SafeNet Luna PED 2.7.1-5

UPGRADE INSTRUCTIONS

Issue Date: 08 May 2017

Document Part Number: 007-012337-003 Rev. A

Contents

Overview

This document describes how to upgrade the firmware on your Luna PED from version 2.6.0-6 or 2.7.1-0 to version 2.7.1-5.

> ⚠️ **CAUTION:** This upgrade applies to Luna PEDs running firmware 2.6.0-6 or 2.7.1-0. Do not attempt to apply this upgrade to a Luna PED running firmware prior to 2.6.0-6. Doing so can cause the pre-2.6.0-6 Luna PED to lose functionality, with no rollback option.

The files and instructions necessary to get a Luna PED from older versions to version 2.6.0-6, before you begin the upgrade to 2.7.1-5 (in this present instruction), are available in the firmware folder in the root of the Luna Client installation media, or you can download the upgrade package from the Technical Support portal.

Files Included in this Upgrade Package

The update package includes the following files. All of the files are required to successfully perform the update:

- 630-010317-005_ped-2.7.1-5-kernel-real.bin
- LunaPED_Update.exe
- 007-012337-003_PED_upgrade_2-7-1-5.pdf

Preparing for the Upgrade

Before you can install the new firmware, you must download the upgrade package to the Windows Luna Client PC you will use to perform the upgrade, and configure the PED to accept the upgrade.

> ⚠️ **CAUTION:** It is strongly recommended that you protect both your computer and Luna PED with an uninterruptible power supply during the upgrade operation. A power failure while any of the file images are being applied to the PED can result in loss of function that might require an RMA.

To prepare your computer for the upgrade

1. Ensure that the Luna client, including the Remote PED option, is installed on the Windows PC you will connect to the PED that you want to upgrade. To verify, ensure that the following files/directories are installed:

   – C:\Program Files\SafeNet\LunaClient\RemotePEDDriver

   – C:\Program Files\SafeNet\LunaClient\pedserver.exe

2. The needed upgrade files, including these instructions, are provided in an archive file named for the PED upgrade part number. The contents of the archive are as follows:

   Extract the files to the Windows PC that is connected to the Luna PED that you are upgrading.

3. On your Windows PC, open a command prompt window and move to the directory where you copied the files in the upgrade package.

To prepare the Luna PED for the firmware upgrade

1. Connect power to the Luna PED (using the SafeNet-supplied power block to connector B in the illustration) and connect the USB cable between the Luna PED (connector A) and your Windows PC.
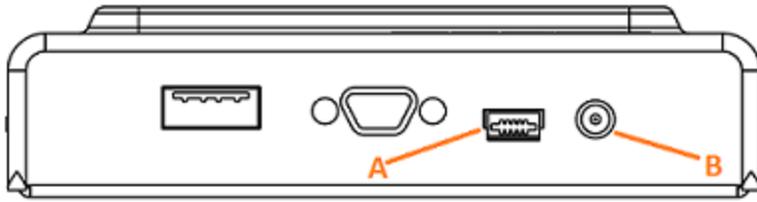
2. Allow the PED to boot normally until it reaches the default **Local PED mode Awaiting command…**.

3. Press the **<** key to display the **Mode** menu.

4. Verify the PED version – the bottom line of the PED display must report either **PED V.2.6.0-6** or **PED V.2.7.0-1**.

> ⚠️ **CAUTION:** If any other version is shown, stop now. If you attempt to continue with the upgrade, it will fail and the PED will require an RMA. Before continuing, you must acquire and install the necessary upgrades to reach version 2.6.0-6, and then return to resume these instructions.

5. Select **4** to display the **Admin** menu.

6. Select **7** for **Software Update**.

7. Select **0** to reset the PED and immediately press and hold the **<** key while the PED is resetting. Continue to hold the **<** key until the **Select Mode** menu is displayed.

8. Select **USB Mode** (4) when prompted to **Select Mode**. The PED displays **USB Mode**.

Upgrading the Luna PED Firmware to Version 2.7.1-5

During this procedure, each of the **.bin** files is individually uploaded from your computer to the Luna PED, and then saved into permanent memory as the new version of that component. Individual responses are required at the PED to accept and load each file.

> ⚠️ **CAUTION:** Complete the instructions in the order provided. If you do not, the PED could be left in an unusable state.

Once you start transferring/uploading a file to the PED, pay attention and promptly respond to the PED messages to acknowledge the upload and then to confirm installation of that new file. The individual PED operations do impose a timeout. However, you can pause before the next file transfer step, as there is no time restriction from one file upload to the next.

To upgrade the Luna PED firmware to version 2.7.1-5

1. In the command prompt window on the Windows Luna Client PC you prepared to perform the upgrade, execute the following command:

   prompt> **LunaPED_Update.exe 630-010317-005_ped-2.7.1-5-kernel-real.bin**

2. At the Luna PED, select **Yes** in response to the prompt: **Software update. Upload Image? YES/NO**.

   Wait approximately six minutes. While transfer is in progress, the command line shows a progress indicator (remaining bytes to transfer), and the PED display shows:

   ```
   USB Mode
   Software update
   Uploading image…
   ```

3. The output of the update command in the Windows command prompt should be similar to the following:

```
LunaPED_Update v2.1.0-1 Nov 25 2013 12:44:48
PED operation is required (to upload image)...
(Sent 3199130 bytes in 327977000 microsecs).
PED operation is required (to save image)...
```

4. If the image has been sent correctly, the PED displays the following message:

```
USB Mode
Software update
** WARNING **
A power failure during save is unsupported!
Save Image? YES/NO"
```

Select **Yes** to save the new image.

5. Wait for 20-30 seconds. When the PED displays the following message, press the **Enter** key on the PED keypad to return to USB mode:

```
USB Mode
Software update
Success
Press ENTER
```

6. Unplug all cables from the PED and then reconnect to restart the PED. As the PED starts booting, it should display the following messages:

```
BOOT  V.1.0.6-2,
loading PED…
Local PED Mode   Awaiting command…
```

7. Press **<** to exit to the **Select Mode** menu. If the upgrade was successful, the PED version displayed at the bottom of the PED screen will be **PED V.2.7.1-5**. If any other version is displayed, repeat the upgrade procedure.

8. Your Luna PED is now updated and ready to use. Repeat the procedure for each Luna PED that you own.

📝 **Note:** To operate the PED in Local PED-USB mode on a Release 7.x SafeNet Luna HSM, you must connect the PED directly to the USB port on the HSM card , and not one of the other USB connection ports on the appliance or host system, as illustrated below.
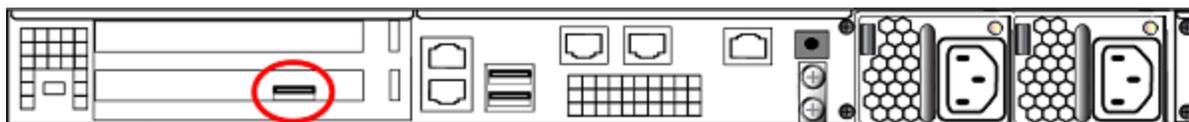
Troubleshooting

This section provides guidance for resolving problems you may encounter when upgrading the PED firmware.

No PED Prompts

You must attend to the PED when image files are being applied. If no prompts appear on the PED shortly after you issue the **LunaPED_Update.exe** command, re-check your connections, as follows:

- The PED power block must be connected to AC power and to the power socket on the PED.
- A USB connection must exist between a USB port on the sending computer and the USB-mini port on the PED (immediately beside the power socket).
- The PED must be powered on, and in USB mode.

Files Uploaded in the Wrong Order

If you attempt to upload the files in the wrong order, the PED performs some verification at the end of a file upload. If the PED displays a message similar to the following, it is a good indication that you uploaded the wrong file first:

```
Failure (VERIFY) (7)
Press Enter
```

You are not given an opportunity to attempt to install/confirm the file if the upload does not verify.

To resolve the issue, restart the process from the beginning of these instructions, ensuring that you follow the sequence in these instructions, taking the upgrade files in the order specified. If that does not correct the problem, contact Technical Support.

Upgrade Failed Message (or Similar)

If the PED displays an **Upgrade Failed** message, or any message that does not say **Upgrade in Progress** followed by **Upgrade Complete**, before the **Admin** menu appears, stop the upgrade process immediately.

To resolve the issue, you can take the following actions:

- Reboot the PED by disconnecting and then re-connecting the PED cables. This may clear the problem. If the problem clears, the PED displays a **Nothing to Upgrade** message. In this case, try the upgrade again.
- If the PED shows **Upgrade in Progress** followed by **Upgrade Failed!** every time you reboot it, then stop trying and contact Technical Support.
- You can re-upload the file and try again if the upload action failed to complete, or if you failed to acknowledge it on the PED, with the following caution.

> ⚠️ **CAUTION:** Attempting to re-upload the file to try again, after an upgrade failure (the step where the file is applied after upload), you risk losing Remote PED capability, if your PED was remote capable.

Support Contacts

Contact method	Contact	
Phone (Subject to change. An up-to-date list is maintained on the Technical Support Customer Portal)	Global	+1 410-931-7520
	Australia	1800.020.183
	India	000.800.100.4290
	Netherlands	0800.022.2996
	New Zealand	0800.440.359
	Portugal	800.863.499
	Singapore	800.1302.029
	Spain	900.938.717
	Sweden	020.791.028
	Switzerland	0800.564.849
	United Kingdom	0800.056.3158
	United States	(800) 545-6608
Web	https://safenet.gemalto.com	
Technical Support Customer Portal	https://supportportal.gemalto.com Existing customers with a Technical Support Customer Portal account can log in to manage incidents, get the latest software upgrades, and access the Knowledge Base. To create a new account, click the "Register" link at the top of the page. You will need your Customer Identifier number.	