



Aprisa **SR**



Software Release Notes

Version 1.1.0

September 2010



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1. Introduction

Introduction

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

Software version	Release date
1.0.4	12 th July 2010

This release of Aprisa SR software is:

Software version	Release date
1.1.0	17 th September 2010

This document covers the major changes, product enhancements, new functionality, and bug fixes since Aprisa SR software version 1.0.4.


2. Released Files

Release Files

The following is a list of files released for Aprisa SR Software Version 1.1.0.

File Name	File Type	File Function
asraduc	ADUC Code	Discriminator micro controller code
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. Radio Software Upgrade

Upgrade 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.



Radio Settings All radio parameter settings will not be altered during the upgrade process but there may be new parameters introduced with the new software version. These may need to be set (see change details below).

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).

3.1. Upgrade Process

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).

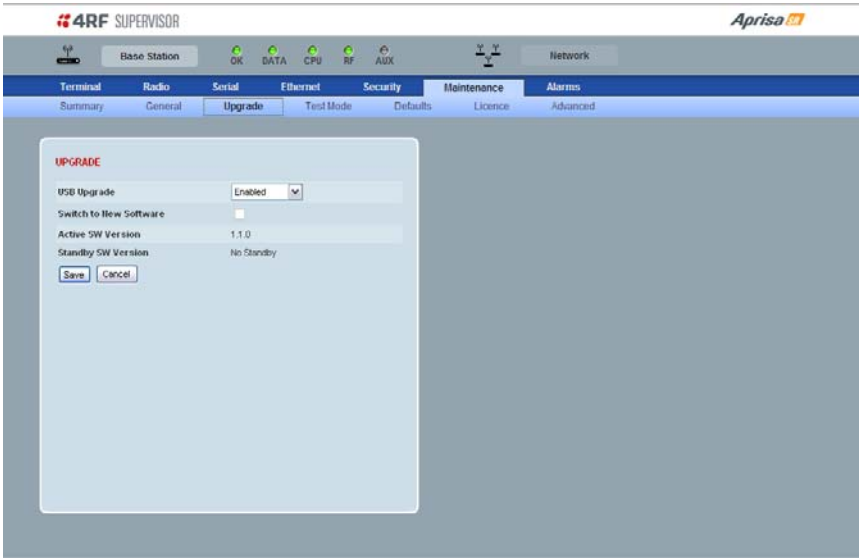
If the upgrade process was successful, the Active SW Version will show the new software version and the Standby SW Version will be shown as 'No Standby'.

Possible Upgrade Failure Causes

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.



4. Enhancements

4.1. Major Enhancements

Channel Access Wizard

In software version 1.1.0, a Channel Access Wizard has been added to SuperVisor that automatically configures the Channel Access settings for specific network topologies.

Previously, SuperVisor > Radio > Channel Access provided manual setting of Channel Access settings. In software version 1.1.0, the manual setting of Channel Access settings is now in SuperVisor > Radio > Advanced.

When a network critical parameter is changed in the radio, the optimum Channel Access settings are automatically selected for the selection e.g. if the radio is changed from a Remote Station to a Base Station.

If the Channel Access parameters are manually set using Radio > Advanced, the Wizard blanks the Network Type and displays a warning message in red 'Advanced Configuration'.

See Aprisa SR User Manual 1.1.0 for more information.

Licence Status Display

In software version 1.1.0, an 'Interface Mode' has been added to the operating summary of SuperVisor > Terminal > Summary to display the Interfaces available for traffic on the radio e.g. 'Ethernet and Serial'.

Save and Restore Radio Configuration

In software version 1.1.0, a new feature has been added in SuperVisor > Maintenance > Advanced which saves and restores user configuration settings.

Save Configuration to USB

This parameter saves all user configuration settings to binary encrypted files on the USB root directory with filenames of asrcfg_1.1.0 and asruser_1.1.0. Some parameters are not saved e.g. security passwords, licence keys etc.

Restore Configuration from USB

This parameter restores all user configuration settings from binary encrypted files on the USB root directory with filenames of asrcfg_1.1.0 and asruser_1.1.0.

4.2. Minor Enhancements

Transmitter Test Mode Timeout

Previously, there was no timeout for the Transmitter tests on SuperVisor > Maintenance > Test Mode.

In software version 1.1.0, a Transmitter tests timeout has been added 'Test Mode Timeout (secs)' which will timeout any of the transmitter tests after the period seconds entered. The timeout range is 1 to 120 seconds.

Username / Password Message

In software version 1.1.0, when an invalid username or password is entered in SuperVisor > Security > Users, the warning message now shows:



5. Bug Fixes

5.1. Major Bug Fixes

Re-register Causing Base Station Reboots

Previously, if SuperVisor > Terminal > Details are changed on a Repeater Station via the Base Station that requires the Repeater to re-register, the Base Station does a reboot.

This bug has been corrected in software version 1.1.0.

Many Alarms Causing Radio Reboot

Previously, when a large number of alarms were generated, a bug could cause the radio to reboot.

This bug has been corrected in software version 1.1.0.

Remote Management Unreliable After Timeout Errors

Previously, remote management of remote and repeater stations could become unreliable if for any reason the request times out. The Base Station would require a reboot to recover.

This bug has been corrected in software version 1.1.0.

Simultaneous Traffic Causing Base Station Reboots

Previously, simultaneous Ethernet and RS-232 serial traffic from the Base Station to multiple Repeater / Remote Stations could intermittently cause a Base Station reboot.

This bug has been corrected in software version 1.1.0.

Intra-Frame Gaps in Serial Data

Previously, serial packets could intermittently become fragmented causing packets to be dropped if ModBus or DNP3 protocols are used.

Remote stations detected spurious end of packets in the middle of an incoming data packet resulting in a shorter RF burst length and extra RF packets being sent.

This bug has been corrected in software version 1.1.0.

RS-232 CTS Not Inactive when Buffer Full

Previously, with Flow Control enabled, flooding the serial input buffer with sustained data did not cause the CTS line to go inactive.

This bug has been corrected in software version 1.1.0.

RS-232 DCD and DSR Lines In Incorrect State

Previously, when RS-232 Flow Control was enabled, the DCD and DSR lines were in an incorrect state (OFF) which would signal to the connected device that the radio was not ready to accept data.

In software version 1.1.0, these lines are permanently set to the ON state.

5.2. Minor Bug Fixes

Network Status Node Address Name Incorrect

Previously, the wireless address was named 'Node Address' on SuperVisor > Terminal > Summary but named 'RF Address' on the Network Status page.

In software version 1.1.0, the name has been changed to 'Node Address' on the Network Status page.

Multiple Transmitter Tests

Previously, multiple Transmitter Tests on SuperVisor > Maintenance > Test Mode could be enabled e.g. PRBS Test Enabled and Deviation Test Enabled.

In software version 1.1.0, the Transmitter Tests are mutually exclusive.

End