



# **Aprisa XE Software Release Notes**

## **7.3.1**

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4RF Communications Ltd

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# Table of Contents

1.	Introduction.....	1
2.	Released Files.....	2
3.	Upgrade Process .....	3
3.1.	TFTP Upgrade .....	3
3.2.	Synthesizer File Update .....	4
4.	Major Changes .....	4
5.	SuperVisor.....	5
5.1.	SuperVisor Enhancements .....	5
5.2.	SuperVisor Bug Fixes .....	10
6.	Cross Connection Application .....	12
6.1.	Cross Connections Application Enhancements .....	12
6.2.	Cross Connections Application Bug Fixes .....	12
7.	Setup Menu .....	13
7.1.	Setup Enhancements.....	13
8.	MIB Changes .....	13
8.1.	MIB Bug Fixes.....	13
8.2.	New MIB Events.....	13
8.3.	New MIB Objects .....	14
9.	Backward Compatibility Issues.....	16
10.	Recommendations.....	16

## 1. Introduction

### Introduction

The previous Aprisa XE software version 7.1.4 was released for general use on the 3<sup>rd</sup> May 2006.

This release of Aprisa XE software version 7.3.1 was released for general use on the 22<sup>nd</sup> September 2006.

This document covers the major changes, product enhancements, new functionality, bug fixes and MIB changes since Aprisa XE software version 7.1.4.

### 4RF Support

Prior to upgrading Aprisa XE terminals with this software, please contact 4RF Customer Support at [support@4rf.com](mailto:support@4rf.com) to obtain the upgrade files and upgrade process.

Where possible, the customer should consider upgrading in a controlled environment before upgrading the entire network.

## 2. Released Files

**Releases Files** The following is a list of files released for Aprisa XE software version 7.3.1.

File Name	File Type	File Function
Rel_7_3_1a.cfg	TFTP Upgrade	Full TFTP upgrade - used when running 7.2.x or later
Rel_7_3_1.cfg	TFTP Upgrade	Standard TFTP upgrade - used when running 7.2.x or later
Rel_7_3_1p.cfg	TFTP Upgrade	Partial TFTP upgrade - used when running 7.2.x or later
release_7_3_1a.cfg	TFTP Upgrade	Full TFTP upgrade - used when running 7.1.x or earlier
release_7_3_1.cfg	TFTP Upgrade	Standard TFTP upgrade - used when running 7.1.x or earlier
release_7_3_1p.cfg	TFTP Upgrade	Partial TFTP upgrade - used when running 7.1.x or earlier
F_7_3_1.cfg	TFTP Upgrade	Used by Rel_7_3_1a.cfg during TFTP upgrade (FPGA firmware)
M_7_3_1.cfg	TFTP Upgrade	Used by Rel_7_3_1a.cfg during TFTP upgrade (modem)
O_7_3_1.cfg	TFTP Upgrade	Used by Rel_7_3_1.cfg during TFTP upgrade (FPGA firmware old)
P_7_3_1.cfg	TFTP Upgrade	Used by Rel_7_3_1p.cfg during TFTP upgrade (FPGA firmware partial)
R_7_3_1.cfg	TFTP Upgrade	Used by Rel_7_3_1a.cfg during TFTP upgrade process (RF synth files)
S_7_3_1.cfg	TFTP Upgrade	Used by Rel_7_3_1a.cfg during TFTP upgrade process (software)
C-fpga_E1-0-7-0.img	Firmware Image	Motherboard 1 image file
C-fpga_E2-0-5-3.img	Firmware Image	Motherboard 2 image file
C-fpga_E5-0-7-0.img	Firmware Image	QJET image file
C-fpga_E7-1-3-3.img	Firmware Image	Q4EM image file
C-fpga_E7-2-3-3.img	Firmware Image	Q4EM image file
C-fpga_E8-1-4-0.img	Firmware Image	DFXO image file
C-fpga_E8-2-4-0.img	Firmware Image	DFXO image file
C-fpga_E8-3-5-1.img	Firmware Image	DFXO image file
C-fpga_E9-0-4-0.img	Firmware Image	DFXS image file
C-fpga_E9-1-4-0.img	Firmware Image	DFXS image file
C-fpga_E9-2-4-0.img	Firmware Image	DFXS image file
C-fpga_EA-0-5-1.img	Firmware Image	Modem image file
C-fpga_EA-1-0-0.img	Firmware Image	Modem image file
C-fpga_EB-0-1-0.img	Firmware Image	QV24 image file
C-fpga_EC-0-1-3.img	Firmware Image	HSS image file
C-fpga_EC-1-1-6.img	Firmware Image	HSS image file
C-CC-K-6_0_0.img	Kernel Image	Linux Kernel
C-CC-R-7_3_1.img	Software Image	Root File System
C-crossconnect_7_3_1.cfg	Configuration	Cross Connect upgrade file
modem_7_3_0.cfg	Configuration	Modem Upgrade file - ETSI variants
snmp_exclude_7_3_1.cfg	Configuration	Used by system for Aprisa Mux / Aprisa XE OID exclusion
XE_300_400_synth.cfg	Configuration	Synthesizer Upgrade file for 300, 400 MHz frequency bands
XE_700_800_900_synth.cfg	Configuration	Synthesizer Upgrade file for 700, 800, 900 MHz frequency bands
XE_1400_synth.cfg	Configuration	Synthesizer Upgrade file for 1400 MHz frequency band
XE_2000_2500_synth.cfg	Configuration	Synthesizer Upgrade file for 2000, 2500 MHz frequency bands
C-crossconnect_7_3_1.jar	Java Application	Cross Connect - used when running 7.1.4 or later
crossconnect_7_3_1.jar	Java Application	Cross Connect - used when running 7.0.6 or earlier
C-ccapp_exe_7_3_1.jar	Java Application	Cross Connect (stand alone application)
C-CC-B-7_1_1.srec	System	Bootloader (cannot be uploaded)
C-CC-F-7_3_1.img	System	Flash File System (cannot be uploaded)
4RF-MIB.mib	SNMP MIB file	Top level MIB
4RF-APRISAXE-MIB.mib	SNMP MIB file	Aprisa XE MIB
4RF-COMMON-MIB.mib	SNMP MIB file	Common MIB
4RF-PRODUCTS-MIB.mib	SNMP MIB file	Products MIB
4RF-APRISAXE-TC.mib	SNMP MIB file	Aprisa XE Textual Conventions MIB
4RF-COMMON-TC.mib	SNMP MIB file	Common Textual Conventions MIB
4RF-APRISAXE-EVENTS.mib	SNMP MIB file	Events MIB

## 3. Upgrade Process

### 3.1. TFTP Upgrade

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#### TFTP upgrade process

To run a TFTP upgrade process:  
Select the SuperVisor menu item Local > Maintenance > Upload > TFTP Upgrade  
Type the IP address of the TFTP server in the **TFTP Server** field.  
Type the version number in the **Upgrade Version** field e.g. '7\_3\_1'.  
Click the Apply button and wait for the upgrade process to complete.  
Reboot the terminal.

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#### TFTP upgrade process types

Aprisa XE terminals running the older Bootloader software have a limitation on the number of software images that can be loaded simultaneously into a terminal.  
First, determine which Bootloader version your terminal is running by using the SuperVisor menu item Maintenance > Support Summary and look for the 'Bootloader Version' number.

- (1) If your terminal is running Bootloader version 1, use the TFTP full upgrade process.
  - (2) If your terminal is running Bootloader version 0 and running a software version prior to 7.0.6, use the TFTP partial upgrade process.
  - (3) If your terminal is running Bootloader version 0 and running a software version 7.0.6 or later, use the TFTP standard upgrade process.
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#### TFTP partial upgrade process

Run the TFTP upgrade process by typing 7\_3\_1p in the Upgrade Version field.  
This will perform a partial upgrade which will delete unnecessary image files that might be taking up space in the Image Table (which could prevent a normal upgrade).  
Reboot the terminal.  
Run a TFTP standard upgrade process on the terminal.  
Reboot the terminal again.

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#### TFTP standard upgrade process

This TFTP standard upgrade process excludes FPGA images for the newly introduced revisions of the Modem, DFXO and DFXS cards.  
To make space for the new images, manually delete 'Inactive' firmware image files by selecting the SuperVisor menu item Maintenance > Image Table, select the firmware image and click on Edit. Set the IMAGE DETAILS Command to 'Delete' and click 'Apply'.  
Reboot the terminal.  
Run the TFTP upgrade process by typing '7\_3\_1' in the Upgrade Version field.  
Reboot the terminal again.  
Additional TFTP upgrade options have been provided to load these new images separately. Run the TFTP upgrade process using the file:

- 'F1\_7\_3\_1' to load images for the newest DFXO and DFXS cards (rev D).
- 'F2\_7\_3\_1' to load images for all revisions of DFXO and DFXS cards.
- 'F3\_7\_3\_1' to load images for the newest Modem card (rev D).

Reboot the terminal again.

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### TFTP full upgrade process

Run the TFTP upgrade process by typing '7\_3\_1a' in the Upgrade Version field.  
Reboot the terminal.

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## 3.2. Synthesizer File Update

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### Synthesizer Files Update

Synthesizer files can now be updated without the need for a new software release.

When upgrading terminals that are currently running software version 7.0.6 or earlier, the Synthesizer File appropriate for the terminal frequency band, must be uploaded to each terminal before doing the TFTP software upgrade.

Frequency Band	Synthesizer File (to be installed)
300 MHz	XE_300_400_synth.cfg
400 MHz	XE_300_400_synth.cfg
700 MHz	XE_700_800_900_synth.cfg
800 MHz	XE_700_800_900_synth.cfg
900 MHz	XE_700_800_900_synth.cfg
1400 MHz	XE_1400_synth.cfg
2000 MHz	XE_2000_2500_synth.cfg
2500 MHz	XE_2000_2500_synth.cfg

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## 4. Major Changes

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### Major enhancements

The following major enhancements have been implemented in Aprisa XE software version 7.3.1:

- New ETSI 7 MHz and 14 MHz channel sizes
  - Ethernet capacity increased from 16 Mbit/s to 32 Mbit/s.
  - Local cross connection capacity has been increased from 16 Mbit/s to 64 Mbit/s.
  - Framed T1
  - Support for 600 MHz and 900 MHz frequency bands
  - Modem interleaver option
  - DFXO echo canceller
  - 2 wire DFXO / DFXS interface card changes
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### Major bug fixes

The following major bug fixes have been implemented in Aprisa XE software version 7.3.1:

- MIB load failure
-

## 5. SuperVisor

### 5.1. SuperVisor Enhancements

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#### New 7 MHz and 14 MHz support

Support has been added for the new ETSI 7 MHz and 14 MHz channel sizes. These channel sizes are available in the 2000 MHz and 2500 MHz frequency bands.

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#### Framed T1

Previously, the Aprisa XE operated the QJET E1/T1 interface in both unframed and framed E1 but only unframed T1. Framed T1 has been added to the product including the cross-connection of the 24 timeslots with CAS to voice and data interfaces.

The frame formats supported are:

T1 - SF	12 frame Super Frame without signalling.
T1 – SF 4	12 frame Super Frame with 4 state signalling (AB bits).
T1 – ESF	24 timeslots in an Extended Super Frame without signalling.
T1 – ESF 4	24 frame Extended Super Frame with 4 state signalling (AB bits).
T1 – ESF 16	24 frame Extended Super Frame with 16 state signalling (ABCD bits).

For the 24 frame ESF 4 and ESF 16, the Data Link bit is shown, but is currently unavailable for use.

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#### Modem interleaver mode

The 'Modem Interleaver Mode' is now selectable Default, On or Off from Local or Remote > Performance > Summary and Quick Links of Modem Performance Settings.

The Default Modem Interleaver Mode setting is on for channel sizes of 250 kHz and greater and off for channel sizes of 200 kHz and less.

The User Manual now gives the End to End Link Delay for both interleaver on and off options.

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#### Reset to Reboot

The terminal 'Reset' function in Maintenance > Reset has been renamed to 'Reboot' and all the function names have changed from 'reset' to 'reboot' e.g. 'hard reset' to 'hard reboot'

This was done mainly to avoid confusion with the common 'Reset' button (which resets page parameters).

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#### Interface card names

The naming of interface cards has been changed to standard names of DFXO, DFXS, QJET etc.

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#### Image table option

The 'Image Table' option has been moved from Maintenance > Upload > Image Table to Maintenance > Image Table as it was not relevant to 'Upload'.

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#### Transceiver compliance variant

The transceiver compliance variant numbers have been added to the Maintenance > Support Summary page as 'Tx op data version' and 'Rx op data version'.

These numbers will only be displayed on later versions of the transmitter or receiver modules.

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<b>Clear Alarms</b>	<p>A new Local and Remote &gt; Alarms &gt; Clear Alarms page has been added. This page includes two alarm clear functions previously shown in Local and Remote &gt; Alarm Summary page; MHSB switchover alarm and Image Table Alarm</p>
<b>SNMP settings</b>	<p>Changes have been made to the Local &gt; Maintenance &gt; SNMP &gt; SNMP Settings.</p> <p>The 'Trap Setup Summary' has been renamed to 'Trap Destination Setup'.</p> <p>The 'Community Setup Summary' has been renamed to 'Access Control Setup' to better define its purpose.</p> <p>The delete messages have been changed to reflect the new function names.</p>
<b>SNMP Trap Destination Setup</b>	<p>Previously, an IP address of 'Default' or an invalid IP address could be entered for a 'Trap Destination Setup'.</p> <p>In 7.3.1, the 'Trap Destination Setup' IP Address input has been restricted to a valid dot delimited IP address.</p>
<b>SNMP Access Control Setup</b>	<p>Previously, an IP address of 'Default' could be entered for an 'Access Control Setup' to indicate any IP address.</p> <p>An invalid IP address could also be entered for an 'Access Control Setup'.</p> <p>In 7.3.1, the 'Access Control Setup' IP Address input has been restricted to a valid dot delimited IP address or '*' or 'Any' (not case sensitive) to indicate any IP address. This wildcard for any IP address always displays as 'Any' in SuperVisor and Setup.</p>
<b>SNMP 'public' community string</b>	<p>Previously, the default SNMP community string was 'public' which only allowed read only access to the MIBII's SysGroup but not the 4RF MIB.</p> <p>In 7.3.1, we have removed 'public' as a default community string, but added the ability for a customer to enter a 'public' community string, which has full MIB access, via Supervisor or the Setup console port. Any such user, will have access to the entire MIB, including the 4RF MIB.</p>
<b>External alarm inputs</b>	<p>The external alarm inputs 'Alarm On When' options have been changed from Loop Current / No Loop Current to External Source On / External Source Off and the option is now available in MHSB mode.</p>
<b>External alarm outputs</b>	<p>The external alarm outputs 'Alarm Output Polarity' setting label has been changed to 'Relay Closed When' and the options have been changed from Normally Closed / Normally Open to Alarm Off / Alarm On.</p>

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#### External alarm input display locally option

The external alarm input 'Display Locally' option has been changed so that if the 'No' option is selected, an external alarm input;

- does not generate an alarm on the local terminal
- does not appear in the 'Alarm Table' or 'Alarm History'
- shows as grayed out on the 'Alarm Summary'.

Alarms present on a local terminal external alarm input will only be displayed in the remote terminal Alarm Table / Alarm History if it has been mapped to one of the remote terminal external alarm outputs.

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#### MHSB external alarms

Previously, the external alarm inputs 'Alarm On When' option and the external alarm outputs 'Relay Closed When' option were disabled in MHSB mode. They are now available in MHSB mode.

InputAlarm2 and OutputAlarm4 have been removed from the Alarm Summary while in MHSB mode.

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#### DFXO, DFXS, Q4EM analogue circuit levels

The setting of analogue circuit levels on the DFXO, DFXS and Q4EM interfaces has been changed from Input gain (dB) and Output gain (dB) to Input level (dBr) and Output level (dBr) respectively.

The effective change is that the Input values have changed polarity, see Aprisa XE User Manual 7.3.1 for more details.

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#### DFXS / DFXO signalling advanced

The DFXS / DFXO Signalling advanced has been enhanced by adding additional 'forced' signalling state options for the ABCD bits in the DFXO → DFXS direction and the A bit in the DFXS → DFXO direction. The options are now:

Transparent Normal	Normal transparent transmission of the CAS bit
Transparent Inverted	Transparent transmission of the CAS bit but inverts the polarity.
Forced Normal	Sets the CAS bit to 1 (inactive).
Forced Inverted	Sets the CAS bit to 0 (active).

Transparent Normal mode is used for normal traffic and Transparent Inverted mode can be used for special signalling requirements when a function needs to be reversed e.g. to change the idle polarity of the DFXS line feed voltage.

Forced modes are used to disable particular functions e.g. when polarity reversals are not required. They can also be used for system testing e.g. to apply DFXS continuous ringing output.

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#### DFXS ringing voltage with DC offsets

Previously, the DFXS would ring trip during the ringing cycle by detecting AC ringing current when the phone went off hook. The normal DC line feed voltage enables ring trip to occur with a DC loop in the silent period between the ringing cycles.

A DC offset has been added to the AC ringing signal which enables ring trip to occur with a pure DC loop (no AC current) during ringing cycles. The following options have been implemented in 7.3.1. 60 Vrms + 0 VDC

- 55 Vrms + 10 VDC
  - 50 Vrms + 18 VDC
  - 45 Vrms + 22 VDC
  - 40 Vrms + 24 VDC
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**DFXS path  
mute**

A DFXS 'path mute' function has been added to the 'DFXS Port Settings' page under the 'Output Level (dBr)' selection box.

This function is required to mute the return direction of transmission during A-A intrinsic performance testing (ITU G.712 rec 1.2 Port definitions).

No Mute - Normal signal transmission in both directions (default)

Mute TX - Mutes the signal from the DFXS to the DFXO

Mute RX - Mutes the signal from the DFXO to the DFXS

---

**DFXO echo  
canceller**

An echo canceller has been added to the DFXO to reduce circuit echo entering the DFXO interface. This feature is only available on Rev D (and later) DFXO cards (the rev of the card is shown on the printed circuit board).

The echo canceller has a disable option so that analogue data devices e.g. modems can send a disable signal to disable it while it trains its own echo canceller.

---

**DFXO current  
overload alarm**

Changes have been made as to the operation of the DFXO FxoCurrentOvld alarm.

The DFXO FxoCurrentOvld alarm activates when the current flowing in the DFXO loop current exceeds 100mA but did not clear until the DFXO loop current reduced to 22mA (which held an active alarm until the call cleared). This alarm clear threshold has been increased to 90mA.

A debounce of 2 seconds has been added to the alarm activate to prevent current transients triggering the alarm. The alarm has been disabled when the DFXO current limiter is set to on.

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## Default values changed

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Some default values have been changed in 7.3.1. They are:

### Terminal

Basic Radio Settings > Contact Details changed to 'support@4RF.com' from '@root'

Basic Radio Settings > Modulation changed to '16 QAM' from 'No modulation'

Advanced Radio Settings > IP Address changed to '169.254.50.10' from '0.0.0.0'

Advanced Radio Settings > Subnet mask changed to '255.255.0.0' from '0.0.0.0'

Advanced Radio Settings > Remote Address changed to '169.254.50.20' from '127.0.0.1'

External alarms > Alarm Output Polarity changed to 'Normally Open' from 'Normally Closed'

Cross Connect DFXS / DFXO Signalling mode changed to 'Multiplexed' from 'Non Multiplexed'

### DFXO

Slot > Input Level (dBr) changed to '-4.0 dBr' from '0.0 dBr'

Slot > Output Level (dBr) changed to '-1.0 dBr' from '0.0 dBr'

DFXO Control > Billing Tone > Frequency changed to '16 kHz' from '12 kHz'

### DFXS

Slot > Input Level (dBr) changed to '+1.0 dBr' from '0.0 dBr'

Slot > Output Level (dBr) changed to '-6.0 dBr' from '0.0 dBr'

DFXS Control > Billing Tone > Frequency changed to '16 kHz' from '12 kHz'

DFXS Control > Billing Tone > Level changed to '300 mV' from '250 mV'

DFXS Control > Ringer Settings > Level changed to '45 Vrms + 22 VDC' from '50 Vrms'

### Q4EM

Port Control > Input Level (dBr) changed to '+0.0 dBr' from '-10 dBr'

Port Control > E wire changed to 'Normal' from 'Inverted'

Port Control > M wire changed to 'Normal' from 'Inverted'

### QV24

Port Control > Baud Rate changed to '9600' from '300'

### HSS

Port Settings > Clocking > XTxC changed to 'Disabled' from 'Enabled'

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## 5.2. SuperVisor Bug Fixes

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### TX and RX frequency input rounding

Previously, TX and RX Frequency input in 'Basic Terminal Settings' rounded to 4 digits so frequencies with synthesizer step sizes of 6.25 kHz displayed the last digit as a zero.

This has been corrected in 7.3.1 by changing the TX and RX Frequency input rounding to 5 digits.

---

### TX power warning message

Previously, when entering an incorrect TX power level in 'Basic Terminal Settings', the 'pop-up' warning displayed 'The selected power is not supported at this QAM level'.

This has been corrected in 7.3.1 by changing the 'pop-up' warning message to 'The selected TX power is not supported at the Modulation type selected' and 'Valid range is +15 to +29 dBm'.

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### TX and RX frequency warning message

Previously, when entering an incorrect TX or RX frequency in 'Basic Terminal Settings', the 'pop-up' warning displayed 'The selected frequency is not supported at this QAM level'.

This has been corrected in 7.3.1 by changing the 'pop-up' warning message to 'The selected frequency is not supported by this product variant' and 'Valid range is 1350 – 1550 MHz'.

---

### MIB load failure

Previously, loading a saved MIB file (Maintenance > Config Files > Load MIB):

- Could fail due to incorrectly set data in the saved MIB file.
- Would indicate a status of 'Succeeded' but option parameters associated with DFXO, DFXS or QV24 interface cards would be incorrectly set.

This has been corrected in 7.1.6 and 7.3.1.

---

### DFXO nominal level operating range error

Previously, the DFXO had a nominal input and output level operating range of -10 dBr to +10 dBr.

The DFXO nominal levels > +1 dBr did not provide a +3.14 dBm0 overhead required by ITU G.712.

The 7.3.1 DFXO nominal input and output level operating range has been reduced to a maximum of +1dBr i.e. a stated nominal level range of -10 dBr to +1 dBr.

---

### DFXS / DFXO metering failure

Previously on a new terminal (initialised defaults), SuperVisor default was 12 kHz but the DFXS / DFXO metering circuitry was operating at 16 kHz, so 12 kHz metering did not work.

After changing the SuperVisor metering setting, DFXS / DFXO metering worked correctly.

This has been corrected in 7.3.1.

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**DFXS / DFXO  
level error with  
complex**

Previously, the DFXS / DFXO had a level error with the Line Impedance set to any complex impedance or 900 ohms and was correct only with 600 ohms and 600 ohms + 2.16uF.

The level error was approx -1.6dB D-A and +1.6 A-D.

This has been corrected in 7.3.1.

---

**DFXS metering  
output levels**

The DFXS metering source impedance is determined by the DFXS line impedance setting but is typically measured on line as terminated with 200  $\Omega$ .

Previously, the DFXS metering output level was preset to deliver the stated mV output into 200  $\Omega$  but for a line impedance setting of 600  $\Omega$  only.

In 7.3.1, the DFXS will deliver the stated mV rms into 200  $\Omega$  independent of the DFXS line impedance setting. The metering voltage into 200  $\Omega$  is limited by the maximum open circuit voltage of 1 Vrms. The drop down list reflects the maximum allowable billing tone output voltage for the Line Impedance setting selected.

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**QJET AIS alarm  
change**

Previously, the QJET AIS alarm was incorrectly named 'AIS Output'.

This has been renamed 'AIS Received' to indicate the receiving of the AIS signal from the downstream system.

This has been corrected in 7.3.1 during the framed T1 introduction.

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**QJET sending  
RAI**

Previously, the QJET in framed E1 modes was not outputting Remote Alarm Indicator (RAI TS0 NFAS bit3) with LOS or LOF.

This has been corrected in 7.3.1 during the framed T1 introduction.

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**Q4EM port  
loopback**

Previously, if a loopback was attempted on an inactive Q4EM interface port, the port did not loopback and no warning message was given.

A warning message has been added "Loopbacks cannot be enabled on an inactive interface port".

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## 6. Cross Connection Application

### 6.1. Cross Connections Application Enhancements

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#### Framed T1 modes

Cross connect support has been added for the new framed T1 modes.

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#### Local cross connections capacity

Previously, the Cross Connect application allowed a maximum of 16 Mbit/s for local cross connections.

This has been increased in 7.3.1 to up to a maximum of 64 Mbit/s minus the 'Total Capacity' of the radio link.

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#### Interface card names

The naming of interface cards has been changed to standard names of DFXO, DFXS, QJET etc.

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### 6.2. Cross Connections Application Bug Fixes

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#### RF errors caused by activating cross connects

Previously, the process of activating cross connections caused some uncorrectable and correctable errors on both terminals (one QJET port cross connected).

This bug could have caused modem alarms and interface ports could have taken longer to re-establish traffic.

This has been corrected in 7.3.1.

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#### Cross connect matrix maximum warning

Previously, if the number of required cross connections exceeded the cross connect matrix maximum (more of an issue with larger capacity radios), not all cross connections were made and activated, and the user was not made aware of the problem.

This has been corrected in 7.3.1 by displaying a progress bar of the number of ports that have activated. The user can cancel the polling by pressing the "cancel" button on the dialog box.

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#### Drag action on range of timeslots bug

Previously, after selecting a range of framed E1/T1 timeslots by holding down the Shift key and clicking on the row number, the 'drag' action to create the cross connection was not recognised at first and would only succeed on the second attempt.

This has been corrected in 7.3.1.

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## 7. Setup Menu

### 7.1. Setup Enhancements

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#### SNMP Settings

Changes have been made to the '4) Configure SNMP'.

'1) Display SNMP Settings' 'Trap Setup Summary' renamed to 'Trap Destination Setup' and 'Community Setup Summary' has been renamed to 'Access Control Setup'

'2) Set Community String' has been changed to '2) Add SNMP Access Control'

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## 8. MIB Changes

### 8.1. MIB Bug Fixes

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None

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### 8.2. New MIB Events

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None

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### 8.3. New MIB Objects

Type	Parent	Parent Object	Object ID	Syntax	Description
OBJECT-TYPE	1	aprisaXECCActivationStatusTableEntry	aprisaXECCActivationStatusSlotIndex	AprisaXESlotNumber rxSlot (0), txSlot (1), -- MUX card slots slotA (2), slotB (3), slotC (4), slotD (5), slotE (6), slotF (7), slotG (8), slotH (9), -- Modem auxSlot (10), noSlot (255)	Slot index for CC Activation Status table
OBJECT-TYPE	1	aprisaXECCActivationStatusTable	aprisaXECCActivationStatusTableEntry	aprisaXECCActivationStatusTableEntry	entries for CC Activation status table
OBJECT-TYPE	2	aprisaXECrossConnectControl	aprisaXEMotherboardExtendedModeCapable	extModeNo (0), extModeYes (1)	Allows the cross connect application to determine whether to stripe cross connections or not.
OBJECT-TYPE	2	aprisaXECCActivationStatusTableEntry	aprisaXECCActivationStatus	AprisaXECCActivationStatus ccActivated (0), ccActivationFailed (1), ccBusyActivating (2)	Cross-connect activation status i.e activated, failed or currently busy activating
OBJECT-TYPE	3	aprisaXECrossConnectControl	aprisaXEEthernetActivationStatus	AprisaXECCActivationStatus ccActivated (0), ccActivationFailed (1), ccBusyActivating (2)	Ethernet activation status i.e activated, failed or currently busy activating
OBJECT-TYPE	9	aprisaXEQquadJetIFConfigEntry	aprisaXEQquadJetTxWaveFormShaper	AprisaXEQquadJetWaveFormShapers wfs0To133Ft (2), wfs133To266Ft (3), wfs266To399Ft (4), wfs399To533Ft (5), wfs533To655Ft (6)	This indicates the T1 Tx Waveform Shaper for a port; 0~133 ft, 133~266 ft, 266~399 ft, 399~533 ft, 533~655 ft.
OBJECT-TYPE	9	aprisaXEFXOPortControlTableEntry	aprisaXEFXOInputLevel	AprisaXEFXOInputLevel dfxoadpos10(22), dfxoadpos05(21), dfxoadpos0(20), dfxoadneg05(19), dfxoadneg10(18), dfxoadneg15(17), dfxoadneg20(16), dfxoadneg25(15), dfxoadneg30(14), dfxoadneg35(13), dfxoadneg40(12), dfxoadneg45(11), dfxoadneg50(10), dfxoadneg55(9), dfxoadneg60(8), dfxoadneg65(7), dfxoadneg70(6), dfxoadneg75(5), dfxoadneg80(4), dfxoadneg85(3), dfxoadneg90(2), dfxoadneg95(1), dfxoadneg100(0)	Input Level -10.0 dBr to +1.0 dBr in half db steps
OBJECT-TYPE	9	aprisaXEFXSPortControlTableEntry	aprisaXEFXSInputLevel	AprisaXEFXSInputLevel dfxsadpos30(25), dfxsadpos25(24), dfxsadpos20(23), dfxsadpos15(22), dfxsadpos10(21), dfxsadpos05(20), dfxsadpos0(19), dfxsadneg05(18), dfxsadneg10(17), dfxsadneg15(16), dfxsadneg20(15), dfxsadneg25(14), dfxsadneg30(13), dfxsadneg35(12), dfxsadneg40(11), dfxsadneg45(10), dfxsadneg50(9), dfxsadneg55(8), dfxsadneg60(7), dfxsadneg65(6), dfxsadneg70(5), dfxsadneg75(4), dfxsadneg80(3), dfxsadneg85(2), dfxsadneg90(1)	Input Level -9.0 dBr to +3.0 dBr in half db steps
OBJECT-TYPE	10	aprisaXEFXOPortControlTableEntry	aprisaXEFXOOutputLevel	AprisaXEFXOOutputLevel dfxodapos10(18), dfxodapos05(19), dfxodapos0(20), dfxodaneg05(21), dfxodaneg10(22), dfxodaneg15(23), dfxodaneg20(24), dfxodaneg25(25), dfxodaneg30(26), dfxodaneg35(27), dfxodaneg40(28), dfxodaneg45(29), dfxodaneg50(30), dfxodaneg55(31), dfxodaneg60(32), dfxodaneg65(33), dfxodaneg70(34), dfxodaneg75(35), dfxodaneg80(36), dfxodaneg85(37), dfxodaneg90(38), dfxodaneg95(39), dfxodaneg100(40)	Output Level -10.0 dBr to +1.0 dBr in 0.5 db steps
OBJECT-TYPE	10	aprisaXEFXSPortControlTableEntry	aprisaXEFXSOutputLevel	AprisaXEFXSOutputLevel dfxsadpos25(1), dfxsadpos20(2), dfxsadpos15(3), dfxsadpos10(4), dfxsadpos05(5), dfxsadpos0(6), dfxsadneg05(7), dfxsadneg10(8), dfxsadneg15(9), dfxsadneg20(10), dfxsadneg25(11), dfxsadneg30(12), dfxsadneg35(13), dfxsadneg40(14), dfxsadneg45(15), dfxsadneg50(16), dfxsadneg55(17), dfxsadneg60(18), dfxsadneg65(19), dfxsadneg70(20), dfxsadneg75(21), dfxsadneg80(22), dfxsadneg85(23), dfxsadneg90(24), dfxsadneg95(25)	Output Level -9.5 dBr to +2.5 dBr in 0.5 db steps
OBJECT-	11	aprisaXEFXSPortControlTableEntry	aprisaXEFXSPathMute	AprisaXEFXSPathMute noMute(0), muteRx(16), muteTx(32)	Applies DFXS Mute Function - No

Type	Parent	Parent Object	Object ID	Syntax	Description
TYPE					Mute, Mute Rx or Mute Tx
OBJECT-TYPE	12	aprisaXE4WirePortControlTableEntry	aprisaXE4WireInputLevel	AprisaXE4WInputLevel q4emadpos40(36), q4emadpos35(35), q4emadpos30(34), q4emadpos25(33), q4emadpos20(32), q4emadpos15(31), q4emadpos10(30), q4emadpos05(29), q4emadpos0(28), q4emadneg05(27), q4emadneg10(26), q4emadneg15(25), q4emadneg20(24), q4emadneg25(23), q4emadneg30(22), q4emadneg35(21), q4emadneg40(20), q4emadneg45(19), q4emadneg50(18), q4emadneg55(17), q4emadneg60(16), q4emadneg65(15), q4emadneg70(14), q4emadneg75(13), q4emadneg80(12), q4emadneg85(11), q4emadneg90(10), q4emadneg95(9), q4emadneg100(8), q4emadneg105(7), q4emadneg110(6), q4emadneg115(5), q4emadneg120(4), q4emadneg125(3), q4emadneg130(2), q4emadneg135(1), q4emadneg140(0)	Input Level -14.0 dBr to +4.0 dBr in half db steps
OBJECT-TYPE	13	aprisaXE4WirePortControlTableEntry	aprisaXE4WireOutputLevel	AprisaXE4WOutputLevel q4emdapos40(0), q4emdapos35(1), q4emdapos30(2), q4emdapos25(3), q4emdapos20(4), q4emdapos15(5), q4emdapos10(6), q4emdapos05(7), q4emdapos0(8), q4emdaneg05(9), q4emdaneg10(10), q4emdaneg15(11), q4emdaneg20(12), q4emdaneg25(13), q4emdaneg30(14), q4emdaneg35(15), q4emdaneg40(16), q4emdaneg45(17), q4emdaneg50(18), q4emdaneg55(19), q4emdaneg60(20), q4emdaneg65(21), q4emdaneg70(22), q4emdaneg75(23), q4emdaneg80(24), q4emdaneg85(25), q4emdaneg90(26), q4emdaneg95(27), q4emdaneg100(28), q4emdaneg105(29), q4emdaneg110(30), q4emdaneg115(31), q4emdaneg120(32), q4emdaneg125(33), q4emdaneg130(34), q4emdaneg135(35), q4emdaneg140(36)	Output Level -14.0 dBr to +4.0 dBr in 0.5 db steps
OBJECT-TYPE	20	aprisaXEFXSControlTableEntry	aprisaXEFXSABitOffHook	AprisaXE2WireSignalState fxTransNormal(0), fxTransInvert(1), fxForcedNormal(2), fxForcedInvert(3)	set the CAS A off hook bit to Transparent Normal, Transparent Inverted, Forced Normal or Forced Inverted
OBJECT-TYPE	21	aprisaXEFXOControlTableEntry	aprisaXEFXOABitOffHook	AprisaXE2WireSignalState fxTransNormal(0), fxTransInvert(1), fxForcedNormal(2), fxForcedInvert(3)	set the CAS A off hook bit to Transparent Normal, Transparent Inverted, Forced Normal or Forced Inverted
OBJECT-TYPE	37	aprisaXEReceiver	aprisaXEReceiverOperationalDataVersion	DisplayString	The version of the operational data of the receiver
OBJECT-TYPE	38	aprisaXEReceiver	aprisaXEReceiverSwCompatibility	INTEGER	The receiver software compatibility number
OBJECT-TYPE	39	aprisaXETransmitter	aprisaXETransmitterOperationalDataVersion	DisplayString	The version of the operational data for the transmitter
OBJECT-TYPE	40	aprisaXETransmitter	aprisaXETransmitterSwCompatibility	INTEGER	The transmitter software compatibility number
OBJECT-TYPE	202	aprisaXEObjects	aprisaXECCAActivationStatusTable	SEQUENCE OF aprisaXECCAActivationStatusTableEntry	CC Activation status table



## 9. Backward Compatibility Issues

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### Hardware Variants

Any hardware variant of Aprisa XE terminal can be upgraded with this software.

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### Link Software

Aprisa XE radio links with different software versions can exist in the same network, however, both terminals of an individual link must be running the same software version.

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## 10. Recommendations

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### Java 1.5 JRE

That all PCs running the Aprisa XE support software, SuperVisor and the Cross Connections application be upgraded to Java 1.5 JRE (JVM).

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End