



Upgrading Synapse Cards

Introduction

This technical note describes how to upgrade a Synapse card in a Synapse frame using a .spf file. This document is written for engineers, technicians, operators and other broadcasting employees that are responsible for the proper installation and/or operation of Synapse products. This technical note assumes familiarity with basic file management tasks and common interface and Internet activities, such as selecting menu options and clicking buttons or Internet links.

A Synapse card's function is determined by the hardware platform and the software application (a.k.a. firmware) that resides on the hardware platform. Changing the firmware of the card changes the way the card functions. To keep improving quality and to answer customer needs, Miranda occasionally releases new firmware revisions for Synapse cards. These revisions are formatted as one file for each revision, with a .spf extension.

This technical note contains the following topics:

- [Installing Synapse Setup](#)
- [Launching Synapse Setup](#)
- [Choosing and Acquiring the .spf File](#)
- [Uploading the .spf File](#)
- [Restoring Prior Settings](#)
- [Errors During Upload](#)

Installing Synapse Setup

Before reprogramming or upgrading a Synapse card, the Synapse Setup software application must be installed on a PC or laptop connected to the same network that is connected to the Synapse frame. Before starting to upgrade, download and install Synapse Setup.

Follow these steps to download and install Synapse Setup:

- 1 Open an Internet browser and go to Miranda's website at <http://www.miranda.com>.
- 2 On the Miranda home page, click 'Library' and then 'Software'.
- 3 On the 'Software' page, click 'Synapse software'.
- 4 On the 'Synapse software' page, click 'Synapse Set-up (ZIP)'.

When the security dialog appears, click **Save**. A 'Save As' window opens in which you may select a location to download the file to a specific location. A progress dialog box appears showing the progress of the download. The file is approximately 6 megabytes.

The file name is 1154030652_3816.f_doc_file.zip. Extract (or unzip) the file from this .zip file. That file is SynapseSetup_v190.exe and it installs Synapse Setup.

- 5 Launch SynapseSetup_v190.exe. Disregard any security warnings.

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Installing Synapse Setup

6 On the ‘Welcome’ window, click **Next**:



Figure 1-1. Welcome Window

7 On the ‘License Agreement’ window, select the ‘I accept the terms in the license agreement’ radio button and then click **Next**.



Figure 1-2. License Agreement Window

8 On the ‘Ready to Install the Program’ window, click **Install**. The window displays the location where the program will be installed.

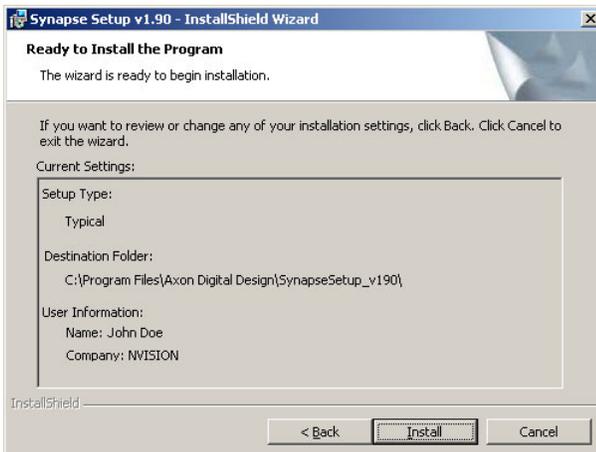


Figure 1-3. Ready to Install the Program Window

Click **Next**. A progress indicator briefly appears. When the installation is complete (after a few seconds), the 'InstallShield Wizard Complete' window appears.

- 9 On the 'InstallShield Wizard Complete' window, click **Finish** to close the InstallShield Wizard. Installation is complete.

(Optional) Synapse Setup can launch automatically. To prevent that, uncheck the 'Launch the program' check box.

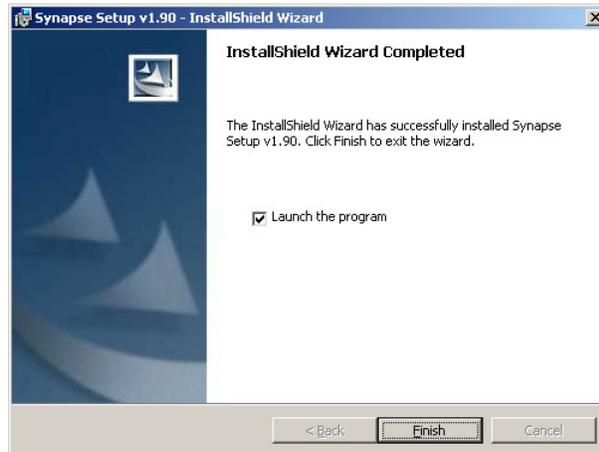


Figure 1-4. InstallShield Wizard Complete Window.

Launching Synapse Setup

To launch Synapse Setup, use the Windows Start menu:

Programs > axon digital design > synapse setup v1.90 > SynapseSetupv190.exe'

Or

Double-click the desktop shortcut.



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Choosing and Acquiring the .spf File

Choosing and Acquiring the .spf File

Not all .spf files are compatible with all hardware platforms. To ensure that a compatible .spf file is selected, you must know the hardware revision of the card being upgraded.

Follow these steps to locate the card revision number:

- 1 Launch Synapse Setup.
- 2 From the left-hand pane, double-click on the frame containing the card to be upgraded. Properties for the selected frame appear in the center pane, as shown in Figure 1-5.

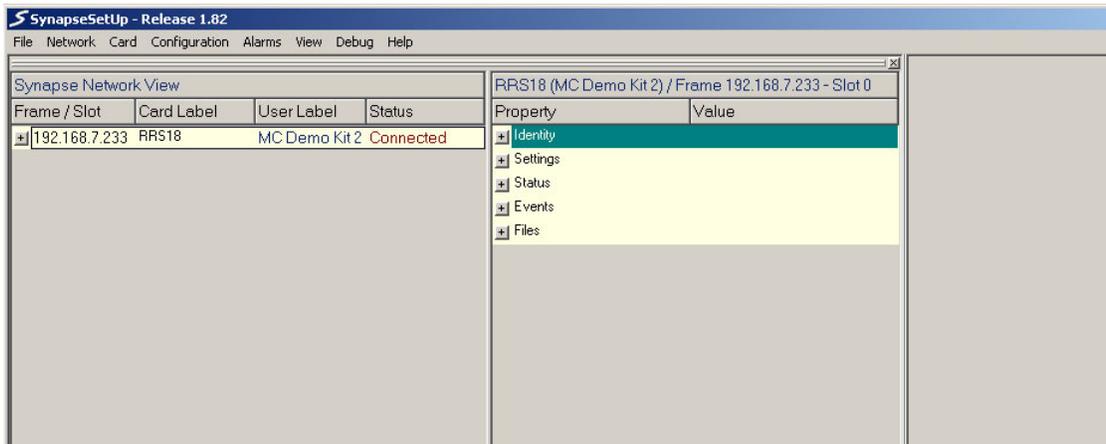


Figure 1-5. Synapse Setup Window — Properties for Selected Frame

- 3 Click the [+] next to 'Identity' to expand the list, as shown in Figure 1-6.

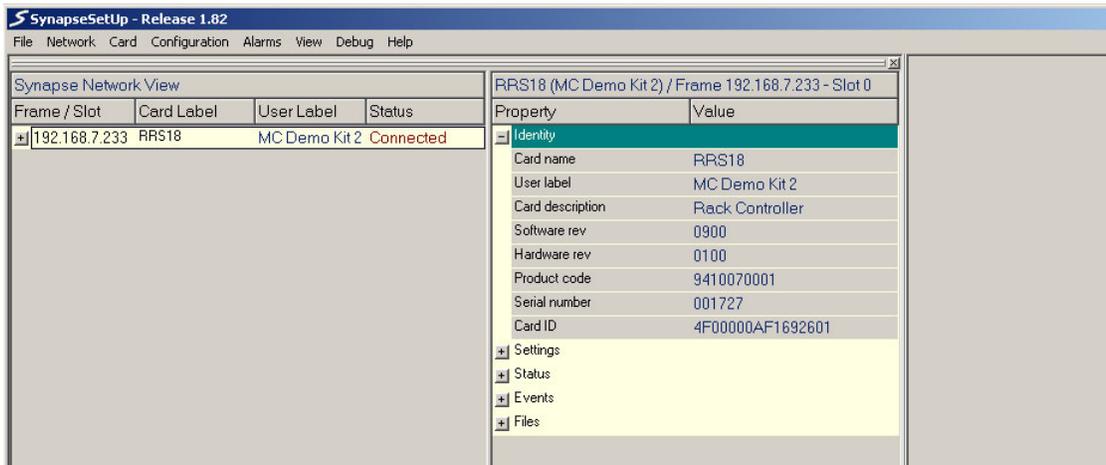


Figure 1-6. Synapse Setup Window — Identity Property Expanded

- 4 On the 'Hardware rev' line, note the hardware revision number listed.

Note

If you do not see your card's revision number listed, contact Miranda Technical Support.

- 5 Contact Miranda Technical Support and request a .spf file for your card.

Uploading the .spf File

Before upgrading a card, it is recommended that you copy any settings to the clipboard. After a card is upgraded, the card resets to factory default settings. This means that the settings selected before the upgrade are overwritten.

During the upgrade process, the card stops functioning for a period of time. Make sure the card being upgraded is currently not being used by anyone in your company. Also, after the upgrade the original settings are not yet restored and the card might not function as it did before the upgrade. For information on restoring settings, see [Restoring Prior Settings](#) on page 7.

Important! Make sure the card is not in use before starting the upgrade process.

Follow these steps to upgrade the card:

- 1 Launch Synapse Setup.
- 2 (Recommended) Copy the current card settings to the clipboard:

From the left-hand pane, double-click on the frame (for example, RRC18, RRS18, RRC08, RRS08, RRC04 or RRS04) containing the card you want to upgrade. Properties for the card appear in the center pane, as shown in Figure 1-7.

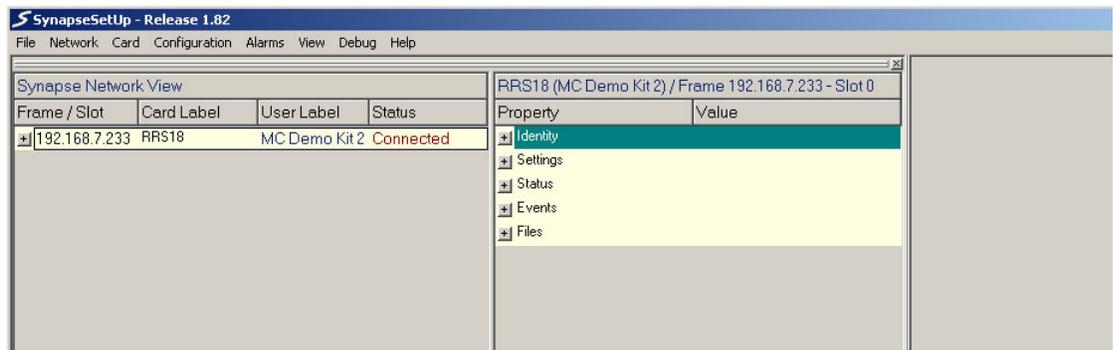


Figure 1-7. Synapse Setup Window — Properties for Selected Frame

From the menu bar, select 'Card > Copy Card to Clipboard'. An exact copy of the card's setting is placed on the clipboard (left-hand pane) for future use, as shown in Figure 1-8.

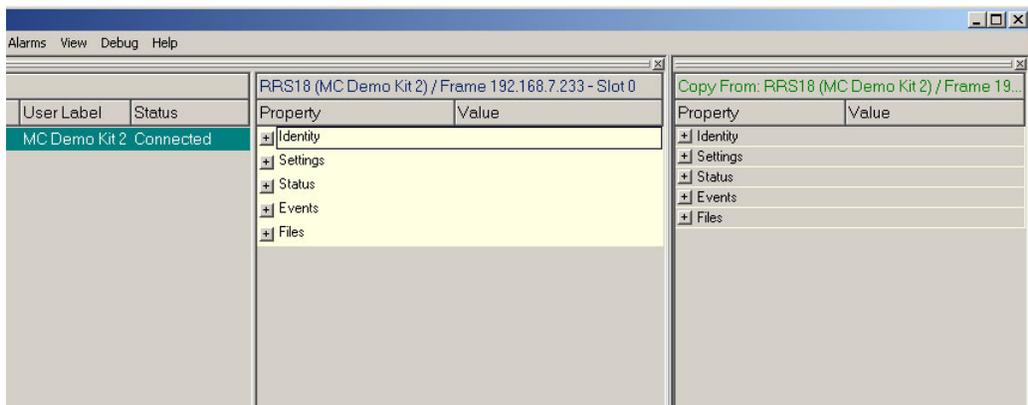


Figure 1-8. Synapse Setup Window — Properties Copied to Clipboard

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Uploading the .spf File

- 3 From the center pane, click the [+] next to 'Files' to expand the list. All currently installed .spf files display (for an SFR04 and SFR08 the list is shorter than presented in the example), as shown in Figure 1-9.

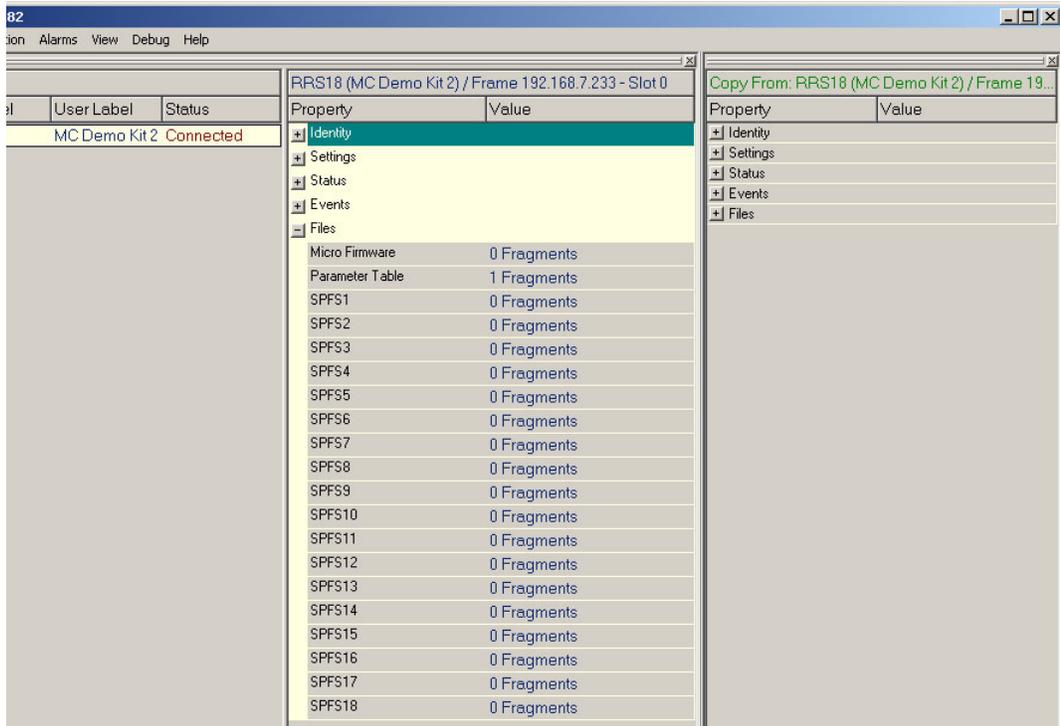


Figure 1-9. Synapse Setup Window - Files Property Expanded

- 4 Each SPFS listed represents a slot number in the frame. Double-click on the SPFS's slot number for the card you want to upgrade. The 'SPFS Upload Dialog' window appears, as shown in Figure 1-10.

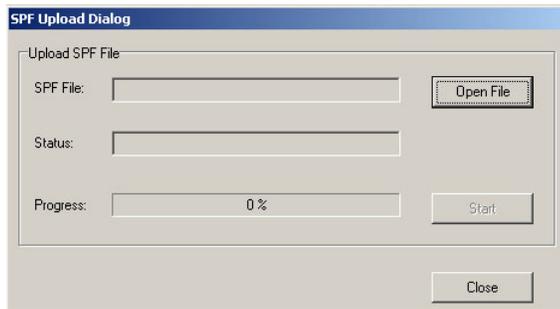


Figure 1-10. SPFS Upload Dialog Window

- 5 Click **Open File**. The 'Browse' window appears.

On the 'Browse' window, locate and select the .spf file you want to upload and then click **Open**. The file name appears in the 'SPF File' field on the 'SPFS Upload Dialog' window.

- 6 Click **Start** to start the upload process. The 'Status' field displays "Uploading SPF" and the 'Progress' field displays a progress bar and percentages indicating how much of the upload is complete.

It can take up to 10 minutes to complete the upload procedure. The time depends on the card being upgraded. When uploading is complete, the 'Status' field displays "Ready programming Card!" and the 'Progress' field displays "100%", as shown in Figure 1-11.

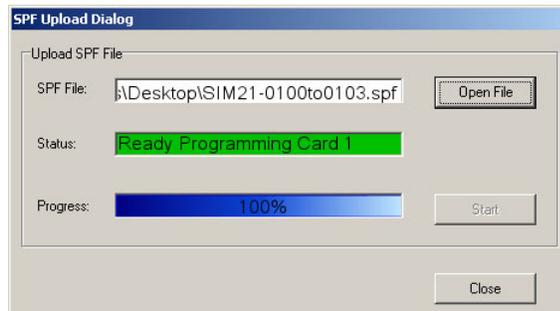


Figure 1-11. SPF Upload Dialog Window - Upload Complete

- 7 Click **Close** to close the 'SPF Upload Dialog' window.
- 8 To verify that the card is functioning properly, reset the card manually by pulling it out of the frame and putting it back into the frame. The card should be recognized with the correct card name, indicating that the firmware upgrade has been successful.

Note

It is strongly recommended that you test the card's functioning before putting it into real on-air use.

Restoring Prior Settings

When an upgrade is successful, the card has factory default settings applied. You can restore the settings to what they were before the upgrade by using the settings previously copied to the clipboard. (See [Uploading the .spf File](#) on page 5.)

Prior settings can be applied to a card in two ways: copied from the clipboard or entered manually. If the menu for the card has not changed, simply paste the settings from the clipboard to the card. (For instructions, see the preceding procedure.) If the settings for the new card differ from the old settings, then settings must be changed manually using the information from the corresponding settings listed in the clipboard. For instructions on applying settings manually, see the Synapse Setup online Help.

Follow these steps to paste files from the clipboard to an upgraded card:

- 1 Launch Synapse Setup.
- 2 From the menu bar, select 'Card > Paste Clipboard to Card'.
- 3 On the confirmation dialog box, click **Yes**. The settings are copied to the card.
- 4 On the 'Ready Updating Card' dialog box, click **OK**. The settings are copied and applied to the card.

Errors During Upload

When an error occurs during upload, the bar in the 'Progress' field ceases to grow and the 'Status' field displays an error message on a red background, as shown in Figure 2.

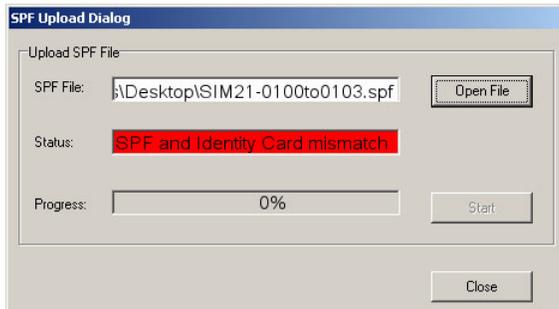


Figure 2. SPF Upload Dialog Window - Critical Error Message

Errors might occur because a .spf file selected for upload is not compatible with the selected card's hardware, or because of a lost connection, heavy network load, or a defective card. In these instances, either restart the upload process or contact Miranda Technical Support.

In certain instances, the 'Broadcast' setting in the selected frame menu is set to "Off." This causes the 'Status' field in the 'SPF Upload Dialog' window to display "SPF Status unknown (status wait time out)" with a yellow background, as shown in Figure 3.

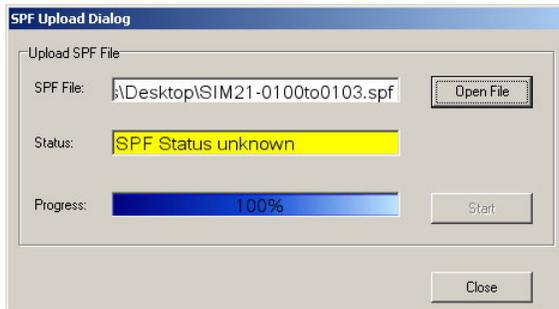


Figure 3. SPF Upload Dialog Window - Non-critical Error Message

This is a non-critical message. The firmware will upload and function properly.