

Release Note Quadro4x16x 4.1.57, Edition 2

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1 Introduction

This Release Note describes hardware and software requirements to use with the

Quadro4x16x software 4.1.57 Date: April 8, 2008

Additional enhancements, bug fixes and known issues incorporated in this software will be listed as known.

Date: April 9, 2008

2 Requirements

2.1 Hardware requirements

- The software can be used on all Quadro4x16x models.
- The model name is written on the back plate of the unit and the model number is on the bottom label.

2.2 Software requirements

- A software upgrade can be made from 2.4.50 or later software.

2.3 Supported SIP phones

Below is the list of SIP phones with the corresponding firmware versions that are supported by Epygi and are recommended for optimal compatibility with Quadro4x/16x.

Please Note: Any problems and limitations on the SIP phones listed below are described in detail in the **Quadro Features on Supported IP Phones** document. The document **Quadro Features on Tested IP Phones** describes the problems and limitations on the SIP phones that have been tested by Epygi. Both documents are available at www.epygi.com and can be found under the Channel's Portal.

Vendor	Model	Software
SNOM	300	Application: snom300-SIP 6.5.15
SNOM	320	Application: snom320-SIP 6.5.15
SNOM	360	Application: snom360-SIP 6.5.15
SNOM	370	Application: snom370-SIP 7.1.30
Aastra	480i	Application version: 1.4.2.1081
Aastra	9112i	Application version: 1.4.2.1081
Aastra	9133i	Application version: 1.4.2.1081
Aastra	51i	Application version: 2.2.0.166
Aastra	53i	Application version: 2.2.0.166
Aastra	55i	Application version: 2.2.0.166
Aastra	57i	Application version: 2.2.0.166
QCM		4.1.12

2.4 Interaction with other Quadro SW releases

The Quadro4x/16x with SW 4.1.57 can use a QuadroISDN as an external PSTN gateway in the shared mode only if QuadroISDN is running a SW version 4.1.40 or higher. This limitation does not apply to the QuadroFXO gateway.

3 New Features History

The table below indicates a high-level list of new features that have been added beginning with the most recent Quadro4x/16x release.

Release	New Features
4.1.57	
4.1.52	The results of system configuration backup & download are reflected in the system events
	Snom and Aastra phones automatically get rebooted when the Quadro is rebooted
	Added auto configuration support for the following IP phone models: Aastra51i, Snom370
	Added MSN selection for ISDN Point-To-Point mode
	Added ISDN BRI timeslot selection in Call Routing (for Japan ISDN)
	Added "Start USB Flash Memory Testing" button under System Diagnostics
	Adjusted timezone parameters for Venezuela according to new standards
4.1.40	IP phones do not lose registration after Quadro soft reboot (i.e. if the reboot is not initiated by disconnecting/reconnecting the power or pressing the reset button on the back of the Quadro)
	Possibility to upload and customize system messages (in the uploadownmessages.cgi hidden page)
	Attendant Ringing Announcement is now available both for default and custom AA scenarios and the selection is moved to the bottom in Attendant Scenario Settings page
	Possibility to change the default memory size to be allocated as a temporary storage for unified FAX message (in the extmanagement.cgi hidden page)
	The 3PCC Settings option was added under Telephony menu
	Multiedit support in Extensions Management for Codec Settings
4.1.33	Support for HotCall Add-In
	SIP Address Resetting function in the Extensions Management for restoring the default SIP settings of extensions
	Possibility to change static, running logos, links and browser mini logo (accessible from loadlogo.cgi hidden page)
	Possibility to change the signaling procedure for hold process in case the "Send Hold Music to Remote Party" is enabled on the extension
	Added auto configuration support for the following IP phone models: Aastra53i, Aastra55i, Aastra57i, Aastra57iCT, Grandstream GXP-2000, BT-200, BT-100 (not fully automatic yet), ATL Berkshire 5000, Thomson ST2030s
	Use Session Timer checkbox is added in the IP line settings page
	Added PnP for the Aastra53i, Aastra55i, Aastra57i, Aastra57iCT
4.1.28	
4.1.22	Support of 2-stage dialing for ISDN BRI

Release	New Features
	Initial VM Setup via Phone
4.1.18DS	Support for US new Daylight saving rules
4.1.18	<p>SIP Trunk</p> <p>3rd Party Call Control</p> <p>Flexible Numbering Plan for extensions</p> <p>ISDN NT Mode</p> <p>Download IP phone FW and Reboot of Aastra/Snom IP Phones</p> <p>Download Quadro Directory via XML to Snom/Aastra phones</p> <p>IP Phone Plug-and-Play</p> <p>Automatic Quadro FW update</p> <p>Easier GUI for forwarding lists</p> <p>Use 8 and 9 for extensions</p> <p>Kill a call from Active Calls page</p> <p>Detect FAX ring/voice ring for Australia</p> <p>Use List package for QCM/Quadro notifications</p> <p>Distinctive ringing on Snom and Aastra IP phones</p> <p>Play custom message instead of ring back tone on Auto Attendant</p> <p>Add month/weekday to filter</p> <p>Incoming inter digit service (for E1/T1 CAS)</p> <p>Send EVENTS via SMS</p> <p>CDR Tags for Billing</p> <p>DNS/DHCP enhancement</p> <p>Daylight savings adjustment</p> <p>SMS and E-mail notification about the call forwarding</p> <p>Change extension password from phone handset</p> <p>Access to extension voice mailbox from outside by-pass the auto attendant</p> <p>Automatic backup and download of Quadro configuration</p>

Release	New Features																															
4.0.4	Support for SOHO-MB 0307																															
	IP Line capacity changes, including new IP Line licensing. The following chart compares the previous IP Phone capacities to the new IP Phone capacities.																															
	<table border="1"> <thead> <tr> <th colspan="8" data-bbox="313 405 1474 436">IP Phone Capacity Changes (FXS + IP)</th> </tr> <tr> <th data-bbox="313 436 459 489">Model</th> <th data-bbox="459 436 589 489">3.x Base Capacity</th> <th data-bbox="589 436 735 489">Expansion Options</th> <th data-bbox="735 436 865 489">3.x Max Capacity</th> <th data-bbox="865 436 995 489">New Base Capacity</th> <th data-bbox="995 436 1125 489">Expansion 1</th> <th data-bbox="1125 436 1255 489">Expansion 2</th> <th data-bbox="1255 436 1474 489">New Max Capacity</th> </tr> </thead> <tbody> <tr> <td data-bbox="313 489 459 541">Quadro4x</td> <td data-bbox="459 489 589 541">4 + 4</td> <td data-bbox="589 489 735 541">12 User Expansion</td> <td data-bbox="735 489 865 541">4 + 16</td> <td data-bbox="865 489 995 541">4 + 30</td> <td data-bbox="995 489 1125 541">16 User Expansion</td> <td data-bbox="1125 489 1255 541">16 User Expansion</td> <td data-bbox="1255 489 1474 541">4 + 62</td> </tr> <tr> <td data-bbox="313 541 459 594">Quadro16x</td> <td data-bbox="459 541 589 594">16 + 16</td> <td data-bbox="589 541 735 594">32 User Expansion</td> <td data-bbox="735 541 865 594">16 + 48</td> <td data-bbox="865 541 995 594">16 + 18</td> <td data-bbox="995 541 1125 594">16 User Expansion</td> <td data-bbox="1125 541 1255 594">16 User Expansion</td> <td data-bbox="1255 541 1474 594">16 + 50</td> </tr> </tbody> </table>	IP Phone Capacity Changes (FXS + IP)								Model	3.x Base Capacity	Expansion Options	3.x Max Capacity	New Base Capacity	Expansion 1	Expansion 2	New Max Capacity	Quadro4x	4 + 4	12 User Expansion	4 + 16	4 + 30	16 User Expansion	16 User Expansion	4 + 62	Quadro16x	16 + 16	32 User Expansion	16 + 48	16 + 18	16 User Expansion	16 User Expansion
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Quadro16x	16 + 16	32 User Expansion	16 + 48	16 + 18	16 User Expansion	16 User Expansion	16 + 50																									
3.1.31	QCM centralized licensing included																															
	SNMP support for event monitoring																															
	Intercom service (for Snom, Aastra480i and Aastra480e phones)																															
	Paging group service (for Snom, Aastra480i and Aastra480e phones)																															
	Redirection on timeout to the specified address if no action on the AA welcome message																															
	AA welcome and menu messages enabling/disabling capability																															
	Call queue for virtual extensions																															
	Toggling for call routing entries from the handset																															
	Retrieve timeout configuration for parked call																															
	SDMF Caller ID standard																															
	Routing rules activity timeout																															
3.1.23																																
3.1.12	Capability to make SIP calls using TCP as a transport protocol																															
	"Client Code Identification" feature on routing rule (with RADIUS enabled)																															
	Receptionists' Call Queue																															
	Extension Status Monitoring																															
	Call Interception																															
	Direct Transfer to Voicemail																															
	Call Park Capability on IP Phones																															
Call Pickup Group																																
Paging support with 3rd party devices																																

Release	New Features
	Simplified IP Phone Installation (auto configuration for certain IP phones)
	Administrator Rights Management
	Support for an External Voicemail System
	Empty Voicemail Truncation
	QuadroFXO Auto Configuration
	Proprietary method for Remote Extension to bypass certain types of NAT (Symmetric RTP)
	Status for Registered IP Lines and Remote Extensions
	Readable Transfer statistics
	New voice mail notifications via phone and via SMS
	Universal extension recording (music on hold, VM greetings, incoming/outgoing blocking messages)
	Sending unified fax message from mailbox to fax machine

4 Changed Features History

The following table provides a high-level list of new features that have been changed beginning with the most recent Quadro4x/16x release.

Release	Changed Features
4.1.57	Changed the tone detection mechanism to resolve FXO disconnect problems in South Africa
4.1.52	The minimum value of SIP Registration Timeout parameter for IP lines is limited to 120 seconds. For more details see Technical Advisory chapter.
	The memory used by "DSP Capture", "Call Capture" and "Network Capture" hidden pages is limited to 3 Mb. This will put a limitation on the duration of captured file
	The maximum length of VM sent by email is limited to 3 minutes
	The no-answer timeout range for extensions is increased to 180 seconds
	The maximum count for allowed MSN numbers is increased from 10 to 16
	The number of VMs in the mailbox for one extension is limited to 300
	The firmware version control for IP lines is forcefully disabled to avoid problems on the phone during FW upgrade. If user is sure he needs that, he should re-enable that after upgrade
	Use Session Timer in IP Line Settings is deselected by default
4.1.40	SNMP is disabled in default configuration
	Call bandwidth usage statistics is temporarily removed
	The Call Park feature has been changed so that pressing the pound key (#) is no longer required if a password has not been assigned to the CP Extension
	IP line status and SIP registration status are shown in separate pages under Quadro Status
	The "SIP Tunnels to Slave Devices" and "SIP Tunnels to Master Devices" shown under Quadro status only if there is at least one SIP tunnel active of the corresponding type
	The "SIP Trunk" is renamed to "SIP Tunnel"
	Increased the logs capacity of the Quadro by archived logging
	The echo cancellation parameters for ISDN trunks are optimized: the default values for NLP Difference and NLP Shift are set to 6 dB and 3 dB accordingly (in the trunkecho.cgi hidden page)
	New Zealand Daylight Savings Changed
	The default domain name "epygi-config.com" replaced with "epygi-config.loc"
	ISDN wizard improved
	The default registration timeout for all IP phones is set to 1 hour
Telephone Event Draft Support checkbox removed from RTP Settings	
4.1.33	Best Matching Algorithm is modified

Release	Changed Features
4.1.22	Two new IP-PSTN providers in the "VoIP Carrier Wizard" list (AGN and Netlogic)
4.1.18DS	
4.1.18	Backup and Restore configuration procedure changed
	Download and Upload Legible configuration procedure changed
4.0.4	
3.1.31	Call back through call routing and IP/IP-PSTN implemented
	SMS settings redesigned allowing providers different from Clickatel
3.1.12	Hunt Group Changes
	Extensions Management –GUI is enhanced
	VoIP Carriers Wizard Pre-configured Carriers list expanded

5 Fixed Issues

Issues fixed since version 4.1.52:

The length for SIP registration password field is not sufficient		14188
D:	The SIP registration password field in both "VoIP Carrier Wizard" and "Extension Management" is limited to 20 digits.	
C:	It is not sufficient for some providers.	
The Single URL field under Filtering rules is too small		14241
D:	The field does not allow you to enter DNS URL for some providers. For example, it is too small for the "teleprime.dnsalias.com" URL.	
C:	The field needs to be larger to support longer URL names.	
Quadro reboot changes the memory allocation from USB Flash to embedded memory storage		13911
D:	This happens when using USB memory with a capacity of 512 MB and more.	
C:		
Memory allocation changes from embedded to external USB is incorrect for USB sticks 512MB and larger USB flash memories		13979
D:	When changing memory allocation from embedded to USB, the formatting and data copying is performed for the very first time only. Later, even if the data on USB stick is changed, no formatting and no copying is performed.	
C:	The voice mails and custom greeting will be lost.	

6 Known Issues

- D: Description
 C: Consequences
 Fix: How to avoid the situation, or what to do in case the situation has occurred.

The Voice Mail option of "Sending new voice message notification via phone call" option does not work for notification calls to a PBX extension 9716	
D:	Using the "Send new voice message notifications via phone call" feature in Voice mail settings for an extension doesn't work for PBX calls. The Quadro will not send notification via a PBX call to a phone when receiving a new voice message. This includes selecting call type as 'PBX' or 'Auto' and entering the extension number.
C:	No consequences
Fix:	Voice mail notifications via a phone call should use SIP calls through a SIP server.
It is impossible to login as 'admin' after making changes on "Advanced PPP Settings" page 9549	
D:	You cannot login to the Quadro as 'admin' after making changes on the "Advanced PPP Settings" page. You can only login as 'user'.
C:	No consequences
Fix:	Restart the Quadro to resolve this.
One way audio with IPsec VPN in the scenario "Gateway<->Remote Subnet" 9327	
D:	Scenario: <ol style="list-style-type: none"> 1. Establish an IP-Sec connection between two Quadros (connection type is "Quadro <-> Remote Subnet"). 2. Make an SIP call from Quadro1 (gateway) to Quadro2 (remote subnet).
C:	The call is established, but there is no audio in Quadro1. The same result will occur when calling from Quadro2 to Quadro1. A direct call cannot be established at all.
Fix:	Add an additional "Quadro <> Remote Gateway" tunnel in IPsec configuration. With two tunnels: "Quadro <> Remote Gateway", "Quadro <> Remote Subnet" in IPsec VPN configuration this issue will resolved.
Call interception fails in a specific scenario with a watched extension in the many extension ring list 9399	
D:	Scenario: <ol style="list-style-type: none"> 1. Use Snom360 for receptionist extension (for example, extension #31), 2. Configure Many Extension Ringing on ext. #31 with extensions #31 and #12 in the MER list, 3. Configure extensions #11 and #12 as watched extensions, 4. Make a call to extension #31, 5. The phones for extensions # 31 and #12 will start ringing. 6. The programmable key for the ext. #12 is flashing on the receptionist's ext. #31, 7. Pressing that key the receptionist stops ringing, but ext. #12 is still ringing, 8. Hang-up the phone for that caller's extension.
C:	Call interception on the receptionist's line fails. The light for ext. #11 will stay ON on the ext. #31.
Fix:	This problem is specific for Snom phones only. When using a Snom phone, calls should be answered on your own extension and not the watched extension.

Firmware update cannot be completed when "High availability" is enabled in SIP Settings page		12306
D:	Scenario: <ol style="list-style-type: none"> 1. Using SIP Timers radio button in Telephony-SIP Settings, define the timeouts of the SIP messages retransmission as "High availability". 2. Try to make firmware update. 	
C:	Firmware update will hang and not complete	
Fix:	Set the SIP Timer to RFC3261 standard before firmware update. Under investigation, will be fixed in the future releases.	
An issue when transferring calls from PSTN to PSTN on Quadro IP PBX configured with the QuadroFXO in shared mode		13202
D:	Scenario: <ol style="list-style-type: none"> 1. The Quadro IP PBX is configured in shared mode with the QuadroFXO. 2. The PSTN lines of the Quadro IP PBX are connected to QuadroFXO. 3. PSTN call to Quadro IP PBX is being transferred back (blindly or with consultation) to a PSTN destination. 	
C:	The transferred calls are not displayed under active calls and in Call Statistic on the Quadro IP PBX.	
Fix:	Under investigation, will be fixed in the next release.	
Filtering does not work correctly for manually added routing rule when Quadro IP PBX is in shared mode with the QuadroFXO		13145
D:	Scenario: <ol style="list-style-type: none"> 1. On the Quadro IP PBX add manually a call routing rule for calls to FXO 2. Configure Quadro IP PBX with the QuadroFXO in the shared mode. 3. Select "Filter on Caller / Call Type / Modify Caller ID" checkbox for that routing rule, specify the "Inbound Call Type" as PBX, the "Inbound Caller Pattern" as an extension (or a range of extensions). 4. Try to use that routing rule from the specified extension (or from any extension in specified range). 	
C:	If the SIP username for the extension differs from extension number this rule shall not work. Call will pass through another routing rule for QuadroFXO with pattern (*).	
Fix:	Under investigation, will be fixed in the future releases.	
Redirection on Call Queue is not working when activated on an IP Line		12918
D:	Scenario: <ol style="list-style-type: none"> 1. Activate Call Queue on an extension attached to the IP line, 2. Enable Redirection to some address, 3. Make a call to that line while the attached phone is off-hook 	
C:	When the line is off-hook but not in a call, the calls in queue will not be redirected and will stay in the queue.	
Fix:	Will be fixed in the next release.	
Redirection on Call Queue is not working on virtual extensions		13198
D:	Scenario: <ol style="list-style-type: none"> 1. Activate Call Queue on a virtual extension, 2. Enable Redirection to some address, 3. Make a call to that virtual extension to enter the call queue 	
C:	The call in queue will not be redirected and will stay in the queue.	
Fix:	Will be fixed in the next release.	

An issue with configuring IP phones as local extensions for Quadro IP PBX	
13471	
D:	Plug and Play and Auto configuration of IP phones is impossible with the modified "HTTP Server Port" on the Quadro.
C:	
F:	Add the changed http port value in the "option tftp-server-name" row ("dhcpd.conf.lan" file) for each IP phone. Example: "option tftp-server-name "http://172.30.38.1:8080". Will be fixed in the future releases.
"Name recording" from Admin Login (*75) does not apply to the entries in the "Extensions Directory"	
13454	
D:	
C:	
F:	Upload user names for extensions one by one. Will be fixed in the next release.
Incorrect call routing on external PSTN gateways in shared mode with IP PBX	
13757	
D:	Scenario: <ol style="list-style-type: none"> 1. There are several routing rules on the Quadro IP PBX with the same pattern, 2. The fail reason is activated for all routing rules, 3. The shared mode is activated on both Quadro IP PBX and gateway to allow Quadro IP PBX using PSTN lines for external gateway (QuadroISDN or QuadroFXO).
C:	The automatically generated routing rules on the external gateway has a fail reason "None" and only the first routing rule is functional.
F:	Under investigation, will be fixed in the next release.
Snom IP phone lose the dial tone after leaving voice mail with duration of about 10 minutes	
13880	
D:	The dial tone, also ring tone and voice are lost on the Snom IP phone once a voice mail of about 10 minutes long is recorded.
C:	
F:	Select "Use Session Timer" checkbox in IP line settings to resolve this problem. Reboot the phone to restore the functionality if this condition happens. Under investigation.
Some of the Quadro voice mail services could be unavailable if external Voice Mail is in use for extension	
12190	
D:	In this scenario some of the features, for example Zero-out and entering the VMS directly with option "1" will not work.
C:	
F:	This is normal, as those features are the Quadro's internal VMS system features. If external VMS system is used, user gets the features of that external system.
Snom, Aastra, Grandstream and Thomson IP phones may disconnect if you press "Mute" button for a long time (60 min)	
D:	
C:	
F:	Under investigation, will be fixed in the future releases.

Aastra IP phone is not ringing when it is used in many extension ringing list		13830
	Scenario: <ol style="list-style-type: none"> 1. Many extension ringing is enabled on a virtual extension with an Aastra phone in the list 2. Distinctive Ringing is enabled on that virtual extension with Nickname that contains space 	
C:	When a call without Caller ID comes to that extension, the Aastra phone in MER does not ringing.	
F:	The problem is solved if there is a Caller ID available on the incoming call or if the Nickname doesn't contain a space. This problem is limited to Aastra IP phones only.	
An issue with configuring Aastra IP phones as local extensions for Quadro IP PBX		13802
D:	After changing the LAN IP address for the Quadro the 480i, 9133i and 55i Aastra phones with currently recommended 1.4.1.2000 firmware are not registering after restart.	
C:		
F:	They must be factory reset to register again. Under investigation. Will be fixed in the future FW versions for Aastra phones.	
The Voice Mail Service for extensions becomes unavailable when terminating the call to the VMS from the GUI		14298
D:	Scenario: <ol style="list-style-type: none"> 1. Make a call from SIP or PSTN to Auto Attendant and use Remote Access Menu (*0) feature code to access to the extension's voice mailbox. The call will appear in the "Active Calls" table. 2. Terminate the call from "Active Calls" table. 	
C:	Now the VMS of that extension becomes unavailable for future usage: i.e. entering to the Voice Mail System (*0) for that extension from anywhere (the exact phone attached to that extension, SIP or PSTN) user will hear the message "feature not available now", also it becomes impossible to leave voicemail to that extension.	
F:	Reboot the Quadro to resolve this problem. Under investigation, will be fixed in the next release.	
The line status is not displayed on the SNOM360 Expansion module		14044
D:	Expansion module does not show any line status when SNOM360 IP phone is using FW version 6.1.15.	
C:		
F:	If expansion module is used, use the 6.5.17 FW.	
An issue with voice mail indication on Snom IP phones		13440
D:	When receiving a new voice mail the Snom phones turn on the voice mail indication.	
C:	But after phone reboot by power down the indication is lost unless a new voice mail is received.	
F:	Under investigation, will be fixed in the next releases.	
Incoming calls with empty destination number are always routed to Auto Attendant for Quadro4xi/16xi		14068
D:	Incoming calls should go to the Call Routing table if "Routing with Inbound Destination Number" is selected in the ISDN settings.	
C:	But in case of calls with empty destination number from central office they go to the auto attendant instead of call Routing table.	
F:	Under investigation, will be fixed in the next releases.	

7 Upgrading Instructions

7.1 Technical Advisory

Attention: For manually configured IP phones, it is now required to have the **SIP Registration Timeout** parameter set to 120 seconds or more on your IP phone. Values less than 120 seconds will not be accepted by the Quadro and will cause the IP phone registration failure on the Quadro.

7.2 General hints

In general, the configuration of a system will remain after the software update.

It is recommended to execute the update by downloading the software first to a PC located in the LAN side of the Quadro and perform the firmware update from the LAN side. This is to ensure that the Internet connection will not affect the upgrade process.

Additionally, it is recommended to backup the existing configuration prior to upgrading.

Remember that some data is lost during upgrade:

- **Call Statistics**
Workaround - to save the existing call statistics, download it to the PC from Call Statistics-Statistics Settings before performing the firmware update.
- **Voice mails** (only when embedded memory storage is used)
Workaround – save the recorded voice mails from the Voice Mailbox before performing the firmware update. It is also recommended to use an external USB flash memory to keep the voice mails safe.
- **All custom voice greetings** (only when embedded memory storage is used)
Workaround – backup and download all configuration and voice data to a PC. It is also recommended to use an external USB flash memory to keep the custom voice messages safe.
- **All custom recordings for the custom Auto Attendant** (only when embedded memory storage is used)
Workaround – backup and download all configuration and voice data to a PC. It is also recommended to use an external USB flash memory to keep the custom recordings safe.
- **Transfer statistics for the network**
- **Event log**
- **DHCP leases**