Release Note Quadro4x16x 5.3.6, Edition 1

1 Introduction

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

Quadro4x16x software 5.3.6 Date: May 3, 2012

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

Date: May 4, 2012

2 Requirements

2.1 Hardware requirements

Attention: The 5.3.x software can be used on almost all Quadro4x/16x units. The exception to this is for older Quadro4x/16x models that have only 32MB of NAND flash memory.   The following hardware versions support 5.3.x: SASY-SOHO-0103-xxx

Additional details are provided in **Section 7: Upgrading Instructions**

2.2 Software requirements

Attention: The software upgrade 5.2.x to 5.3.x can be done from 5.2.9 and higher 5.2 versions.

Attention: The software upgrade 5.1.x to 5.3.x can **ONLY** be done from 5.1.38 and higher 5.1 versions. Before updating to 5.3.x the unit should be updated to 5.1.38 or higher 5.1 version first.

2.3 Supported and Tested SIP phones

Listed below are the Epygi Supported SIP phones with the corresponding firmware versions that are tested and recommended for use with Quadro4x/16x SW 5.3.6.

Vendor	Model	Software
snom	300	Application: snom300-SIP 8.4.35
snom	320	Application: snom320-SIP 8.4.35
snom	360	Application: snom360-SIP 8.4.35
snom	370	Application: snom370-SIP 8.4.35
snom	821	Application: snom821-SIP 8.4.35
snom	870	Application: snom870-SIP 8.4.35
snom	MeetingPoint	Application: snomMP-SIP 8.4.35
Aastra	9143i (33i)	Application version: 2.5.2.1010
Aastra	9480i (35i)	Application version: 2.5.2.1010
Aastra	9480iCT (35iCT)	Application version: 2.5.2.1010
Aastra	6753i	Application version: 2.5.2.1010
Aastra	6755i	Application version: 2.5.2.1010
Aastra	6757i	Application version: 2.5.2.1010
Aastra	6757iCT	Application version: 2.5.2.1010
Aastra	6730i	Application version: 2.5.2.1010
Aastra	6731i	Application version: 2.5.2.1010
Aastra	6739i	Application version: 3.0.1.38

Please Note: Any problems and limitations on the SIP phones listed above are described in detail in the **Quadro Features on Supported IP Phones** document.

Please Note: Quadro IP phones firmware control mechanism will not upgrade Snom firmware version from 6.x to 7.x. This should be done manually via Snom web site. Once the Snom firmware version is 7.x, the Quadro's firmware control will automatically upgrade/downgrade the phone to Epygi's recommended.

Listed below are the Epygi Tested SIP phones with the corresponding firmware versions that are tested and recommended for use with Quadro4x/16x 5.3.6 SW.

Any problems and limitations on these SIP phones are described in detail in the **Quadro Features on Tested Phones** document.

Vendor	Model	Software
Audiocodes	310HD	1.6.0_build_37
Audiocodes	320HD	1.6.0_build_37
Cisco	SPA525G2	7.4.8
Cisco	SPA303	7.4.8
Cisco	SPA501G	7.4.8
Cisco	SPA509G	7.4.8
Polycom	SoundPoint IP 330SIP*	Application: SIP software 3.3.1.0933
Polycom	SoundPoint IP 331SIP*	Application: SIP software 3.3.1.0933
Polycom	SoundPoint IP 335SIP*	Application: SIP software 3.3.1.0933
Polycom	SoundPoint IP 450SIP*	Application: SIP software 3.3.1.0933
Polycom	SoundPoint IP 550SIP*	Application: SIP software 3.3.1.0933
Polycom	SoundPoint IP 650SIP*	Application: SIP software 3.3.1.0933
Polycom	SoundStation IP 5000*	Application: SIP software 3.3.1.0933
Polycom	SoundStation IP 6000*	Application: SIP software 3.3.1.0933
Polycom	VVX 1500*	Application: SIP software 3.3.1.0933
Polycom	KIRK wireless server 300	PCS08__
Polycom	KIRK wireless server 6000	PCS08__
Panasonic	KX-TGP550T04	12.17
Panasonic	KX-UT123-B	01.061
Panasonic	KX-UT136-B	01.061
snom	PA1	8.4.35
snom	m9	9.4.7
Grandstream	GXP1400	Program- 1.0.1.83
Grandstream	GXP1405	Program- 1.0.1.83
Grandstream	GXP1450	Program- 1.0.1.83
Grandstream	GXP2000	Program- 1.2.5.3
Grandstream	GXP2100	Program- 1.0.1.83
Grandstream	GXP2110	Program- 1.0.1.83
Grandstream	GXP2120	Program- 1.0.1.83
Grandstream	GXV3140	Program- 1.0.7.3
Grandstream	GXV3175	Program- 1.0.3.22
Grandstream	HT286	Program- 1.1.0.26
Yealink	SIP-T20P	SW version: 9.50.0.50
Yealink	SIP-T22P	SW version: 7.50.0.50
Yealink	SIP-T26P	SW version: 6.50.0.50
Yealink	SIP-T28P	SW version: 2.50.0.50
Yealink	VP-2009P	22.21.0.40/22.30.0.60

Both mentioned documents are available at www.epygi.com and can be found under the Channel's Portal.

Please Note: In the model's list the Polycom phones with (*) sign are also presented as **Polycom-xx-Pre-3.3.0** due to backward incompatibility of UCSoftware 3.1.1 configuration. It is recommended to use **Pre-3.3.0** models with Application SIP software 3.2.2.0477.

2.4 Interaction with other Quadro SW releases

QuadroISDN or QuadroFXO external PSTN gateways used in the shared mode should have SW 5.1.12 or higher to achieve maximum feature functionality with the Quadro4x/16x SW 5.3.6.

QuadroFXS 16 Gateway should have SW 5.2.1 or higher for PnP configuration with the Quadro4x/16x SW 5.3.6.

ActiveX Control SW 5.3.0 or higher should be used with 3pCC functions with the Quadro4x/16x SW 5.3.6.

To use Quadro4x/16x SW 5.3.6 with a 3pcc or Click2Dial application the "3pcc/Click2Dial Login Allowed" checkbox should be enabled for each extension(s) using this feature.

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
5.3.6	The Call Park feature has been expanded with a Directed Call Park method. This allows users to define the call park extension they wish to park the call on. There are two methods available: 1) Hold the current call, and then dial the call park extension number; 2) Assign the call park extension to a key on the phone and then, just press the key during an active call.
	New Call Intercept feature. A new feature code has been added allowing users to dial *94 followed by the extension number to intercept an inbound call on another extension.
	IP Phone Key Assignment Templates are now available to define a set of extensions mapped to keys on IP phones. These templates can be used for multiple IP phones to streamline installation and configuration of multiple phones.
	The Find Me/Follow Me announcement message is now customizable. Users can remove the message, use the default, define a new recording or use music on hold.
	Added the option to review and modify the system default Find Me/Follow Me welcome message like other universal extension messages using the admin *75 feature code on the phone.
	Added the option to review and modify the user's personal Find Me/Follow Me welcome message like other personal greeting messages using the extensions *0 feature code on the phone.
	Added support for P-Asserted-Identity header field defined in RFC 3325. This is important to retain original caller information even after a call is transferred within the office.
	Statistics gathered from the Find Me/Follow Me have been improved for greater visibility of call flow.
	Auto configuration support for new IP phones: Snom m9, Panasonic KX-TGP550T04, KX-UT123-B, KX-UT136-B, Audiocodes 320HD and 310HD.
	A new option to use RTP streaming channel for playing Hold Music is added to the "Universal Extension Recordings" configuration page. This allows using an external RTP as default Hold Music for all extensions.
	Intercom settings are improved. Now it will be possible to define whether the phone should make a sound when Intercom is activated. The default is silence.
	Added support for T.38 faxing on IP lines for use on devices such as an ATA for faxing.
	The Maximum recording count option has been restored back in the Recording Box Settings.
	The VoIP carrier wizard is improved which allows creating the outbound routing rules not only by prefix but also by 7 and 10 digit pattern.
	The Add Multiple Extensions feature is improved which allows automatically attaching extensions to IP Lines
	A new **MS Exchange Server** option has been added in the **Use External Voice Mail** settings for extension. This allows keeping recorded voice messages into one universal inbox.
5.2.49	PnP and auto configuration support for Grandstream GXP1400/1405/1450/2100/2110 IP phones.
	Basic auto configuration support for Polycom KIRK Wireless server 6000 IP phone.

Release	New Features
5.2.48	Security enhancement. A new security check has been added to prevent an external 3PCC or Click2Dial application from using any of the Quadro features unless specifically authorized from the user's extension settings. The new option (3pcc/Click2Dial Login Allowed) is displayed when doing an edit on the extension and is disabled by default. **Please note**. If the Quadro extension is currently being used with some 3PCC or Click2Dial application, then this option will need to be enabled after the firmware update or the feature will no longer work. Epygi applications that use 3PCC, such as HotCall and HotKeyCall, do not rely on this setting to be enabled to work.
	TDVC and H.263+ codecs support.
	Language pack support for Polycom IP phones. Polycom phones change the GUI to the installed custom language.
	Local Admin password management enhanced. The local admin login password for GUI access is alphanumeric and a second numerical password can be entered for accessing settings from the phone handset, such as the Auto Attendant greeting messages.
	The Administrator password for phones is added as an item in the security audit.
	Auto configuration support for Cisco SPA303, SPA501G, SPA509G, SPA525G2 phones.
	PnP and auto configuration support for Grandstream GXP2120 and GXV3175 phones.
	PnP support for Grandstream GXV3140 video phone
	PnP and auto configuration support for Yealink VP-2009P model flavor.
	Added the falsealertmsg.cgi hidden page to make timeout for false ALERT message configurable. So that Quadro may send to ISDN false ALERT message after some timeout (defined in timeout value) if ISDN side does not receive any ringing from Quadros high level applications.
5.2.26	New Quadro System Security Management page added with security diagnostics and a security audit
	Secure system mail allowing to work with TLS or SSL mail servers
	A new option in Call Routing - Local AAA Table: Authentication by PIN code
	Possibility to enable/disable TLS functionality for IP Lines and extensions
	A new option in the extension voice mail settings under the Send new voicemail notifications via e-mail, allowing differentiating between fax messages and voicemail messages when deciding whether or not to receive email notifications, with or without attachments.
	Admin password management enhanced. The admin login password for GUI access is alphanumeric and a second numerical password can be entered for accessing settings from the phone handset, such as the Auto Attendant greeting messages.
	PnP and auto configuration support for snom 821
	PnP and auto configuration support for Aastra 6739i phone
	Auto configuration support for Grandstream GXV3140 video phone
	PnP and auto configuration support for Yealink VP-2009 video phone
	Auto configuration support for snom PA1 paging system
	Polycom KIRK Wireless server 300 phone support
	Call recording soft button implementation for Polycom phones
	Downloaded call statistics enhancements to include detailed information regarding the used interface for each call (PSTN, ISDN, etc), if call had been forwarded, transferred, etc.
	Viewing the Call Statistics on the Quadro GUI has been updated to select the number of records per page
5.2.12	
5.2.9	Full support for Secure RTP (SRTP) to encrypt voice packets.

Release	New Features
	Full support for TLS (Transport Layer Security) protocol (RFC 2246) to provide communications privacy for the SIP messaging port over the Internet. The protocol allows client/server applications to communicate in a way that is designed to prevent eavesdropping of the SIP messages.
	HD codecs such as G.722 and G.722.1 are now supported in pass-through mode.
	Security enhancement. Password strength checking has been added in the IP Lines settings table for configuring IP Phones. The system will provide feedback on whether the chosen password is weak. An option is also provided to let the system create a strong, random password. Password strength enforcement can be configured in the hidden menu generalconfig.cgi.
	Security enhancement. Protection against certain SIP DoS attacks has been added by enabling the "SIP IDS" feature in the hidden menu generalconfig.cgi. Enabling this option will automatically block malicious IPs in the firewall.
	Global speed dialing. Configured in Telephony/Call Routing/Global Speed Dial Directory. An Excel .CSV file can be used to upload the entries in the format: Code, Number (e.g. 44, 9726921166). Each entry should be on a new line.
	Emergency Call Interrupt feature in the Caller ID based services. A new feature that will allow specific Caller Ids to be configured so that a call received from one of these numbers will immediately disconnect the call in progress and ring the user's extension.
	Configuring IP phones from WAN option
	System logging enhancement. If a user encounters a problem while on a phone call the pertinent details related to the call can be saved. The user will dial *82 (getting dialtone and dial *82 from the same or a different phone) as soon as the problem occurs. The details will be saved until the next time someone enters *82. When the systemlogs are downloaded it will contain the details from the most recent *82 entry.
	The voicemail to email option can now be configured in Telephony/Voice Mail Common Settings so that the subject of the email contains a user defined text along with selected system variables (e.g. caller id).
	Option to select the format of FAX in Voice Mail sent by email. Defined in Telephony/Voice Mail Common Settings. TIFF or PDF can be used.
	A prompt to the user is provided with the option to save the system configuration prior to executing a firmware update
	Authorized phones database can now be used with a custom auto attendant scenario. This allows callers to bypass authentication in custom auto attendants for user's who have been included in the authorized phone database.
	Configurable auto attendant Callback Response Delay allows users to specify a timeout before the system will try to call back the user.
	Configurable auto attendant callback activation timeout from the GUI, which allows activating automatic Call Back for trusted PSTN and SIP callers not after the one - two rings as previously defined, but during the time frame specified in the GUI. So now users can configure the activation timeout in seconds needed to wait for initiating the callback. This configuration is accessible from the hidden menu "extmanagement.cgi".
	Allow the Automatic Callback feature to be used to call back to the originating caller using the "Auto" call type. User can select "Auto" as the "Callback Call Type", while leaving the "Callback Destination" field empty. This will allow to callback to the caller using the Caller ID for callback.
	Quadro FXS gateway PnP support
	Support for T38 FAX proxy (from standalone IP Phone in the LAN to outside)

Release	New Features
	Yealink IP phone enhancements. PnP and auto configuration support for T20, T22 and T26 models. Advanced button configuration added in the IP Line Settings. Receptionist configuration support for add on modules. A custom logo image can now be displayed.
	Polycom IP phone enhancements. PnP and auto configuration for Polycom IP335 and IP450 models. Advanced button configuration added in the IP Line Settings. Receptionist configuration support for add on modules. Custom data files for Polycom IP phones can now be uploaded from the hidden menu ipphonesdirectory.cgi.
	PnP and auto configuration for Aastra 6730i phone
	PnP and auto configuration for snom 870 and snom MeetingPoint
5.1.39	
5.1.38	Ability to configure speed-dial buttons of snom IP phones via IP phone template mechanism
	The size of NAND Flash memory is shown in the HW status page
5.1.31	Call recording (with a license key)
	Possibility to download the call statistics in CSV format
5.1.30	Telematrix IP phones auto configuration support
	Call Forking (FindMe/FollowMe service)
	Call max duration (disconnecting call after specified time)
	Yealink phone auto configuration
	Reason header in SIP CANCEL message (prevents the call from being reported as "missed" if it was picked up by another extension)
	Auto configuration and compatibility for Polycom VVX 1500 video phone
	Automatic logout for HotDesking phones
	Hot Desking capability enabled for remote extensions
	Line appearance added on Remote Extensions
	Park slot segmentation (access list for call parking and retrieve)
	3PCC: capability for 3pcc programmer to modify username
	Shared Voice Mailbox
	Call routing table debug/tracing tools (new events raised from Routing rule: call failover, fail, success)
	Aastra 6731i autoconfiguration and PnP
	Polycom Soundpoint IP 331 auto configuration and PnP
	3PCC: ability to differentiate call failure reasons (different error codes)

Release	New Features
5.1.18	
5.1.17	Music on Hold can originate from the Epygi Media Streamer which is a software application running on a PC that can have a playlist of MP3 files.
	The Quadro Call Statistics (CDR) can be automatically sent via email or uploaded to an FTP or TFTP server.
	Plug and Play for Polycom IP Phones
	Click To Dial (CTD) feature updated to allow calls to be initiated from a Website, connecting two parties together via the Quadro. There are two options to make the call: (a) Using the HTTP request to specific URI from a third party WEB page or application; (b) Using a special hidden page on Quadro's WebGUI (in the hidden menu callcontrol.cgi)
	New system events added to track IP phones registration status
	A custom logo image can be displayed on snom 360, 370 and 820 IP Phones
	Speed Dial numbers can now be updated from the phone handset (*76)
	Outgoing Call Blocking can be updated from the phone handset (*79)
	Hot Desking feature. This allows a single phone (IP or analogue phone) to be used by many users. Users can login to the Hot Desking phone (*78) using their extension number, and get all the credentials of their extension until they logout (*78).
	Virtual extensions can be optioned to provide a simulated ring back. The VE can be assigned to a receptionist phone and this option will now give him/her the option to answer the call before it goes to voice mail.
	Zero-out on Auto Attendant
	The Automatic Call Back option has been expanded to include callback to SIP callers. Previously, this feature was specific to PSTN callers.
	TLS/SSIP support added to send and receive encrypted SIP messages from designated peers
	Video phone support (proxy mode)
	E1 MELCAS digital hookflash feature added for E1 CAS to SIP calls
	The Unconditional Call Forwarding option has been enhanced so that enabling/disabling the feature from the handset can include the designated caller Ids.
	Load balancing for the FXO lines (including FXO gateways)
	Easier for extensions to forward their calls to external numbers without compromising the security of Call Routing entries that have the PBX filtering option enabled.
	Possibility for a user to designate a bad call in the system logs by dialing *81 after releasing the bad call.
	The Quadro system voice messages can be browsed and updated from a PC using 3PCC
	New features in 3pcc: Using the SIP Dialog package the call states for extensions can be viewed and tracked.
	New features in 3pcc: This feature allows the 3pcc application to subscribe to the Quadro's extension's list and receive an event notification the list has changed.

Release	New Features
	New features in 3pcc: The connect function has been added which allows the application to use an extension's authentication parameters (extension number, password). After successful connection establishment an application can manipulate options on the extension.
	New features in 3pcc: Capability to upload the contents of legible configuration files and do the configuration update via 3pCC
	An option to "Discard Non-Numeric Symbols" is added in the Call Routing Wizard to delete extra characters that might be received in the caller id.
	Possibility to append the called number to the caller id using the format <dialednum:range>. This will allow the user to appropriately answer a call based on the number that was dialed.
	snom M3 support
	snom820 auto-configuration support
	Ability to download "packages" of CGI's in legible format
	The configuration templates that the Quadro uses for the IP Phones can now be modified.
	Ability to remotely access the Auto Attendant and use the admin login menu (*75) to update the AA greeting messages. Previously this login was only accessible from an extension.
	Capability to configure emergency numbers from the VoIP Carrier Wizard
	Support for multiple extensions adding to quickly and easily configure the system
5.0.19	Distinctive ringing, intercom and paging support for Polycom IP phones
5.0.17	
5.0.16	Random call hunting
	Capability to choose GUI desired theme in login
	Capability to Show/Hide extensions attached to disabled IP lines in the Extensions Management
	Capability to Show/Hide the disabled IP lines
	Auto configuration support for the following Linksys IP phone models: SPA941, SPA942, SPA921, SPA922
	Ability to remove the Display name of the call passing through Routing Table
	New Auto Attendant or extension adding process simplified
	Add mechanism for the DND and CallFwd functionality of Snom and Aastra IP phones.
5.0.12	
5.0.11	Ability to record voice messages from a phone that are referenced from the Auto Attendant Interactive Voice Response menu. When needed, the recordings can then be easily updated with current messages.
	Support for MS OCS and MS Exchange configuration with Quadro
	It is now possible to reboot each IP phone separately from the Quadro's GUI

Release	New Features
	FXO diagnostics have been added to automatically adjust to the best echo cancellation settings
	Added receptionist wizard and expansion module support for Grandstream GXP2000
	Added silent VM recording option in the Voice Mail Settings
	Added Custom Profiles for Voice Mail Settings
	Programmable Keys Configuration page added in the IP Line Settings for snom, Aastra, (except for snom300 and Aastra51i, 9112i), Grandstream GXP2000. There is an advanced link on IP Lines page to configure the programmable buttons of each phone models for the "watching" and for the standard services like "DND" and others
	DHCP Advanced Settings added
	Extended flexibility for the Intercom feature: added PBX-Intercom call type in Call Routing wizard and 3 options to enable Intercom service
	A new checkbox called "Check with 3PCC" is added in Call Routing Wizard. When checking it will allow 3PCC application to place a hook on calls done through that rule
	Local authentication parameters are shown in Details column of Call Statistics
	"Check/Update Now" option is added in Automatic Firmware Update page
	Added SNMP status and configuration
	The results of system configuration backup & download are reflected in the system events
	snom, Aastra and Grandstream phones automatically get rebooted when the Quadro is rebooted
	Added auto configuration support for the following Polycom IP phone models: Soundpoint IP 330, Soundpoint IP 550 and Soundpoint IP 650
	Intercom and paging support for Grandstream IP phones
	Possibility to hide/show disabled records in the call routing table
	SIP P-Asserted-Identity support for SIP calls to ISDN network
	Caller ID can be used to define the call destination in call routing table
	The "Deny reinvites" option is added for ITSPs that do not support this option.
	Call forwarding configuration through custom Auto Attendant
	Added two stage dialing for FXS calls
	G729/G729a codec type selection is GUI configurable
	Added dependence for Server status and E1/T1 link status
	Language pack support for the IP Phones
	Extended auto configuration capabilities for the Aastra phones. For Aastra phones the "Time-zone" setting has been added to set up this parameter according to Quadro regional settings.

Release	New Features
	Changed the Auto Attendant custom scenario to allow multiple WAV files to be uploaded all at once in a single compressed ZIP file.
	Added possibility to change the original display name in the Caller ID
	Added Kickback feature allowing not to lose the call after blind transfer
	Changed the Subscription limitations and made it configurable from generalconfig.cgi hidden page.
4.1.58	
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

Release	New Features
	Added PnP for the Aastra53i, Aastra55i, Aastra57i, Aastra57iCT
4.1.28	
4.1.22	Support of 2-stage dialing for ISDN BRI
	Initial VM Setup via Phone
4.1.18DS	Support for US new Daylight saving rules
4.1.18	SIP Trunk
	3rd Party Call Control
	Flexible Numbering Plan for extensions
	ISDN NT Mode
	Download IP phone FW and Reboot of Aastra/snom IP Phones
	Download Quadro Directory via XML to snom/Aastra phones
	IP Phone Plug-and-Play
	Automatic Quadro FW update
	Easier GUI for forwarding lists
	Use 8 and 9 for extensions
	Kill a call from Active Calls page
	Detect FAX ring/voice ring for Australia
	Use List package for QCM/Quadro notifications
	Distinctive ringing on snom and Aastra IP phones
	Play custom message instead of ring back tone on Auto Attendant
	Add month/weekday to filter
	Incoming inter digit service (for E1/T1 CAS)
	Send EVENTS via SMS
	CDR Tags for Billing
	DNS/DHCP enhancement
	Daylight savings adjustment
	SMS and E-mail notification about the call forwarding

Release	New Features
	Change extension password from phone handset
	Access to extension voice mailbox from outside by-pass the auto attendant
	Automatic backup and download of Quadro configuration
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.
	QCM centralized licensing included
3.1.31	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
	Capability to make SIP calls using TCP as a transport protocol
	"Client Code Identification" feature on routing rule (with RADIUS enabled)
3.1.23	
3.1.12	Receptionists' Call Queue
	Extension Status Monitoring
	Call Interception
	Direct Transfer to Voicemail

Table inside the 4.0.4 / IP Line capacity cell:

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	16 + 50

Release	New Features
	Call Park Capability on IP Phones
	Call Pickup Group
	Paging support with 3rd party devices
	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 changed features that have been changed beginning with the most recent Quadro4x/16x SW release.

Release	Changed Features
5.3.6	Added the option to delete the uploaded global speed dialing directory
	Added Kebu.it as a new carrier to the VoIP Carrier Wizard list
	The name of **Login/Call Relay** column in the Extensions Management is changed to **External Access**, which indicates whether the GUI login, 3pcc/Click2Dial login or Call Relay options are enabled on the extension.
	New FW recommendations for snom phones.
	Some of the system voice messages are improved.
5.2.49	New FW recommendations for snom, Grandstream and Polycom phones.
5.2.48	Added information regarding video codec's under the Details in the call statistics
	Added P-asserted identity header in all SIP messages that contain "p-preffered identity" or "Remote-party-ID".
	Changed the SIP parser for proper processing of From: field in header if URI scheme is included.
	The SIP IDS configuration options are available in the SIP IDS settings page.
	The "3pcc/Click2Dial Login Allowed" checkbox is available when editing multiple extensions at the same time.
	The Skype service is added in the VoIP Carrier list
5.2.26	The Call Recording settings page is updated with a second, more simplistic method for enabling extensions. Either of two modes can be used: Basic view and Advanced view.
	Improvements in Call Recordings FTP retransmission mechanism.
	Extension Login permission to access the Quadro GUI. The login is disabled by default for all extensions.
	Multiple DHCP subnet support (two subnets allowed instead of one, making it possible to have about 500 devices getting DHCP from Quadro).
	The "Send Hold Music to remote IP party" is enabled by default in the Basic services for extensions.
	The Developer Logging is enabled by default.
	The default for "Maximum recording duration" is changed to 1 hour in the "Recording box settings" and "Call recording settings".
	All "Extension Codecs Settings" page parameters are available for any selected group of extensions in multiple extensions edit mode, including the Secure RTP options.
	Multiple SMS numbers can be allowed in SMS destination fields, separated by SMS provider required delimiter (the comma for Clickatell)
	The SoTel SIP trunk is modified in the VoIP Carrier Wizard
5.2.12	
5.2.9	Changed the behavior of intercom and paging to not interrupt current active call by default
	Intercom option has been changed so that an audible sound is now provided to the called phone to alert the person when the microphone is opened.
	Indication of BLF/MWI subscription count and raising an event if the upper limit is reached
	Allowing to have multiple recording sessions regardless of the "max mail/recording duration" setting on the VM/recording box
	FTP retransmission mechanism improvement and manual FTP upload request from WebGUI. Call recordings can be manually uploaded from Web GUI.

Release	Changed Features
5.1.39	
5.1.38	The SIP server value for Broadvox in the VoIP Carrier Wizard was changed
	Added an option in the Automatically Download Call Statistic page to choose the download format
	The VM-to-email text for FAX mail was changed to be different from the one of the regular voicemail text
	An audible sound to the called phone is provided in case of intercom call
5.1.31	In the call statistics-automatically download page a new option added to select the file format to download
	Added possibility to correct TX/RX gains for Aastra phones from configuration templates
5.1.30	After using the feature code *79 (for outgoing call blocking) from phone handset to block a dialed number the "Send Message to Caller Party " option should be enabled automatically
	The limitation for the number of entries in the local AAA table has been eliminated
5.1.18	Added new VoIP carriers to the VoIP Carrier Wizard list (Acf2i and babyTEL)
	The "Automatic Firmware Update" link is moved from "Configuration Management" to "Firmware update" page
	The auto-configuration and PnP support are added for Polycom SoundStation IP 6000
	The auto-configuration support is added for Yealink T28 IP phone
5.1.17	Added new VoIP carriers to the VoIP Carrier Wizard list
	Adding extensions to Paging and Call Pickup groups has been simplified
	The expiration date for trial keys are shown under the Features menu
	The Call Routing Management option for the Auto Attendant has been changed from *7 to *77. This option allows entries in the Call Routing Table to be remotely enabled/disabled.
	Possibility to multi-edit the some of the extension's Voice Mailbox Settings
	A prefix is added to the Caller ID to identify calls returned by the Kickback option
	It is possible to upload the Call Queue messages as Universal Extension Recordings
	The timeout for automatic Call Back feature is changed. To activate automatic Call Back the PSTN callers should disconnect the call not after the two rings as previously, but just after one.
	The "MAC address" widget behavior is changed to be like IP address widget: if user presses 2 digits/letters, the cursor moves to the next text field.
5.0.19	
5.0.17	
5.0.16	In the System-> IP routing Configuration the name of "VPN Routes" changed to "PPTP/L2TP Routes
5.0.12	

Release	Changed Features
5.0.11	For snom phones, the "Call join on Xfer (2 calls)" setting is configurable in the phone GUI
	Adjusted timezone parameters for Venezuela according to new standards
	The Fail Reason in the call routing changed as group of check boxes instead of drop down list
	Added status info in 3PCC settings
	Added scrollbars in the tables for Call Routing and Extension Management pages
	ADSL support removed from Quadro4x
4.1.58	
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"

Release	Changed Features
	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
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 5.2.49:

An issue with the Emergency Interrupt feature on snom IP phones 16391	
D:	The Emergency Interrupt fails when snom phone is in a 3-way call. Instead of ringing the phone call goes to VM directly
C:	

An issue when using the variable "Date" in the subject of voice mail send by email 16150	
D:	If the subject $[VM_DATE] is placed at the end of the subject line, then Voice Mail will not send as an attachment.
C:	Add an underscore (_) after the $[VM_DATE]. Or put the $[VM_DATE] in the beginning or between other subjects in the subject line.

No audio on both sides if you hold the call, then unhold it after the Holding reminder on snom phone running FW 8.4.32	
D:	This problem is specific for snom 3xx models only. When the "Holding reminder" option is set to 'on', the phone reminds you with a short beep after timeout of 30 sec that you still have somebody on hold. Unholding the call after Holding reminder will bring to the audio loss on both sides.
C:	

The video part is missing for the calls with video IP phones which are being recorded 16480	
D:	This problem has concern only the scenario when video phone calls to external SIP destination.
C:	

Some of the functions in the Programmable Keys Configuration page for IP lines are not working for Polycom phones 16682	
D:	The "Speed Dial" and "Call recording" features are not working for Polycom phones when configured in the Programmable Keys Configuration page
C:	

6 Known Issues

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

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
F:	Restart the Quadro to resolve this.

One way audio with IPSec VPN in the scenario "Gateway<->Remote Subnet"	9327
D:	Scenario: 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.
F:	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; Or register the IP phone from Remote Subnet as the RE for Quadro.

Call interception fails in a specific scenario with a watched extension in the many extension ring list	9399
D:	Scenario: 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.
F:	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.

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:	No consequences	
F:	Upload user names for extensions one by one.	

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: 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 ring.	
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.	

An issue with distinctive ringing on some of IP phones		**11519**
D:	Snom, Aastra and Grandstream IP phones ring only once if the distinctive ringing is enabled with the "winter" ringing pattern.	
C:	No consequences	
F:	Use other ringing patterns for distinctive ringing.	

Call Interception doesn't work on GrandStream GXP2000 configured as receptionist, when extensions watched on expansion module		**14797**
D:		
C:		
F:	Use basic 7 keys instead of expansion module. Will be fixed in the future releases.	

Paging and intercom services do not work on the GrandStream BT100 IP phone		**14909**
D:		
C:		
F:	Currently BT100 has no support for paging/intercom.	

It is impossible to pickup (via pickup group or extension watching) the call to	

extension with Find Me/Follow Me enabled	15942
D:	
C:	
F:	Will be fixed in the next releases.

Any change in the Quadro LAN IP configuration makes it impossible to use the auto configuration for supported IP Phones	16037
D:	Changing the LAN IP or Subnet Mask in Quadro LAN IP configuration makes it impossible to use auto configuration for supported IP Phones
C:	
F:	Discard the changes to resolve this issue. Will be fixed in the next releases.

A problem with "Remove VM On Send" option in Voice mail settings	16432
D:	If this option is enabled new VMs are removed from the extension mailbox even if sending the new VM via e-mail fails because the mail server is unreachable or mail address is incorrect
C:	
F:	Will be fixed in the next releases.

MAC address recognition problem in the FXS Gateway Management" page	16468
D:	In the page Line Settings-> IP Line Settings->FXS Gateway Management, if FXS Gateway is added manually, the system can't recognize MAC address of FXS Gateway entered in uppercase.
C:	As a result the "Edit" and "Reboot" functional buttons become unusable that makes not possible to edit existing records or reboot the registered FXS Gateways.
F:	Enter the MAC address in lowercase. Will be fixed in the next releases.

A problem with incoming Secure RTP call in a specific scenario	16533
D:	When incoming Secure RTP call is connecting to the destination via Call Routing table, Quadro always tries to connect it as an un-secure call and the call is being dropped due to the media parameters incompatibility.
C:	
F:	Will be fixed in the next releases.

An issue with wrongly displayed "Start Recording" message in the Active Calls	16184
D:	The recording type is set to "start automatically"; the number of allowed parallel call recordings is exhausted, therefore the recording for the next call cannot be started, but the "Start Recording" is wrongly shown in the Active Calls page.
C:	
F:	Will be fixed in the next releases.

Find me/follow me doesn't work for incoming Secure RTP call	16683
D:	Though the call came with SRTP option the FM/FM is making unsecure calls
C:	As a result the call isn't established
F:	Will be fixed in the next releases.

The configuration page for Expansion Module is missing when configuring Yealink T28 and T26 as receptionist phones	16971
D:	In Receptionist Management wizard the Expansion module configuration pages are not available for Yealink T28 and T26 phones.
C:	
F:	Will be fixed in the next release.

One way audio in a scenario when Holding/Retrieving the PSTN call	17245
D:	Scenario: **1.** ext. A is configured to watch the ext. B **2.** PSTN call comes to ext. B and the functional key of the ext. A shows the ringing state for ext. B **3.** ext. A presses the functional key and intercepts the call to ext. B

	4. ext. A holds the call **5.** ext. A retrieves the call
C:	Result: ext. A hears the PSTN, but the PSTN doesn't hear the ext. A
F:	The reason is the SRTP option on ext. A set to "Make unsecure calls, accept anything". Change the SRTP option on the ext. A to "Make and accept only unsecure calls". Will be fixed in the next release.

An issue with Intercom service on snom 8xx phones   **17282**

D:	When the snom phone of 8xx series (tested with snom phones 821, 870 running FW version's 8.4.32, 8.4.33) have some watching configured for it's functional keys and the status of the watching resource is changed (e.g. the watching phone receives or makes a call), immediately the next intercom call to the snom phone doesn't activate the intercom but continuously ring the phone.
C:	As a result, if the calling phone is configured as a watched extension, the snom phone never activates the intercom for that caller.
Fix:	Will be fixed in some future FW release for snom.

Local authentication doesn't work for a call scenario   **16784**

D:	Local authentication configured in the Local AAA table by User Login or by PIN code is ignored for the following call scenario; a SIP call to Quadro Auto Attendant, then call to a SIP destination.
C:	Quadro doesn't ask for authentication in this case.
Fix:	Will be fixed in the next release.

The snom phone doesn't allow multiple call park/retrieve   **17340**

D:	Upon successful call park/retrieve on snom the call couldn't be parked again.
C:	
Fix:	Will be fixed in some future FW release for snom.

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 Quadro SW and HW requirements for upgrading to 5.3

Attention: The software upgrade 5.2.x to 5.3.x can be done from 5.2.9 and higher 5.2 versions.

Attention: The software upgrade 5.1.x to 5.3.x can ONLY be done from 5.1.38 and higher 5.1 versions. Before updating to 5.3.x the unit should be updated to 5.1.38 or higher 5.1 version first.

Attention: The 5.3.x software can be used on almost all Quadro4x16x units. The exception to this is for older Quadro4x16x models that have only 32MB of NAND flash memory.
The following hardware versions support 5.3.x: SASY-SOHO-0103-xxx
Note: The SASY number is found on the bottom of the unit.

Beginning with 5.1.38 software the size of NAND flash memory is also displayed within the Quadro GUI under System/Status/HW Status page. Only units that indicate 64MB of "NAND Flash" size can install 5.3.x.

Note: For units with 32MB of NAND Flash an error message is provided after an unsuccessful attempt to install 5.3. The unit will need to be rebooted at this point to recover the system.

7.3 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**

The following steps describe how to correctly perform the firmware update:

1. Save the current configuration by doing a Backup and Download of all config and voice data (**System**->**Configuration Management**->**Backup and download all config and voice data**).

2. Perform the Firmware Update.

3. Is there a USB memory stick installed?
- Yes- No further action is required
- No- Restore the configuration that was saved in Step 1 (**System** -> **Configuration Management** -> **Upload and Restore all config and voice data**).
  This is necessary to restore the extension custom voice messages and the custom Auto Attendant messages.