Release Note Quadro4x16x 5.3.20, Edition 1

1 Introduction

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

Quadro4x16x software 5.3.20 Date: April 11, 2013

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

Date: April 18, 2013

2 Requirements

2.1 Hardware requirements

Attention: The 5.3.20 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 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 5.3.20 SW. All the phones in this list can be automatically configured to work with Quadro4x/16x 5.3.20 SW.

Please Note: For the most of phones Quadro supports both the PnP and the auto-configuration options. For some specific phones the auto-configuration option is supported only.
Using of the configuration options on each specific SIP phone is described in detail in the **Configuring Epygi Supported IP Phones on Quadro** document.

Please Note: Any known issues and limitations regarding usage of Quadro4x/16x telephony services and features on these SIP phones are described in detail in the **Quadro Features on Epygi Supported IP Phones** document.

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

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	720	Application: snom720-SIP 8.7.3.15
snom	760	Application: snom760-SIP 8.7.3.15
snom	821	Application: snom821-SIP 8.4.35
snom	870	Application: snom870-SIP 8.4.35
snom	MeetingPoint	Application: snomMP-SIP 8.4.35
snom	PA1	8.4.35
snom	m9	9.4.7
Aastra	9143i (33i)	Application version: 2.6.0.2019-SIP
Aastra	9480i (35i)	Application version: 2.6.0.2019-SIP

Aastra	9480iCT(35iCT)	Application version: 2.6.0.2019-SIP
Aastra	6753i	Application version: 2.6.0.2019-SIP
Aastra	6755i	Application version: 2.6.0.2019-SIP
Aastra	6757i	Application version: 2.6.0.2019-SIP
Aastra	6757iCT	Application version: 2.6.0.2019-SIP
Aastra	6730i	Application version: 2.6.0.2019-SIP
Aastra	6731i	Application version: 2.6.0.2019-SIP
Aastra	6739i	Application version: 3.2.2.2088-SIP
Audiocodes	310HD	1.6.0_build_37
Audiocodes	320HD	1.6.0_build_37
Cisco	SPA525G2	7.4.9c
Cisco	SPA303	7.4.9c
Cisco	SPA501G	7.4.9c
Cisco	SPA509G	7.4.9c
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
Grandstream	GXP1400	Program- 1.0.4.13
Grandstream	GXP1405	Program- 1.0.4.13
Grandstream	GXP1450	Program- 1.0.4.9
Grandstream	GXP2000	Program- 1.2.5.3
Grandstream	GXP2100	Program- 1.0.4.9
Grandstream	GXP2110	Program- 1.0.4.9
Grandstream	GXP2120	Program- 1.0.4.9
Grandstream	GXV3140	Program- 1.0.7.3
Grandstream	GXV3175	Program- 1.0.3.22
Grandstream	HT286	Program- 1.1.0.26
Grandstream	HT386	Program- 1.0.3.96
Yealink	SIP-T20P	SW version: 9.61.0.85
Yealink	SIP-T22P	SW version: 7.61.0.80
Yealink	SIP-T26P	SW version: 6.61.0.83
Yealink	SIP-T28P	SW version: 2.61.0.80

Yealink	SIP-T32G	SW version: 32.70.0.100
Yealink	SIP-T38G	SW version: 38.70.0.100
Yealink	VP-2009P	22.21.0.40/22.30.0.60
Yealink	VP-530	23.70.0.40

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 version but not to 6.x.

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 5.3.20.

QuadroFXS 16 Gateway should have SW 5.2.1 or higher for PnP configuration with the Quadro4x/16x SW 5.3.20.

ActiveX Control SW 5.3.0 or higher should be used with 3pCC functions with the Quadro4x/16x SW 5.3.20.

DCC SW 1.8 or higher should be used with the Quadro4x/16x SW 5.3.20.

To use Quadro4x/16x SW 5.3.20 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 Quadro4x/16x 5.1 SW release.

Release	New Features
5.3.20	A new warning in the security audit for the case when the filtering on the routing rule is enabled, but the Source Call Type is set to anything but PBX.
	New Automatic Fax Receiving Mode.
	A new feature code (*84) for manually configuring and switching no answer call forwarding on the phone handset.
	New "URL" functionality in IP Phones advance settings.
	GUI login for Recording Box extension. The Recording Box extension can be used to access the appropriate Recording Box via Quadro WEB interface by extension name and password.
	Yealink IP phone configuration support enhanced to auto-detect the phone firmware and to provide the proper configuration.
	The injected DTMF duration and pause is now configurable from GUI in the hidden menu fxocfg.cgi.
5.3.10	Support for the new Epygi Desktop Communication Console (DCC) application (with a license key).
	The Caller ID based services are improved by adding the presence state of the extension for use with the DCC application.
	The maximum number of active calls in Find Me/Follow is now configurable. If the number is set to 1 then only one active call will be possible and the next call will go to voice mail. If that number is >1 then the next call will ring the Find Me/Follow phones which are not on a call.
	The Call Recording feature is improved to also allow recording for pass-through calls.
	Added capability to activate Voicemail profile based on caller id and presence state.
	PnP and auto configuration support for new IP phones: snom 720, snom 760, Yealink SIP T32G, Yealink SIP T38G, Yealink VP 530.
	The Zero-Out redirection in the Call Queue settings is modified with a new option to redirect the call to the Voice Mail of the extension, or to another destination.
	LDAP support for Yealink IP phones.
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.

Release	New Features
	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.
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

Release	New Features
	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.
	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).

Release	New Features
	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)
	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)

Release	New Features
	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)
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.

Release	New Features
	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.
	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

4 Changed Features History

The following table provides a high-level list of changed features that have been changed beginning with the Quadro4x/16x 5.1 SW release.

Release	Changed Features
5.3.20	Added **Use RTP proxy** mode in Call routing for PBX type calls.
	Improved the GUI for Recording Box; recordings are displayed as tabbed page (300 recordings per page).
	snom PA1 template enhancement: "**Intercom Policy**" has been added for snom PA1. Its default value is set to "off".
	Distinctive Ring tones have been changed for Yealink phones.
	snom 7xx phones (720 & 760) have been upgraded to FW version 8.7.3.15.
	Recommended FW version for Yealink T3X and VP530 phones is updated to public Version 70 (3x.70.0.100/23.70.0.40 accordingly).
	New FW recommendations for Aastra , Grandstream, Cisco and Yealink IP phones.
	Added Speed dial based services for Polycom.
	Added "Park", DirPckUp, "BrdgeIn" soft keys on Polycom UCSoftware.3.3.1 or higher.
	Language Pack update for Aastra, Alcatel, Grandstream GXP2000 and Polycom (FW 3.3.1.F) IP phones.
	Voice mail **Specific Profile** selection is simplified using the drop-down list of the created profiles.
	Aastra IP phone template enhancements: Added **Callers List Script** field, **Call Waiting/ Hold Reminder/Stutter Tones** and **Password protected "Options"** checkboxes.
	Restored the "Edit Watch Access List" link in the extension settings.
	Yealink T2x phones default settings updated.
	Added **voipvoice.it** as a new carrier to the VoIP Carrier Wizard list.
5.3.10	All preconfigured functions have been removed from Aastras' Programmable Keys Configuration.
	Improved the voice message played when collecting the user logs using feature code *82
	Improved the voice message played when user marks the call using feature code *81
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.

Release	Changed Features
	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.
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

Release	Changed Features
	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 Fixed Issues

Issues fixed since version 5.3.10:

It is impossible to park or transfer a call when there is a second incoming call in ringing state	**17593**
D:	
C:	
Only the User type Extensions are shown on Quadro public directory	**17603**
D:	Extensions other than User type are not shown in public directory on phones even thought they have "Show on public directory" checkbox available
C:	
An issue with "Automatically attach to IP Line" option in the "Add Multiple Extensions" feature	**17529**
D:	When "Start From the SIP User Name" field is empty, after generating multiple extensions IP lines are not attached to the extensions.
C:	
Phone parameters configured in IP Phone Template get default after renaming the Template	**17588**
D:	
C:	
Quadro crashes when using auto redial(*1) for calling to hunt Group with Circular Mode	**17686**
D:	
C:	
After enabling/disabling the SNMP some of the service agents continue running thus occupying system recourses which may destroy Quadro functionality	**17728**
D:	
C:	
The DCC option isn't visible in the features list	**17564**
D:	
C:	
Fix:	This option will become visible in the features list after activating by a software key. Will be fixed in the next releases.
Quadro Public Directory doesn't work on Aastra and snom IP phones	**17298**
D:	When pressing the directory hard button on Aastra and snom phones, it brings an empty list. The number of items in this blank list is equal to the number of extensions configured to "Show on public directory". Pressing the Dial on each item just does nothing.
C:	
Fix:	Will be fixed in the next releases.

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.

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.

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.
Shared Mailbox doesn't work when using "Allow access to Shared Mailbox for enabled extensions" option in Many Extension Ringing configuration	**16635**
D:	Extension has Many Extension Ringing enabled with a few extensions configured for Shared Mailbox.
C:	However, in the IP Line settings, the "Shared VMail Ext. xxx" option is not listed in the drop down list for Advanced-Programmable Keys Configuration.
Fix:	Use the "Shared Mailbox: Edit Voice Mailbox Access List" link in the Voice Mailbox Settings for extension. 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 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.

Please 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.