



Aprisa **SR**



Software Release Notes

Software Version 1.3.1

1.3.1

October 2011



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1. Introduction

Introduction

The previous Aprisa SR software version release relevant to this release is:

Software Version	Release Date
1.3.0	7 th June 2011

This release of Aprisa SR software is:

Software Version	Release Date
1.3.1	30 th September 2011

This document covers the major changes, product enhancements, new functionality, and bug fixes since Aprisa SR software version 1.3.0.

2. Released Files

Release Files

The following is a list of files released for Aprisa SR Software Version 1.3.1.

File Name	File Type	File Function
asraduc_25u	ADUC Code	Discriminator micro controller code UHF 25 kHz radios
asraduc_25v	ADUC Code	Discriminator micro controller code VHF 25 kHz radios
asraduc_u	ADUC Code	Discriminator micro controller code UHF 12.5 kHz radios
asraduc_v	ADUC Code	Discriminator micro controller code VHF 12.5 kHz radios
asrapp	Upgrade App Code	Used to initiate radio software upgrade
asrboot	Bootloader	Used to initiate radio software startup
asrmain	Application Code	Main radio system software
asrrootfs	Root File System	Catalog of system files
asrver	Version File	Release build version
version.txt	Public Version File	Release information

3. Software Upgrade

Upgrade Type


If the Aprisa SR radio is a stand alone radio i.e. not part of a Aprisa SR Protected Station, follow the procedure 'Radio Software Upgrade Process'.

If the Aprisa SR radio is part of a Aprisa SR Protected Station, follow the procedure 'Protected Station Software Upgrade Process'.

Note: If a radio has been configured for a Protection Type of 'Redundant' (see Aprisa SR User Manual 'Terminal > Protection'), and that radio is no longer part of a Protected Station, the Protection Type must be changed to 'None' before the radio software upgrade can be achieved with the 'Radio Software Upgrade Process'.

3.1. Radio Software Upgrade Process

Method



The Aprisa SR radio software is upgraded simply by plugging a USB flash drive containing the new software into the USB A host port  on the Aprisa SR front panel and power cycling the radio.

Procedure

To minimize disruption of link traffic and prevent your radios from being rendered inoperative, please follow the procedures described in this section together with any additional information or instructions supplied with the upgrade package.

The radio software must be identical on all radios in the FAN (Field Area Network).

Process Steps

1. Check that the SuperVisor USB Upgrade setting is set to 'Enabled' (see Possible Upgrade Failure Causes below).
2. Unzip the software release files in to the root directory of a USB flash drive.
3. Power off the Aprisa SR and insert the USB flash drive into the Host Port .
4. Power on the Aprisa SR.
5. The software upgrade process is complete when the OK LED lights solid orange. This can take about 2 minutes.
The software will have loaded in to the radio Standby SW location.
6. Remove the USB flash drive from the Host Port .
7. Power cycle the Aprisa SR.

Upgrade Did Not Start

If the upgrade process did not start, the Aprisa SR could already be operating on the version of software on the USB flash drive. This will be indicated by flashing Display Panel OK LED and then the OK, DATA and CPU will light steady green.

If any Display Panel LED flashes red or is steady red during the upgrade process, it indicates that the upgrade has failed. This could be caused by incorrect files on the USB flash drive or a radio hardware failure.

Check the Result

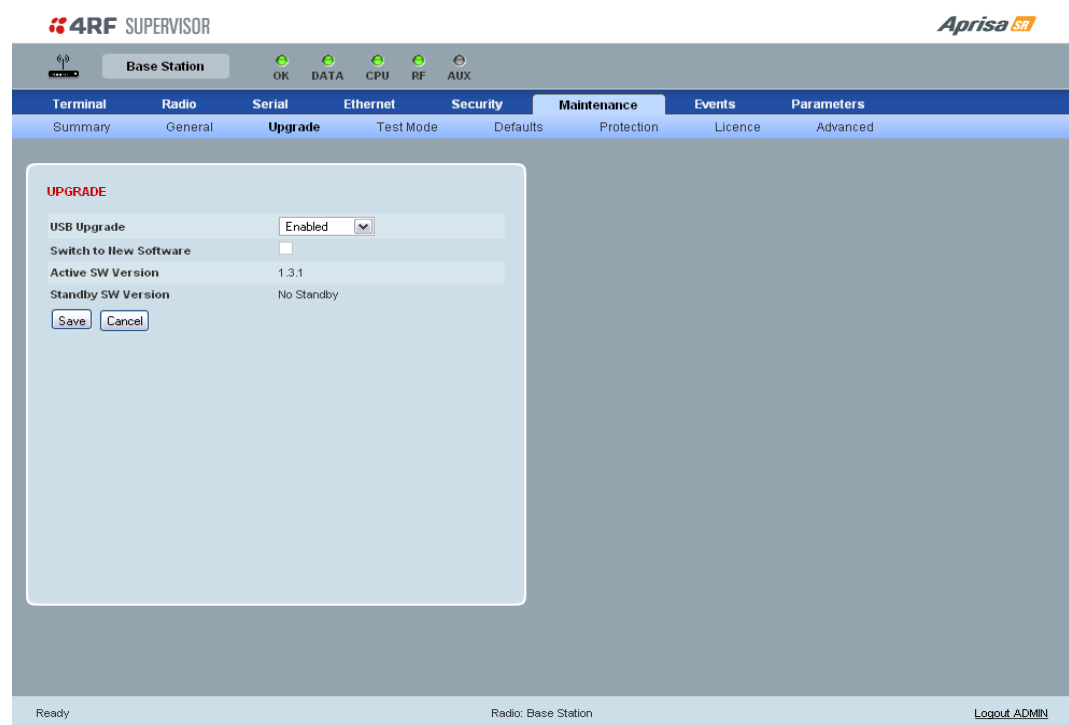
If the upgrade process did complete, you can login in to the radio to view the Active and Standby SW version (see 'View the Software Version' below).

If the upgrade process was successful, the Active SW Version will show the new software version and the Standby SW Version will be shown as 'No Standby'.

Possible Upgrade Failure Causes

1. USB Upgrade setting set to 'Disabled'

Check that the SuperVisor USB Upgrade setting is set to 'Enabled'.



2. USB Upgrade setting set to 'Authenticate'

If the radio is not operating on the new software (after the power cycle), it could be caused by the SuperVisor USB Upgrade setting set to 'Authenticate'.

The new software will have uploaded in to the Aprisa SR but will not have activated. The new software version will be displayed in the Standby SW version.

In this case, tick the 'Switch to new Software' checkbox and click 'Save' to apply the changes.

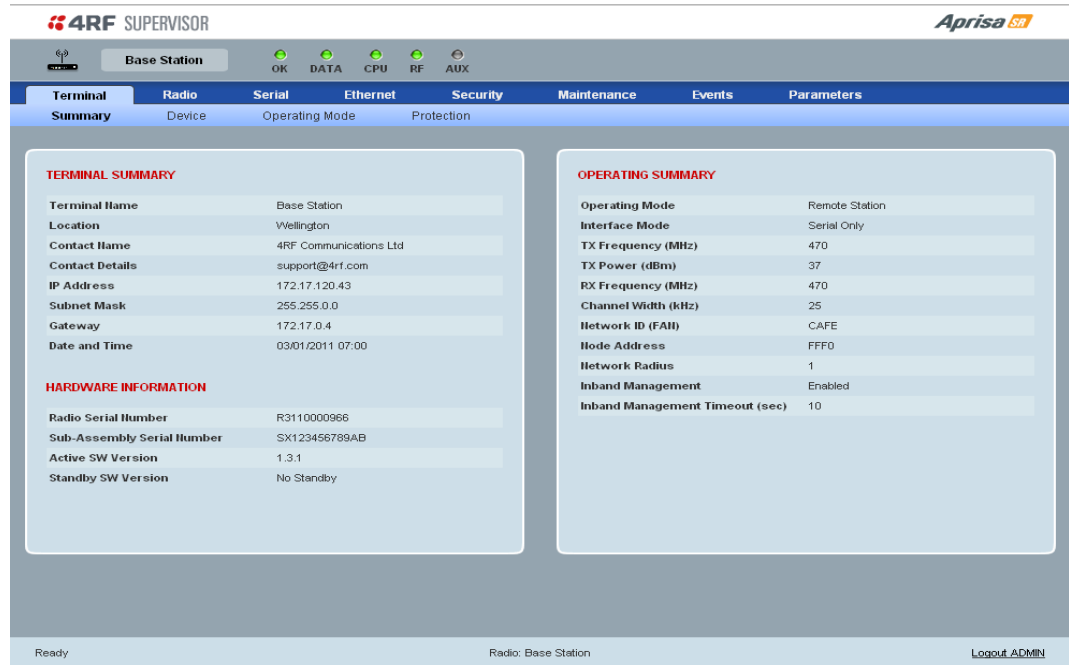
View the Software Version

To view the uploaded software version:

Select Terminal Settings > Terminal > Summary

If USB Upgrade setting is set to 'enabled', then the version of software uploaded will be displayed in 'Active SW Version' field.

If USB upgrade setting is set to 'Authenticate', then the version of software uploaded will be displayed in 'Standby SW Version' field.



The screenshot displays the 4RF SUPERVISOR web interface. At the top, there's a status bar with icons for OK, DATA, CPU, RF, and AUX. Below this is a navigation menu with tabs for Terminal, Radio, Serial, Ethernet, Security, Maintenance, Events, and Parameters. The 'Terminal' tab is selected, and the 'Summary' sub-tab is active. The main content area is divided into two columns. The left column contains the 'TERMINAL SUMMARY' and 'HARDWARE INFORMATION' sections. The right column contains the 'OPERATING SUMMARY' section. The status bar at the bottom shows 'Ready', 'Radio: Base Station', and a 'Logout ADMIN' link.

TERMINAL SUMMARY	
Terminal Name	Base Station
Location	Wellington
Contact Name	4RF Communications Ltd
Contact Details	support@4rf.com
IP Address	172.17.120.43
Subnet Mask	255.255.0.0
Gateway	172.17.0.4
Date and Time	03/01/2011 07:00

HARDWARE INFORMATION	
Radio Serial Number	R3110000966
Sub-Assembly Serial Number	SX123456789AB
Active SW Version	1.3.1
Standby SW Version	No Standby

OPERATING SUMMARY	
Operating Mode	Remote Station
Interface Mode	Serial Only
TX Frequency (MHz)	470
TX Power (dBm)	37
RX Frequency (MHz)	470
Channel Width (kHz)	25
Network ID (FALL)	CAFE
Node Address	FFF0
Network Radius	1
Inband Management	Enabled
Inband Management Timeout (sec)	10



3.2. Protected Station Software Upgrade Process

Procedure

The Protected Station software upgrade can be achieved without disruption to traffic.

This procedure assumes that the Primary radio is active and the Secondary radio is standby.

Process Steps

1. Using the Hardware Manual Lock switch, force the primary radio to active.
 2. Carefully remove the Host Port USB cable connecting the secondary radio to the Protection Switch and insert the USB flash drive with the new software release into the secondary radio Host Port .
 3. Power cycle the secondary radio. The radio will be upgraded with the new software.
 4. When the secondary radio upgrade is completed, remove the USB flash drive, restore the Host Port USB cable to Protection Switch, power cycle the secondary radio and wait for it to become standby.
 5. Using the Hardware Manual Lock switch, force the secondary radio to active.
 6. Carefully remove the Host Port USB cable connecting the primary radio to the Protection Switch and insert the USB flash drive with the new software release into the primary radio Host Port .
 7. Power cycle the primary radio. The radio will be upgraded with the new software.
 8. When the primary radio upgrade is completed, remove the USB flash drive, restore the Host Port USB cable to Protection Switch, power cycle the primary radio and wait for it to become standby.
 9. Set the Hardware Manual Lock switch to the Auto position. The secondary radio will remain active and the primary radio will remain standby. To set the primary radio to active, use the hardware lock switch to select the primary radio and wait for it to become active, then set the hardware manual lock switch to the Auto position.
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4. Software Enhancements

4.1. Major Enhancements

None.

4.2. Minor Enhancements

25 kHz Channel Size

In software version 1.3.0, initial support was been added to manage the new 25 kHz channel size Aprisa SR radios.

In software version 1.3.1, the performance of the new 25 kHz channel size Aprisa SR radios has been improved.

Software version 1.3.0 should not be used for 25 kHz channel size Aprisa SR radios.

5. Software Bug Fixes

5.1. Major Bug Fixes

None.

5.2. Minor Bug Fixes

None.

6. Hardware Enhancements

None.
