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PBXware 6 DATASHEET

The PBXware 6 datasheet contains a comprehensive list of features and their detailed description, as well as the comparison of business, call center, and multi-tenant editions of PBXware.

bicom
SYSTEMS

WORLD'S FIRST AND MOST MATURE IP PBX

dedicated to hosting telephony & unified communications in the cloud.

PBXware EDITIONS

PBXware is the world's first and most mature IP PBX Professional Open Standards Turnkey Telephony Platform. Since 2004, PBXware has deployed flexible, reliable, and scalable New Generation Communication Systems to SMBs, enterprises, and governments worldwide by unifying the most advanced of the latest technologies. PBXware is offered in the Business, Contact Center and Multi-Tenant Editions, each supporting specific features maximizing performance, reliability, and expandability.

MULTI-TENANT EDITION

The Multi-Tenant Edition of PBXware gives Telecom Service Providers a powerful platform to serve the IP PBX market in the cloud as a VoIP switch. Unlimited Hosted IP PBX Multi-Tenants, Unlimited resellers, user/company self-portal, and LCR are just a few of the advanced features included with desktop applications.

BUSINESS EDITION

PBXware Business edition is our extensive and fully customizable platform providing you with a comprehensive set of features and capabilities of the enterprise phone system. Transform the way you conduct business and increase efficiency in the workplace by truly unifying your communication system. As you grow, so does your phone system!

CONTACT CENTER EDITION

PBXware Contact Center edition is designed to simplify and enhance call management at the busy call centers of any size. Give your business all the tools it needs to effectively start and manage inbound or outbound call campaigns. Upgrade to PBXware Contact Center, and provide your customers with a consistent and quality experience.

SYSTEM DASHBOARD

	Multi-Tenant	Business	Contact Center
System Dashboard The Dashboard section gives you an overview of vital PBXware information. It displays hardware usage, main services status, information on the system and gloCOM licensing as well as the number of Total calls, Answered calls, SIP registration etc.	✓	✓	✓
Number of Provisioned Extensions on the Dashboard Presents information on how many extensions have been provisioned/added to the system.	✓	✓	✓

SYSTEM EXTENSIONS

	Multi-Tenant	Business	Contact Center
Protocols: **SIP, IAX2, DAHDI** PBXware extensions support SIP and IAX2 protocols as well as DAHDI interface technology. SIP and IAX2 are communications protocols used for signaling and controlling multimedia communication sessions while DAHDI is an open-source computer telephony hardware driver API.	✓	✓	✓
Outbound Destinations Permissions Administrators have full control over which destinations, local or remote, PBXware extensions can dial. These rules can be applied to multiple extensions at the same time (through Service Plans) or individually per extension.	✓	✓	✓
Multiple Registrations PBXware 6 does not have restrictions in regards to the number of registered devices, regardless of device type.	✓	✓	✓
Multiple MAC Addresses per One Extension We have added the ability to use multiple MAC addresses per single extension. This provides the ability to auto-provision multiple phones attached to the same Extension. In practice, this could be one type of device, or multiple types of devices linked to the same extension. This is similar to our Hot Desking feature.	✓	✓	✓

	Multi-Tenant	Business	Contact Center
Push Notifications PBXware 5 is now running push notification service that propagates push notifications to devices that are registered to a PBXware extension with gloCOM GO. This feature increases user connectivity and flexibility for business trips, working from home, or any other calls made outside of the office.	✓	✓	✓
Enhanced Services Enhanced Services allows PBXware Administrators, as well as end users, to set up and control extensions features like Caller ID, Call Pickup, Call Filters & Blocking, Call Forwarding etc. from their phone and through a web interface.	✓	✓	✓
Billing PBXware billing module is one of the most important system components. It allows you to set up outbound and inbound billing prices for all the destinations across the globe. When Time Based Dialing (TBD) rules are used, the system allows you to create different prices for the specific day/time ranges.	✓	✗	✓
LCR PBXware LCR (Least Cost Routing) section allows fine-tuning of the system's trunks usage, enabling administrator to set up the order in which trunks will be used in order to strike the perfect balance between price and call quality.	✓	✓	✓
Caller ID Control PBXware allows you complete control of your Caller ID for outbound calls. Please note that this feature will also depend on Caller ID rules enforced by your trunk provider.	✓	✓	✓
Codec Selection PBXware allows you to set the preferred order in which codecs will be used on system, tenant or extension level. This option will allow you to assign more than one codec and set them to be used under a specific priority.	✓	✓	✓
Auto Provisioning Auto-provisioning allows you to automatically configure your phones by pointing them to a PBXware tftp/http address. To utilize the auto-provisioning system you must use one of the desk phone devices from the evergrowing PBXware list of supported UADs and configure a PBXware extension with a matching UAD and MAC address.	✓	✓	✓

	Multi-Tenant	Business	Contact Center
Auto provisioning, additional config customization variables Additional config for Auto Provisioning on the following pages can now use template variables: Extensions > Edit > UAD Auto Provisioning Template Settings > UAD > Edit > User Agent General Auto Provisioning Template Settings > UAD > Edit > User Agent Auto Provisioning Template The following variables can be used: %TENANT_CODE% - tenant code %EXT_NUMBER% - extension number %EXT_NAME% - extension name %MAC_ADDRESS% - extension MAC address (the mac from the auto provisioning request) %WAN_IP% - WAN Hostname/IP set in Servers > Edit %LAN_IP% - LAN Hostname/IP set in Servers > Edit %AUTH_USERNAME% - HTTP username %AUTH_PASSWORD% - HTTP username %VM_PIN% - extension voicemail PIN	✓	✓	✓
Line Number When auto-provisioning multiple extensions on 1 phone, extensions are assigned to the lines in the order in which they were created in PBXware. The line field will allow customers to specify the extension line where this extension will be assigned on the device. An empty line number field will be treated as the last one.	✓	✓	✓
Voicemail PBXware voicemail is an advanced answering machine that allows callers to leave a voicemail message in scenarios where the callee is not able to answer the call. Although each PBXware extension is usually equipped with a voice mailbox, this feature can be turned off, and, if necessary, voice mailboxes can be created on their own, unrelated to any extension on your PBXware.	✓	✓	✓
Call Recording PBXware offers multiple options to enable call recording, defining whether you would like to inform all parties that a call recording is turned on or not. Call recording can be enabled globally, for the entire system, or lower level per Tenant, DID, Extension, Ring group etc.	✓	✓	✓

	Multi-Tenant	Business	Contact Center
Call Recordings: Listen to Recordings in Web Browser The new PBXware 5 interface now has an integrated call recordings player, allowing users to listen to PBXware call recordings directly from their browser and navigate through the recording with a simple click of a mouse. This prevents the issue users might have experienced with earlier versions, as they had to find a media player that supports the format in which recordings were being downloaded.	✓	✓	✓
CSV Upload CSV upload allows you to easily create multiple entries for different PBXware elements like Extensions and DIDs, or to quickly add or change prices for every destination in the service plan.	✓	✓	✓
CSV Download CSV download gives you an option to export PBXware data in CSV format, allowing you to get information for data processing (i.e. DID or Extension list), or for importing data to another PBXware (i.e. billing prices for different destinations).	✓	✓	✓
Departments Departments section lists all of the departments created on your PBXware and gives you the ability to add new ones or edit existing. Departments are used by Bicom Systems gloCOM to easily filter extensions per department or to broadcast messages to specific department members only.	✓	✓	✓
gloCOM Modules and Editions gloCOM Editions and Modules allow you to restrict extensions to only use selected gloCOM editions and modules. This prevents users from switching their gloCOM edition, for sheer curiosity, to one that they should not be using. When a user does this, it prevents extensions that are actually supposed to use that particular edition from using it.	✓	✓	✓
gloCOM Features Administration We have introduced the ability for an administrator to enable/disable gloCOM features globally per system, per edition or per Tenant.	✓	✓	✓
QR Code QR Code allows for an easy first-time login with the gloCOM GO mobile app. Instead of entering an e-mail, password and server address manually on the first login, all you have to do is to scan the QR Code from your mobile app and all the information will be entered automatically.	✓	✓	✓
Desktop Apps Integration PBXware offers seamless integration with the gloCOM desktop app, allowing users to save time and improve productivity.	✓	✓	✓

	Multi-Tenant	Business	Contact Center
Mobile Apps Integration gloCOM GO mobile app allows you to stay connected to your PBXware extension even when you are not in your office, enabling you to do your work without being confined to your desk.	✓	✓	✓
WebRTC Support PBXware now supports WebRTC. WebRTC provides browsers and mobile applications with Real-Time Communications capabilities via simple APIs.	✓	✓	✓
PIN Based Devices Every extension is now allocated in its own unique PBD PIN. This PIN will identify the user on the system and, when logged in to a PIN Based Device, dialing will proceed as though the user was calling from their own extension. Billing, CDRs and all other functions will be completed on the user extension and not the extension associated with the Pin Based Device.	✓	✓	✓
Copy Extension A new feature in PBXware 5.1 is "Copy As New", an option to create a new extension by making copies of an existing extension's settings. This will speed up the process of adding new extensions to the system.	✓	✓	✓
Operation Times per Extension We have introduced an "Operation Times" option for extensions allowing you to control work days and hours per extension by simply adjusting this feature in enhanced services. This is also available in OSC if enabled in Enhanced Services. We have also implemented UX improvements and GUI improvements in the Global Operations Times page for a better user experience.	✓	✓	✓
Area Code per Extension Area code implemented per extension so you can define the area code which will be dialed if a specific extension makes a call without the need to dial the initial area code.	✓	✓	✓
Ability to Block Incoming Calls Ability to block incoming calls while having another active call. This will be used by the users who do not wish to receive incoming calls if they are already on a call (either incoming or outgoing).	✓	✓	✓
Show on the Monitor Page Excludes an extension from showing on the Monitor page. Useful for virtual extensions that will never be online in order to get a more accurate count of phones online.	✓	✓	✓
Ability to control default location mode when adding extensions When creating a new extension you can choose which default location will be selected.	✗	✓	✓

	Multi-Tenant	Business	Contact Center
Support for PAI variable per extension Define what will be inserted into the trunk PAI header template.	⊗	✓	✓
Caller ID/E911 summary A list of all extensions and assigned Caller IDs and Emergency Caller IDs.	⊗	✓	✓
Operator Extension During the initial Setup Wizard, on the Business/Call Center edition, the Operator Extension will be assigned to the extension that is created automatically once the Setup Wizard is completed (i.e. extension 1000) but can later be changed to any other extension on your system. The Operator extension is a central location where all the calls will be routed if a call is passed through the trunk to the PBXware but its destination is wrong or does not exist. In the rare occurrence this might happen, is when you purchase a range of DIDs from your provider, but do not create a matching DID on your PBXware. In this scenario, your provider will forward the call to your system but because the DID does not exist, the call will be forwarded to the Operator Extension instead of being dropped by PBXware.	⊗	✓	✓
Add emergency trunk per extension option Ability to set emergency trunks per extension.	⊗	✓	✓

BILLING

PBXware billing module is a vital tool that provides easy management of service plans, extension funds, and allows full control over pricing and billing for outbound and inbound calls.

	Multi-Tenant	Business	Contact Center
Service Plan Service plan defines billing details for all available destinations but it will also enable you to create a template for PBXware Enhanced Services, Destinations permissions and Online Self Care settings which all will be automatically applied to every extension associated with a particular service plan.	✓	✗	✓
Master / Slave Accounts Depending on your preferences, an extension can have its own funds (master) or share funds with master extensions (slave). Setting one extension as "master" and rest of the extensions as "slave" can be very useful and would improve billing management as with this setup you will have a single point for managing funds and billing, instead of doing it for each of the extensions individually.	✓	✗	✓
Credit Limits Credit limits allow you to assign the maximum amount of funds extensions will be able to spend on calls, preventing users from having unlimited funds at their disposal.	✓	✗	✓
Soft and Hard Daily / Monthly Billing Limits Once a Soft Limit is reached on an extension, PBXware will send an email notification to the user, informing him that extension funds are getting low. When the Hard Limit is reached PBXware will block all outbound calls for this extension. Soft and Hard Limit can be set on a daily or monthly basis. Setting these two values will prevent users from having unlimited funds at their disposal.	✓	✗	✓
Inclusive Minutes Assigning a certain number of inclusive minutes to a service plan will allow users to make calls to destinations set up to use inclusive minutes, free of charge until all inclusive minutes are spent. At that point, the extension will start using available funds. Destinations that are not set up to use inclusive minutes will be charged according to the price set in the service plan.	✓	✗	✓

OUTBOUND DESTINATIONS PERMISSIONS

	Multi-Tenant	Business	Contact Center
Destination Groups Permissions per destination groups enable you to restrict dialing to specific domestic or international destinations, or to all international destinations if necessary. This feature can be set on the service plan level or set and modified per extension.	✓	✓	✓
Local Destinations In addition to permissions per destination group PBXware allows you to restrict calls to local destinations such as local extensions, auto attendants, conferences, queues etc. This feature can be set on the service plan level or set and modified per extension.	✓	✓	✓
Other Networks Other Networks feature allows the administrator to assign a specific prefix to some of the PBXware trunks. This will allow users to dial the assigned prefix in order to force the call to be made through a specific trunk. *NOTE: Please be aware that when Other Networks features are used, the billing module will be overridden and calls made this way would not be billed.*	✓	✓	✓
Special Routes Special Routes feature allows the PBXware administrator to add special service numbers that will be distinguished from extension numbers (even if they have the same number of digits) and dialed through the specified trunk, similar to how Emergency Services numbers are dialed through an Emergency Trunk.	✓	✓	✓

ENHANCED SERVICES

	Multi-Tenant	Business	Contact Center
Caller ID Caller ID feature allows users to create and control the caller ID number that will be displayed to the called party. In addition to setting the permanent call that will be used as primary Caller ID, the administrator can create a list of allowed caller IDs that can be selected before the call is initiated. This feature is intended to be used with the gloCOM desktop app but it can also be used by entering an access code on the desk phone.	✓	✓	✓

	Multi-Tenant	Business	Contact Center
Call Pickup Call Pickup feature enables users to pick up calls that are ringing other extensions in associated call groups. Along with call pickup enabling you to pick calls that are ringing any extension in your call group by simply dialing *8, it is possible to use directed pickup and pick up calls from a specific extension by dialing *88 + EXTENSION.	✅	✅	✅
Last Caller Last Caller allows users to dial the last number that dialed their number by entering an access code. This is basically a redial feature intended to be used on phones without a display screen or analog phones that are registering to PBXware through ATA devices.	✅	✅	✅
Call Filters & Blocking Based on a set of predefined rules this service filters and blocks all incoming calls based on the rules you have set for incoming caller IDs. This way, you are able to send a busy signal to all calls that have their caller ID hidden, or forward the call to an out of service number whenever a specific number dials your extension.	✅	✅	✅
Do Not Disturb When enabled the Do Not Disturb service can block and temporarily or permanently redirect all incoming calls to a preferred destination number.	✅	✅	✅
Call Screening Call screening enables a user to forward calls to other extensions depending on the user's extension status.	✅	✅	✅
Call Forwarding Call Forwarding service forwards calls to other destinations depending on the rules created for a particular extensions status. For example, you can forward calls to your cell phone in case you do not answer the call in 15 seconds or in case your extension becomes unavailable for some reason.	✅	✅	✅
Configure Call Forwarding for Internal and External Calls Separately Check the "Different Rules for Local calls" box on the Call forwarding section. Checking this box will show a table where you can define different rules for Local Calls.	✅	✅	✅
Whitelist Caller IDs that won't be Forwarded An Exclude list has been added where you can enter Caller IDs that will not be call forwarded.	✅	✅	✅

	Multi-Tenant	Business	Contact Center
Follow Me Follow Me service rings destinations in a sequence set up by the user. If a call is not answered by the initial destination, the next destination in sequence will be dialed. For example, this allows you to set up your desk phone to ring first, for 10 seconds and if the call is not answered it will move forward and ring your cell phone for 10 seconds. In case you are unable to answer it, you can also set the call to return to your extensions voicemail, ensuring that you will receive the message from the caller once you are available.	✓	✓	✓
Group Hunt CSV upload allows you to easily create multiple entries for different PBXware elements like Extensions and DIDs, or to quickly add or change prices for every destination in the service plan.	✓	✓	✓
Mobile Numbers With Mobile Numbers, you can assign the Mobile Numbers you would like to receive calls from when you're not in the office. If you enable the Mobile Numbers service and add a number to the mobile numbers list it will be displayed in gloCOM as one of the destinations you can be reached on.	✓	✓	✓
Speakerphone Page Speakerphone Page allows you to broadcast a voice message to multiple extensions at the same time through the desk phone intercom. You can either create a list of specific Extensions you would like to page or you can add ALL extensions to avoid typing in all extensions numbers on the system/tenant. In addition to this, PBXware allows directed paging, in case you would like to broadcast the message to a specific extension only, and even directed two-way paging where a user is able to broadcast the message and listen to the response from other parties.	✓	✓	✓
Speakerphone Paging Groups Paging Groups feature works similar to standard paging, except this feature allows you to organize extensions to multiple paging groups and assign a unique number to each of them. As this feature is used with access code *600, the paging group number is entered after the access code. For example, if we assign number 300 to paging group and add 4 extensions to it, once we dial *600300 we will be able to broadcast the message over an intercom to all the extensions added to paging group 300. In Enhanced Services we are only able to allow or disallow whether extension will be able to use this service, while paging groups are created at Home -> Extensions -> Paging groups.	✓	✓	✓
Directory / BLF List The directory is used to enter a list of extensions you would like to have as contacts. When used with the Busy Line Field enabled phone, you can select some of those extensions to be monitored through the BLF buttons on your phone.	✓	✓	✓

	Multi-Tenant	Business	Contact Center
Speed Dial Speed Dial service allows you to assign shortcode (up to 3-digits) to numbers you frequently dial so you don't have to type the full number every time. To use Speed Dial you must dial '130 in front of your assigned shortcode (for example, *130 13).	✓	✓	✓
Instant Recording Instant Recording service allows you to start a call recording at any point of the call. To start recording the call, the user simply has to dial *159 access code.	✓	✓	✓
Remote Access Remote Access enables users to dial into the system from a remote location and authenticate to their personal extensions so they can make calls as if they were using their office phone.	✓	✓	✓
Delete Recordings Delete Recordings will give permission to the end user to delete recorded calls from their personal CDR list that they can reach by logging into their Online Self Care portal. Recordings will be deleted from the system, not just from users OSC CDR list. Although users can only delete a recording from the calls they made, you should be careful to which users this permission is assigned to.	✓	✓	✓
Listen to Recordings This service allows a user to listen to recorded calls by downloading them from the Online Self Care portal or by dialing access code *170 on their phone and then pressing numbers 1-9 for the last 9 recordings, 1 being the newest.	✓	✓	✓
Call Monitoring This service monitors active calls in real time, allowing you to choose between three different monitoring options, listening, whispering and barging. The listening option allows you to listen to the calls, whispering allows you to listen to the conversation and talk only to the monitored extension and barging allows you to listen and talk to both parties on the call. All three options (Dynamic mode) allows you to dynamically choose what mode of monitoring you want to use during the call.	✓	✓	✓
Phone Callback Phone callback allows you to set up one or more Caller IDs that will be matched once a call gets to your PBXware. Once the caller ID is matched, the call is dropped and the user will receive the call from PBXware. Once the call is answered, the user is able to dial any destination as if they were using an office phone.	✓	✓	✓

	Multi-Tenant	Business	Call Center
"Confirm Calls" Disabled for Local Destinations If enabled this will force the confirmation of the calls for local destinations. The option is available on "Group Hunt" and "Follow Me" Enhanced services. (external numbers still have to be confirmed).	✓	✓	✓
Wake-Up Calls A user can now call an access code *611 and use an IVR to set up a wake up call. They can also set up wake up calls for other extensions by calling *612. An admin must grant them this privilage by enabling the enhanced service for them.	✓	✓	✓
BLF Cleanup BLF buttons that are not set by autoprovisioning will be cleared if a checkbox has been selected. Supported phones: • Cisco SPA and the newest Cisco models • Fanvil phones • Gigaset Maxwell series • Grandstream GXP series • Grandstream GRP series • Htek UC9xx series • Obihai phones • Vtech phones • Yealink phones • Snom phones • Sangoma phones • Polycom phones	✓	✓	✓

CUSTOM EXTENSIONS

	Multi-Tenant	Business	Contact Center
Custom Routing via Dial Plan For advanced users PBXware allows custom modifications directly from the dialplan configuration file, allowing you to customize routing beyond settings available in PBXware GUI.	✗	✓	✓

HOT DESKING

Hot Desking is a feature that allows employees to work at any available desk in an office and still be able to have their own extension. If the phone is set up to be used with hot desking, any user can log in to their own extension by entering the extension number and PIN. Only specific Polycom and Yealink devices are supported for hot desking.

	Multi-Tenant	Business	Contact Center
Polycom Hot desking support for Polycom devices - All Polycom devices	✓	✓	✓
Yealink Hot desking support for Yealink devices - All Yealink devices except T18	✓	✓	✓
Cisco Hot desking support for Cisco devices - 8865, 8851, 8841, 7821, 6851, 525G2, 509G and 508G	✓	✓	✓
HTek Hot desking support for HTek devices - All HTek UC9XX devices	✓	✓	✓
Grandstream Hot desking support for GXP1625, GXP1628, GXP1630, GXP1782, GXP2170 and GRP series phones	✓	✓	✓
Gigaset Hot desking support for Gigaset Maxwell Basic, 2, 3, and 4.	✓	✓	✓
Emergency Caller ID Field The emergency Caller ID field is attached to the Hotdesking entry, so when a phone logs in from a remote location, the Emergency Caller ID field under Enhanced Services will be replaced by the Hotdesking one.	✓	✓	✓

	Multi-Tenant	Business	Contact Center
Log out without PIN To log out from a Hot Desking device, a user will need to dial *555 while logged in and this will log them out immediately. Minor database editing is required for this feature to be enabled.	✓	✓	✓
HotDesking page - 'Logout' device button Introduced a new optional button for each device on the HotDesking page to log out the device from the GUI. The button will only be visible if the device is currently logged in.	✓	✓	✓
MAC address is in use HotDesking warning shown when an existing MAC address is in use	✓	✓	✓

RING GROUPS

Ring Groups are used to group a number of UADs/Phones into one network destination. Each Ring Group is assigned a network number which, once dialed, rings all extensions assigned to the group according to the ring strategy.

	Multi-Tenant	Business	Contact Center
***Ring Strategy:* All** Ring strategy All will ring all available extensions at the same time.	✓	✓	✓
***Ring Strategy:* Round** Round ring strategy will ring each available extension in a specific order.	✓	✓	✓
***Ring Strategy:* Round Memory** Round Memory ring strategy will ring each available extension in a specific order but it will begin with the extension that was last to ring on the previous call.	✓	✓	✓
***Ring Strategy:* Least Recent** Least Recent ring strategy will ring the extension with the least answered calls.	✓	✓	✓
Ringtone Customisation PBXware allows you to set up your ring group so phones use a different ringing sound if calls are coming from ring group.	✓	✓	✓
Caller ID Customisation Allows you to append the preferred string to the incoming caller ID number in order to distinguish the calls that are coming from the ring group or from other extensions.	✓	✓	✓

	Multi-Tenant	Business	Contact Center
Custom Greeting Custom greeting can be played to callers once their call enters the ring group.	✓	✓	✓
Exit Digit Exit digit can be set to transfer the ring group call to the destination assigned as "Exit Destination", usually an operator extension.	✓	✓	✓
Incoming Call Confirmation Enable Confirm Calls option to allow ring group members to be asked whether they would like to accept or reject the call coming from the ring group.	✓	✓	✓
Paging Groups Paging Groups feature works similar to standard paging, except this feature, allows you to organize extensions to multiple paging groups and assign a unique number to each of them. As this feature is used with access code *600, the paging group number is entered after the access code. For example, if we assign number 300 to paging group and add 4 extensions to it, once we dial *600300 we will be able to broadcast the message over the intercom to all the extensions added to paging group 300.	✓	✓	✓
Store Unanswered CDRs Exclude unanswered CDR records from the report. If the option is set to 'yes' or 'not set' ring groups will behave the same as before. If the option is set to 'no' the following will change: • The call was not answered/canceled: Instead of 2 generated CDRs per extension in the ring group, only a single CDR will be stored. • The call was answered: Instead of 2 generated CDRs per extension in ring group a total of 2 CDRs will be generated (one for the call to the ring group and one for the extension that answered)	✓	✓	✓
Operation Times for "Ring Groups" Set the "Ring group" open/closed times. Depending on the time when the call is received, the call can be redirected to different PBXware destinations.	✓	✓	✓
Limited Maximum Number of Extension that may be dialed when Ring Strategy is "All" When strategy is "All" the default number of Extensions that may be dialed in a single Ring Group is set to 9. The limitation number for Ring Groups can be changed if additional configuration is set differently	✓	✓	✓

TRUNKS/GATEWAYS

	Multi-Tenant	Business	Contact Center
***Protocols:* SIP, IAX2, DAHDI** PBXware Trunks/Gateways supports SIP and IAX2 protocols as well as DAHDI interface technology	✓	✓	✓
***DAHDI Signaling:* PRI, & Analog** DAHDI signaling support PRI, and Analog PCI cards	✓	✓	✓
Codec Selection Every trunk on PBXware can have a separate codec selection so you can make sure only the allowed codecs are in use when a call is passing through that trunk. Supported codecs: G.711 ulaw, G.711 alaw, G.722, G.723.1, G.726, G.726 AAL2, G.729, GSM, iLBC, Speex, LPC10, H.261 Video, H.263 Video, H.263+ Video, H.264 Video.	✓	✓	✓
SIP and IAX2 Outbound Registrations Trunks on PBXware support SIP and IAX2 outbound registration.	✓	✓	✓
***DAHDI Hardware Supported:* Digium Analog and Digital Cards** PBXware supports Digium Analog and Digital PCI cards:TDM10B, TDM11B, TDM12B, TDM13B, TDM20B, TDM21B, TDM22B, TDM23B, TDM2400P, TDM30B, TDM40B, TDM410P, TDM800P	✓	✓	✓
***DAHDI Hardware Supported:* Sangoma Analog and Digital Cards** PBXware supports Sangoma Analog and Digital PCI cards, A500, B700, A200, A400, A601, A700, AFT-B600.	✓	✓	✓
***DAHDI Hardware Supported:* OpenVox Analog and Digital Cards** PBXware supports OpenVox Analog and Digital PCI cards: A400P/E, A400M, A810P/E, A800P/E, A1200P/E, A1610P/E, A2400P/E, D830P/E, D430P/E, D230P/E, D130P/E, D410P/E, D210P/E, D110P/E.	✓	✓	✓
***DAHDI Hardware Supported:* Xorcom Astribank** Support for Xorcom Astribank VoIP gateway.	✓	✓	✓
Check for Additional Headers This field should have a comma separated list of Headers to look out for. If a call comes to a trunk and has a header set that is in this list then that header will be preserved for when call leaves the system.	✓	✓	✓

SIP TRANSPORTS SUPPORTED

	Multi-Tenant	Business	Contact Center
UDP PBXware supports UDP transport. With UDP, computer applications can send messages, in this case, referred to as datagrams, to other hosts on an Internet Protocol (IP) network without having prior communications to set up special transmission channels or data paths.	✓	✓	✓
TCP PBXware supports TCP transport. TCP provides reliable, ordered, error-checked delivery of a stream of octets between programs running on computers connected to local networks or the public Internet.	✓	✓	✓
TLS PBXware supports SIP/TLS transport but it is important that clients also support TLS and that they are set up accordingly. TLS is a cryptographic protocol and it provides encrypted communication over the Internet improving security.	✓	✓	✓
Customizing TLS Bind Port This port overrides any TCP/UDP settings in the SIP protocol settings and applies for all users (external/internal).	✓	✓	✓

SIP GENERAL SETTINGS

	Multi-Tenant	Business	Contact Center
NAT Settings PBXware NAT settings allow you to configure settings according to network configuration on location from which devices are registering to PBXware.	✓	✓	✓
Registrations An administrator can customize SIP registration settings to preferred values. It is possible to change settings for the length of incoming and outgoing registrations, Registration context, Registration timeout etc.	✓	✓	✓

	Multi-Tenant	Business	Contact Center
Codecs PBXware supports a number of different codecs: G.711 ulaw, G.711 alaw, G.722, G.723.1, G.726, G.726 AAL2, OPUS, G.729, GSM, iLBC, Speex, LPC10, H.261 Video, H.263 Video, H.263+ Video, H.264 Video.	✓	✓	✓
RTP Timers RTP timers define a time period after which calls will be terminated if there is no RTP activity.	✓	✓	✓
SIP Timers PBXware has 3 parameters for SIP timer: 1. Minimum round trip time for a monitored host that defines minimum round trip time for messages to be monitored (default 100 ms). 2. Default T1 timer is the estimated round trip time of an IP packet. By default, T1 is set to 500 milliseconds 3. Call Setup Timer - this timer defines the period after which a call will auto congest if a response was not received. Default value is 64 * [T1 timer]"	✓	✓	✓
MWI Message Waiting Indicator (MWI) is a feature that informs users that they have a new voicemail message(s) waiting in their mailbox. In its most common form, this feature lights a lamp on a phone to indicate the presence of a voice message.	✓	✓	✓
Subscriptions SIP protocol includes a standardized mechanism to allow any SIP client, for example, your desk phone, to monitor the state of another device. So for example, if you would like to monitor whether your coworker is on the phone or not, your phone must send the SUBSCRIBE request, either directly to your coworkers desk phone or to a server that is aware of the state of the device. If the SUBSCRIBE request is successful, then every time that device changes state, your desk phone will receive a SIP NOTIFY message telling it about the event or change of status. This is the mechanism that IP phones use to control BLF lamps. PBXware enables you to make changes to subscription settings. You can use Allow Subscription setting to disable/enable subscription support, you can set a specific context for SUBSCRIBE requests with Subscribe Context. enable disable Notify on RINGING or Notify on HOLD.	✓	✓	✓
Video Support PBXware natively supports SIP video but in order to use it, some settings will need to be enabled on the extension settings page as well as on the device itself.	✓	✓	✓

	Multi-Tenant	Business	Contact Center
Remote-Party-ID PBXware supports SIP Remote-Party-ID (RPID) and allows you to use services like Caller ID and Caller ID blocking. Not setting the RPID on your server in some situations can cause the preferred Caller ID not to be delivered to the called party (in which case the default Caller ID assigned by your provider might be used instead) and it can also prevent you from hiding your Caller ID if necessary. This, however, will mostly depend on your provider's requirements.	✓	✓	✓
SIP Debugging SIP debugging features available in shell and Asterisk CLI are adding an additional layer of information necessary for troubleshooting when the data available in CLIRs is simply not containing all the necessary information. To fully utilize these features the user will require advanced experience with PBXware and Asterisk.	✓	✓	✓
QoS QoS settings on PBXware allow administrators to prioritize traffic in their local network, improving call quality in busy and networks with low Internet bandwidth. In order for this to work, QoS rules must be set on PBXware and on the networking devices (routers/modems).	✓	✓	✓

CODECS

Codecs are used to convert an analog voice signal to a digitally encoded version. Codecs vary in the sound quality, the bandwidth required, computational requirements, etc.

	Multi-Tenant	Business	Contact Center
G.711 uLAW Support for G.711 uLAW codec.	✓	✓	✓
G.711 aLAW Support for G.711 aLAW codec.	✓	✓	✓
G.729 - Royalty free Support for G.729 - Royalty free (License included with PBXware 5.0).	✓	✓	✓
G.722 Support for G.722 codec.	✓	✓	✓

	Multi-Tenant	Business	Contact Center
G.723.1 Support for G.723.1 codec.	✓	✓	✓
G.726 Support for G.726 codec.	✓	✓	✓
GSM Support for GSM codec.	✓	✓	✓
iLBC Support for iLBC codec.	✓	✓	✓
Speex Support for Speex codec.	✓	✓	✓
LPC10 Support for LPC10 codec.	✓	✓	✓
H.261 Video Support for G.722 codec.	✓	✓	✓
H.263 Video Support for H.263 Video codec.	✓	✓	✓
H.263+ Video Support for H.263+ Video codec.	✓	✓	✓
H.264 Video Support for H.264 Video codec.	✓	✓	✓
Opus Support for Opus codec.	✓	✓	✓
Default Codecs for Newly Created Tenants When creating a new tenant the Codecs set will be inherited from Master Tenant instead of being hardcoded.	✓	✗	✗

ONLINE SELF CARE

Online Self Care portal allows the end user to modify their extensions settings according to assigned permissions. Users can edit Enhanced Services settings, set up voicemail behavior, check CDRs, download call recordings etc.

	Multi-Tenant	Business	Contact Center
Dashboard PBXware, the new OSC portal also has a Dashboard that displays all the relevant information about users calls for that day. On the dashboard, users can see their voicemail status, the total number of calls, the number of answered calls, talk time, and funds spent. In addition, the status for Call Forwarding and Do Not Disturb services is displayed, to help prevent scenarios in which users forget to disable these services, causing their calls to be forwarded or rejected.	✓	✓	✓
Account Details Changes Online Self Care portal allows the end user to modify extensions, email address, password and PIN.	✓	✓	✓
Voicemail End users can download and listen to received voicemail messages and modify their voicemail settings for their extension from the Online Self Care portal.	✓	✓	✓
Voicemail Speech to Text This feature will allow customers to attach the transcript of voicemails when sending out emails to users as well as being able to access the transcripts inside OSC. Two transcription services will be supported in this version, Google Speech and IBM Watson.	✓	✓	✓
Speech to Text Additional Languages Speech-to-text now supports Spanish and French language.	✓	✓	✓
Reports Online Self Care portal allows end users to see their call records, filter them by date, time and caller ID, print or email CDR search results.	✓	✓	✓
Call Recordings In addition to checking their CDR records, end users are also able to listen and download their Call Recordings from the CDR page in the Online Self Care portal.	✓	✓	✓

	Multi-Tenant	Business	Contact Center
Enhanced Services If permitted by the PBXware administrator, users can edit the Enhanced Services settings from their Online Self Care portal.	✓	✓	✓
Enhanced Services Status Status for the Call Forwarding and Do Not Disturb services is displayed, to help prevent scenarios in which users forget to disable these services.	✓	✓	✓
Destinations Permissions If permitted by the assigned Service Plan, users can edit their Destinations Permissions from the Online Self Care portal.	✓	✓	✓
Registered Devices With multiple registrations available, users can also see what devices are registered to their extension and from which IP address. We combined geo IP lookup with this feature, so if the device is registering from a public IP address, a flag icon will appear next to the registered device name, representing the country in which that particular IP is located. This should help users to notice and report any unusual registrations to their extensions.	✓	✓	✓
Today's Calls The total number of calls, the number of answered calls, talk time, and funds spent.	✓	✓	✓

DIDs

	Multi-Tenant	Business	Contact Center
CSV Upload CSV upload in DIDs page allows you to create a large number of DIDs by simply uploading a .csv file with the DID numbers and preferred settings.	✅	✅	✅
CSV Download CSV Download, in the DIDs page, allows you to download the full .csv file with DID list and its defined settings.	✅	✅	✅
DID Groups To make DID management easier the Multi-Tenant DID section has a new feature for master administrator users. When the DID mode is set to "groups" (under the master tenant settings), the administrator can assign a range of DID numbers to a DID group which can later be assigned to a particular tenant. The tenant administrator can later distribute and set up DID numbers from this group however preferred (single DID or a range of numbers) without needing a PBXware administrators assistance.	✅	❌	❌
Available Numbers for a DID Group The DID Mode needs to be set to Group. When adding/editing a DID the following things have been changed: 1. After you choose a group, the DID/Channel field will be changed to a drop-down, depending on some rules (written under) 2. The dropdown will be used as an autocomplete feature and will show available DIDs from the chosen group 3. A maximum of 10 DID numbers are shown at a time so to narrow your choice you need to type in more characters 4. The drop-down will show only available DIDs, meaning that those already reserved/created will not be shown	✅	❌	❌
Enable / Disable Local DID Matching Forces the call to leave the system without trying to match a dialed number with a local DID. Option available only on master tenant/server.	✅	✅	✅
***Destinations:* Extension** Assigning Extension as a destination for DID will allow an administrator to forward calls directly to specific extensions.	✅	✅	✅

	Multi-Tenant	Business	Contact Center
Destinations: Ring Group Assigning Ring Group as a destination for DID will allow administrator to forward calls directly to specific Ring Group.	✓	✓	✓
Destinations: Multi-User Extension (DID Forwarding) Multi-User Extension is used for DID forwarding, in cases where remote system trunk is registering to PBXware extension, which allows PBXware to pass inbound calls to the remote PBX system.	✓	✓	✓
Destinations: Multi User DID Controlled by License. Setting IVR (Interactive Voice Response) as a DID destination will enable callers to choose one of the multiple available selections by entering the assigned number on their phone keypad.	✓	✓	✓
Destinations: IVR Setting IVR (Interactive Voice Response) as a DID destination will enable callers to choose one of the multiple available selections by entering the assigned number on their phone keypad.	✓	✓	✓
Destinations: Queue When set as a PBXware destination, calls will be forwarded to the Queue where they will wait, listening to Music on Hold and/or pre-recorded announcements, until they are served by an available Agent.	✓	✓	✓
Destinations: Voicemail If preferred DID calls can be forwarded to extensions voicemail directly, even if user is available.	✓	✓	✓
Destinations: Conference Setting Conference room number as a DID destination will allow callers outside the company to join conference calls by dialing the DID number.	✓	✓	✓
Destinations: Remote Access Remote Access can be set as a DID destination to allow users to make calls from their extension even when they are not in the office. When a user dials the DID number to set to use Remote Access they will be asked to enter their extension number and PIN. Once the user is authenticated they can make calls to allowed destinations, check voicemail or even log in as a queue agent.	✓	✓	✓
Destinations: Use PBD Pin as DID Remote Access Authentication Users can chose PBD authentications for DID remote access.	✓	✓	✓
Destinations: Trunk When a trunk is set as a DID destination PBXware will act as a gateway and it will simply pass the calls to a remote system through a specified trunk, where it will be routed accordingly.	✗	✓	✓

	Multi-Tenant	Business	Contact Center
Destinations: Fax to E-mail Set Fax to E-mail as a DID destination if you would like to receive faxes on PBXware. A Fax will be sent to an e-mail address (if the SMTP server is configured on PBXware) and saved on PBXware where it can be downloaded from the FAX section.	✓	✓	✓
Destinations: External Number You can set an External Number as a destination to forward the calls to numbers that are not terminating on PBXware, for example, a users cell phone number.	✓	✓	✓
Destinations: Phone Callback Status for Call Forwarding and Do Not Disturb services is displayed, to help prevent scenarios in which users forget to disable these services.	✓	✓	✓
Destinations: Deny Access When used, the Deny Access destination plays a busy sound to all the callers that dial that DID number.	✓	✓	✓
Operation Times Operation times is a feature that enables you to forward DID calls to a destination different from the one that is set in DID, based on date, day and time.	✓	✓	✓
Caller ID Validation & Routing This option is used to fine-tune functionality of the DID by adding rules according to which calls will be routed to the preferred destinations based on the rule associated with specific Caller ID.	✓	✓	✓
Custom Ringtones The custom ringtones feature allows you to set up your DID so your phone uses a different ringing sound when calls are routed to your phone from a specific DID.	✓	✓	✓
Caller ID Replacement Allows you to append the preferred string to the incoming caller ID number in order to distinguish calls coming from the specific DID versus every other call.	✓	✓	✓
Call Recording Call recording can be enabled on the DID as well as on several other places on PBXware, however, if enabled on DID, call recording will have the entire length of the call in a single sound file, even if the call was transferred more than once.	✓	✓	✓

	Multi-Tenant	Business	Contact Center
Queue Priority Queue priority option allows you to assign certain levels of priority for calls that are being forwarded to the Queue. You can set up a queue priority level to give calls higher or lower priority compared to calls entering the queue from other destinations.	✓	✓	✓
Billing: **Specific Service Plan** Creating multiple service plans enables you to easily assign or change call prices which will be used by all extensions that are set to specific service plans. Creating multiple Service Plans allow you to set up extension pricing based on the package you are selling to that particular user or group of users. In addition to this, Service Plan allows you to create a template with a specific set of Enhanced Services and/or Destinations permissions which will be enabled for extensions that are assigned with particular service plans, preventing manual labor which would be needed if every extension was to be set manually.	✓	✓	✓
Billing: **Use Billing Extension for Billing** You can easily manage inbound calls billing on DIDs by assigning the Billing Extension number and automatically deduct the funds from extensions account balance for every inbound call made.	✓	✓	✓
Billing: **Force Codec** Enables you to force a specific codec to be used for all calls that come to the DID when this feature is enabled on.	✓	✓	✓
Billing: **Strip Digits** If your calls are being directed to a trunk, it is possible to define the number of digits which will be stripped from the beginning of the incoming call number in order to meet the dialing rules specific to that trunk provider.	✓	✓	✓

CALLER ID VALIDATION & ROUTING

This option is used to fine-tune functionality of the DID by adding rules which route the calls to different destinations based on incoming Caller ID.

	Multi-Tenant	Business	Contact Center
Match Explicitly Match Explicitly will inform the system to explicitly match the numbers with identical Caller ID as stated. For example, if you would like to block a particular number you would enter that number, select block and set Match Explicitly to yes. This will ensure only the entered number is blocked once it reaches the DID.	✓	✓	✓
Match Partially This option will inform the system to match all the Caller IDs that start with a specific number. For example, if you are receiving calls from a range of numbers originating from a foreign country you would like to block, you could enter the starting digits that are in common for all the Caller IDs you were receiving nuisance calls from. This will prevent all the calls from that particular range to be blocked or forwarded, depending on your preference. NOTE: Unless you would like to block all the inbound calls originating from a specific country, try to extend the range of numbers to at least cover the area code alongside the country code to minimize the range you are trying to block.	✓	✓	✓
Custom Destinations Identical to DID Destinations Destinations used for Caller ID Validation and Routing can be set to the same values available on DIDs.	✓	✓	✓
CLI Validation & Routing per Tenant CLI Routing and validation per tenant (the tenant administrator can manage the validation and routing per tenant). This option is used to fine-tune the functionality by adding rules which send the calls to different destinations based on Caller IDs.	✓	✗	✗

CONFERENCING

	Multi-Tenant	Business	Contact Center
Limit Maximum Number of Participants Allows you to define the maximum number of users that can join the conference.	✓	✓	✓
Instant Conferences via Desktop App Integration with gloCOM allows you to create dynamic conferences by draging users into an active call.	✓	✓	✓
Conference PIN Enables you to define Conference PIN all users must enter in order to join the conference.	✓	✓	✓
Conference Admin PIN Enables you to define Conference Admin PIN to authenticate user as a Conference Admin in order to assigns administrative privileges.	✓	✓	✓
Conference Marked User PIN Enables you to define Conference Marked User PIN to authenticate user as a Marked user in order to assign set of privileges.	✓	✓	✓
Dynamic PIN Prompt Enables you to define Conference PIN all users must enter in order to join conference.	✓	✓	✓
Announce User Join/Leave When joining a new conference, members will be asked to say their name and press the '#' key before they enter the conference. Their name will be recorded and played to other conference members when a caller joins/leaves the conference.	✓	✓	✓
Announce Number of Participants Turning on this option will announce the number of conference participants to a new conference member. e.g "There is currently one other participant in the conference."	✓	✓	✓
Email Conference Recording At the end of a conference call (static not dynamic) if the email is in there as an option the sound file of the conference would be emailed to a pre-specified email once everyone has exited the room.	✓	✓	✓

	Multi-Tenant	Business	Contact Center
DTMF Menu for Participants When marked as a conference admin users are able to perform several actions: 1. **Mute Control**: Conference Admins are able to mute a specific user. 2. **Volume Control**: Conference Admins are able to adjust the speaking volume for an entire conference room. 3. **Kick Users**: Conference Admins are able to kick specific user(s) from a conference room. 4. **Eject Users**: Conference Admins are able to use the eject command to kick out the last user that joined the conference room. 5. **Lock Conference**: Conference Admins are able to lock the conference room, preventing new callers from joining in. 6. **Record conferences**: Enables recording of the conference room calls. 7. **Music on Hold**: This option will play Music on Hold to the first user that joins the conference. As soon as the second user enters the conference room Music on Hold will stop playing and users are able to talk to each other. 8. **Wait for Marked User to Start Conference**: Enabling this option will prevent users to talk to each other until the marked user joins the conference, this is useful when you are arranging a conference call between multiple parties that are unfamiliar with each other. 9. **Close the Conference when Marked User Leaves**: Closes the conference when last marked user exits, regardless of the number of active participants in the conference room, their calls will be immediately dropped at that moment. 10. **Control Members of Conference**: Conference admin is able to mute, add or remove conference participants.	✓	✓	✓
Control Options for Each Member: It is possible to assign conference privileges on per extension basis. Available control options for each member are: 1. **Admin**: If this option is enabled, conference calls coming from the extension will be treated with admin privileges. 2. **Marked**: If this option is enabled, conference calls coming from the extension will be given fewer privileges than the admin, but more than regular conference participants. 3. **Talk-Only**: If this option is enabled, conference calls coming from this extension will be allowed to talk only and no sound from the conference will be heard on that phone. 4. **Listen-Only**: If this option is enabled, conference calls coming from this extension will be allowed to listen only and no sound from the extension will be heard in the conference. 5. **Exit Digit**: If this option is enabled, users will be allowed to exit the conference by dialing any digit on their phone.	✓	✓	✓

IVRs

	Multi-Tenant	Business	Contact Center
Standard IVR IVR (Interactive Voice Response) is an automated answering machine which will guide callers to their destination by providing a number of choices and waiting for the caller to make a selection through DTMF tones via a device keypad.	✓	✓	✓
Pin-Based IVR PIN-Based IVR allows dialing to local/remote destinations by providing a pre-set IVR PIN number.	✓	✓	✓
Multi-Digit IVR Unlike regular IVR, Multi-digit IVRs accepts two or more digits as a response from the caller, therefore providing a wider range of options compared to Standard IVR.	✓	✓	✓
Meeting IVR Meeting IVR is selected when a user wants to join the Conference only via audio. A user needs to call a DID that is connected to a Meeting IVR and follow the instructions in order to join a Meeting. The necessary information (Meeting Number and Participant ID) is provided in an e-mail when the Meeting is being created.	✓	✓	✓
IVR Tree Builder IVR Tree is a special form of IVR where creation of a particular IVR is more graphically oriented than it is with regular IVRs. This allows better overview when creating more complex IVR system in which callers have to navigate through multiple IVRs in order to reach preferred destination.	✓	✓	✓
IVR Destinations: **Extension** Setting up an extension as a destination in IVR will forward the call to a specified extension number once the assigned digit is pressed.	✓	✓	✓
IVR Destinations: **IVR** Setting up IVR as a destination in IVR will forward the call to a specified IVR number once the assigned digit is pressed.	✓	✓	✓
IVR Destinations: **Queue** Setting up Queue as a destination in IVR will forward the call to a specified Queue number once the assigned digit is pressed.	✓	✓	✓

	Multi-Tenant	Business	Contact Center
IVR Destinations: Conference Setting up Conference as a destination in IVR will forward the call to a specified Conference number once the assigned digit is pressed.	✅	✅	✅
IVR Destinations: Voicemail Setting up a Voicemail as a destination in IVR will forward the call to a specified extension number's voicemail directly, without dialing the extension, once the assigned digit is pressed.	✅	✅	✅
IVR Destinations: Remote Access Set Remote Access as an IVR destination to enable users to dial into the system from a remote location and authenticate to their personal extensions and make calls as if they picked up their office phone.	✅	✅	✅
IVR Destinations: Directory With this option selected, you will have the ability to dial an extension by entering the first three letters of the extension's last or first name.	✅	✅	✅
IVR Destinations: Fax to E-mail Set Fax to E-mail as an IVR destination if you would like to receive faxes on PBXware. Fax will be sent to an e-mail address (if the SMTP server is configured on PBXware) and saved on PBXware where it can be downloaded from the FAX section.	✅	✅	✅
IVR Destinations: Call External Number In order to dial a specific number as an IVR selection, you must select Call External Number as a destination in IVR and enter the number which will be dialed once the selection is made.	✅	✅	✅
IVR Destinations: Ring Group Setting up Ring Group as a destination in IVR will forward the call to specified Ring Group number once assigned digit is pressed.	✅	✅	✅
IVR Destinations: Remote Access Setting up Remote access as a destination in IVR will allow the caller to use Remote Access functionality.	✅	✅	✅
IVR Destinations: CRM Routing Setting up CRM Routing as a destination in IVR will allow the caller to use CRM Routing, which allows routing to a specific Queue or IVR or playing sound files based on information fetched from CRM	✅	✅	✅

	Multi-Tenant	Business	Contact Center
IVR Destinations Options: Default Caller ID You can append the preferred string to incoming Caller ID (for example IVR 1) to differentiate between multiple destinations that calls can come from.	✓	✓	✓
IVR Destinations Options: Change Language If sound files in languages other than English are uploaded to PBXware, alongside the defaulted English language prompts, you can set voice prompts to be played in the preferred language once a call is routed to its destination.	✓	✓	✓
Operator Extension Operator extension option allows you to assign the number of extension to which calls will be redirected to if 'IVR Status' is set to 'Off'.	✓	✓	✓
Custom Timeouts Allows administrators to set preferred time values for Response Timeout, Digit Timeout, Selection Timeout etc. In case any of these timeouts are exceeded voice prompt will be played back to the user several times, after which, the call will be dropped.	✓	✓	✓
Custom Greeting Custom greeting enables administrators to play a greeting with IVR instructions once the caller gets to the IVR.	✓	✓	✓
Change Greeting Access Code for a Specific Destination Type Users are able to change a greeting themselves without the admin making any changes to the file name and assign it to an IVR greeting. Two new access codes have been added: 1. Change Greeting: defaults to *303 and takes a queue/IVR or ring group as the destination. When dialed the user is prompted to record a new greeting. Once accepted the greeting is set as the destination's new greeting. 2. Change Greeting: defaults to *304 and takes a queue/IVR or ring group as the destination. When dialed the user is prompted to record a new greeting. Once accepted the greeting is set as the destination's new greeting, and the old greeting, if it existed, will be deleted.	✓	✓	✓
IVR Extension Exclusion A new field under "IVR > Local Dialing" called "Exclude list" has been added. Any extension added in field cannot be called form that IVR even if it is within the set range.	✓	✓	✓
IVR Extension Range When enabling local dialing on IVR, it is possible to exclude 1 or 2 extensions from this.	✓	✓	✓

	Multi-Tenant	Business	Contact Center
IVR: Add # Option Allow # to be used as an IVR option.	✅	✅	✅
Ringing Type This option allows you to set whether you would like to play Music on Hold or a ringing sound to callers once their call reaches the IVR.	✅	✅	✅
Dial Local Extensions Directly This feature allows callers to dial an extension number directly, once their call enters the IVR. If this feature is enabled anybody that enters the IVR will be able to dial extensions on the system/tenant directly if they know the number that would like to dial. This option can be used alongside standard IVR selections.	✅	✅	✅
Dial Local Extensions Limits Administrators are able to restrict extension dialing from IVR by defining a range of extensions that are allowed to be called directly.	✅	✅	✅
Dial Permissions Permissions are used to allow an organization to restrict who is able to enter an IVR. In particular, there are organizations where access to the IVR is only allowed to callers with a valid account number, but it can be used for other similar purposes.	✅	✅	✅
Operation Times Operation times enables the administrator to forward calls that are supposed to enter IVR to a different location depending on the date, day and time.	✅	✅	✅
FAX Detection When FAX recognition is enabled on your PBXware system, you can turn on FAX detection on your IVR by entering an e-mail address in the FAX Email field. This will automatically accept all FAX calls and send received FAXes to that e-mail address without any additional actions from the sender.	✅	✅	✅
Disable CallerID (PIN-based IVR only) This option disables CallerID but only for PIN-based IVRs.	✅	✅	✅

IVR DIRECTORY

With this option selected, you will have the ability to dial an extension by entering the first three letters of the extension's last or first name.

	Multi-Tenant	Business	Contact Center
Search by First Name With this option selected callers will have to enter the starting letters of a users first name in order to dial their extension. This is done by entering numbers that correspond with letters on the keypad on the phone/softphone the caller is using.	✅	✅	✅
Directory DTMF Timeout After entering directory from IVR for example, from that moment you only have 3 seconds to start typing in the first 3 letters of a last name if you do not do that call gets disconnected.	✅	✅	✅
Directory DTMF exit key can be customized The user can exit the Directory app at any moment by pressing the '#' or '0' key.	✅	✅	✅
Search by Last Name With this option selected callers will have to enter the starting letters of a users last name in order to dial their extension. This is done by entering numbers that correspond with letters on the keypad on the phone/softphone the caller is using.	✅	✅	✅
Search by First and Last Name With this option selected callers will have to enter the starting letters of a users First or Last name in order to dial their extension. This is done by entering numbers that correspond with letters on the keypad on the phone/softphone the caller is using.	✅	✅	✅
Play Voicemail Greeting for Name If a name is recorded in the voicemail box by a user, the message will be played in the IVR directory instead of automated spelling.	✅	✅	✅
IVR Directory Filter per Department This feature simplifies the search inside the IVR Directory by limiting searches to a group of extensions (departments) instead of the entire directory. This feature will assist when searching through the IVR if there are duplicate names in a system.	✅	✅	✅

IVR DIRECTORY

Same as regular IVR, IVR tree offer multiple available options for destination type.

	Multi-Tenant	Business	Contact Center
Dial Local Extension Dial Local extension feature will allow you to assign a local extension as an IVR Tree destination.	✓	✓	✓
Dial Remote Extension This feature allows you to assign an external number as an IVR Tree destination.	✓	✓	✓
Dial Voicemail This feature allows you to assign an extension voicemail as an IVR Tree destination.	✓	✓	✓
Check Voicemail Set up Check Voicemail on IVR Tree to allow users to log in to their extensions voicemail and check messages without using their extension.	✓	✓	✓
Go to Context Setting Go to Context on IVR Tree will forward calls to given context and extension.	✓	✓	✓
Start Recording Call recording will be enabled from point in which call gets to branch of IVR tree with Start recording enabled.	✓	✓	✓
Set Queue Priority Queue priority option allows you to assign certain level of priority for calls that are being forwarded to Queue. Set up a queue priority level to give calls higher or lower priority compared to calls entering the queue from other destinations.	✓	✓	✓
Set Language If sound files in language other than english are uploaded to PBXware alongside default english language prompts, it is possible to set voice prompts to be played in preferred language.	✓	✓	✓
Play Sound This selection will play selected sound file in multiple languages (if available). In addition, it is possible to allow DTMF entries, enabling callers to dial local destinations.	✓	✓	✓

	Multi-Tenant	Business	Contact Center
Change Caller ID You can append preferred string to incoming Caller ID (for example IVR Tree 1) to diferentiate between multiple destination calls can come from.	✓	✓	✓
Wait This option allows you to set pause time in seconds after which IVR will continue executing assigned actions actions.	✓	✓	✓
Busy Signal When selected, this option will play Busy signal to callers.	✓	✓	✓
Hangup This action will hang up incoming calls upon execution.	✓	✓	✓
Go to IVR Tree This option will forward calls to other IVR Tree destinations.	✓	✓	✓
Local/Remote Destinations IVR Tree supports forwarding calls to both Local and Remote destinations.	✓	✓	✓
Voicemail IVR Tree supports Voicemail as an IVR destination.	✓	✓	✓
RIng group IVR Tree supports Ring Group as an IVR destination.	✓	✓	✓
Queue IVR Tree supports Queue as an IVR destination.	✓	✓	✓

PIN BASED IVR

PIN-based IVR allows dialing local/remote destinations by providing a pre-set IVR PIN number

	Multi-Tenant	Business	Contact Center
CSV Upload PIN-based IVR allows you to create a large number of PIN numbers and matching destinations by uploading a CSV file.	✓	✓	✓
Expiry Date per PIN PIN Expiry date allows the PBXware administrator to define the PIN expiry date, rendering it unusable after a specified date.	✓	✓	✓
Destination per PIN Every created PIN is assigned to a specific destination, once the pin is entered in PIN based IVR, the matching destination will be dialed.	✓	✓	✓

IVR STATISTICS

We have added a new feature called IVR statistics, this feature is similar to Queue or Agent statistics for Call Center systems.

	Multi-Tenant	Business	Contact Center
IVR Calls IVR call statistics report will show: Callid, Date time, Called Number, Callerid, IVR name, IVR number, Option, Destination, Dest. Type, Ended	✗	✓	✓
IVR Calls per Called Number IVR calls per called number report will show: Called Number, Date Time, Callerid, Callid, IVR name, IVR number, Option, Destination, Dest. Type, Ended	✗	✓	✓
IVR Calls per Option IVR calls per option: Callid, Date time, Called Number, Callerid, IVR name, IVR number, Option Destination, Dest. Type, Ended	✗	✓	✓

	Multi-Tenant	Business	Contact Center
IVR Calls per DID in IVR Statistics IVR statistics page has been enriched with a new report page called "IVR calls per DID".	⊗	⊗	✓

REMOTE ACCESS

In most cases, Remote Access is set as a DID destination (although it can be set as an IVR destination as well) in order to allow users to make calls from their extension even when they are not in the office. When a user dials the DID, the number is set to use Remote Access. They will then be asked to enter the extension number and PIN. Once a user is authenticated they can make calls to allowed destinations, check voicemails or even log in as queue agent.

	Multi-Tenant	Business	Contact Center
Destinations Set destination to Remote Access in order to allow users to log in to their extension and make calls from it as if they were using their desk phone.	✓	✓	✓
Voicemail Voicemail can be assigned as a Remote Access destination in order to allow users to check their voicemail when not in the office.	✓	✓	✓
Agent Login Voicemail can be assigned as a Remote Access destination in order to allow users to log in as agents even if they are not using a PBXware extension.	⊗	✓	✓

OPERATION TIMES

Operation times is a feature that enables you to forward IVR calls to different locations depending on the date, day and time.

	Multi-Tenant	Business	Contact Center
Default Destination Destination, different from the one set on IVR, where calls will be forwarded according to the Operation Times rules.	✓	✓	✓
Custom Destinations for a Specific Day/Time Range You are able to define a specific day/time range when calls will be forwarded to a custom destination.	✓	✓	✓

	Multi-Tenant	Business	Contact Center
Control Open Days and Hours You are able to define the day/time range after which calls will be forwarded after working hours.	✅	✅	✅
Control Closed Dates and Hours You are able to define a default destination where calls will be forwarded during closed dates.	✅	✅	✅
Custom Greeting Create a custom greeting and assign it to Operation Times to inform customers that their call will be forwarded to a different destination because your office is closed.	✅	✅	✅
Midnight Reset for Operation Times In Access Codes → Edit, the Operation Times group feature called "Midnight reset" is available. By default this option is set to "Yes", meaning that the access codes will be reset in midnight. If set to "No", the midnight reset will be skipped.	✅	✅	✅
Import and export csv for operation times Operation Times configuration can be exported into csv or imported from csv file.	✅	✅	✅

QUEUES

Queue system allows you to receive more calls in your PBXware than your staff members are able to answer at the same time.

NOTE: Queues in MT edition have fewer options available. For example, Agents are not available on MT and only static members (SIP extension) can be added to the queue members list.

	Multi-Tenant	Business	Contact Center
QUEUE RING STRATEGIES Queue ring strategies allow you to distribute queue calls more efficiently and according to your specific needs. You can assign one of the available strategies to your queues in order to ring queue agents or static members randomly or in a specific order.	✅	✅	✅
Queue Ring Strategies: **Ring All** When the Ring All ringing strategy is selected, once a call enters the queue it will ring all available queue members at the same time.	✅	✅	✅
Queue Ring Strategies: **Linear** When the Linear ring strategy is selected, once a call enters the queue it will ring available queue members one by one in a specific order.	✅	✅	✅

	Multi-Tenant	Business	Contact Center
Queue Ring Strategies: **Least Recent** The Least Recent ring strategy will ring available agents with the least answered calls in order to distribute the calls evenly between all queue members.	✓	✓	✓
Queue Ring Strategies: **Fewest Calls** The Fewest Calls ring strategy will ring available agents with the fewest calls received in order to distribute the calls evenly between all queue members.	✓	✓	✓
Queue Ring Strategies: **Random** Random ring strategy will randomly ring any of the available queue members.	✓	✓	✓
Queue Ring Strategies: **Round-Robin with Memory** You are able to define the day/time range after which calls will be forwarded after working hours.	✓	✓	✓
Queue Ring Strategies: **Round-Robin Ordered** Same as Round-Robin with memory, except the queue member order from the config file is preserved so interfaces will ring in the order specified in the configuration file. If you use dynamic members, the members will be rung in the order in which they were added	✓	✓	✓
Queue Ring Strategies: **Random with Penalty** The Random with Penalty ring strategy will randomly ring available members of the lowest penalty level. In case all the members of that penalty are busy or not available, the call will move to members with a higher penalty level assigned.	✓	✓	✓
Music on Hold This option allows you to enable music on hold for callers that are waiting in the queue.	✓	✓	✓
Custom Ringtones PBXware allows you to set up your queues to send a matching string to the phone so it is informed to use a different ringtone when calls are coming from the queue set up with this option. In order to use this feature, alongside PBXware, part changes must be made in the phone as well. For information on how to set up the phone please consult your device admin manual.	✓	✓	✓
Caller ID Replacement Caller ID Replacement allows you to append the preferred string to the incoming caller ID number in order to distinguish calls coming from the queue or from other calls to an extension, for example Queue 1.	✓	✓	✓

	Multi-Tenant	Business	Contact Center
Custom Sounds You can record your custom sound files like Greeting, Periodic Announce, Agent Announce, Callback announcements for Caller and Agent.	✓	✓	✓
Ringing Timeouts Ring timeouts allow you to define how long will call ring each queue member before it continue to the next available member.	✓	✓	✓
Waiting Timeouts Define the total time the call spent in the queue and what should happen with unanswered calls and where they should be routed after timeout is reached.	✓	✓	✓
Announcements Queue Announcements inform callers waiting in the queue what their current position is and for how long (approximately) they should wait before their call is answered.	✓	✓	✓
Periodic Announcements Periodic announcement option allows you to play a custom message to the callers waiting in the queue.	✓	✓	✓
Call Recordings In order to allow you to preserve important customer calls PBXware queues also offer the option to record all queue calls.	✓	✓	✓
Exit Digit This option allows you to define Exit Digit which will be used to allow users to drop out of queue calls. Depending on the queue settings they can be forwarded to an operator extension, voicemail or to initiate queue callback.	✓	✓	✓
Abandoned Calls E-mail Notification When Abandoned Calls E-mail Notification is enabled, PBXware will send reports, once per hour, with information on all abandoned queue calls and the reason why the calls were dropped.	✗	✓	✓
Queue Callback Depending on the queue settings, Queue Callback will initialize the call to numbers that dropped in the queue before they were served by Agents. Queue Callback has a number of options that will allow you to fine-tune it according to your personal preference.	✗	✗	✓

	Multi-Tenant	Business	Contact Center
Queue Callback IVR In addition to the default Queue Callback setting that uses Caller ID to initialize the call, Queue Callback IVR allows users to enter different caller ID number from the one they are using.	⊗	⊗	✓
Static Member Login Queues on PBXware Business and Call Center edition offer options to allow static members (SIP extensions) to log in and log out of the queue in the same manner as Agents.	⊗	✓	✓
Prevention of Enhanced Services for Static Members This option allows you to choose whether extensions in Enhanced Services should apply to queue static members. The option is called Disable Member Enhanced Services. When set to Yes, ES rules will not be applied when the Queue dials static members. *NOTE: This only applies to Static Members with no login and Callback Agents or DynamicAgents that have ES disabled by default.*	✓	✓	✓
Queue Members Management You can easily add and remove queue members from the queue members management panel.	✓	✓	✓
Queue Member Penalties Assigning different penalty levels to queue members will help you achieve more precise call distribution in your queues. Members with a lower penaltiy number will receive calls until all members with that penalty are busy or unavailable, which will move the call to members with a higher penalty number.	✓	✓	✓
Desktop App Integration PBXware Call Center integration with desktop clients gloCOM Agent and gloCOM Supervisor will allow you to improve your employee's performance by speeding up their workflow.	⊗	✓	✓
Caller ID for Queue Callback Caller ID for callback is a new queuing feature in our Call Center Edition. When a customer receives a call from the Queue Callback you can choose a Caller ID to display.	⊗	⊗	✓
Caller Early Hangup When a call comes into the system via DID and the call is hung up while the greeting is played, the call still passes to the Queue because of statistics. So, users are aware they have abandoned calls. This is a new option in the queue and can be disabled or enabled per the user's preference. BBasically, if the user wishes to pass abandoned calls to the queue, they can still have these calls in statistics. If calls are abandoned during the greeting and are detected and not routed, it will also show in the statistics.	✓	✓	✓

	Multi-Tenant	Business	Contact Center
Disabled Queue Calling to Mobile Endpoints in PBXware Disabled queue calling to mobile endpoints in PBXware.	✓	✓	✓
Limited Number of Members to Ring for ringall Strategy When strategy is "ringall", the default number of Queue Members and Agents that may be dialed in a single Queue is set to 9. The limitation number for a Queue can be changed per single Queue if additional configuration is set differently.	✓	✓	✓
Better control over announce Position and Periodic announces are split into separate sections. Also, we added option to choose if one want to hear Hold-Time or Position announce or both.	✓	✓	✓

SKILL BASED ROUTING (SBR)

Different agents in queue can have different penalties. SBR allows one to create Sets of Rules to change the value of the Min Penalty and Max Penalty channel variables in mid-call. This means that it is possible to open a call to more members or potentially a different set of members. Agents with different penalties can answer a call in different period of time, depending on the Rule. On each queue one can choose which rule to use or no rule to use.

	Multi-Tenant	Business	Contact Center
Rule configuration Using this one can controll when Rule's configuration will be changed (Caller Hold Time) and which agents can answer the call (using Min and Max penalties).	✗	✗	✓

QUEUE MONITORING

Queue monitor is useful tool that will display information on Agent status (Unavailable, Idle, On call), and some Basic queue information (Answered calls, Abandoned calls, current number of calls waiting in queue etc.), or one can select specific queue to show detailed information about it.

	Multi-Tenant	Business	Contact Center
Calls Waiting Queue monitor Calls Waiting section displays total number of calls waiting in queue.	✗	✗	✓
Average Calls Waiting Queue monitor Average Calls waiting section displays average time calls were waiting in queue.	✗	✗	✓

	Multi-Tenant	Business	Contact Center
Agents Logged Queue monitor Agents Logged section displays information on number of logged in agents.	⊗	⊗	✓
Agents on Call Queue monitor Agents on Call section displays information on agents on call.	⊗	⊗	✓
Agents Idle Queue monitor Agents Idle section displays information on number of idle agents	⊗	⊗	✓
Agents Not Logged Queue monitor Agents not logged section displays information on number of agents that are not logged in	⊗	⊗	✓
Agents Not Ready Queue monitor Agents Not Ready section displays information on number of agents that are in not ready state.	⊗	⊗	✓
Overview Queue monitor Overview section displays information about number of Entered, Connected and Abbandoned calls for specific queue for current day.	⊗	⊗	✓
Callers Queue monitor Callers section displays information about number of Total, Connected and Waiting callers for specific queue - realtime data.	⊗	⊗	✓
Agents Queue monitor Agents section displays information about total number of Agents in queue, as well as number of Logged in and Paused agents for specific queue - realtime data.	⊗	⊗	✓
Extensions Queue monitor Extensions section displays information total number of Static members and how many extensions is online for specific queue - realtime data.	⊗	⊗	✓
Caller You can filter your reports per specific caller number, allowing you to get even more precise information in your reports.	⊗	⊗	✓
List of Agents/Extensions/Callers Shows detailed information (Number, Name, Channel ID, Caller ID, etc.) about each agent, static member and caller with various options (monitor call, transfer call, hangup call)	⊗	⊗	✓

QUEUE PANEL

Queue panel is useful tool that will display list of all available queues and general information about each queue (Agent status, number of Answered calls, Abandoned calls, etc) with option to show only total number for all queues and to show historycal data rather than data for current day only.

	Multi-Tenant	Business	Contact Center
Calls Queue Panel Calls section displays total number of calls serviced in the queue.	⊗	⊗	✓
Answered Queue Panel Answered section displays total number of answered calls.	⊗	⊗	✓
Abandoned Queue Panel Abandoned section displays total number of abandoned calls.	⊗	⊗	✓
Waiting Queue Panel Waiting section displays total number of the calls waiting in the queue	⊗	⊗	✓
Agents Idle Queue Panel Agents Idle section displays number of currently idle Agents.	⊗	⊗	✓
Agents Not Ready Queue Panel Agents Not Ready section displays number of agents which are not ready.	⊗	⊗	✓
Agents On Call Queue Panel Agents On Call section displays number of agents currently on a call.	⊗	⊗	✓

DIALER

Dialer allows lists of data to be loaded to a database and an application will run and dial these numbers based on an algorithm or settings entered by the admin. Dialer is mainly managed through Campaigns.

	Multi-Tenant	Business	Contact Center
***Dialer Ring Strategy:* Power** In the power strategy the campaign dials leads based on Idle agents multiplied with power number.	⊗	⊗	✓

	Multi-Tenant	Business	Contact Center
Dialer Ring Strategy: Preview This strategy gives an agent the ability to preview some details about a lead before it decides to dial them.	⊗	⊗	✓
Dialer Ring Strategy: Progressive This strategy works the same as a preview strategy, the only difference is that the agent has a certain timeout in which he/she must perform a dial.	⊗	⊗	✓
Dialer Ring Strategy: Voice Messaging This strategy automatically plays the message to leads. Additionally it records DTMF pressed during message.	⊗	⊗	✓
Numbers Option to import list of numbers to call via CSV files.	⊗	⊗	✓
Number of Retries How many time campaign will try to call one lead (one number imported via CSV file).	⊗	⊗	✓
Force Trunk and Codec Campaign can be forced to use only one Trunk and/or audio codec.	⊗	⊗	✓
Agents Agent can be member of only one campaign. Agents will not be able to use enhanced services when getting calls from dialer.	⊗	⊗	✓
Retries No Answer/Busy/Abandon Time in which the campaign will try to call again if current lead disposition is No Answer/Busy/Abandon.	⊗	⊗	✓
Answering Machine Detection Posibility to enable and configure AMD. If this feature is on, for each lead answer, dialer will run AMD, to avoid connecting agent with answering machine.	⊗	⊗	✓
Campaign Cycle For power like strategies (Power and Voice Messaging), one can option to set number of seconds campaign will sleep bewteen cycles, maximum number of leads to call per cycle nad maximum number of concurrent leads campaign can have.	⊗	⊗	✓
Caller ID Option to choose which caller ID campaign will use.	⊗	⊗	✓

	Multi-Tenant	Business	Contact Center
Dial Timeout Time dialer will ring the lead.	⊗	⊗	✓
Miminum digits to dial A minimum number length allowed in order to dial numbers.	⊗	⊗	✓
Don't dial failed numbers again If the numbers have failed for some reason, set the dialer not to dial them again.	⊗	⊗	✓
Generate CDR Option to enable/disable dialer to generate Asterisk CDR entries. Turning this feature ON is a performance penalty, and should be used only if you want to debug trunks.	⊗	⊗	✓
Operation Times This feature allows one to set working time for campaign, and applies only for power like strategies.	⊗	⊗	✓
Dispositions One can create list of dispositions that Agent will see in gloCOM which can be applied at the end of the call.	⊗	⊗	✓
Desktop App Integration PBXware Contact Center integration with desktop clients gloCOM Agent and gloCOM Supervisor will allow you to improve your employees performance by speeding up their workflow.	⊗	⊗	✓
Stop Campaign(s) Option to stop specific campaign or to stop all campaigns at once.	⊗	⊗	✓

CAMPAIGNS MONITORING

Campaign monitor is useful tool that will display information on Agent status (Loggend, Paused, Idle, Busy), and some basic campaign information (number of Dialling calls, number of Connecting calls, number of Connected calls), or one can select specific campaign to show detailed information about it.

	Multi-Tenant	Business	Contact Center
Calls Dialling Campaign monitor Calls Connection section displays number of calls currently dialing.	⊗	⊗	✓
Calls Connecting Campaign monitor Calls Connection section displays number of calls currently connecting.	⊗	⊗	✓
Calls Connected Campaign monitor Calls Coonected section displays number of calls currently connected.	⊗	⊗	✓
Agents Logged Campaign monitor Agents Logged section displays information on number of logged in agents.	⊗	⊗	✓
Agents Paused Campaign monitor Agents on Call section displays information about paused agents.	⊗	⊗	✓
Agents Idle Campaign monitor Agents Idle section displays information on number of idle agents.	⊗	⊗	✓
Agents Busy Campaign monitor Agents Busy section displays information on number of agents that are busy.	⊗	⊗	✓
Contacts Total Number of contacts made by agents on campaign.	⊗	⊗	✓
Contacts Rate Rate of contacts on campaign.	⊗	⊗	✓
Overview Campaign monitor Overview section displays information about number of Dialed, Unanswered, Connected and Abbandoned calls for specific campaign for current day.	⊗	⊗	✓
Leads Campaign monitor Leads section displays information about number of Dialling, Connecting and Connected leads for specific campaign - realtime data.	⊗	⊗	✓

	Multi-Tenant	Business	Contact Center
Agents Campaign monitor Agents section displays information about total number of Agents in queue, as well as number of Logged in and Paused agents for specific campaign - realtime data.	⊗	⊗	✓
List of Agents/Extensions/Callers Shows detailed information (Number, Name, Channel ID, Lead, etc.) about each agent and lead with various options (monitor call, transfer call, hangup call).	⊗	⊗	✓

DNC NUMBERS

DNC (Do not Call) Numbers contain a list of numbers not to be dialed by agents. You can upload your list by CSV. These numbers can be deleted from the list or added manually. Any DNC number marked by agent trough disposition will be visible here also.

	Multi-Tenant	Business	Contact Center
CSV Upload/Download Option to upload/downlaod list of numbers marked as DNC via csv file.	⊗	⊗	✓

FEEDBACK FORM

	Multi-Tenant	Business	Contact Center
Customizable Feedback Forms Creating custom feedback forms to be used with gloCOM Agents in outbound (dialer) calls.	⊗	⊗	✓

AGENTS

	Multi-Tenant	Business	Contact Center
Agent Types: Dynamic Agents This type of agents can login with access code *202. The dynamic agent line is always opened, and he is listening Music on Hold when not serving customer calls.	⊗	⊗	⊘
Agent Types: Callback Agents This type of agent can login by dialing *203 access code. Callback agents phone will ring once they have call waiting to be served.	⊗	⊗	⊘
Group of Agents To simplify queue members, management administrators can create groups of agents to easily add and remove multiple queue members. *NOTE: Agent Groups act as a template that allow you to move an entire group of agents into the queue but in case you add new group members into the group, they will not be automatically added to the queues you already added this group into prior to that moment.*	⊗	⊗	⊘
Agent wrap-up time Wrap-up time is a small time period in which agents will not receive the next call after they hang up a call. For example, if an agent finishes the call, you can assign a wrap-up time of 5000 ms (5 seconds) to allow the agent to recover before a new call is forwarded to that agent.	⊗	⊗	⊘
Login with PIN If set, agents must provide a personal PIN number in order to log in and start taking calls.	⊗	⊗	⊘
Pause Reason Codes When an Agent needs to stop receiving the queue calls, but does not want to log out, they are able to use pause and stop receiving queue calls until they use un-pause option. Under these conditions they will still be reported as logged in to the queue(s). Now agents can provide a pause reason code to indicate the reason they are currently paused. This reason code is logged in with their pause event.	⊗	⊗	⊘
Auto Log Off Time in seconds that the agent's extension should ring before declaring him unavailable and logging him off.	⊗	⊗	⊘
Auto Pause Automatically put agent on pause if she did not answered a call.	⊗	⊗	⊘

	Multi-Tenant	Business	Contact Center
Bind to Extension Whether the system will bind the agent in question to the extension specified in the Extension field.	⊗	⊗	✓
Direct IN Agent calls received directly are tracked and logged. This is when agent is dialed directly using agent number and not extension. Those calls are reported as part of agents statistics.	⊗	⊗	✓
Direct OUT Agent calls made by direct dialing out are tracked and logged. Those calls are reported as part of agents statistics.	⊗	⊗	✓
Project Codes Agent can now make direct out call, and associate it with Project that is defined on server. Each Project can have defined different Caller Id, so when agent dials with that project, it will use caller id predefined.	⊗	⊗	✓
Blending Using desktop app integration agent can work in blending mode. That is system will switch agent inbound (queues) or outbound (campaign) depending based on queue requirements where he is member of.	⊗	⊗	✓
Agents Realtime Statistics Agents realtime statistics is useful tool that will display real time information about Agents on your system (answered and unanswered calls, talk time, idle time, sessions , pauses).	⊗	⊗	✓
Calls Number of total calls for agent, and number of answered and unanswered calls.	⊗	⊗	✓
Talk Time Total talk time, average talk time and average delay.	⊗	⊗	✓
Idle time Total idle time and average idle time.	⊗	⊗	✓
Sessions Total sessions time and number of sessions.	⊗	⊗	✓
Pauses Total pause time and number of pauses.	⊗	⊗	✓

CONTACT CENTER STATISTICS

Statistics data will provide necessary tools that will help you to improve your contact center workflow and efficiency, detect bottlenecks and act in order to eliminate them.

	Multi-Tenant	Business	Contact Center
***Pre-Defined Date Ranges:* Today** PBXware statistics allows you to use predefined data statistics filter to display information for current day.	⊗	⊗	✓
***Pre-Defined Date Ranges:* Yesterday** PBXware statistics allows you to use predefined data statistics filter to display information for yesterday.	⊗	⊗	✓
***Pre-Defined Date Ranges:* This Week** PBXware statistics allows you to use predefined data statistics filter to display information for last seven days.	⊗	⊗	✓
***Pre-Defined Date Ranges:* This Month** PBXware statistics allows you to use predefined data statistics filter to display information for current month.	⊗	⊗	✓
***Pre-Defined Date Ranges:* Last Month** PBXware statistics allows you to use predefined data statistics filter to display information for last month.	⊗	⊗	✓
***Pre-Defined Date Ranges:* This Year** PBXware statistics allows you to use predefined data statistics filter to display information for last year.	⊗	⊗	✓
***Pre-Defined Date Ranges:* Custom Date Range** PBXware statistics allows you to use predefined data statistics filter to display information for custom date range.	⊗	⊗	✓
***Other Filters:* Call Duration** Using Call Duration filter will allow you to get additional information based on call length.	⊗	⊗	✓

	Multi-Tenant	Business	Contact Center
Other Filters: Hold Duration Using Hold Duration filter will allow you to get additional information based on how long caller waited prior connecting.	⊗	⊗	✓
Other Filters: Time Format You can change the format of value for all time-related fields. Possible options are: dd-hh-mm-ss normal time format e.g 01d 02h 03m 04s Days time format in days e.g 1.25d Hours time format in hours e.g 1.25h Minutes time format in minutes e.g 1.25m Seconds time format in seconds e.g 1.25s	⊗	⊗	✓
Report Actions: PDF Download This option allows you to download your reports in PDF format.	⊗	⊗	✓
Report Actions: CSV Download This option allows you to download your reports in CSV format.	⊗	⊗	✓
Report Actions: Email This option allows you to send your reports via E-mail. Report will be delivered in PDF format.	⊗	⊗	✓
Report Actions: Print This option allows you to print your reports from HTML page.	⊗	⊗	✓
Report Actions: Graph This option allows you to display graphs for your report.	⊗	⊗	✓
Report Actions: More This option allows to split you report into shorter date ranges.	⊗	⊗	✓

AGENT STATISTICS

	Multi-Tenant	Business	Contact Center
Other Filters: Agents You can filter your reports per specific agents, allowing you to get even more precise information in your reports.	⊗	⊗	✓
Agent Reports: Agent Availability Shows detailed information about agents. It provides a lot of information in a single report to give a quick overview of agent availability to the customer. The main feature here is agent idle time. This report focuses on all calls of agents, sessions, pauses and provides you with accurate information about agent idle time.	⊗	⊗	✓
Agent Reports: Agent Calls per Direction Shows a number of calls per direction. For each agent, the data is grouped per agent and then additionally grouped per direction (direct in, direct out, inbound, outbound).	⊗	⊗	✓
Agent Reports: Agent Direct IN Calls Shows agents direct in calls. The main feature here is calls > 1m. Those calls should be looked like as effective calls. This value is configurable.	⊗	⊗	✓
Agent Reports: Agent Direct OUT Calls Shows detailed information about agents direct out calls. The main feature here are calls > 1m. Those calls should look like as effective calls. This value is configurable.	⊗	⊗	✓
Agent Reports: Agent Direct OUT Calls per Project Shows detailed information about agents direct out calls that were made with project codes. The data is grouped per agent, and for each agent the data is grouped per project code. Eg. If one agent made direct out calls with three different project codes, that will be also shown in statistics.	⊗	⊗	✓
Agent Reports: Agent Occupancy Shows detailed information about agent sessions, pauses, talk time and occupancy. The data is grouped per agent. Provides a lot of information in a single report to give the customer a quick overview of agent occupancy.	⊗	⊗	✓

	Multi-Tenant	Business	Contact Center
Agent Reports: Agent Pauses Shows number of agent pauses with/without reason, billable/payable pauses. The data is grouped per agent.	⊗	⊗	✓
Agent Reports: Agent Sessions and Pauses Shows information about agent sessions and pauses. The data is grouped per agent. The main feature here is a number of agent pauses per session.	⊗	⊗	✓
Agent Reports: All Calls Shows summary information about all agent calls. Includes all calls dispositions which contains the total number of calls, number of answered and unanswered calls.	⊗	⊗	✓
Agent Reports: Direct OUT Answered Calls Shows summary information about agent direct out answered calls. Includes direct out answered calls dispositions (agent hangups, caller hangups, transferred calls).	⊗	⊗	✓
Agent Reports: Direct OUT Calls Shows summary information about all direct out calls. Includes direct out calls dispositions which contains the total number of calls, the number of answered and unanswered calls.	⊗	⊗	✓
Agent Reports: Direct OUT Unanswered Calls Shows summary information about agent direct out unanswered calls. Includes direct out unanswered calls dispositions where users can see what was the reason for not answering (busy, no answer, cancel)	⊗	⊗	✓
Agent Reports: Project Calls Shows a number of calls made with some project code. The data is grouped per Project so the user can see how project codes are used. You can see here how calls are distributed per each project code.	⊗	⊗	✓

DIALER STATISTICS

	Multi-Tenant	Business	Contact Center
Other Filters: Campaigns You can filter your reports per specific campaigns, allowing you to get even more precise information in your reports.	⊗	⊗	⊘
Other Filters: Members You can filter your reports per specific campaign members, allowing you to get even more precise information in your reports.	⊗	⊗	⊘
Other Filters: Lead You can filter your reports per specific lead number, allowing you to get even more precise information in your reports.	⊗	⊗	⊘
Agent Reports: Agent Calls Shows a detailed report about agent outbound calls. Data is grouped per agent.	⊗	⊗	⊘
Campaign Reports: Campaign All Calls Shows detailed information about agent sessions, pauses, talk time and occupancy. The data is grouped per agent. Provides a lot of information in a single report to give the customer a quick overview of agent occupancy.	⊗	⊗	⊘
Campaign Reports: Campaign Calls per Disposition Shows summary information about campaign all calls which include talk time, hold time and ring time. Data is grouped per campaign.	⊗	⊗	⊘
Summary Reports: Abandoned Calls Rate Shows the number and percentage of abandoned calls.	⊗	⊗	⊘
Summary Reports: All Answered Calls Shows summary information about all answered outbound calls. Includes all answered calls dispositions where we can see how did call finished (agent hangups, caller hangups, transferred).	⊗	⊗	⊘
Summary Reports: All Calls Shows summary information about all outbound calls. Includes all calls dispositions which include the total number of calls, number of answered and unanswered calls.	⊗	⊗	⊘
Summary Reports: All Unanswered Calls Shows summary information about all unanswered outbound calls. Includes all unanswered calls dispositions where we can see what was the reason for not answering (abandoned, machine, busy, noanswer, cancel).	⊗	⊗	⊘

QUEUE STATISTICS

	Multi-Tenant	Business	Contact Center
Other Filters: **Queues** You can filter your reports per specific queues, allowing you to get even more precise information in your reports.	⊗	⊗	✓
Other Filters: **Members** You can filter your reports per specific queue members, allowing you to get even more precise information in your reports.	⊗	⊗	✓
Other Filters: **Caller** You can filter your reports per specific caller number, allowing you to get even more precise information in your reports.	⊗	⊗	✓
Other Filters: **DID** You can filter your reports per specific DID number, allowing you to get even more precise information in your reports.	⊗	⊗	✓
Agent Reports: **Agent Dumped Calls** Shows how many calls agent had dumped. Note that for one call, an agent can dump several times. Total is the number of calls agent had including calls that are dumped. This type of calls happen when agent hang up on the caller while the queue announcement (agent announce) was being played.	⊗	⊗	✓
Agent Reports: **Agent Inbound Calls** Shows information about agent inbound calls. Data is grouped per agent.	⊗	⊗	✓
Agent Reports: **Agent Inbound Calls per Queues** Shows detailed information about agent inbound calls. For each agent, data is grouped by queue. Users can see here how calls are distributed per agent per each queue.	⊗	⊗	✓
Agent Reports: **Agent Missed Calls** Shows agent missed calls, average of missed calls and total ring time. Important thing here is that we can have more than one missed call for one agent call in queue.	⊗	⊗	✓
Queue Reports: **Entry Positions** Shows average, min and max entry positions of the calls in the queue. Data is grouped per queue. This is a very important report because from this report we can find out how much load was in queues.	⊗	⊗	✓

	Multi-Tenant	Business	Contact Center
Queue Reports: Queue Answered Calls Shows more detailed information about queues answered calls. Data is grouped per queue. Includes answered calls dispositions where we can see how did call finished (agent hangups, caller hangups, transferred).	⊗	⊗	✓
Queue Reports: Queue Callback Calls Shows information about queues callback calls. Data is grouped per queue. Includes callback calls dispositions which contain the total number of callback calls, number of answered and unanswered calls.	⊗	⊗	✓
Queue Reports: Queue Calls Shows summary information about all queue calls. Data is grouped per queue. Includes Queue Calls Dispositions which contains the total number of calls, answered and unanswered calls.	⊗	⊗	✓
Queue Reports: Queue Calls per Agents Shows detailed information about queue calls per agent. Data is grouped per queue. For each queue, data is additionally grouped by an agent. You can see here how calls are distributed per queue per agent.	⊗	⊗	✓
Queue Reports: Queue Unanswered Calls Shows more detailed reports about queues unanswered calls. Data is grouped per queue. Includes unanswered calls dispositions where we can see what was the reason for not answering (abandon, exit with key, timed out).	⊗	⊗	✓
Queue Reports: Repeated Callers This report shows statistics of a caller who has called the queue at least two times.	⊗	⊗	✓
Summary Reports: All Answered Calls Shows summary information about all answered inbound calls. Includes all answered calls dispositions where we can see how did call finished (agent hangups, caller hangups, transferred).	⊗	⊗	✓
Summary Reports: All Calls Shows summary information about all inbound calls. Includes all call dispositions (Total, Answered, Unanswered).	⊗	⊗	✓
Summary Reports: All Unanswered Calls Shows summary information about all unanswered inbound calls. Includes unanswered calls dispositions where we can see what was the reason for not answering (Abandon, Exit With Key, Timeout).	⊗	⊗	✓

	Multi-Tenant	Business	Contact Center
Summary Reports: Distributions for All Calls per Day Shows all calls per each day. List of days depends on the time range filter.	⊗	⊗	✓
Summary Reports: Distributions for All Calls per Day of Month Shows you all calls for every 1st, 2nd day of month.	⊗	⊗	✓
Summary Reports: Distributions for All Calls per Day of Week Shows how the calls were distributed per day of the week.	⊗	⊗	✓
Summary Reports: Distributions for All Calls per Hour Shows how the calls were distributed per hour.	⊗	⊗	✓
Summary Reports: Service Level Agreement Service level agreement is calculated per each time range(10, 20, 30, 40 ,50, 60, 70, 80, 90, 100, 110, 120) as: Service level = Answered calls inside time / Total answered calls * 100.	⊗	⊗	✓
Summary Reports: Service Level Agreement Inclusive Service level agreement inclusive is calculated per each time range(10, 20, 30, 40 ,50, 60, 70, 80, 90, 100, 110, 120) as: Service level agreement inclusive = 100 - Answered calls inside time / Total all calls * 100.	⊗	⊗	✓

VOICEMAIL

	Multi-Tenant	Business	Contact Center
Authentication with PIN All users need to provide a PIN in order to authenticate when accessing their voicemail.	✓	✓	✓
Voicemail to E-mail (Optional Attachment) It is possible to enable all voicemail notifications to be sent to an e-mail address assigned to the extension. It is possible to select whether the voicemail message should be included in the attachment.	✓	✓	✓
Custom Greeting Messages Depending on Status (Busy, Unavailable) Users are able to record their personalized voice messages for "busy" and "unavailable" status, which will be played to callers depending on the current status of their extension.	✓	✓	✓
Voicemail Operator Support If enabled, callers are allowed to reach operators extension by pressing 0 once their call is forwarded to voicemail.	✓	✓	✓
Timezone Support Setting up matching time zone in extensions voicemail settings will make sure voicemail messages are played to users with the correct time information.	✓	✓	✓
Sounds per Language If sound files in a language other than English are uploaded to PBXware alongside the default English language prompts, it is possible to set voicemail prompts to be played in the preferred language.	✓	✓	✓
Limit Voicemail Length This option will allow the administrator to define the maximum length of voicemail messages per mailbox, allowing you to limit space usage on servers with a large number of users.	✓	✓	✓
Limit Voicemail Count This option allow the administrator to define a maximum number of voicemail messages per mailbox, allowing you to limit space usage on servers with a large number of users.	✓	✓	✓
Voicemail Groups Voicemail groups allow you to group multiple voicemail inboxes to a group, informing all users once a voice message is left to their group.	✓	✓	✓

	Multi-Tenant	Business	Contact Center
Message Waiting Indicator (MWI) MWI option will inform the user that they have a voicemail message waiting in their mailbox by activating a new voicemail message indicator on their phone or gloCOM desktop client.	✓	✓	✓
Custom Greeting for a Voicemail Group We have introduced an administrative option to upload a custom greeting for a voicemail group. Sound files can be uploaded via the Sounds section as previously. Sound files must begin with vm-greeting-*.	✓	✓	✓
Voicemail CSV Upload Voicemail upload and Template download available on the Voicemail page. The template is: mailbox, name, pin, e-mail.	✓	✓	✓
Speech to Text Ability to Specify Multiple Languages This feature is located under: Settings > Voicemail > Show Advanced Options > Transcription. Speech to text ability to specify more than one language for transcription is available. Multiple languages are available only via the Google Speech service.	✓	✓	✓
Voicemail Transcription on the Tenant and Extension Level Under the Transcription options for the tenant the "Enable Transcription by Default" has been implemented. This option will determine if the transcription is enabled on all extensions for the tenant by default.	✓	✗	✗
Control of Voicemail Messages from Admin GUI An administrator can view all voicemails from the selected voicemail box on the system. To view the voicemails go to: Home > Voicemail > Messages.	✓	✓	✓
Custom Voicemail Login and Access When creating a custom voicemail via Voicemail > Mailboxes > Add Voicemail, a "Password" field is added. This password together with the e-mail is used for the mailbox login. When logged in with this e-mail and password the user will only see the Voicemail Page.	✓	✓	✓
Carbon Copy E-mails On the Extensions page under the Voicemail section a field called "Carbon Copy E-mails" is available. "Carbon Copy E-mails" is used to add multiple recipients for e-mails, as BCC. The users can add multiple extensions in this field by typing them out and pressing Enter or the "Add xxxx" option displayed while typing.	✓	✓	✓
Voicemail Lockout If a user enters wrong pin for voicemail 3 times in a row, they will be locked out of the voicemail and the administrator will receive an email notification. These 3 failed attempts can be accross multiple calls.	✓	✓	✓

MONITORING

The monitoring section allows the PBXware administrator to monitor the status of main system extensions, trunks, conferences, queues and live channel in real time.

	Multi-Tenant	Business	Contact Center
System Extensions Extensions panel in the Monitoring section will give you an overview of the current status of extensions, what user agents (device) are registered to the extensions, whether extensions are online or offline, and which extensions are on a call.	✓	✓	✓
Trunks The Trunks monitoring panel will display the trunks current status (online/offline) and the IP address of the remote system the trunk is registering to.	✓	✓	✓
Conferences The Conferences monitoring panel will display a list of available conferences, total activity time in the conference as well as a list of active conference members.	✗	✓	✓
Queues The Queues monitoring panel will display information on the Agent's status (Unavailable, Idle, On call), statistics on queue calls etc.	✗	✓	✓
Queue Panel The Queue panel offers the same information as the Queue monitoring section, except the information in it is adapted for displaying on large screens.	✗	✓	✓
Live Channels The Live channels monitoring panel will display information on active channels and it will allow the administrator to monitor, transfer and hangup calls, as well as to see details on the selected live channel.	✓	✓	✓

SYSTEM EXTENSIONS AND TRUNKS WARNING SYSTEM

	Multi-Tenant	Business	Contact Center
Monitoring of SIP and IAX2 System Extensions The Monitoring system can be set to monitor the status of SIP and IAX2 peers and if the status is changed it will trigger an offline warning notification.	⊗	✓	✓
Monitoring of Trunks via Outbound Test Number In addition to monitoring the trunk status, it is possible to assign a Test number to each trunk. This number will be dialed in a predefined interval and if the number is unreachable, a warning notification will be triggered.	⊗	✓	✓
E-mail Notifications If the PBXware warning system is enabled, a notification will be sent to the assigned email addresses whenever the SIP or IAX2 peer goes offline or the Test number on the trunk is unreachable.	⊗	✓	✓

CDR REPORTS

	Multi-Tenant	Business	Contact Center
Linked ID for CDR's Filtering CDRs by linked ID will display all the CDRs that are "linked" to the selected one.	✓	✓	✓
Control Access to Recordings This feature provides control of who can access and manage call recordings, as well as the recording access history. This will ensure listening, downloading and deleting recordings is only available to authorized users.	✓	✓	✓
CDR Search and Filters The results will display as a call flow with the selected CDR included.	✓	✓	✓
Listen and Download Call Recordings Listen to call recordings for a specific call by locating a specific CDR and downloading the attached sound file.	✓	✓	✓

	Multi-Tenant	Business	Contact Center
Call Recordings - Listen Recordings in-Browser The PBXware 5 interface now has a integrated call recordings player, allowing users to listen to PBXware call recordings directly from their browser and navigate through the recording with a simple click of a mouse. This prevents the issue users might have experienced with earlier versions, as they had to find a media player that supports the format in which the recordings were being downloaded.	✓	✓	✓
Delete Call Recordings PBXware allows you to delete call recordings from the Reports page.	✓	✓	✓
Make Calls You are able to initiate calls from the CDR page by selecting one record, picking up one of the call parties and entering the extension number you wish to use to make the call. The selected extension will ring and once you answer, the call to the destination chosen in the CDR page will be initiated.	✓	✓	✓
Print Recordings The print recordings option allows you to click the Print icon in order to print out the CDR records that are displayed on the current page.	✓	✓	✓
E-mail Recordings The E-mail recordings option allows you to send a specific call recording by clicking the E-mail icon and entering the e-mail address you would like to send the CDR records to.	✓	✓	✓
Information About Calls (CLIRs) The CDR page offers additional call information for easier debugging. To see detailed information about the call, click Advanced icon, select the checkbox for the CDR in question and click the CLIR icon to open the popup window with the full call report.	✓	✓	✓
CLIR for Exceed Channels When the channels limit defined in the license is exceeded the CLIR will show the exact numbers (current > max). The notification email body will contain the same information.	✓	✓	✓
CSV Download Click this option in order to download the .CSV file which will include the CDR records based on your search.	✓	✓	✓
Retention Policy PBXware's retention policy for call recording files now goes up to 7 years now.	✓	✓	✓

	Multi-Tenant	Business	Contact Center
Searching CDR by entering 'anonymous' This option enables to search reports by entering 'anonymous' in From field, to query the reports for Anonymous (inbound) calls	✅	✅	✅

CDR STATISTICS

CDR statistics provides all the information related to the calls made on your PBXware.

	Multi-Tenant	Business	Contact Center
Daily Statistics Daily statistics displays the total number of calls per day for a selected date range.	✅	✅	✅
Compare Data by Day / Month The Compare section allows you to compare statistics per day/month range by selecting the Date range filter.	✅	✅	✅
Calls Duration per Month The Compare section allows you to check the call duration per month by selecting the month range filter.	✅	✅	✅
Statistics per Extension The extension section allows you to check the call statistics per extension.	✅	✅	✅
Concurrent Calls Report Ability to list the concurrent calls statistics per tenant / trunk.	✅	✅	✅
Incoming Calls per DID DID statistics filter calls per DID.	✅	✅	✅

FILE SYSTEM CONTROLS

All PBXware logs, sound recordings, CLI and CLIR files are stored on the local file system. Some of these files can grow to a size that will not leave any space on the system. This section provides management with information of how and when these files should be rotated or deleted in order to prevent such a scenario.

	Multi-Tenant	Business	Contact Center
Set time for deletion of file sharing files PBXware admin sets time after files stored from file sharing will be deleted. Default value is 2 weeks.	✓	✓	✓
LOG ROTATION To prevent log files from growing too large and consuming all of the data on your PBXware's hard drive, data from the main log files are moved to another file after a certain period of time.	✓	✓	✓
Log rotation: **Control of Log Rotation** Select how often you would like PBXware log files to rotate. (default 2 weeks)	✓	✓	✓
Log rotation: **Other Log Files** The compare section allows you to check the call duration per month by selecting the month range filter.	✓	✓	✓
FILES REMOVAL CONTROL To prevent a number of large log files consuming all of the data on PBXware's drive, data that was moved from the main log files is deleted from the drive after a certain amount of time.	✓	✓	✓
Files removal control: **PBXware CLIR Files** Select for how long you would like to preserve the PBXware CLIR files. (default 2 weeks)	✓	✓	✓
Files removal control: **Asterisk Backup Files** Select for how long you would like to preserve Asterisk backup files. (default 2 weeks)	✓	✓	✓
Files removal control: **Control of Voicemail Removal** Select for how long you would like to preserve Voicemal messages. (default 2 weeks)	✓	✓	✓
Files removal control: **Control of Call Recordings Removal** Select for how long you would like to preserve PBXware Call Recordings files. (default 2 weeks)	✓	✓	✓
Files removal control: **Control of FAX Files Removal** Select for how long you would like to preserve received FAX files. (default Never)	✓	✓	✓

	Multi-Tenant	Business	Contact Center
System Optimization System reload and memory usage on large system optimized.	✓	✓	✓
System Files Upgraded System upgraded to PHP 7, Rebuilds of binaries.	✓	✓	✓

LOGS

	Multi-Tenant	Business	Contact Center
CLI Messages In the event your system is experiencing some call issues, you can inspect the CLI messages log in order to get a better understanding of the problem.	✓	✓	✓
SMTP Log The SMTP log section will provide you with useful information on eventual issues with e-mail notifications and messages.	✓	✓	✓

SOUNDS AND MUSIC ON HOLD

	Multi-Tenant	Business	Contact Center
Sounds Download / Upload and direct conversion of sound files Easily upload, download and convert sound files from the PBXware web interface or with the PBXware Sound Converter desktop app.	✓	✓	✓
Music on Hold Customization In order to allow you to customize your system to your preference, Music on Hold classes can be easily assigned to queues, IVRs and even extensions.	✓	✓	✓
Music on Hold Options: **Files Only, Grouped per Class** For easier management, sound files are grouped in MoH classes which can contain one or more sound files.	✓	✓	✓
Music on Hold Options: **MP3 Streaming** MoH MP3 streaming is set up by simply entering the link to a streaming MP3 sound file.	✓	✓	✓

	Multi-Tenant	Business	Contact Center
Music on Hold Options: Random Playback To avoid playing the same sound files to callers at all times, it is possible to add multiple sound files to a single MoH class and enable a random playback option. PBXware will shuffle the order in which files are played to avoid monotonous playbacks.	✓	✓	✓

ROUTING

	Multi-Tenant	Business	Contact Center
E.164 Routing E.164 routing mode is using destination routes based on E.164 numbering rules. E.164 defines a general format for international telephone numbers. Plan-conforming numbers are limited to a maximum of 15 digits, excluding the international call prefix.	✓	✓	✓
Simple Dial Plan Routing Simple routing mode allows you to manually create preferred destination routes based on the number of digits dialed.	✓	✓	✓
Disabled Routes The Disabled Routes section allows you to enter specific destination routes in order to prevent callers from dialing the numbers that are part of those specific routes.	✓	✓	✓
Special Routes The Special Routes feature allows the PBXware administrator to add special services numbers that will be distinguished from extensions numbers (even if they have the same number of digits) and dialed through the specified trunk, similar to how Emergency Services numbers are dialed through an Emergency Trunk.	✓	✓	✓

LCR

LCR (Least Cost Routing) section allows fine-tuning of the system's trunks usage accordingly to the price and quality.

	Multi-Tenant	Business	Contact Center
Setup Routing Up to Three Trunks per Destination Group LCR allows you to setup up to three trunks to be used according to the cheapest price for each available route to lower the costs of calls for you and your customers.	✅	✅	✅
LCR per System Extension Mini LCR on extension enables you to override the system LCR and allow an extension to make calls through different trunks.	✅	✅	✅

BILLING & SERVICE PLANS

	Multi-Tenant	Business	Contact Center
Billing Rates, Minimum Charge, Connection Charge, and Billing type per Destination Group Billing rates can be set per Destination group, but to allow better billing customization, PBXware also allows the setup of Minimum charge and Connection charge per destination group.	✅	❌	✅
Time-Based Dialing Time-based dialing allowa an administrator to set up different billing prices for a specific time of the day.	✅	❌	✅
Minimum Charge For easier management, sound files are grouped in MoH classes which can contain one or more sound file.	✅	❌	✅
Connection Charge Charges are applied to any call that leaves the system, regardless if the call was answer or not.	✅	❌	✅
Inclusive Minutes Adding a number of Inclusive minutes to a Service Plan will enable callers to spend that time on calls to routes that have Inclusive minutes enabled, free of charge.	✅	❌	✅

	Multi-Tenant	Business	Contact Center
Billing Increments Assign specific billing increments to your Service Plan or route to fine-tune billing.	✓	✗	✓
Option to Limit Service Plan for Tenants in "Tenant Packages" An administrator user will now be able to select which service plans are allowed for each tenant. This will allow the restriction of tenant users to only the plans allowed by the administrator.	✓	✗	✗
Enhanced Services Template When creating a service plan, the default enhanced services can be selected, which will be available in OSC for the end user.	✓	✗	✓
Change the word "Billing" with "Call Rating" Systemwide changed the word "Billing" with "Call Rating".	✓	✓	✓
Call Rating Cost in OSC and CDR Options button "Show Call Rating Cost in OSC". When used on the extension it affects OSC and when used on a group it will affect all users that are in that group. If this option is set to "No" or is not checked then when looking at CDRs the Rating Cost column will not be shown.	✓	✓	✓
LCR Page Visible on Master Tenant On Tenants it can set to use System Default LCR (the one on Master Tenant) or not. If Use System Default LCR is set to On then the configuration on that tenant will be ignored and the configuration on master tenant will be used. If it is set to Off then the configuration from that tenant will be used.	✓	✓	✓

CRM INTEGRATION

	Multi-Tenant	Business	Contact Center
SugarCRM PBXware supports SugarCRM 6.5 and later.	✓	✓	✓
SalesForce PBXware supports SalesForce CRM.	✓	✓	✓
Zendesk PBXware supports ZenDesk CRM.	✓	✓	✓
Zoho PBXware supports Zoho CRM.	✓	✓	✓

	Multi-Tenant	Business	Contact Center
Zoho Added support for Zoho API v2	✓	✓	✓
Microsoft Dynamics CRM PBXware supports Microsoft Dynamics 2015 CRM.	✓	✓	✓
Bullhorn PBXware supports Bullhorn CRM.	✓	✓	✓
Vtiger Support for Vtiger CRM.	✓	✓	✓
The SuiteCRM Support for The SuiteCRM	✓	✓	✓
Pipedrive CRM Support for Pipedrive CRM	✓	✓	✓
CRM Routing CRM Routing allows routing to a specific queue or IVR, or playing sound files based on information fetched from the CRM. So, when the call comes in AGI, we will first contact the CRM and then based on the result, we will make a specific action. In the PBXware Home tab we added a CRM menu with an Integration and Routing submenu. In the Routing submenu one can set up rules based on which call is to be routed. On DID and IVR we added new destinations where one can select the rule which will be evaluated for the particular DID/IVR.	✓	✓	✓
SugarCRM Added support for API v10+.	✓	✓	✓
Hubspot Support for Hubspot CRM.	✓	✓	✓

E-MAILS

	Multi-Tenant	Business	Contact Center
E-mail Notifications Control E-mail notifications control allows you to control which e-mail notifications will be sent to the administrator.	✓	✓	✓
E-mail Templates E-mail templates allows you to edit the content of each E-mail notification message that is sent to users and administrators. The number of available variables enables you to provide information tailored to a specific user.	✓	✓	✓
E-mail Template for Call Rating A new email template for Call Rating was added to email templates.	✓	✓	✓
Extension E-mail Templates per Tenant Extension email templates per tenant will allow creating customized extension email templates for every tenant.	✓	✗	✗
Proxy Value for Voicemail Templates Variable %PROXY% is available for Email Templates. It references the value of gloCOM SIP Proxy in the tenant / server settings.	✓	✓	✓

GUI NOTIFICATIONS

GUI notifications warn users about license expiry date, new updates and status of emergency trunks setup in order to prevent potential system issues.

	Multi-Tenant	Business	Contact Center
License Notifications The PBXware GUI now displays notifications on upcoming license expiry. The administrator will be informed both in web interface and by e-mail (on servers that have an SMTP server configured).	✓	✓	✓
Update Notifications Update notifications will be pushed to PBXware GUI, notifying Administrators about new PBXware releases and informing them of new features/bug fixes.	✓	✓	✓

	Multi-Tenant	Business	Contact Center
Emergency Trunks Notification On systems that do not have Emergency trunks assigned, a warning will be displayed in the notification bar, informing administrators of a potential issue.	✓	✓	✓

DTMF ACCESS CODES

DTMF access codes allow PBXware users to easily access and manage a number of PBXware features.

	Multi-Tenant	Business	Contact Center
Access Voicemail The Voicemail box is accessed by dialing *123 on the phone that is connected to the user's extension. In addition, to access the voicemail box from other extensions on PBXware, users can dial *124 and then authorize with their personal extension number and PIN.	✓	✓	✓
Voicemail Transfer To transfer a call to an extension's voicemail dial # *125 while on the active call, followed by the number of the extension you would like to transfer the call to.	✓	✓	✓
Agents Login / Logout / Pause / Not Ready PBXware allows users to enter a range of access codes to log in/out agents, pause them or put them in a not ready state.	✗	✓	✓
Instant Call Recordings When enabled in enhanced services users can start call recording at any point in a live call by dialing *159.	✓	✓	✓
Pause/Unpause Call Recording To pause a call recording, while on an active call, users can dial *9. This is useful for situations where the customer is providing personal data like a credit card number. Once they are done, in order to continue the call recording users can dial *91.	✓	✓	✓
Start Monitoring a Call Users with Call Monitoring enabled, in extensions enhanced services, are able to listen to active conversations by dialing *199 followed by the number of the extension they would want to monitor, while that extension is on the call.	✓	✓	✓

	Multi-Tenant	Business	Contact Center
Paging Users can dial *399 to relay a voice message to a predefined set of extensions. To page a single extension, users have to dial *400 followed by the number of the extension they would like to page. Some phones require additional setup in order for speakerphone to activate automatically when the device is paged.	✓	✓	✓
Paging a Group Through Speakerphone Dial *600 followed by the number of the paging group you would like to page in order to broadcast the message over the speakerphone of extensions that are members of this paging group.	✓	✓	✓
Speed Dial Dial *130 followed by the short code assigned to the number you frequently dial in order to initiate speed dial to a specified number.	✓	✓	✓
Select Other Networks Other network features allow you to force calls to go through a specific trunk by entering an assigned number that can be 1-3 digits in length. If the Other Networks option is set up to be used with numbers longer than 1-digit, access code *188 must be entered before the assigned number and this is followed by the number the caller wishes to dial. For example, if you assigned 231 as an Other Network number for Trunk D, to force the call to go out through that trunk you must dial *188 231 followed by the number you wish to call.	✓	✓	✓
Listen to CDR Recordings Access code *170 is used when the user want to listen to the last 9 Call Recordings from the CDRs page. For example the user can dial *170 from their phone followed by a number between 1 and 9, where 1 is the most recent recorded conversation.	✓	✓	✓
Toggle Call Forwarding Dial *71 on your extension to enable the call forwarding rules predefined in the extension's enhanced services. To disable call forwarding dial *72.	✓	✓	✓
Toggle Group Hunt Dial *510 on your extension to enable the Group Hunt rules predefined in the extension's enhanced services. To disable the Group Hunt rules, dial *511.	✓	✓	✓
Block Your Caller ID You are able to block your Caller ID by entering *67. Blocking will be in effect until you use *68 to unblock your caller ID. If you would like to temporary block your caller ID, dial *81 to block it for only the next call.	✓	✓	✓

	Multi-Tenant	Business	Contact Center
Call with CallerID If an extension has a list of Allowed CallerIDs set, users can use access code *65 to use one of the available caller IDs to make a temporary change of caller ID. Although this feature is meant to be used with gloCOM, we have made it available to use over your desk phone.	✓	✓	✓
Toggle Follow Me Rules Dial *520 on your extension to enable the Follow Me rules predefined in the extension's enhanced services. To disable the Follow Me rules dial *521.	✓	✓	✓
Call Parking If you would like to park a call to available parking slots, dial *700 while on the call. The system will play notifications to what parking slot number your call was parked. The default parking slot range span starts at 701 and ends at 720. This can be changed from Settings -> Access Codes page.	✓	✓	✓
Direct Call Parking The voicemail box is accessed by dialing *123 on a phone connected to the user's extension. In addition, to access the voicemail box from other extensions on PBXware, users can dial *124 and then authorize with their personal extension number and PIN.	✓	✓	✓
Enhanced Call Parking While on an active call you can dial '#800'. The call will be parked and the Announce Extension will ring for a set number of seconds. After that period, the call will be directed to the Timeout Extension. Timeout, Announce Extension and Timeout extension must be set under Settings -> Servers/Tenants -> Master Tenant/TenantName -> Enhanced Call Parking (section).	✓	✓	✓
Test Music on Hold To perform a system test for the default music on hold class, dial *388 from your extension. If everything is okay, you should be able to hear your MoH class playing without any issues.	✓	✓	✓
Echo Audio Read Users can dial '*398' and talk into the phone. Everything they say will be played back to them to allow them to check the server response time.	✓	✓	✓
Record Greetings Dial *301 on your extension to record greeting messages from your phone. Greeting messages recorded this way can be found in the Sound files section under the letter G and will be named greeting-DATE-TIME. Rename them to the required format to use them with other PBXware elements.	✓	✓	✓

	Multi-Tenant	Business	Contact Center
Toggle Operation Times Use *401 on your extension to open your system's operation times or *402 to close it. The extension must have the Operation Time option enabled in extensions Enhanced Services.	✓	✓	✓
Reset Operation Times Users can dial *403 to reset the Operation Time rules. Before, they had to open them in order to allow calls to come in after closed time. In order to use this feature, Operation times must be closed first using *402.	✓	✓	✓
Hot Desking Users can dial *555 in order to log in or log out of their hot desking extension.	✓	✓	✓
Customizable Access Codes for Call Pickup 1. Under Settings > Access codes, added codes for call pickup using *8 and *88+EXT_NUM 2. Under Extension > Enhanced Services added codes for call pickup using *8 and *88+EXT_NUM next to the Call Pickup.	✓	✓	✓
Toggle for the Do Not Disturb Feature Implemented an Access Code as a toggle for the "Do Not Disturb" feature. The default value is *77. This Access Code can be used as a BLF in the BLF/Directory list by adding *77XXX, where XXX is the extension number. When used as a BLF, the button will also switch colors when DND is enabled/disabled.	✓	✓	✓
Voicemail transfer between tenants During an active conversation users can dial '*125 + $TENANT + $EXTENSION' to transfer the calling party to a system $EXTENSION number voice box.	✓	✓	✓
Greeting access code for specific destination type (IVR, Ring Group etc) Change Greeting: defaults to *303 and takes a queue/IVR or ring group as destination. When dialed the user is prompted to record a new greeting. Once accepted the greeting is set as the destinations new greeting. Change Greeting: defaults to *304 and takes a queue/IVR or ring group as destination.	✓	✓	✓
Toggle Operation Times Dialing *405 will toggle *402 / *403 access codes.	✓	✓	✓
Transfer call to voicemail on different tenant Redirect an ongoing call to a voicemail on a different tenant by dialing *125 + tenant extension.	✓	✓	✓

FAX

	Multi-Tenant	Business	Contact Center
SIP T.38 Support PBXware supports T.38 standard for faxing over SIP.	✓	✓	✓
Sending Faxes PBXware supports sending of FAXes using the gloCOM desktop app.	✓	✓	✓
Receiving Faxes (E-mail) Fax to E-mail option on PBXware allows you to receive faxes in digital form and to automatically send them to a specified e-mail address. Received FAXes will stay preserved on the server as well. In addition, it is possible to connect a FAX machine to an ATA device in order to receive FAXes in a conventional manner.	✓	✓	✓
Viewing Faxes in TIFF / PDF Format In the FAX section of the PBXware GUI you can see a list of FAXes received through the Fax to E-mail feature. You can download them in a TIFF or PDF format and view them on your computer.	✓	✓	✓
FAX Cover Page Customization PBXware allows you to set general FAX settings for a fax cover page which will be applied on every fax that is sent from PBXware. Additional options are available in the gloCOM desktop client.	✓	✓	✓
Sending Faxes Between PBXware Instances (Remote FAX Functionality) This option allows you to configure PBXware to transfer all incoming faxes to a remote system.	✓	✓	✓
FAX Caller ID Choose a CallerID when sending a fax from a list of predefined caller IDs. gloCOM users can choose different caller IDs, from a predefined list in the PBXware GUI, for sending a FAX.	✓	✓	✓
Email to Fax This is a service that allows people to send faxes via e-mail. An e-mail can have multiple files attached but there is a configurable limit on those files, the default is a maximum of 5 files per e-mail. E-mail To Fax must be enabled on the license	✓	✓	✓
Allow Caller ID Option to have both name and number This option enables to set both caller id name and caller id number for Email to Fax Caller ID.	✓	✓	✓

	Multi-Tenant	Business	Contact Center
Requeue Timeout This option defines the number of seconds after which a failed Fax try will be requeued.	✓	✓	✓
Choose Trunks to use Set the primary, secondary and tertiary trunk for Email to Fax feature. These trunks would then override the trunks set on tenant/server level.	✓	✓	✓
Email Addresses Whitelist Whitelist which email addresses can use Email to Fax feature.	✓	✓	✓

GUI GLOBAL SETTINGS

The PBXware graphical interface allows you to configure and supervise your PBX faster, easier, and much more efficient than any other product on the market.

	Multi-Tenant	Business	Contact Center
Global Administrators Besides the main administrative accounts, PBXware GUI allows the creation of additional administrator accounts so users do not have to share a single account.	✓	✓	✓
Site / Tenant Administrators To give customers management over settings on rented tenants, an administrator can create lower level administrator accounts with tenant level administrative privileges.	✓	✓	✓
Action Logs The Action Logs feature will provide information on what changes are made, who made them and when. It can also help you detect unauthorized access by storing information of IP addresses from which the connection to your PBXware was established.	✓	✓	✓
Different Action Log for "Download" and "Listen" Actions Separated logs for CDR Download and Listen actions. Logs are available for CDR Download and Listen actions. These can be found under Admin Settings > Action Logs.	✓	✓	✓
Admins/Users Permission to Create Tenants Grant admins/users permission to create tenants along with other permissions. Full administrator access will not be granted but they will be able to create tenants.	✓	✗	✗

	Multi-Tenant	Business	Contact Center
Date/Time Format Settings PBXware GUI allows you to Set/Change the date and time format settings according to your location.	✓	✓	✓
Timezone per Tenant, Timezone per Extension Setup a default timezone for a tenant that will apply to all extensions on that tenant. There is a new option to change the time zone for only an extension. This option will enable usage of one multi-tenant in different time zones.	✓	✗	✗
Language Settings (Internationalization Support) PBXware GUI is already translated to several languages but in case your language is not available, Bicom Systems will provide you with translation files which will allow you to translate PBXware GUI to your preferred language.	✓	✓	✓
New Language Added French language translation added for GUI.	✓	✓	✓
Tenant groups A user can create one or more tenant to tenant call groups with a list of tenants who are allowed to call each other. Tenants and packages together with Call Groups are in the sub menu of the Tenant's menu items. On the Tenant Add/Edit page option, "Disable Tenant to Tenant calls" was renamed to "Enable Tenant to Tenant calls". To choose the tenant to tenant calls group (Field label "Tenant to Tenant calls groups"), when selecting/changing a group, the tenant will be automatically added/removed to/from the group. If no group is selected, tenant calls will be allowed for all tenants.	✓	✗	✗
E-mail Sender per Tenant On the Tenant Add/Edit page, options to customize e-mail sender per tenant is added.	✓	✗	✗
Send E-mail in Case Special Number is Dialed Server/Tenant Edit - > Emergency Services button. A new field called Notification E-mail. When set on something that is not Master Tenant (CC or Tenant) after dialing one of the emergency numbers, an e-mail will be sent to the provided address. If the e-mail field is left empty, no e-mail will be sent. Note that setting this on Master Tenant will not affect others. In E-mail Templates there is a new template called 'Emergency Call Template'.	✓	✓	✓
HTTP API PBXware API is a service that provides easy access to PBXware features and data over HTTP.	✓	✓	✓
IP Address Restrictions (Blacklist/Whitelist) It is possible to restrict access to PBXware GUI by either adding IP addresses to a blacklist to restrict their access or by creating a whitelist which will only allow access to specified IP addresses.	✓	✓	✓

	Multi-Tenant	Business	Contact Center
LDAP Integration PBXware now allows LDAP integration, which allows users with an Active Directory or openLDAP account to authenticate to PBXware using their LDAP credentials.	✓	✓	✓
Branding Branding allows you to customize PBXware GUI with your company logos and/or colors.	✓	✓	✓
Simple Branding for Online Self Care This offers a possibility to brand the Online Self Care including the logo change. Location of the feature is: Admin settings > Branding > Online Self Care.	✓	✓	✓
Sessions To prevent unauthorized access to the PBXware web interface we created an automatic account suspension feature. By default, accounts will be suspended after 5 unsuccessful login attempts in 1 minute but users can change these values to match their preferences. After an account is suspended it will have to be unlocked by the administrator.	✓	✓	✓
CDR Extension Limit - Advanced Options A drop-down is added on the "Allow CDR extensions field" in user groups which will expand this field's functionality. 1. Including > All CDRs that include the selected extensions can be shown. 2. Between > Only calls BETWEEN the selected extensions can be shown. 3. From > Only calls made FROM the selected extensions can be shown. 4. To > Only calls made TO the selected extensions can be shown.	✓	✓	✓
Speed Dial Settings can be Managed per Tenant The Speed Dial page is available per tenant - Tenant > Settings > Speed Dial. The Speed dial page was available only on Master tenant before.	✓	✗	✗
Prevent users from deleting call recordings Prevent user from deleting call recordings.	✓	✓	✓

BRANDING

	Multi-Tenant	Business	Contact Center
Simple Branding The simple branding feature allows users to easily upload their custom logo and change the interface colors from PBXware GUI by simply clicking the mouse.	✓	✓	✓
Custom CSS Branding Advanced users are able to modify CSS files to visually adapt PBXware GUI to their preference.	✓	✓	✓
Custom Login logo Your company logo can be uploaded to replace the default Bicom Systems logo displayed on the PBXware login page.	✓	✓	✓
Product Name Branding Bicom Systems is offering an option to change the "PBXware" name to match our customer's preferences. For more information please contact your account manager.	✓	✓	✓

GUI TOOLS

	Multi-Tenant	Business	Contact Center
In-browser Asterisk CLI To make it easier for our customers that do not have as much experience working in a terminal environment, PBXware 5 has an integrated Asterisk CLI monitor in its interface. The Asterisk CLI is accessible on main administrative accounts on PBXware and does not require a root password to access it. While this may sound like a potential security issue, we have prevented problems by allowing the execution of monitoring commands only when using the in-browser Asterisk CLI. Apart from permissions being limited, you will be able to use debugging and other monitoring features the same as if you were logged in to the Asterisk CLI from the shell.	✓	✓	✓
SMTP Log E-mail notifications are a useful tool for PBXware administrators as well as end users. By providing automatic reports on system status and issues or automatically emailing access details when new users are created, administrators will be relieved of the additional workload. At the same time, the end user experience is improved through the use of different e-mail notifications. In 5.0 we made things even better with a SMTP Log that is built-in to the PBXware interface, allowing easy debugging in cases where e-mails are not delivered. To see the issue, simply navigate to Reports → SMTP Log, from the Home tab of PBXware settings.	✓	✓	✓

SUPPORTED BROWSERS (GUI)

	Multi-Tenant	Business	Contact Center
Internet Explorer 10+ PBXware GUI supports the Internet Explorer version 10 and later.	✓	✓	✓
Safari PBXware GUI supports the Safari web browser.	✓	✓	✓
Google Chrome PBXware GUI supports the Google Chrome web browser.	✓	✓	✓
Firefox PBXware GUI supports the Firefox web browser.	✓	✓	✓

HTTP API

In general terms, API is a set of clearly defined methods of communication between software components, or in our case between PBXware and custom solutions developed for working with PBXware.

	Multi-Tenant	Business	Contact Center
Extensions You can add, edit, configure, delete or list PBXware extensions through API queries. In addition to these options it is possible to manage extension billing through API.	✓	✓	✓
Trunks API queries can be used to list Trunks available on PBXware.	✓	✓	✓
Trunks Extended API Trunks: Add, Edit, Delete, Tenant actions.	✓	✓	✓
DIDs It is possible to add, edit, delete or list PBXware DIDs through API queries.	✓	✓	✓
DID Groups API queries can be used to add, edit, delete or list DID groups on PBXware 5.0 MT	✓	✗	✗

	Multi-Tenant	Business	Contact Center
Ring Groups It is possible to add, edit, delete or list PBXware Ring groups through API queries.	✓	✓	✓
IVRs It is possible to add, edit, delete or list PBXware IVRs through API queries.	✓	✓	✓
CDRs It is possible to download CDRs and get information on billing amounts through API requests.	✓	✓	✓
Routes It is possible to list available PBXware Routes using API queries.	✓	✓	✓
Servers On the Bussines and Call Center edition you can use API queries to get server configuration details.	✗	✓	✓
Enhanced Services Enhanced Services API update, all enhanced services are exposed in new APIs.	✓	✓	✓
Tenants On the MT edition It is possible to add, edit, delete or list PBXware Tenants through API queries.	✓	✗	✗
Service Plans API queries can be used to list available service plans and list prices for available destination groups.	✓	✗	✓
Destinations API queries can be used to list available destinations and destination groups.	✓	✓	✓
Print the API doc from within PBXware Print the API doc right from PBXware.	✓	✓	✓
Advanced API keys management Advanced API keys management allows: Multiple API keys, Defining allowed actions per key, Which tenant ID can be accessed, Limit API key access per IP address (or address range), Add API key expiry, Add information about last access of API key, browser, IP address.	✓	✓	✓

SETUP WIZARD

	Multi-Tenant	Business	Contact Center
Timezone Configuration In this part of the setup wizard, the administrator is able to set up or change the default time zone on PBXware.	✓	✓	✓
Administrator Password The PBXware setup wizard will allow you to create/change the main administrator username and password.	✓	✓	✓
Licensing The licensing section allows the administrator to apply new or reapply updated PBXware license when needed.	✓	✓	✓
Services control From the Services control section, an administrator can stop, start or restart server services like PBX service, PBXware, HTTP service, Database service etc.	✓	✓	✓
SMTP Configuration Configure your PBXware with an e-mail account in order to send out notification e-mails to users and administrators.	✓	✓	✓
G.729 Codec and License Installation The G.729 section of the PBXware setup wizard allows you to easily apply G.729 codec licenses to your PBXware.	✓	✓	✓
Updates and Upgrades You can easily update or upgrade your PBXware server from the Updates section. This feature only allows updates between minor versions like 4.1 to 4.1.2 while major versions upgrades, 4.0 to 5.0 for example, can only be performed by trained Bicom Systems staff members.	✓	✓	✓
Remote Logs Remote logs feature allow you to connect your PBXware to remote MySQL database in order to store CDR database on remote server. Please note that if this feature is enabled, in case connection to database server is interupted, you will not be able to access CDR data until connection is reestablished.	✓	✓	✓

	Multi-Tenant	Business	Contact Center
SSL Certificate import Setup wizard allows you to create and download your PBXwares private key and CSR files in order to send them to certificate authorities. In addition, once you receive your certificate files you can use this tool to install it on your PBXware.	✓	✓	✓
SSL Certificate Integration with Let's Encrypt With the Let's Encrypt integration in PBXware 5 our users will not have to worry about when their SSL certificate is about to expire as PBXware and the Let's Encrypt service will renew the certificate every 90 days automatically without any need for user interaction. Let's Encrypt is a free, automated, and open Certificate Authority used for setting up an HTTPS server and having it automatically obtain a browser-trusted certificate, without any human intervention (https://letsencrypt.org/). This means the customer will need to install the certificate only once and it will be automatically renewed once it is about to expire.	✓	✓	✓
Backup Manually initiate PBXware backup or set up a backup to run daily by selecting an option in the Backup section. It is possible to exclude Recordings, Voicemails, CLIR files and/or Log files in order to preserve space.	✓	✓	✓
QoS If you are experiencing call quality issues because of high network load, you can set tag VoIP packets based on your preferred QoS settings.	✓	✓	✓
Progress bar in Setup Wizard Progress bar in Setup Wizard is added to show info about updates on tables.	✓	✓	✓

AUTO PROVISIONING

	Multi-Tenant	Business	Contact Center
HTTP/HTTPS Provisioning with Authentication PBXware supports HTTP/HTTPS provisioning with Polycom, Yealink, Cisco SPA, Panasonic and Obihai devices.	✓	✓	✓
TFTP Provisioning PBXware supports TFTP provisioning on all devices.	✓	✓	✓
TFTP Provisioning Enable/Disable TFTP startup can be controlled in GUI (Master Server / Master Tenant).	✓	✓	✓
Exposing variables in Additional config	✓	✓	✓

SUPPORTED DEVICES

A wide range of supported UADs is an advantage PBXware is providing for its users. With suport for all major brands in the industry we also offer support for range of devices not as widely supported on other platforms.

	Multi-Tenant	Business	Contact Center
Phones: **Aastra** Supported Aastra models: 480i, 53i, 55i, 57i, 9112i, 9133i.	✓	✓	✓
Phones: **Alcatel** Supported Alcatel models: IP100, IP150, IP200, IP300, IP600, IP800, IP1020, IP2015.	✓	✓	✓
Phones: **Grandstream** Supported Grandstream models: BT-102, BT-101, GXP-2000, GXP-2124, GXP-2160, GXW-4004, GXP1625, GXP1628, GXP1630, GXP1782, GXP2170, GXV3275, GXP2130, GXP2135, GXP1615, GXP1760W, GXP2140, GRP2612, GRP2613, GRP2614, GRP2615, GRP2616.	✓	✓	✓
Phones: **Gigaset** Supported Gigaset models: Maxwell Basic, Maxwell 2, Maxwell 3, Maxwell 10, N720, N510, N870.	✓	✓	✓

	Multi-Tenant	Business	Contact Center
Phones: Cisco Supported Cisco models: 7940, 7941G, 7942G, 7945G, 7960, 7961G, 7962G, 7965G, 7971G, 7975G, 8851, 7821, 8841, 6851, 8865. *WARNING: Cisco 79xx devices, other than 7940 and 7960, will not work if PBXware is not in the same LAN.*	✓	✓	✓
Phones: Cisco SPA Supported Cisco SPA models: SPA301, SPA901, SPA501G, SPA502G, SPA504G, SPA508G, SPA509G, SPA525G2.	✓	✓	✓
Phones: Denwa Supported Denwa models: DW-210P, DW-310P, DW-610P.	✓	✓	✓
Phones: Fanvil Supported Fanvil models: X4, H3, H5, X2P, X3G, X3S, X4G, X5S, X6.	✓	✓	✓
Phones: Hanlong Supported Hanlong models: UC902P, UC903, UC923, UC924, UC926	✓	✓	✓
Phones: Htek Supported Htek models: UC802P, UC803P, UC804P, UC806P, UC840P, UC842, UC860P, UC862, UC912P, UC912G, UC924E, UC926E.	✓	✓	✓
Phones: Huawei Supported Huawei models: eSpace 7910, eSpace 7950.	✓	✓	✓
Phones: Mitel Supported Mitel models: 6867i.	✓	✓	✓
Phones: Panasonic Supported Panasonic models: KX-HDV130, KX-UT113, KX-UT123, KX-UT133, KX-UT136, KX-TGP550, KX-UTG300B.	✓	✓	✓
Phones: Linksys Supported Linksys models: SPA-941, SPA-942, SPA-962	✓	✓	✓
Phones: Obihai Supported Obihai models: OBi110, OBi202, OBi302, OBi504, OBi508, OBi1022, OBi1032, OBi1062	✓	✓	✓

	Multi-Tenant	Business	Contact Center
Phones: Polycom Supported Polycom models: IP301, IP320, IP321, IP330, IP331, IP335, IP450, IP501, IP550, IP560, IP601, IP650, IP670, IP5000, VVX101, VVX201, VVX300, VVX310, VVX400, VVX410, VVX500, VVX600, VVX1500, VVX150, VVX250, VVX350, VVX450, VVX411, VVX501, VVX x50 OBi Edition, VVX601.	✓	✓	✓
Phones: Sangoma Supported Sangoma models: S500, S505, S700, S705.	✓	✓	✓
Phones: Snom Supported Snom models: 320, 360, 190, D315, D345, D375, D715, D745, D765, D785, D735, D717, D120.	✓	✓	✓
Phones: Vtech Supported Vtech models: VCS754, VSP600, VSP715, VSP726, VSP736, VSP725, VSP735, VSP716A, VSP726A, VSP736A, VDP650, ET605, ET617, ET635, ET685.	✓	✓	✓
Phones: Yealink Supported Yealink models: T18P, T19P, T20P, T21PE2, T22P, T23G, T26P, T27P, T28P, T29G, T32P, T38P, T41, T41S, T42G, T42S, T46G, T48G, T48S, T49G, T58V, W52P, W56P, CP860, T60P, T65P, CP920, CP960, T40G, T52S, T64S, T56A, W60B, W53H, T53W, T53, T54W, CP930W, W80B, VP59, T57W.	✓	✓	✓
ATAs: Grandstream Supported Grandstream ATA models: HT-286, HT-386, HT-486, HT-488, HT-496, HT-502, HT-503, HT-701, HT-702, HT-704, HT-814.	✓	✓	✓
ATAs: Cisco Supported Cisco ATA models: SPA112.	✓	✓	✓
ATAs: Linksys Supported Linksys ATA models: PAP2.	✓	✓	✓
ATAs: Obihai Supported Obihai ATA models: OBi302, OBi110, OBi202, OBi300, OBi302, OBi504, OBi508.	✓	✓	✓
ATAs: Sipura Supported Sipura ATA models: SPA-841, SPA-1000, SPA-2000, SPA-3000.	✓	✓	✓
ATAs: ReadyNet Supported ReadyNet ATA models: AC1200MS, AC1000MS, AC1100MSF, QX300.	✓	✓	✓

	Multi-Tenant	Business	Contact Center
UAD Settings on Master Tenant This extends the ability to set specific settings on the Master tenant for UADs. These settings are inherited when creating tenants.	✅	❌	❌
EOL Devices list End of life devices will be shown and flagged in UAD list.	✅	✅	✅

CNAM INTEGRATION

	Multi-Tenant	Business	Contact Center
CNAM Lookup When phone calls are made, there are usually two user-facing identifiable pieces of information: a phone number and a Caller ID Name. CNAM can be used to display the calling party's name alongside the phone number, to help users easily identify a caller. There are numerous CNAM lookup services which allow you to pay a small fee to lookup the CNAM of a specified caller and PBXware now allows you to integrate with them.	✅	✅	✅
Support for CNAM providers with Text/Plain Response Type Added support for CNAM providers which return plain text instead of just a response.	✅	✅	✅

ARCHIVING STORAGE

	Multi-Tenant	Business	Contact Center
Archiving Storage with FTP, Amazon S3 and Dropbox PBXware 5.0 includes the archiving storage feature that can be used to keep your recordings, voicemails, and FAXes on a remote location. You can choose between three options for remote storage: Amazon S3, FTP server, or Dropbox. You can either keep these files on both your PBXware server and the remote server for backup purposes, or set files to be removed after the upload to preserve space on PBXware.	✅	✅	✅
Rename to Archiving Storage Formerly known as "Remote storage" is "Archiving storage".	✅	✅	✅
Google Drive Support Customers can use Google Drive for archiving storage.	✅	✅	✅

	Multi-Tenant	Business	Contact Center
Archiving Storage Optimization Control of MP3 conversion, upload rate control, upload retries and email notification are exposed in GUI. 1. Added option for control over MP3 conversion in PBXware GUI for archiving storage. This way users can choose either to compress uploaded recordings or leave them in native format. 2. The "Upload Rate" field is exposed in the GUI for users, this way users can manage the upload rate to avoid network issues if necessary. 3. The "Max Retries" field is exposed in the GUI for users to enter the maximum number of upload retries for a single file in a case of a network error. 4. Added E-mail Notifications for failed uploads.	✓	✓	✓
Archiving Storage, Schedule Archiving A scheduling option was introduced to the Archiving storage on the master tenant/server. Users can select the frequency in which the archiving storage daemon will execute data offload.	✓	✓	✓
Access Recordings from GUI (S3/Google Drive) This feature enables customers to listen to the remotely stored recordings from the GUI as well as to download them. Recordings are streamed directly to the client and no local files are created on the system during the feature's use. There is a new option in the CDR GUI age which replaces the listen button for a specific CDR which represents the option to listen to the remotely stored record and is indicated by the service the record is stored on.	✓	✓	✓
Bandwidth Control To prevent Archiving Storage data uploads making a negative impact to your network performance, PBXware enables you to easily restrict the maximum upload speed, by entering the number of KB/s which will be used for the upload to archiving storage servers. Data is by default synced once a week.	✓	✓	✓
Remove Files When enabled, the Remove files option will delete the data on PBXware after the transfer to the archiving storage server is successfully completed.	✓	✓	✓
Reports Page The Reports page for Archiving Storage is located under Home -> System -> Storage in your PBXware GUI. Here you will be able to see whether the transfer was succesful or failed, along with information on the number of recordings, voicemails and FAXes that were uploaded to the archiving storage location.	✓	✓	✓

TENANTS / SERVERS

	Multi-Tenant	Business	Contact Center
Not Active tenant status When set to not active, extensions can not be reached and the tenant is not available in the dropdown.	✓	✗	✗
Suspended tenant status When set to suspended, extensions can be dialed, but they can not make calls.	✓	✗	✗
Notification when an emergency service is called When 911 is dialed, an automated call goes out to a specified number or extension or ring group, playing an announcement that 911 was dialed from this extension. This can be done in ring all or ring single strategy.	✓	✓	✓
Set maximum file size for file sharing PBXware admin sets maximum size of file that can be sent with file sharing. Value can be set between 25MB and 250MB, default value is 50MB.	✓	✓	✓

MEETINGS

	Multi-Tenant	Business	Contact Center
Meetings List: Scheduled This list shows all Meetings that will be held in the future.	✅	✅	✅
Meetings List: Recent This list shows all Meetings that have already been held.	✅	✅	✅
Meetings List: Date Range This list shows all Meetings for the period selected beginning from the Start Date and finishing with the End Date.	✅	✅	✅
Meeting Details: Status Shows the Meeting's status.	✅	✅	✅
Meeting Details: Date/Time Date and Time showing if the Meeting will take place or it has been held.	✅	✅	✅
Meeting Details: Duration Time duration of a Meeting.	✅	✅	✅
Meeting Details: Organizer Name of the Meeting's organizer and his/her Extension.	✅	✅	✅
Meeting Details: List of Participants Shows Name and Extension of every Meeting's participant.	✅	✅	✅
Meeting Details: List of DIDs All DIDs in the Meeting.	✅	✅	✅
View Base Meeting The button 'View base meeting' is visible only if a Meeting is recurrent. By pressing it, further information on Base Meeting becomes accessible.	✅	✅	✅
View Base Meeting: Meeting Details Users may click the button 'Meeting details' if they want to return to the "Meeting Details" page as presented on the screenshot.	✅	✅	✅

MEETING SETTINGS

	Multi-Tenant	Business	Contact Center
Daily digest: Time Zone Preferable Time zone.	✓	✓	✓
Daily digest: Use Custom Settings If this option is off, any settings set on the system will be used.	✓	✓	✓
Daily digest: Week Days Specifies days in a week when e-mails will be sent.	✓	✓	✓
Daily digest: Daily digest time Time of receiving daily e-mails.	✓	✓	✓

TOUCHLESS PROVISIONING

Feature that allows simple and fast phone provisioning. Allows the administrators to register the phones to provider's redirection services. After the phone is registered it needs to be factory reset and it will be provisioned automatically. No changes in the Phone's User Interface are needed.

	Multi-Tenant	Business	Contact Center
Support for Yealink Phones Acquire an RPS account from the Yealink support and find the API AccessKeyID and AccessKeySecret. Enter those values in the User Interface and Yealink phones are ready for use with the Touchless Provisioning Feature.	✓	✓	✓
Touchless Provisioning Mode Set where touchless provisioning can be configured, only on Master Tenant or Per Tenant.	✓	✗	✗
Touchless Provisioning Devices A page where it is possible to see all devices that can use the touchless provisioning feature.	✓	✓	✓
Touchless Provisioning Reports All requests and their results to the provider's redirecting services can be seen under Reports > Touchless provisioning.	✓	✓	✓

CENTRAL PHONE BOOK

	Multi-Tenant	Business	Contact Center
Define a Global Phone Book PBXware admins can add contacts to a global Phone Book which will be sent to gloCOM and to some phone models. Supported models as Yealink, Polycom and Cisco. To enable phone book for phones you need to enable LDAP option on Servers/Tenants > Edit page.	✓	✓	✓
Define an Extension specific Phone Book Phone Book contacts can also be added per extension. Contacts added here will be sent together with the global contacts to the extension. Only the extensions where these contacts are defined will see the contacts. Users can also manage their contacts through OSC.	✓	✓	✓
CSV Upload/Download Upload Contacts using CSV or download existing contacts in a CSV format. When uploading a CSV all existing contacts will be removed (Only the contacts in the CSV file will be visible after the upload).	✓	✓	✓

OTHER FEATURES

	Multi-Tenant	Business	Contact Center
Enable Jitterbuffer Based on Extension and Tenant Configuration jitterbuffer on Extension. Jitterbuffer type: 1. Fixed - Set a fixed jitterbuffer on the channel. 2. Adaptive - Set an adaptive jitterbuffer on the channel. 3. Disabled - Remove a previously set jitterbuffer from the channel.	✓	✓	✓
Simplified Mobile App Licensing Users are able to see the mobile devices available on the system as one group of mobile devices. Both "iOS" and "Android" options are merged as a single "Mobile Apps" option. This way the customer buys "Mobile Apps" subscriptions and connects the mobile apps regardless of the platform.	✓	✓	✓
Hide Extension in Desktop/Mobile Apps The option to enable/disable non-gloCOM extensions from displaying in gloCOM. This was added on the PBXware extension so the system admin can manage (enable/disable) this option directly from the PBXware GUI.	✓	✓	✓

	Multi-Tenant	Business	Contact Center
Allow IP Address Authentication for Extensions New field per tenant - Allows IP Address Authentication for Extensions and forces an IP-based authentication. If the option is disabled, the following fields on the extension will be hidden: "Incoming IP Addresses" and "Insecure".	✅	✅	✅
Renamed "Number of Digits" to "Extensions Digit Length" In the setup wizard and in the option to create a new tenant "Number of digits" is changed to "Extension digit length" to avoid problems.	✅	✅	✅
Configurable Features Permissions Separate permissions are available for chat, voicemail, osc, agent pause, access codes, qos, directory and phone DND. Permissions are set per tenant and edition in PBXware.	✅	✅	✅
Control of MP3 Conversion System settings option for audio conversion. Convert files to mp3, this will apply to system-wide recordings Select options from the drop-down: Convert and remove original Convert and listen / download Convert and keep original Do not convert Will leave files in the original format without conversion (recordings can't be played from GUI).	✅	✅	✅
Keyboard Friendly Controls Using the tab key, users are able to access all links and controls in a predictable order based on their visual position on the page. User can tab over the "Yes/No/Not Set" buttons. Pressing Enter while tabbed on a button will be the same as if you clicked on it with your mouse.	✅	✅	✅
CDR Partitioning Partitioning enables tables to be subdivided into smaller manageable pieces and each small piece is called a "partition" which can be safely archived. Users can see reports in GUI Home > Reports > Archived reports and download archived files.	✅	✅	✅
Store Unanswered CDRs An option to exclude unanswered CDR records from a report. This option can be found under Extension > Ring Groups > Store Unanswered CDRs.	✅	✅	✅

	Multi-Tenant	Business	Contact Center
Mobile Applications and Queue Calls If there is a mobile application registered on an extension in the queue and when a call is received from the queue, the mobile application will not be awakened via the push service.	✅	✅	✅
Toggle directly to Advanced options screen On Tenants/Servers Edit there is a new option called "Show advanced options by Default". It is available on Master tenant and per Tenant, meaning that if the option is not set on Tenant the value set on Master Tenant will be used. If you set the option to "Yes" then the "Show Advanced Options" on pages will be automatically clicked and you need to confirm that everything is the same as if you clicked the option yourself.	✅	✅	✅
Custom statuses in PBXware So, on PBXware there would be a page where Admin could see a list of custom statuses, add new status, modify or delete old statuses. Each custom status has it's corresponding state type (Dropdown with 4 possible values) and status message (Text field which must not be empty). Also there should not be 2 custom statuses with the same message.	✅	✅	✅

REMOVED FEATURES

	Multi-Tenant	Business	Contact Center
TFTP Service TFTP service removed from the dashboard.	⊗	⊗	⊗
Multiple Registrations PBXware allows registration of multiple clients to a single extension simultaneously. It is possible to connect the following devices at the same time: 1x Deskphone 1x gloCOM desktop client 1x iOS client (SIP TCP is required) 1x Android client (SIP TCP is required)	⊗	⊗	⊗
Monitoring Conferences This option enables you to dial access code *500 followed by a non-delimited number of conference(s) which you would like to monitor.	⊗	⊗	⊗
BRI Removed BRI cards.	⊗	⊗	⊗
Woomera Removed Woomera devices completely.	⊗	⊗	⊗
IVR Tree Builder IVR Tree is a special form of IVR where the creation of a particular IVR is more graphically oriented than it is with regular IVRs. This allows a better overview when creating a more complex IVR system in which callers have to navigate through multiple IVRs in order to reach preferred destination.	⊗	⊗	⊗
IVR Tree Same as regular IVR, IVR tree offers multiple options for destination types.	⊗	⊗	⊗
IVR Tree Available Actions: **Dial Local Extension** The Dial Local extension feature will allow you to assign a local extension as an IVR Tree destination.	⊗	⊗	⊗
IVR Tree Available Actions: **Dial Remote Extension** This feature allows you to assign an external number as an IVR Tree destination.	⊗	⊗	⊗

	Multi-Tenant	Business	Contact Center
IVR Tree Available Actions: Dial Voicemail This feature allows you to assign an extension voicemail as an IVR Tree destination.	⊗	⊗	⊗
IVR Tree Available Actions: Check Voicemail Set up Check Voicemail on IVR Tree to allow users to log in to their extensions voicemail and check messages without using their extension.	⊗	⊗	⊗
IVR Tree Available Actions: Go to Context Setting Go to Context on IVR Tree will forward calls to given context and extensions.	⊗	⊗	⊗
IVR Tree Available Actions: Start Recording Call recording will be enabled from a point in which the call gets to a branch of the IVR tree with Start recording enabled.	⊗	⊗	⊗
IVR Tree Available Actions: Set Queue Priority Queue priority option allows you to assign a certain level of priority for calls that are being forwarded to the Queue. Set up a queue priority level to give calls higher or lower priority compared to calls entering the queue from other destinations.	⊗	⊗	⊗
IVR Tree Available Actions: Set Language If sound files in a language other than English are uploaded to PBXware alongside the default English language prompts, it is possible to set voice prompts to be played in the preferred language.	⊗	⊗	⊗
IVR Tree Available Actions: Play Sound This selection will play the selected sound file in multiple languages (if available). In addition, it is possible to allow DTMF entries, enabling callers to dial local destinations.	⊗	⊗	⊗
IVR Tree Available Actions: Change Caller ID You can append a preferred string of incoming Caller IDs (for example IVR Tree 1) to differentiate between the multiple destinations the calls can come from.	⊗	⊗	⊗
IVR Tree Available Actions: Wait This option allows you to set pause times in seconds after which IVR will continue executing assigned actions.	⊗	⊗	⊗
IVR Tree Available Actions: Busy Signal When selected, this option will play a Busy signal to callers.	⊗	⊗	⊗
IVR Tree Available Actions: Hangup This action will hang up incoming calls upon execution.	⊗	⊗	⊗

	Multi-Tenant	Business	Contact Center
***Available Selections:* Go to IVR Tree** This option will forward calls to other IVR Tree destinations	⊗	⊗	⊗
***Available Selections:* Local/Remote Destinations** IVR Tree supports forwarding calls to both Local and Remote destinations.	⊗	⊗	⊗
***Available Selections:* Voicemail** IVR Tree supports voicemail as an IVR destination.	⊗	⊗	⊗
Queue Call Pickup Group Queue call pickup group is removed.	⊗	⊗	⊗
Connect PBXware Instances via DUNDi DUNDI is a 'peer-to-peer' system for providing telephony services by locating Internet gateways. DUNDI enables you to connect PBXware servers and enables them to make calls to directly dial extensions on a remote system by simply dialing the assigned prefix number + extension number.	⊗	⊗	⊗
CDR Summary The CDR summary is used to calculate the total cost of calls for the selected extension(s). You can select the date range in which you want the total cost for your chosen extensions, and also group them by one of four grouping methods.	⊗	⊗	⊗
Agent Greeting Access code *302 disabled, do not allow agent greeting on MT.	⊗	⊗	⊗
Network Configuration The network configuration step in the PBXware setup wizard allows user to set up or change the PBXware network settings.	⊗	⊗	⊗
Remove g729 from Setup Wizard Remove g729 from setup wizard and ship it with PBXware as it is free.	⊗	⊗	⊗
Removed option "On DID save update ES/CID/Trunks" MT: Removed option "On DID save update ES/CID/Trunks"	⊗	⊗	⊗
***Sounds and Music on Hold:* Sounds download / upload / conversion** Easily upload, download and convert sound files from PBXware web interface or with PBXware Sound Converter desktop app.	⊗	⊗	⊗
***CRM Integration:* Zoho** Removed support for Zoho API v1.	⊗	⊗	⊗
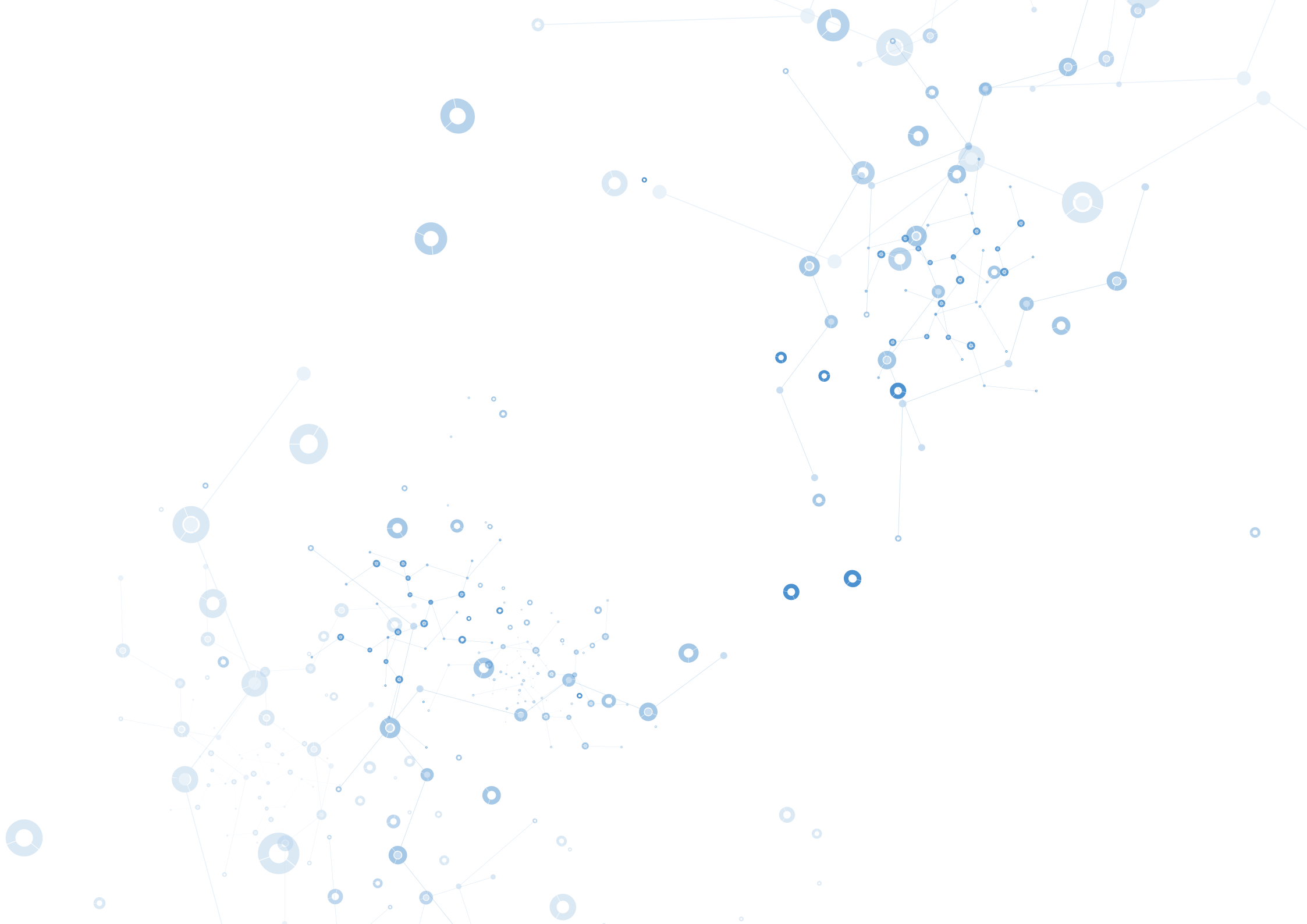
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