



installing FlashTool and flashing micros with Secure Perfect

Contents

This document contains the following sections:

- “Overview” on page 1
- “Installing FlashTool” on page 1
- “Flashing the Micros” on page 2
- “Flash Micro’ - Flashing Micros that have SP3.x or Later Firmware” on page 3
- “FlashTool - Flashing Micros in Maintenance Mode or SP Firmware Earlier than SP3.x” on page 4

Overview

Before flashing (downloading application code) to your micros in maintenance mode or micros with firmware earlier than SP3.X, you need to install the Micro Installation Tool - FlashTool.

This document provides information for installing the FlashTool application. You will use FlashTool to download application code to your micros. If you have not yet installed the FlashTool application, do so at this time. Refer to “[Installing FlashTool](#)”.

Installing FlashTool

► To install the FlashTool application:

1. Log on as local administrator.
2. In Windows® **Explorer**, navigate to the Secure Perfect\Firmware folder on the Server computer.
3. Double-click the `FlashTool.EXE` file.

Result: The **Micro Installation Tool - FlashTool Installation Welcome** window displays.

4. Click **Next**.

Result: The **Select Destination Directory** window displays.

5. Review and verify the destination of the FlashTool folder.
6. Verify that adequate free disk space is available for the installation.
7. Click **Next**.

Result: The **Ready to Install** window displays.

8. Click **Next**.

Result: Install completes and an **Installation Completed** window displays.

9. Click **Finish**.

Result: The **FlashTool** application closes and there is now a FlashTool folder in the location that you selected for installation on your computer.

Flashing the Micros

There are two methods of downloading (flashing) application code to your micros:

1. **‘Flash Micro’ Icon in Secure Perfect**

This feature is not available for new micros. ‘Flash Micro’ is a flash method which does not require the micro to be in maintenance mode and downloads firmware to micros with existing SP3.x or later firmware within the Secure Perfect 6.1 application. [“‘Flash Micro’ - Flashing Micros that have SP3.x or Later Firmware” on page 3](#)

2. **Flashtool**

A standard method for micros in maintenance mode or micros with firmware earlier than SP3.x. To upgrade micros with firmware earlier than SP3.x, you must use the FlashTool standard method of flashing. Refer to [“FlashTool - Flashing Micros in Maintenance Mode or SP Firmware Earlier than SP3.x” on page 4](#) for a detailed description of each flashing method.

List of Micros

The following micros can be flashed:

- Micro/5-PX
- Micro/5-PXN
- Micro/PX-2000
- Micro/PXN-2000
- Micros defined above in maintenance mode
- Micros defined above running any version of Secure Perfect prior to SP3.x

'Flash Micro' - Flashing Micros that have SP3.x or Later Firmware

The **Operations** menu, **Micro Utility Form** of the Secure Perfect application allows you to monitor communications and control each micro in the system. You can identify the micros using the **Search Criteria and Micro Selection**. (Refer to the *Secure Perfect Administrator's Manual* or Online Help for additional information.) The procedure to flash has been integrated so that the micro stays online and continues to process badge and alarm activity while in the process of being flashed.

➤ To flash micros that already have SP3.x firmware:

1. Verify that the Secure Perfect services are running (refer to the appropriate section of the *Installation Manual* for the system you purchased).
2. Log on to the Secure Perfect program. The login ID and password must belong to a member of the spadmin local user group on the Secure Perfect 6.1 Server computer and the user group on any Secure Perfect 6.1 client computer.)
3. Verify that the micro is online (in the Secure Perfect program, select the **Operations** menu, **Micro Utility Form**. Check the **State** column).
4. Select the micro or multiple micros that you want to flash. If flashing a line of micros, we recommend starting with the end-of-line micro, and work toward the head-of-line micro. This requires a working knowledge of your Secure Perfect system.

Result: The firmware version column on the **Micro Utility Form** displays the current firmware on the micro.

- If the LED is green, the firmware on the micro matches the latest firmware on the Server computer.
- If the LED is yellow, the micro firmware does not match with the latest firmware on the Server computer.

'Flash Micro' Icon

➤ To flash the identified micros with application code:

1. Click **Flash** from the **Micro Utility Form** toolbar.

Result: The **Micro Flash & Micro Parameter Configuration** window displays. This window is only available if the micro is online. There are three options:

- **View/Edit Parameter Info**

This option is available for selection of a single micro. When this option is selected, the **Micro Parameter Configuration** window displays and the configuration for the micro is retrieved.

- The **Micro Parameter - Direct/Dialup** tab allows you to change the connection type of the micro and its **Address**, **Idle Time**, and **DI res tolerance**.

- The **Micro Parameter - Networking** tab allows you to change the network parameters for a network micro. This tab will display only if the system identified your micro as a network micro.
 - **View/Edit Flash Files**
This option is used by GE Customer Support personnel when it is necessary to selectively flash an older version of firmware on a micro.
 - **Start Flashing Micro(s)**
This will flash the micro with the correct firmware.
2. Click **Start Flashing Micro(s)** to immediately download the appropriate firmware to the micro.
Result: A dialog box will display asking you to verify you request.
 3. Click **OK** to begin the flash and reset process.
Result: The micro firmware has been downloaded to your micro. The micro will reset after a successful flash and database download will take place.

FlashTool - Flashing Micros in Maintenance Mode or SP Firmware Earlier than SP3.x

Note: Micros in maintenance mode or firmware earlier than SP3.x *MUST* be flashed with the FlashTool application found in your Secure Perfect/Flashtool application folder.

To flash a micro in maintenance mode or with a version of firmware earlier than SP3.x, you must use FlashTool. Instructions are listed in the sections that follow.

► To flash your micro with FlashTool:

1. Verify that the computer is serially connected to the micro that is to be flashed.
2. Make sure that Secure Perfect services are not started, or the selected comm port has assigned micros set to off line.
3. If not already installed, install FlashTool. Refer to [“Installing FlashTool” on page 1](#).
4. To run FlashTool, navigate to the folder where you installed FlashTool. Double-click Flash.exe.

Result: The FlashTool introductory window displays.

5. Click **OK**.
6. If this is the first time you are running FlashTool, a message will display stating **No config file found, creating a default file**. Click **OK**. (You will not see this message again when running the FlashTool application.)

7. When FlashTool loads, it will prompt you to add new files that are found in the FlashTool folder. Answer **Yes** to all prompts.

Result: The application opens, automatically searches for micros, and usually finds a micro within 30 seconds. The **FlashTool** micro status window displays. If no micro is connected, the window displays as in [Figure 1](#).

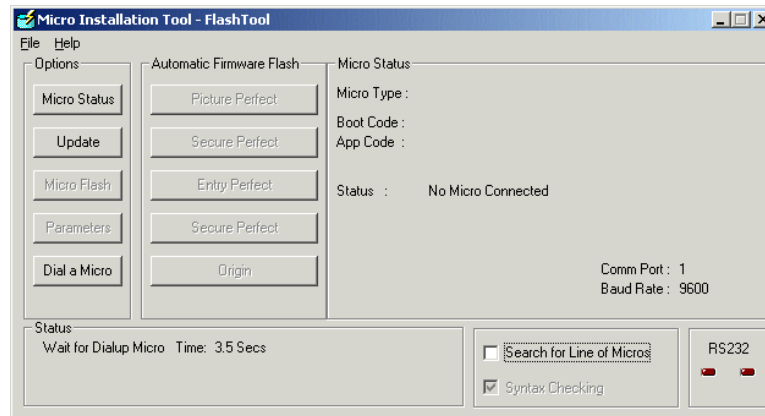


Figure 1. FlashTool Window

If FlashTool does not recognize the existing firmware, the window displays similar to [Figure 2](#).

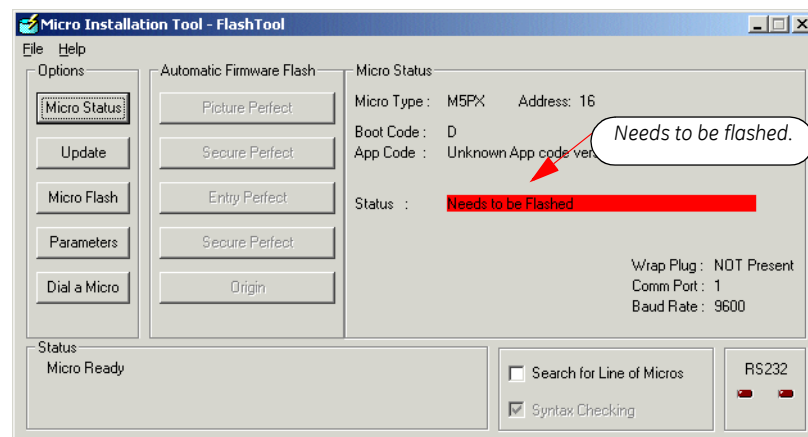


Figure 2. Micro Status

When FlashTool recognizes the firmware, the window will display the **Micro Type** and firmware application code information, similar to [Figure 3 on page 6](#).

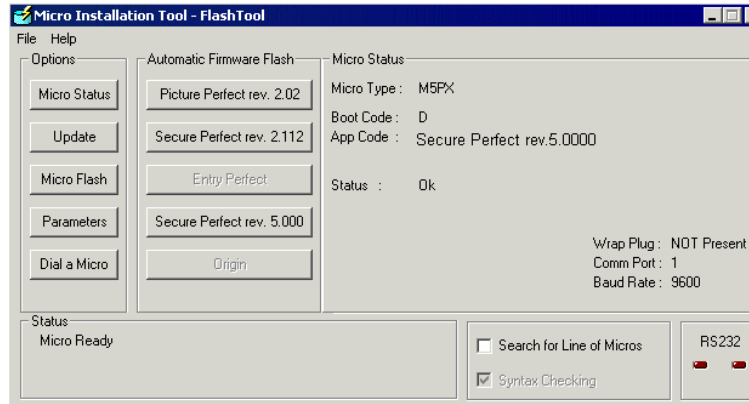


Figure 3. FlashTool Micro Status

8. A micro can be flashed with application firmware in two ways:
 1. Use one of the **Automatic Firmware Flash** buttons in the middle of the window. Click the button that corresponds to the firmware you want. (The buttons display the latest firmware release on your computer.)
Result: The download and flash process begins.
 2. Alternatively, you may click **Micro Flash** from the **Options** listed on the left of the window.
Result: A drop-down list of firmware displays.
 - Select the latest version of Secure Perfect x.000 App Code.
 - Click **Start Flash**. The download and flash process begins.

Note: If you are flashing a Micro/5-PXN, you must follow the steps in this order:

1. Flash the OS firmware.
2. Allow FlashTool to identify the micro.
3. Flash the application firmware.

Download and Flash Process

► To process the download:

1. The firmware download and flash process takes approximately ten minutes for each micro flashed. You can monitor the flash progress window that displays, similar to [Figure 4 on page 7](#).

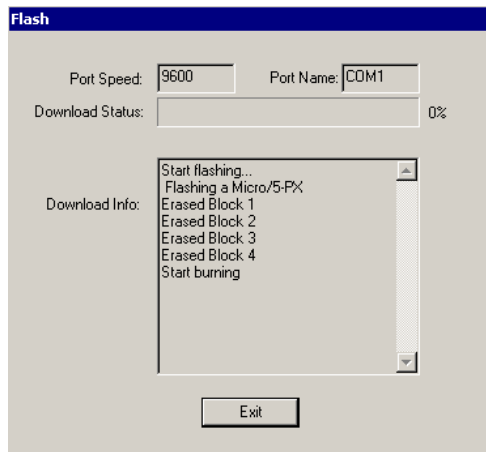


Figure 4. Standard FlashTool Flash Window

- The window will automatically close after a successful flash process.

Flashing a Line of Micros

FlashTool can flash all micros in a line that have been selected and fully identified.

► To flash a line of micros:

- Select **Search for Line of Micros**.

Result: FlashTool will search for all micros in a specified communication line. The results of the search (up to 8 micros) will be displayed in the box below the Status field.

- Click an individual micro from the list, then the **Select** button to select an individual micro from the list of micros found.



*If you choose to flash each micro individually and not the entire line of micros, you **MUST** start flashing the end-of-line micros first, and work your way up the line. The head-of-line micro **MUST** be flashed last. If you do not follow this order and start with the head-of-line, you cannot flash the downstream micros. The way to prevent this from occurring is to select all micros and flash the entire line at the same time.*

OR

Click **Select All** to select the entire line of micros at one time.

Note: To flash the entire line of micros, all micros must be selected and identified prior to starting the flash process. The hourglass icon will remind you to wait until the system identifies the selected micro/micros and allows you to proceed.

- Once selected and identified, an asterisk will display in front of the micro name in the list. A list box will display the firmware for each micro. Scroll up or down in the list box to view the version information for each micro that has been selected. The parameter block information may be obtained for a selected micro by clicking **Parameters**, which is enabled

when a micro is selected. (Refer to “[Editing the Parameter Block](#)” on page 8 and “[Syntax Checking](#)” on page 8.)

4. Click **Deselect** to cancel the selection of an individual micro.
5. Begin the flash process using one of the following methods:
 - Click one of the **Automatic Firmware Flash** buttons.
 - Click **Micro Flash**, select firmware from the firmware drop-down box, and then click **Start Flash**.

Syntax Checking

From the **File** drop-down menu, **Parameter Block Syntax Checking** can be enabled or disabled. Parameter block syntax checking impedes illegal combinations of settings that are micro-specific. A syntax error occurs if the program cannot understand the command that has been entered. It is strongly recommended that this setting remain enabled. A warning message will display if you choose to disable this feature.

***Exception:** When configuring a Micro5/PXN micro that contains anything other than SP3.x firmware (for example, Secure Perfect 2.1 or Picture Perfect), this option **MUST** be disabled.*

Editing the Parameter Block

The micro parameter block holds micro data such as micro address, phone numbers, and network configuration parameters.

► To edit the parameter block:

1. Allow sufficient time for FlashTool to identify the micro.
2. Click **Parameters**.
3. Edit as necessary. Select the **Networking** tab to enter information for a Micro/5-PXN.

- You **MUST** enter an IP address for the micro.
- A host IP address is not required and can be left blank.
- Enter the Gateway IP address (will be the same as the micro IP address).
- All other fields are set by default. Only change them if necessary depending on your network configuration.

4. Click **Save to Micro**.

Result: FlashTool writes the data into the parameter block of the micro and resets the micro.