QuestBlue Systems SIP Trunk Setup with FreePBX version 13.0.27 / Dated DEC -2015

One of the major differences in this version will be the addition of the FreePBX Firewall and PJSIP.

At QuestBlue Systems we will support you in both firewall options as noted below:

A. Built in Sangoma Firewall

B. IPTABLES firewall Access Control List /etc/sysconfig/iptables

QuestBlue Systems will not support the SIPStation Free Trial that you *may* have selected Start Trial during your install. If you selected Not Now, then you can continue below.

First steps after creating your login to the GUI will be a question of optional add-on products.

These products are completely up to you, however they are supported by Sangoma.

They are not products that QuestBlue Systems will support.

Your next screen will be the Firewall option.

All new in the version FreePBX 13 is the built-in Sangoma Firewall.

We recommend to our clients that have network / CentOS knowledge to avoid this firewall and use IPTABLES as your firewall. This is an option that you can make at this time.

We have selected to ABORT the built in Firewall from Sangoma.

Once you have navigated to the next screen of the iso installation you will notice a sales question asking you to purchase SIPStation Free Trial.

At QuestBlue Systems we do not support SIPStation in your FreePBX, we only support the SIP Trunks associated to QuestBlue Systems and interconnected systems over iax2.

Our suggestion is to select abort when asked.



Because of our selection of the Firewall we will need to address an error that is on the main dashboard.

5 <u>7</u> *	Admin Applications Conne	ctivity	Dashboard	Reports	Se	ttings	UCP			
	System	overv	iew		C					
	Welcome to FreePBX FreePBX 13.0.27 'VoIP Server' (You can change this name in Advanced Settings)						FreePBX holiday cyber weekend Forget Cyber Monday, It's Going Commercial Modules, Support Rob's Twist on: Why You Need a			
	Summary	Sysl	nfo updated -1685	3 seconds ago		Checkli	ist: 6 Thing	gs to Consider Wh		
	Asterisk 🔺 MySQL 🗸		System Ale	rts				F		
	Web Server		NO CHICAI ISSUE	silounu		Asteris	ik 🗸 📍	Users Onli 🔘		
	System Registration (Uptim	e 🕶			
ĺ	System Firewall X UCP Daemon V					CPU	•			
	Missing HTML5 format converters			00		Memo	ry -			
	Collecting Anonymous Browser Stats			00		DISK				
	Default bind port for CHAN_PJSIP is: 5	060, CHAN ow New	N_SIP is: 5061	00		Netwo	rk 🔻			

To correct this error, please go to Admin -- Module Admin and locate System Firewall under Connectivity

1

Connectivity	Dashboard	Reports	Settin	igs
13.0.2	Stable	Sangoma Tech	nologie	GPL
13.0.12	Stable	Sangoma Tech	nologie	GPL
13.0.7	Stable	Sangoma Tech	nologie	GPL
13.0.4	Stable	Sangoma Tech	nologie	GPL
13.0.5	Stable	Sangoma Tech	nologie	GPL
13.0.12	Stable	Sangoma Tech	nologie:	GPL
13.0.14	Stable	Sangoma Tech	nologie	Com
13.0.6	Stable	Sangoma Tech	nologie	GPL
13.0.7	Stable	Sangoma Tech	nologie	Com
13.0.7	Stable	Sangoma Tech	nologie:	GPL
13.0.6	Stable	Sangoma Tech	nologie	Com
	Connectivity 13.0.2 13.0.12 13.0.7 13.0.4 13.0.5 13.0.12 13.0.14 13.0.6 13.0.7 13.0.7 13.0.7	ConnectivityDashboard13.0.2Stable13.0.12Stable13.0.7Stable13.0.7Stable13.0.5Stable13.0.12Stable13.0.14Stable13.0.6Stable13.0.7Stable13.0.7Stable13.0.7Stable13.0.6Stable13.0.6Stable	ConnectivityDashboardReports13.0.2StableSangoma Tech13.0.12StableSangoma Tech13.0.7StableSangoma Tech13.0.4StableSangoma Tech13.0.5StableSangoma Tech13.0.12StableSangoma Tech13.0.13StableSangoma Tech13.0.14StableSangoma Tech13.0.7StableSangoma Tech13.0.7StableSangoma Tech13.0.7StableSangoma Tech13.0.6StableSangoma Tech13.0.6StableSangoma Tech13.0.6StableSangoma Tech13.0.6StableSangoma Tech	ConnectivityDashboardReportsSettin13.0.2StableSangoma Technologie:13.0.12StableSangoma Technologie:13.0.7StableSangoma Technologie:13.0.4StableSangoma Technologie:13.0.5StableSangoma Technologie:13.0.12StableSangoma Technologie:13.0.12StableSangoma Technologie:13.0.13StableSangoma Technologie:13.0.14StableSangoma Technologie:13.0.7StableSangoma Technologie:13.0.7StableSangoma Technologie:13.0.6StableSangoma Technologie:13.0.6StableSangoma Technologie:13.0.6StableSangoma Technologie:

Connectivity

Module	Version	Track	Publisher	Licer
DAHDi Config	13.0.7	Stable	Sangoma Technologie:	GPL
Digium Phones Config	2.11.2.9	Stable	Digium	GPL
Extension Routes	13.0.4.2	Stable	Sangoma Technologie:	Com
Outbound Call Limit	13.0.3	Stable	Sangoma Technologie:	Com
SIPSTATION	13.0.13.2	Stable	Sangoma Technologie:	Com
> SMS	13.0.2	Stable	Sangoma Technologie:	Com
✓ System Firewall	13.0.14	Stable	Sangoma Technologie:	AGP

Changelog	Publisher:	Sangoma Techno	logies Corporation	n	
	License:	AGPLv3+			
	Signature Status:	Good (What Does	s this Mean?)		
	Description:	Integrated FreeP	BX Firewall. Currer	ntly works with F	RHEL 6 and RHEL 7 con
	More info:	Get help for <mark>Syste</mark>	em Firewall		
	Track: 🛙	Stable			
	Action: 🕫	No Action	Uninstall	Remove	

After making your selection above you will need to process your selection

	Reset	Process	
IA			

Please confirm your selection



Next you will select Return and then Apply Config in the top right hand corner



We will now move on to the Setting Advanced Setting section.

Here we will only make one modification to this area.

We want to remove the RSS Feeds from the main dashboard to avoid any bandwidth being used for anything not VoIP related.



Remove all the text in this box and select No

Then Select SUBMIT on the bottom right of your screen along with Apply Config in the Top Right when prompted.

Now if you click on Dashboard across the top you will return to a clean Dashboard.

Navigate to Settings - Advanced Settings and locate SIP CHANNEL Driver and change it from BOTH to CHAN PJSIP

SIP Channel Driver 🛛 📿

chan_pjsip

The chan_pjsip channel driver is considered "experimental" with known issues and does not work on Asterisk 11 or lower.

Now we are going to create a PJSIP trunk in the Trunk Module.

At the tab bar go to the Connectivity tab, and then select TRUNK

Now click on "+ ADD TRUNK" < "+ADD SIP (chan_pjsip) Trunk"

Trunks



Under the General tab, enter the trunk name: Questblue



Under the Dialplan Manipulation Rules, enter the following:

(1) prefix [NXXNXXXXX	1
(prepend) prefix [1NXXNXXXXXXX	/

Under the pjsip Settings, enter the following:

The username should be your trunk name

Username	MYTRUNKNA	AME	
The password, also known as secret, can be anything			
Secret			
Select OUTBOUND as the Authentication method			
Registration should have NONE selected			
The only field left to enter is SIP Server: sbc.questblue.com	1		

Submit the changes, and once the red Apply Config button appears click it

The next step in setting up your PBX to use PJSIP is to add an outbound route

Outbound Routes	
This page is used to manage your outbound routing.	
+ Add Outbound Route	
Enter a route name	
Route Name 🕢	outbound
The only other setting we need to add here is th	e Trunk Sequence for Matched Route
We will select the trunk we just created for this	

Click on the Dial Patterns tab, and enter the following:

(prepend)	prefix		[1NXXNXXXXX
(1)	prefix	I	

Submit the changes, and once the red Apply Config button appears click it

Now we must add an inbound route





The first entries must be a description and the DID number

General	Advanced	Privacy	Fax	Other	
Description	0				Sales
DID Number	0				8883390037

The only other setting that is important is the destination

I created an extension and registered a phone as that extension. I have set the extension to be the destination so that when people call my inbound route I just created my phone 100 rings



Submit the changes, and once the red Apply Config button appears click it