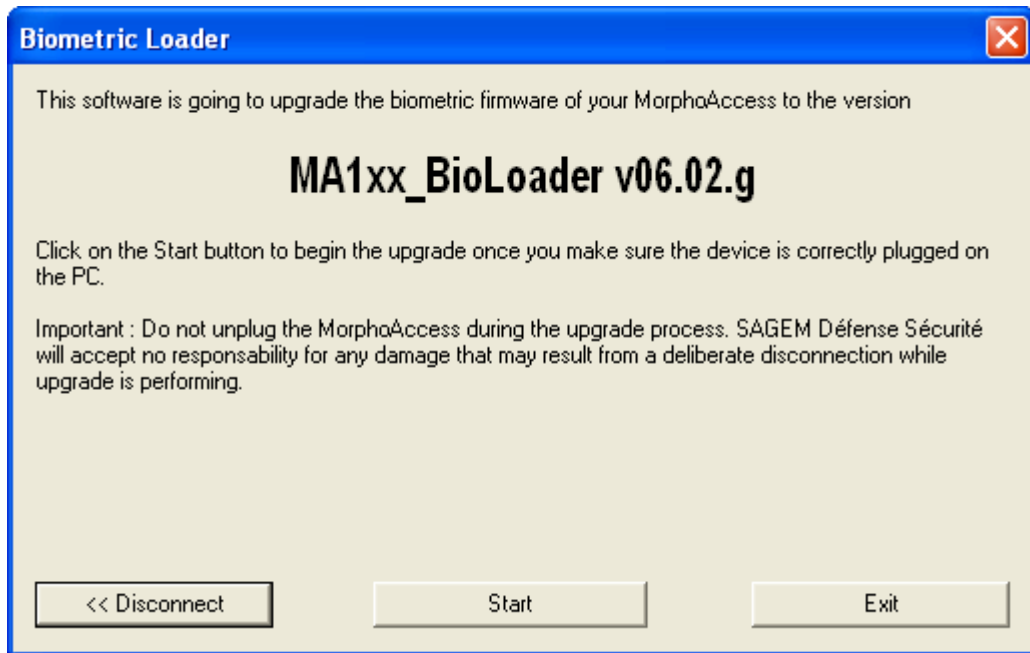
This step consist in connecting to your terminal on a network and it is required before performing any operation.

The process is the following :

- Connect physically your terminal on a network,

- Set the terminal IP address in the IP address field,
- Set the remote management TCP Port in the Port field,
- Click on the *Connect >>* button.

If the process succeeds, the *MA1xx_BioLoader_VXX.YY.z* main dialog window appears on your screen. For example, by using the *MA1xx_BioLoader_V06.02.g.exe* application to upgrade the biometric embedded software to the version 06.02.g, you obtain the following window :

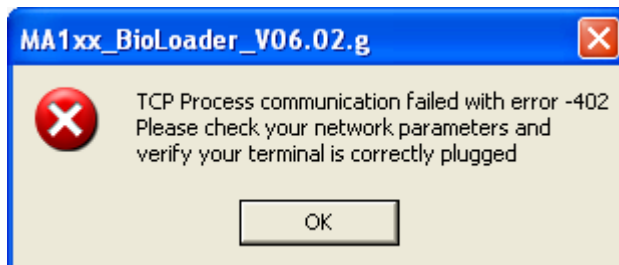


You can now start the biometric firmware upgrade.

[Connection caution note](#)

Take notes the remote management TCP Port if you change its value. In fact, there is no tool to reset this value, so if you do not remember the right value, you could not connect your terminal later.

If the TCP port value is wrong, you obtain the following message :



The set IP address must be the actual address of your terminal. If you have previously changed this address by this tool or by an other, you must enter this last address. If these conditions are not respected, the following message displays on your screen :



This same message also appears if your terminal is not connected on a network.

In all these cases, the application is still active and you can retry to connect your terminal on a network.

Biometric software upgrade process

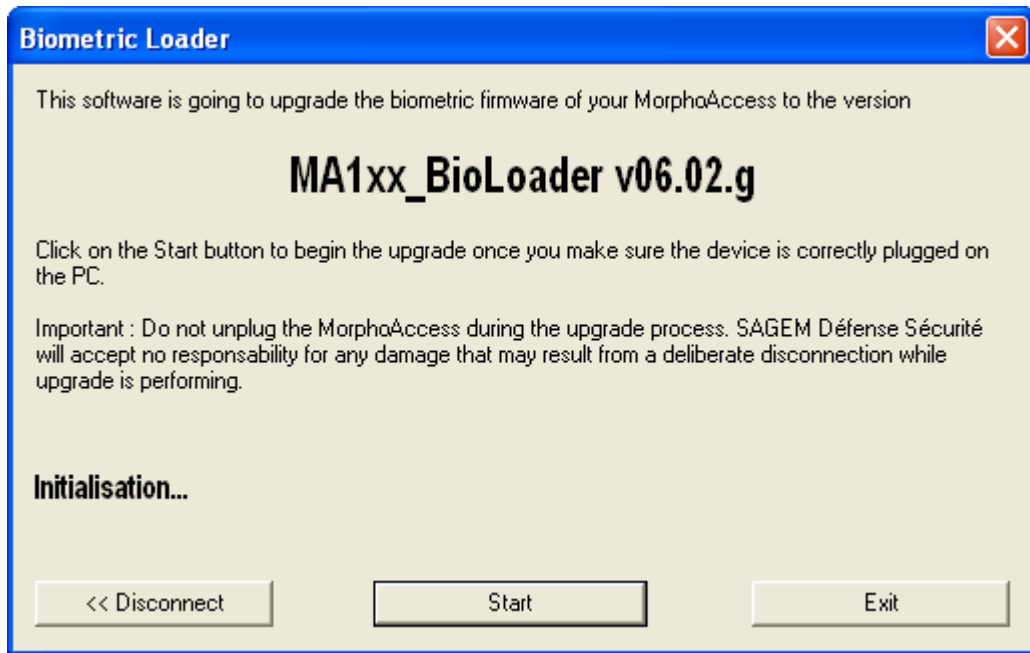
To begin the biometric software upgrade, click on the *Start* button.

The upgrade process will perform the following operations :

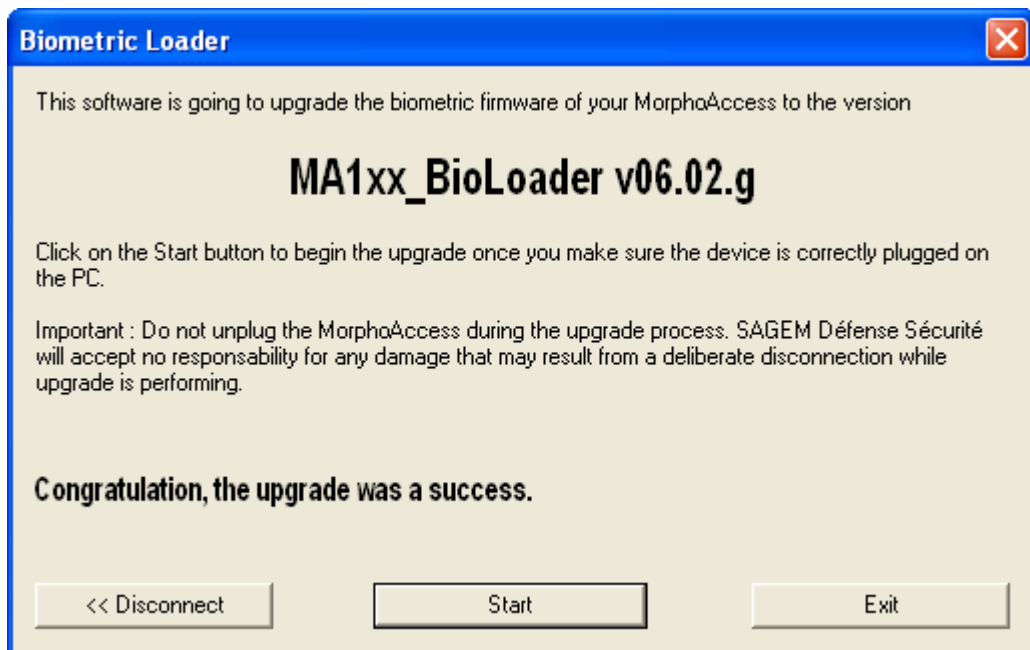
- initialize the connection,
- check that the terminal reference coincides with the version reference that you are going to load (1),
- check the firmware coherence (2),
- compare the current firmware version present in your terminal with the version that you are going to load (3),
- change Run Level to “Downloading” mode (the sensor biometric terminal should blink at this moment) and reboots the terminal,
- proceed the upgrade in adding the new biometric packages and erasing the useless packages,
- load the conformity file,
- execute a garbage collector,
- change Run Level to “Application” mode (the sensor biometric terminal should return to its initial state) and reboots the terminal,
- check the new firmware coherence,
- close the connection.

During the process, for most of the previous steps, a specific message is mentioned above the buttons of the main window.

For example, during the initialization connection step :

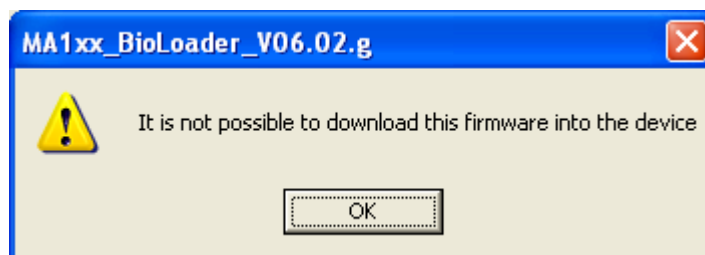


At the end, if the upgrade succeeded, the following message displays :



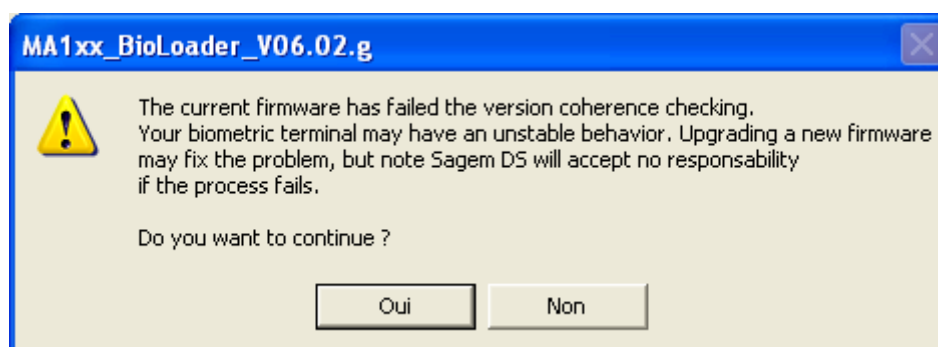
[Upgrade process caution notes](#)

(1) If an error occurs during this step, the following message box displays :



As a result, the upgrade process automatically stops.

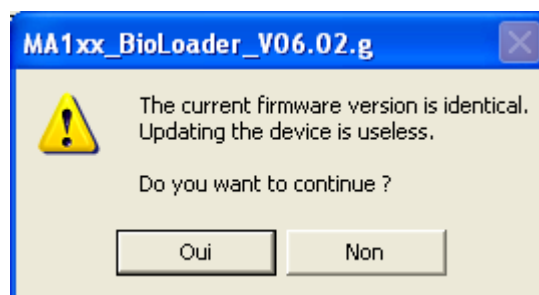
- (2) If the firmware coherence is invalid, the upgrade operation can fail. In this case, the following message box appears on your screen :



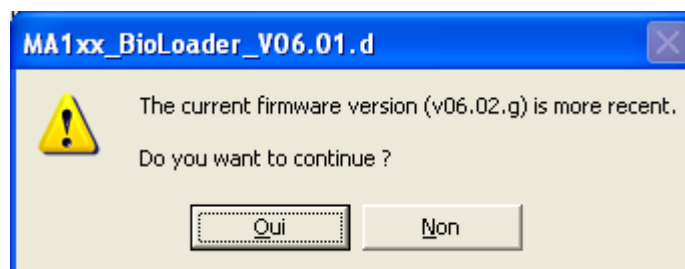
You can choose to continue or to stop the upgrade process.

- (3) If the firmware version present in your terminal is identical or more recent than the firmware version that you attempt to load, a message box appears on your screen :

- o if the current firmware version is identical :



- o if the current firmware version is more recent :



In both cases, you can choose to continue or to stop the upgrade process.



Siège social : Le Ponant de Paris

27, rue Leblanc - 75512 PARIS CEDEX 15 - FRANCE