Maintenance Release 94







New Features Guide

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Preface

PortaSwitch® Maintenance Release 93 is the next leap-forward release, consistent with our "fast releases, precisely on time" ideology.

Where to get the latest version of this guide

The hard copy of this guide is updated upon major releases only and does not always contain the latest material on enhancements introduced between major releases. The online copy of this guide is always up-to-date and integrates the latest changes to the product. You can access the latest copy of this guide at **www.portaone.com/support/documentation/**.

Conventions

This publication uses the following conventions:

- Commands and keywords are given in **boldface**.
- Terminal sessions, console screens, or system file names are displayed in fixed width font.

The **exclamation mark** draws your attention to important actions that must be taken for proper configuration.

NOTE: Notes contain additional information to supplement or accentuate important points in the text.

Timesaver means that you can save time by performing the action described here.

Archivist explains how the feature worked in previous releases.

Gear points out that this feature must be enabled on the Configuration server.

Tips provide information that might help you solve a problem.

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Empower users to control how they accept PBX calls with extension modes (business hours, non-working hours)

PBX users can now use modes to control when and how calls come through to their line, and quickly change the way incoming calls are handled. For example, they can set their mode to accept calls during business hours, send all calls to voicemail at once during non-working hours, and forward calls to another colleague when on vacation. PBX users can change the mode for their extension by calling the IVR or on their self-care interface.

The PBX administrator can quickly change the way incoming calls are handled for all PBX extensions at once. Say the entire staff has to leave for a fire drill – the PBX administrator calls the IVR, and changes the mode from "Business hours" to "Emergency". Now, all incoming calls will be forwarded directly to mobile phones, and everyone who phones the office still receives assistance.

This is how it works:

Let's say ABC company has three modes configured: "Business hours", "Non-working hours", and "Emergency". Each mode has a unique Dual-Tone Multi-Frequency (DTMF) code that is used for switching. Mary, a sales agent, goes out for business lunch (during business hours) and doesn't want any calls to disturb her colleagues in the office. Thus, to forward all calls to voicemail at once, Mary dials *61 on her phone and specifies the DTMF code for "Non-working hours" mode. Once the mode is changed, Mary stops receiving calls, both from clients and other agents. All the calls are forwarded to voicemail. In two hours, Mary comes back to the office. She dials *61 on her phone again and changes the mode to business hours, meaning now she can receive calls.

Benefits

- PBX users have more control over the incoming calls so that they can quickly change the modes to control what calls to accept.
- PBX administrators gain control over all incoming PBX calls. This allows for managing who can reach PBX users and at what time by quickly changing the way all incoming PBX calls are handled via IVR.

Policies

Policy contains a set of rules that define whether to play the response message (personalized audio message to play to callers before the call is answered) and what call action to apply (e.g., ring, forward, voicemail). A PBX customer may have several policies, e.g., a policy for each company department.

The PBX administrator can assign a policy to a specific account.

≡ ↑ Customer	SAVE	CHANGE STATUS						Q 😬 demo	۰	0
Customer 'ABC company* > Ser	Kces > Call screening									
ABC company Cloud PBX customers T (D)	Services	>	Call screening POLICIES MODES	RESPONSE MESSAGE	S TIME FILTER	S NUMBER F	ILTERS			
Balance control Postpaid	Call screening Abbreviated dialing	> >	ADD POLICY							
Currency USD - US Dollar	Bundles	>	Sales department 🥒	π.					ADD R	ULE
Balance, USD 293.26000			Enabled From	To	Period	Mode	Response message	Actions		
Credit limit. USD			🔲 🗸 Any	Any	Any	Vacation	Any	Forward only		
500.00			🔲 🗸 Any	Any	Business hours	Normal (Default)	Working hours	Ring then voicem.		
Accounts >			Any	Any	Non-working hours	Normal (Default)	Non-working hours	Voicemail only		
xDRs >										
Personal ~			Support department	/ 1					ADD R	ULE
Finances ~			Enabled From	То	Period	Mode	Response message	Actions		
DIDs										
Services >			🗏 🗸 Any	Any	Any	Emergency	Working hours	Forward only		
Audit log			🔳 🗸 Any	Any	Any	Any	Working hours	Ring then forward		

The order of rules matters. When the call arrives at PBX, PortaBilling® checks the rules within the policy from top to bottom. The first rule that matches the call is applied, and the other rules are ignored. PortaBilling® checks the rules with these parameters: caller/callee numbers (it can be a pattern, e.g., 2233%), period (time interval), mode of the called extension.

Cal	l scre	ening						
POLIC	IES	MODES	RESPONSE MES	SSAGES TIME FILTERS	NUMBER FILTE	RS		
ADI	D POLICY							
Sale	es dep	artment 🌶						ADD RULE
	Enabled	From	То	Period	Mode	Response message	Actions	
≡	~	Any	Any	Any	Vacation	Any	Forward only	
≡	~	Any	Any	Business hours	Normal (Default)) Working hours	Ring then voicemail	
≡	~	Any	Any	Non-working hou	rs Normal (Default)) Non-working hours	Voicemail only	

Modes

The Normal (Default) mode is present in the system. The DTMF code of the default mode is always zero (0). This DTMF code is used to switch to this mode. Users can switch from individual sticky mode to Normal (Default) mode to continue receiving calls according to the rules defined for the Normal (Default) mode.



Call screening							
POLICIES	MODES	RESPONSE MESSAGES	TIME FILTERS	NUMBER FILTERS			
List of mo	odes	Dial DTMF to switch	Timeout, minutes	ADD Sticky 👔			
Normal (Defaul	it)	0					

The PBX administrator can set the following parameters for a mode:

- **Dial DTMF to switch** this is a unique DTMF code of the mode. Users dial it to switch to this mode. Digits from 1 to 9 are available.
- **Timeout, minutes** this is mode duration in minutes, after which the mode automatically switches to Normal (Default) mode. For example, there is a "Meeting" mode with 60 min timeout. If Mary switches to "Meeting" mode at 3 p.m, the mode switches to Normal (Default) mode at 4 p.m.
- Sticky mode for individual use if the mode is marked sticky, only extensions can set this mode. If the PBX administrator switches all the extensions to the other mode, this change doesn't influence the extensions with sticky mode. These extensions remain in this mode until they change it via IVR or their self-care interface, or sticky mode's timeout ends.

Let's say John Doe changes the mode from Normal (Default) to "Vacation" (all calls are forwarded to the other PBX extension) on their self-care interface. Later, the PBX administrator changes the mode for all PBX extensions to "Emergency" (calls are forwarded to the mobile phone). Despite this change, all incoming calls to John are handled according to vacation mode. Thus, when Mary calls John, the following happens:

- first the call is forwarded to the extension of John's colleague, Ann, (according to "Vacation" mode), and
- then the call is forwarded to Ann's mobile phone (according to "Emergency" mode).



\equiv \uparrow Customer	SAVE CHANGE STATUS	Q 🔒 demo 🋕 🕐
Customer "ABC company" >	Services > Call screening	
Services Voice calls	Call screening POLICIES MODES RESPONSE MESSAGES	TIME FILTERS NUMBER >
Call screening > Abbreviated dialing > Bundles > Call screening > Call scr	Add new mode Name* Meeting Dial DTME to switch *	ADD
«	5 ▼ Timeout, minutes 60 ✓ Sticky €	✓ ✓
	CANCEL ADD	

The PBX administrator can see all the modes and their configuration.

Call screening			
POLICIES MODES	RESPONSE MESSAGES	TIME FILTERS	NUMBER FILTERS
List of modes			ADD
Name	Dial DTMF to switch	Timeout, minutes Stic	ky 🕦
Normal (Default)	0		
Business hours	1		
Non-working hours	2		
Emergency	3		
Meeting	5	60	/
Vacation	9	,	/

Personalized response messages for incoming calls

PBX users and administrators can record a personalized audio message to play to their callers before the call is answered, forwarded, or redirected to voicemail. This gives a caller additional information, such as the user is on vacation. For more information, see the Empower users to control how they accept PBX calls with extension modes **Personalized response messages for incoming calls.**



Call screening								
POLICIES	MODES	RESPONSE MESSAGES	TIME FILTERS	NUMBER FILTERS				
UPLOAD								
Call recor	ding notificati	on						
Meeting								
Non-work	ing hours							
Working h	nours							

Configuration

Let's say ABC company wants to configure three modes for their PBX extensions:

- Business hours to accept all calls from 9 a.m. till 6 p.m.
- Non-working hours to forward calls to voicemail.
- Vacation this is a sticky mode per individual use only. Users can enable it during vacation. All calls will be forwarded to the other PBX extension/phone number.

To configure the call handling for ABC company, the administrator performs the following steps:

- 1. Enable **Call screening** feature on the product:
 - Open Product > Services > Voice calls > Incoming calls.
 - Turn on the **Call screening** toggle switch.
 - Select the **end users** checkbox to enable users to edit call screening rules on their self-care interface.

SuperCall > Services > Voice	calls > Incoming calls				
SuperCall 9 / 100 Name visible to end users *	Services Add a service		Voice calls configuration		Incoming calls configuration
SuperCall 9 / 100	Messaging service	>	Outgoing calls	>	Caller ID (CNAM) lookup
Main	Messaging service Internet access	ا	Incoming calls Fraud detection	>	Call forwarding
Currency USD - US Dollar	Network access Voice calls	■ >	Fair usage policy	~	Perform Caller Verification
Managed by Administrator only	Voice calls	Î	Service policy	~	
Account role Phone line					Call screening Can be edited by administrato
Share with resellers					end user
Services >					Auto attendant

2. Configure a policy to handle incoming calls:



• Open **Customer** > **Services** > **Call screening** > **Modes** tab.

≡ ↑ Customer	SAVE CHANGE STAT	IS
Customer "Easy Call Ltd." > Servic	ces > Call screening	
ABC company Cloud PBX Customer class * Cloud PBX customers	Services Voice calls > Call acreening > Abbreviated dialing >	Call screening POLICIES MODES RESPONSE MESSAGES TIME FILTERS NUMBER FILTERS List of modes
Balance control Postpaid	Bundles >	Name Dial DTMF to switch Timeout, minutes Sticky
Currency USD - US Dollar Ealance, USD -73.87933 Credit Inst, USD 500.00		Normal (Default) 0
Accounts >		
xDRs >		
Finance v		
DIDs >		

- Click **Add** to create a new mode:
 - Business hours select 1 as a DTMF code.
 - Non-working hours select 2 as a DTMF code.
 - Vacation select 9 as a DTMF code, select the **Sticky** checkbox so that only PBX users can use this mode.

Edit mode		
Name *		
Vacation		
Dial DTMF to switch * 9		•
Timeout, minutes		
🗸 Sticky 🕕		
	CANCEL	EDIT



All the modes appear on the interface.

Call screening						
POLICIES MODES	RESPONSE MESSAGES	TIME FILTERS NUMBER FILTERS				
List of modes	Dial DTMF to switch Timeo	ADD ut, minutes Sticky ()				
Normal (Default)	0					
Business hours	1					
Non-working hours	2					
Vacation	9	\checkmark				

- Go to **Time filters** tab, click **Add** to create a new filter:
 - Business hours from 9:00 till 18:00 on Monday-Friday of every month.
 - Non-working hours from 18:01 till 8:59 on Monday-Friday of every month and the whole day on Saturday-Sunday.

Call scree	ening					
POLICIES	MODES		RESPONSE MESSAGES	TIME FILTERS	NU	MBER FILTERS
List of filte	rs				ADD	
Name Business ho	ours		From 09:00 till 18:00 o Fri of every month Hide	n Mon-	•	
_{Name} Non-workin	g hours	ŧ	From 20:01 till 08:59 o Fri of every month	n Mon-		
		±	Whole day on Sun, Sat month H <mark>ide</mark>	of every	•	

- Go to **Policies** tab > **Add Policy** > **Add rule**.
- Create three rules specifying a period, response message and actions such as ring, forward, voicemail, etc.
- Rearrange the rules so that "Vacation" mode becomes the first rule.



Call	scre	ening						
POLIC	IES	MODES	RESPONSE MESSAGES	TIME FILTERS	NUMBER FILTERS			
ADD	POLICY							
Sale	s depa	artment 🖍	I					ADD RULE
	Enabled	From	То	Period	Mode	Response message	Actions	
=	~	Any	Any	Any	Vacation	Any	Forward only	
	~	Any	Any	Business hours	Normal (Default)	Working hours	Ring then voicemail	
≡	~	Any	Any	Non-working hours	Normal (Default)	Non-working hours	Voicemail only	

- 3. Apply policy to every account so that they can use the predefined modes:
 - Open Account > Services > Call screening.
 - Click **Add rule** and select a policy.

\equiv \uparrow Account		SAV	E	CHANGE STATU	JS PORT IN				Q	θ	demo	¢	0
Account "16045551405"	> Call s	creening											
Phone line		Call s	scre	ening Modes F	RESPONSE MESSAGES	TIME FILTER	IS NUMBER	FILTERS					
Type Credit Customer ABC company	Ð	Indivio	dual	rules	То	Period	Mode	Response message	Act	ions	I	ADD R	RULE
Main product *		=	~	Any	Any	Any	Any	Any	App Sal	oly pol es dep	icy partment		
Balance control Subordinate	-												
xDRs	>												
Personal info	~												
Finances	~												
Services	~												

By default, *61 is the prefix for changing mode for a specific extension and *62 for changing the mode for all PBX extensions at once (PBX manager option must be enabled for the account). It's possible to change the default prefixes by creating a new dialing rule.

Personalized response messages for incoming calls

PBX users can record a personalized audio message to play to their callers before the call is answered, forwarded, or redirected to voicemail. This allows PBX users to give a caller additional information, for example, that the call is being recorded. Let's say Mary Smith goes on vacation from August 1 and wants to record a personalized message to play when somebody calls her. Beforehand, the PBX administrator has to set several call processing modes: "Business hours", "Non-working hours" modes, and a "Vacation" mode for the users who go on vacation. You can read more about operation modes in the Empower users to control how they accept PBX calls with extension modes (business hours, non-working hours) chapter.

To switch from "Business hours" to "Vacation" mode, Mary dials *61 on her IP phone. Then she follows the voice-recorded instructions to record a personalized message: "I'm on vacation till August 5. Your call will be forwarded to my colleague, Ann". When John Doe, a client, calls Mary on August 3, he hears the message in full, and only then the call is forwarded to Ann's phone. Ann picks up the call and talks to John. When Mary comes back to work on August 6, she calls the IVR (*61) again and dials a code that switches her phone line back to "Business hours" mode.

The message, added by the user, always overrides the default message added by the PBX administrator, no matter whether it is recorded via the IVR or uploaded via the self-care interface. The audio message can be in .wav, .mp3, .og, or .au format and don't exceed the size of 3 MB.

To add the personalized message to a specific mode via self-care interface, the PBX users have to:

- 1. Upload an audio file to the self-care interface:
 - Go to the account self-care interface > Cloud PBX > Call screening > Response messages.
 - Click **Browse**, choose the file from PC and click **Upload**. The name of the file automatically appears in the **Description** field.

			Account Se	elf-Care Portal			
				Web Interface Language: en - English	~	16045551405 (Login: 16045551	405) 🔒 Logou
E Dashboard	🖂 My Profile		Cloud PBX	Billing Information			
Response me	ssages					1	
🎡 General	Browse	Description:	vacation.wav			Upload	
Piates Bules							
Incoming Calls				Description			
Call Screening	Default greeting						
Caller's Groups	Recording notific	cation					
Bill Own Number Group							
Time Filters							
Response messages							
Call Recordings							
a Identity							
Music On Hold							
			@ 2001-2021 PortaO	ne, Inc. All rights reserved.			

2. Add an audio file to the mode:



- Open Cloud PBX > Call screening > Modes.
- Click **Edit**, select a specific mode from the drop-down menu, and afterward select the **Temporary response** message.

		Account Self-Care	Portal			
		Web Int	erface Language: en - English	✓ 1604	5551405 (Login: 16045551405)	🔓 Logout 👻
Dashboard	🐣 My Profile	🙀 Cloud PBX	Billing Information			
Edit Call Screening Ru	ule					
~	Modes					
Ceneral Control Data Data Data Data Data Data Data Dat	Mode: Temporary response message: Effective until: Sticky:	Business hours Recording notification Not Set No	×			
ag Call Recordings ag letenity Music On Hold	Save Back Edit Call Screening Rule Edit For	m				
dentity	Save Black Edit Call Screening Rule Edit For	m © 2001-2021 PortaOne. Inc. All	rights reserved.			

PBX administrators can also add a default message that applies to all PBX extensions, both via a customer self-care interface and by calling the IVR. Make sure that the **PBX management** feature is enabled for this extension. To do it, go to the **PortaBilling® interface**, open the **Account > Services > Service configuration > Voice calls > Incoming calls > Call screening**, and enable **PBX manager** toggle switch.

≡ ↑ Account	SAVE CHANGE STATUS		Q 🔮 pe	rformance 😝 porta-support 🧯 🕥
Account '222' > Service	ce configuration > Voice calls > Incoming calls			
222	Service configuration	Voice calls configuration	Incoming calls configuration	
Account role Universal	Voice calls >	Call recording >	Forward by DTME	
Type Credit		Fraud detection > Outgoing calls >	Call forwarding Simple forwarding	
calls_cust	GD	Incoming calls >	Simple forwarding settings >	
Main product * call_product	• CD	RTP proxy Override	Perform Caller Verification	
xDRs Personal info	>	RTP proxy Use default	Call screening	
General info	>	Legal intercept	Override 🥣 Enabled 🥌	
Account aliases	>	Override D Enabled	PBX Manager	
Finances	~	Service policy	PEX management *62	
Services.	^	Override D Enabled	Individual call screening management *61	
Service configuration	>		Production of the second se	
Bundles	>	Fair usage policy	Kingback tone	
Call screening	>		Override C Enabled	
Fraud protection	2	Music on hold	File*	
Audit log	>	Override Contraction Enabled	Plikeanneroo.wav	

PortaBilling® administrator can upload a default message on the PortaBilling® web interface:

• For the customer: The administrator can upload a default message that will apply to all PBX extensions that have a specific mode, except those extensions that set their own personalized message.



To add a default message, the administrator goes to the **Response** messages tab and uploads a file.

					Q \varTheta demo		
Customer "ABC company" > Se	rvices > Call screening						_
ABC company	Services		Call screening				
Business model Cloud PBX Customer class * Cloud PBX customers * CD	Voice calls Call screening Abbreviated dialing	> > >	POLICIES MODES	RESPONSE MESSAGES	TIME FILTERS	NUMB	ER >
Balance control Postpaid	Bundles	Upload new response File name * Vacation message	onse message file				
USD - US Dollar Balance, USD 164, 98000		Drop a file or browse for it * vacation.wav Supported file form	1				
Credit limit, USD 500.00			CANCEL UPLOAD				
Accounts >							
xDRs >							
Personal v							
Finances 🗸							
DIDs >							
Services >							
Fraud protection >							

Afterward, to add the default message to the mode, the administrator goes to the **Policies** tab, adds a rule to the specific policy, selects the mode, and chooses the audio file in the **Response message** drop-down list.

≡	↑ Customer						Q	e demo	, ¢	0
	Customer "ABC company" 🖒 S	ervices	Call screening		-					
	Services		Add new rule							
	Voice calls	>	Enabled		NSE N	IESSAGES	TIME	FILTERS	NUM	IBER >
	Call screening	>	Any	-						í
	Abbreviated dialing	>	То							
······	Bundles	>	Any	~						
			Period						ADD RUL	
			Any	*	ł	Mode	Response message	Actions		
			Mode Business hours	*		Vacation	Any	Forward		
>			Response message			Normal	Working	Ring only		
>			Working hours	•	ed	Normal	Closed	Voicem		
~			Ring then forward	*					ADD RUL	
>			CAN	NCEL ADD	4	Mode	Response message	Actions		
>			🔳 🗸 Any	Any Any		Busines	Meeting	Forward		
1										

• For a specific account: Personalized messages can be applied to each of the accounts separately. The administrator has to upload the file in the **Response messages** tab and afterward add it to the mode via the rule in the **Rules** tab. The file uploaded to the



account **Response messages** list will appear on the account self-care portal.

≡ ↑ Account	SAVE CHAN	IGE STATUS PORT IN			Q 😫 demo 🏛 🧿
Account "16045551405" > Cell	screening				
Account Accoun	Call screening Call screening RULES MODES Individual rules	Add new rule Comparison Add new rule Comparison Enabled From Any To Any Period Any Mode Business hours Brecording notification Actions Ring, forward, volcemail Perioy Sales department	* * * * *	NUMBER FILTERS	
Fraud protection > Audit log >		CANC	EL ADD		

Default service codes to change response messages:

- ***62** PBX management default code. When called, the response message for all accounts of a certain customer changes.
- ***61** individual management default code. When called, the response message for a single account changes.

You can change the default service codes by creating a new dialing rule for the customer.

$\equiv \uparrow$ Dialing rule	SAVE RESET		😫 demo 🇘 🥥
Edit dialing rule > Service of	odes		
Standard	Service codes		
Description Applied to End user	Call parking Park prefx *70	Private call Hee CLI prefix *67 Show CLI prefix	Call screening PEX management -62 Individual management +61
PBX -	Call supervision prefixes	Call supervision DTMFs	Huntgroup Log-in/Log-out
International	"Spy mode" prefix to join a call +90	"Spy mode enable" DTMF 0	Log-in huntgroup
Can be edited by end users	"Whisper mode" prefix to join a call *91	"Whisper mode enable" DTMF 1	Log-out huntgroup
Dialing rule parameters > Service codes >	"Barge in mode" prefix to join a call *92	"Barge in mode enable" DTMF 2	Other prefixes
Audit log >	Call recording prefixes	Call recording DTMFs	Group pickup prefix *40
	"Activate call recording per call" prefix	"Start call recording" DTMF	Paging/Intercom prefix *33
	"Deactivate call recording per call" prefix	"Stop call recording" DTMF	Transfer the forwarded call *66
			Bypass dial plan *3164*
			Voicemail *98

Benefit

PBX users can provide better service to their clients with informative audio messages.

Call recording announcement

Now, businesses can notify everyone on the call that their conversation is being recorded, allowing them to comply with call recording regulations. When call recording starts, all parties hear the "Call recording started" announcement. This ensures that everyone on the call is aware that the call is being recorded.

For example, Mary calls ABC company, where all the calls are recorded automatically. The call is received by the auto attendant, and then it is transferred to the sales huntgroup. Peter, the sales agent, picks up the call, and both Mary and Peter hear the "Call recording started" announcement. Later, Peter manually stops the recording during a call since Mary is going to provide some sensitive information such as credit card details. In this case, the "Call recording stopped" announcement is played.

The recording always contains the announcement, ensuring that the call parties are notified of the call recording.

To enable the call recording announcement option for all PBX users, the administrator needs to:

- Open a specific product/add-on product with call recording feature enabled.
- Go to Services > Voice calls > Call recording.
- Turn on the **Play the call recording announcement to all** toggle switch.

\equiv \uparrow Product	SAVE CLONE				Q 😫 demo ᡇ ၇
Call recording > Services > V	oice calls > Call recording				
Call recording	Services		Voice calls configuration		Call recording
14 / 100 Name visible to end users * Call recording	ADD A SERVICE		Call recording	>	Call recording
14/100	Voice calls	>	Outgoing calls	>	Defined 🥌 Enabled 🥌
Product type Priority Add-on Low	Voice calls	Î	Incoming calls	>	Can be edited by administrator 🗸
			Fraud detection	>	end users
Currency USD - US Dollar			Fair usage policy		Auto record outgoing calls
Managed by Administrator only			Defined DEnabled	Ý	Auto record incoming calls
Account role			Service policy		Auto record redirected calls
Realm			Defined DE Enabled	Ý	Allow to start/stop recording manually
None *					Play the call recording announcement to all
Share with resellers	1				Send the call recording via email
Services >					



The administrator can enable the call recording announcement option for a specific account. To do this, the administrator follows these steps:

- Open a specific account.
- Go to Services > Service configuration > Voice calls > Call recording.
- Turn on the **Play the call recording announcement to all** toggle switch.

Account '16045551	405' > Servic	e configuration > Voice calls > Co	all recording				
16045551405		Service configuratio	n	Voice calls config	uration	Call recording	
Account role		Messaging service	>	Call recording	>	Call recording	
		Internet access	>	Dialing rules	>	Override	Enabled
Type Credit Customer		Voice calls	>	Fraud detection Outgoing calls	>	Auto record outgoing o	alls 🗨
ABC company	Ð			Incoming calls	>	Auto record incoming	
Vlain product * SuperCall Salance control	* 🕀			RTP proxy	^	Auto record redirected	calls
Subordinate IDRs	>			RTP proxy Use default		Allow to start/stop rec manually DTMF is guaranteed account has RTP pro	to work only if an xy set to "Always"
	ž			Legal intercept		Play the call recording	
Corvices	~					announcement to all	
Service configuration	>			Override D Enable		Send the call recording	via email 🛛
Bundles	>			Service policy		Email	
Call screening	>				×	john.doe@company.do	im

End users can manage whether to play the call recording announcement on their self-care interface (if the administrator enabled it for end users beforehand).

		Account Sel	lf-Care Portal				
			Web Interface Language	en - English	~	16045551405 (Login: 16045551405)	🔓 Logout 👻
E Dashboard	🔏 My Profile	Cloud PBX		Billing Information			
Call Recordings							😡 Help
~	E Call recording list	ll recordings					
Control Contr	Auto record Outgoing Incoming Redirected Play the cal recording announcement Send the cal recording via email john.doe@gmail.com Alow to start / stop recording manua Dal undefined-number to start recording cal undefined-number to start recording cal undefined during a cal to start call Press undefined during a cal to start call	 ✓ ✓					
	E Save Reset						

Note that the call recording announcement is available only in English. If you need the announcement in another language, contact PortaOne® support team.

Benefit

Businesses comply with call recording regulations by playing a call recording announcement to all call parties.

Allow hunt group members to pause receiving hunt group calls

Hunt group members can stop receiving hunt group calls by logging out of a hunt group. To resume receiving the calls, they log in back to the hunt group.

Let's say John, a support agent, receives calls sent to the "First line support" hunt group.

John needs to write an email to a client. While working on this task, he will be unable to take support calls. Thus, to log out of the "First line support" hunt group, John dials *42302 on his phone, where *42 is the prefix to log out and 302 is the hunt group number. Now, John doesn't participate in handling calls sent to this hunt group but can still receive direct calls. He starts writing the email. John's manager, Adam, calls John to ask whether the email has been already sent to the client. John discusses a few email details with Adam and finishes it. When John sends the email to a client, he logs back in to the "First line support" hunt group. To log in, John dials *41302, where *41 is the prefix to log in and 302 is the hunt group number. Once John is logged in again, he receives another support call.

Note that to log out/log in, John must specify the number of a hunt group he is a member of.

Also, agents can use their account self-care interface to log out/log in: they open the **Cloud PBX** tab > **Hunt groups** page > see the list of hunt groups they are members of > click **Edit** > clear/select the checkbox for a specific hunt group, e.g., "First line support" > click **Save**.

Account Self-Care Portal					
			Web Interface Language: en - Eng	glish 🛛 16045551406 (Login: 16045551406) 🔂 Logout 🕶	
Dashboard	🔏 My Profile	P Centrex	Billing Information		
Huntgroups				😡 Help	
«	Huntgroup Subscription	s			
w DIDs	Log-in	Huntgroup Number		Huntgroup Name	
Dialing Rules	-	301		Premium support	
み Incoming Calls そ Huntgroups 使のentity 化 Music On Hold	×	302		First line support	
	Armen				
	😺 Edit 🔚 Save Refresh				
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On the customer self-care interface, the PBX administrator can monitor whether the hunt group members are logged-in or logged-out at the moment.

Customer Self-Care Portal										
Balance: 293.26 USD						Credit Limit: 500.00 USD en - English	✓ ABC	company (Login	ABC_company)	🔒 Logout 👻
20 Dashboard	🐣 My Profile	Cloud PBX			Billing Information					
💕 Edit: First line s	support									😡 Help
	Huntgroup Number	302			Hunt Sequence	Order 👻				
Extensions	Huntgroup Name	First line support			Caller ID	Keep original				
Phone Lines	Call Dickup Allowed				Net 15					
🙊 DIDs	Call Pickup Allowed									
Abbreviated Dialing										
Dialing Rules	Included Extension	Included Huntgroups	Ringback Te	ine Hunt Or	rder					
Call Barrier	Extension Number	Extension Name	Assigned	to Phone Line	Log-in	Ringing	Ignore Follow- me/Voicemail	Supervision allowed	Set This Group as Primary	Delete
Call Screening	741	Adam	160-	15551405	-	Rings immediately when a call arrives	-	×	-	×
Huntgroups	742	Mary	16045551407		4	Rings immediately when a call arrives	-	-	-	×
	743	Kevin	16045551410		×	Rings immediately when a call arrives	-	-	-	×
	746	Emma	160-	5551409	4	Rings immediately when a call arrives	-	-	-	×
	744	John	160-	5551406	-	Rings immediately when a call arrives	-	-	-	×
	745	Steven	160-	5551408	4	Rings immediately when a call arrives	-	-	-	×
	Add Extension									
	😑 Save 🗦 Back									
	Edit Huntgroup									
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Specifics

By default, *41 is the prefix for logging in and *42 for logging out. It's possible to change the default prefixes by creating a new dialing rule.

For example, a customer migrates to cloud PBX from their legacy PBX. The customer's agents are used to stop/resume receiving hunt group calls by dialing the prefixes *22 and *21. To enable logging out/logging in with these prefixes in cloud PBX, the administrator:

- creates a customer record with the dialing rules option enabled;
- creates a new dialing rule of PBX type; and
- changes the default prefixes in the dialing rule.

Dialing rule	SAVE RESET		
Edit dialing rule > Service codes			
Edit dialing rule Description Cloud PBX	Service codes	Private call	Call screening
Applied to End user	Park prefix *70	Hide CLI prefix *67	PBX management *62
Type PBX -	Release prefix *71	Show CLI prefix *68	Individual management *61
Subtype International	Call supervision prefixes "Spy mode" prefix to join a call *90	Call supervision DTMFs "Spy mode enable" DTMF 0	Huntgroup Log-in/Log-out Log-in huntgroup *21
Dialing rule parameters > Service codes >	"Whisper mode" prefix to join a call *91	"Whisper mode enable" DTMF 1	Log-out huntgroup *22
Audit log >	'Barge in mode' prefix to join a call *92	"Barge in mode enable" DTMF 2	Other prefixes Group pickup prefix
	Call recording prefixes	Call recording DTMFs	*40
	"Activate call recording per call" prefix * *44	*Start call recording* DTMF * *44	Paging/intercom prefix *33
	"Deactivate call recording per call" prefix * *45	*Stop call recording* DTMF * *45	Transfer the forwarded call *66

PBX customers can edit the default prefixes on their customer self-care interface: they need to open the **Cloud PBX** page > **Dialing rules**,



switch to the **Custom rule** and change the prefixes for hunt group logging in/logging out.

Benefits

- Agents can control whether to receive their hunt group calls.
- PBX customers can monitor the availability of their agents.
- PBX customers can provide better service by delivering calls to available agents only.

Control how charges are rounded when billing clients

In certain countries, such as Lithuania, there are strict regulations for charging customers. Service providers can be fined if the charged amount is rounded using a wrong method. Thus, service providers need the ability to select what rounding method to apply to customers' charges and invoice amounts.

With this release, the administrator can change the rounding method globally in the customer class. The selected rounding method will be applied to:

- invoice amounts, and
- charged amounts for subscriptions, bundle promotions, measured services, and DID charges in an individual xDR.

The administrator can select one of the following rounding methods:

- Away from zero this rounding method is selected by default. It works similar to rounding up but differs when rounding negative values. Positive and negative values round symmetrically. For example, if the rounding precision is set to two decimals, then:
 - o 1.214, 1.215 and 1.216 all round up to 1.22.
 - - 1.214, 1.215 and 1.216 all round to 1.22.
- Half away from zero this rounding method works similar to arithmetic rounding but differs when rounding negative values. Positive and negative values round symmetrically. For example, if the rounding precision is set to two decimals, then:
 - o 1.214 rounds to 1.21, 1.215 and 1.216 all round to 1.22.
 - - 1.214 rounds to 1.21, 1.215 and 1.216 all round to 1.22.
- **Special rounding (malaysian)** formerly known as custom rounding. This type of rounding depends on the last decimal at precision point. For example, if the rounding precision is set to two decimals, then:

- If the last decimal at precision point is [0...2], it is set to zero. For example, 1.204, 1.215 and 1.226 all round to 1.20.
- If the last decimal at precision point is [3...7], it is set to 5. For example, 1.234, 1.255 and 1.276 all round to 1.25.
- If the last decimal at precision point is [8...9], it is set to 0 and the previous decimal increases by 1. For example, 1.284, 1.296 all round to 1.30.

\equiv \wedge Customer class	ss	SAVE	CLONE		
Customer class "Retail SIP" > General info					
Retail SIP		General i	nfo		
Business model Residential VoIP		The billing period is closed Automatically			
Currency USD		Rounding method Away from ze	ro		
Managed by Administrator only		Away from zer Half away fror	ro m zero		
Share with resellers		Special round	ing (malaysian)		
Finances	^	Do not ser	nd		
General info	>				
Invoicing	>				
Taxation	>	Status ch	nange		

Also, the administrator can choose the number of decimals to round the charged amount in the **Rounding precision** option. For invoice amounts and charged amounts for measured services the **Rounding precision** can be configured in the customer class. The **Rounding precision** for a tariff, subscription, bundle promotion and DID charges can be configured individually per entity.



\equiv \uparrow Subscription plan	SAVE
Subscription plan "Basic calls" > f	ees
Basic calls	Fees
Subscription plan name visible to end users * Basic calls	Rounding precision 0.01 (2 decimals)
Subscription charges applied In advance	0.00001 (5 decimals)
Periods in advance 1	0.0001 (4 decimals) 0.001 (3 decimals)
Activation mode At the given start date	0.01 (2 decimals)
Share with resellers	Prorate fee for the partial billing period
General configuration >	✓ For the first billing period
Fees>Promotional periods>	✓ For the last billing period

For example, a service provider starts operating in a new country. To comply with local regulations, a service provider wants to apply the **Half away from zero** rounding method to all charged and invoice amounts of their customer John Doe. Also, the service provider wants to round the charged amounts for subscriptions, to two decimals in an individual xDR. So, an administrator assigns a customer class to John Doe where the "Half away from zero" rounding method is selected. Then the administrator creates a "Basic calls" subscription plan for Jon Doe, goes to the **Fees** panel and selects **"0.01 (2 decimals)"** in the **Rounding precision** option.

Benefit

Service providers can comply with local regulations by applying a specific rounding method to their customers' charges and invoice amounts.

Add wildcard SIP domains

When an incoming call comes to PortaSwitch®, PortaSIP® validates the domain name contained in the incoming Invite request to prevent the traffic that is not intended for the service provider's servers. PortaSIP® checks that the domain name is specified in the list of allowed domains owned by a service provider to authenticate the caller.

For example:

INVITE sip:27510230043@greentelecom.sbc.8ic.co SIP/2.0

The list of allowed domains is specified in the **sip_domains** option on the Configuration server.

Each customer who connects their Microsoft Teams to PortaSwitch® has to have their own domain. Previously to route calls between PortaSwitch® and the customer's Microsoft Teams environment a service provider added the domains manually for each new customer. To add each new SIP domain, you needed to apply the configuration with a service restart that led to service downtime.

With this release, you can add a single wildcard SIP domain that matches all new subdomains.

This is how it works:

For example, a service provider adds *.sbc.8ic.co domain name where "*" is a wildcard that matches all new subdomains. Thus, if they add *.sbc.8ic.co to the list of allowed domains, incoming calls from **abctelco**.sbc.8ic.co, **intertelecom**.sbc.8ic.co, and **xxxxxxx**.sbc.8ic.co will be allowed.

Benefits

- Service providers save time on adding new domains for customers who have Microsoft Teams by adding a wildcard SIP domain.
- End users don't experience service downtime due to adding new domains.

Match events related to the same call via the call control API

External applications that use call control API can match call events related to the same call by the **tracking_id** attribute. In complex call scenarios involving attended transfer, call pickup, call parking, etc. where a few calls get connected, the tracking_id value changes. In this case, PortaSwitch® sends both the new and the previous tracking_id values, so an application can track the whole call session consisting of multiple connected calls. Thus, application developers don't need to write and maintain additional code to match the related call events in an application.

For example, ABC company uses a web-based switchboard that allows PBX users to control and monitor calls. When John, ABC's sales manager, calls a client, the application receives notifications for each call status change ("trying", "ringing", "connected", "on-hold", etc.). All these notifications contain the tracking_id attribute. Since these call event notifications include the same tracking_id, the application identifies them as a part of the specific call. When the client tells John they have a technical issue, John transfers the call to the support department. During the attended transfer, the tracking_id changes. The application receives a notification that includes a new value (**tracking_id**) and the previous value (**previous_tracking_id**). The application uses these values to properly track the whole call session consisting of connected calls. As a result, Mary, ABC's receptionist, can see on the switchboard whether John's phone line is busy before transferring a call to him.

Tracking_id is included in all "sip.call_control_notifications" notifications, such as "call_info", "conference_info", "participant_info", etc.

Here's an example of an event notification sent to an application:

```
{
"call":{
"id":"ZGZiODJkZmQ2ZmJjNDJjYzQyMTQ1OWQyZGFjYWRhNWE.",
"tag":"7147342c"
},
"previous_tracking_id":"c67e10bd-c35c-41e7-a3d9-e40e7fb96767",
"tracking_id":"e2dd7af5-7c0d-4e75-a9e2-043bd83c5e37"
}
```

Benefits

- Fewer implementation efforts for external application developers.
- Service providers can reduce costs and delays associated with building their external applications.

Simplified implementation of click-to-call service using the call control API

Service providers may want to implement a simple integration using call control API, e.g., add a possibility to initiate calls from an external application and track the status of these calls. Now, call control API allows applications to receive call statuses via HTTP/HTTPS protocol with no need to connect via WebSocket.

Let's say, a service provider wants to embed click-to-call service in their CRM application so the CRM users can initiate calls from the CRM with one click. A user clicks a number and receives a callback on their IP phone. They pick up the call and get connected with the desired destination. To implement this service, the call control API method **originate_advanced_call** is used. With this release, the statuses of calls initiated with this API method can be sent to the application in HTTP POST requests. This allows the application to display the current call statuses to users. Thus, the call status tracking can be implemented by developers without WebSocket experience. Also, it's possible to specify which statuses to receive and deal with the needed notifications only.

To subscribe an application to call status notifications, the **originate_advanced_call** API method is extended with two optional parameters: **state_callback** and **state_callback_events**.

When a user initiates a call from an application, the application sends **originate_advanced_call** request with **state_callback** and **state_callback_events** parameters to PortaSwitch®:

- **state_callback** contains the URL (HTTP/HTTPS) to send the call status to an application when one of the events specified in **state_callback_events** happens;
- **state_callback_events** contains the statuses (call progress events) that must be sent to the **state_callback** URL. It's possible to specify multiple events:
 - trying a call is initiated, and an outgoing request is sent;
 - ringing a phone is ringing;
 - early early media is played;
 - connected a call is answered/taken from hold and the remote side is connected;
 - terminated a call is disconnected; this status is sent by default;
 - held a call party is connected and is put on hold (this status is returned to the party placed on hold);
 - holding a call party is connected and is put on hold (this status is returned to the party placing the call on hold).
 - queued a caller is placed on a call queue;

• dequeued – a caller is removed from the call queue.

If a call status matches the status specified in **state_callback_events**, the application receives a POST request from PortaSwitch® with the status event details.

Benefits

- Easier implementation for external application developers.
- Service providers can implement click-to-call service in a shorter time.