

Installing FreePBX 15 Asterisk 16

SangomaOS 7.6 (2002.043)

FreePBX 15 Installation (Asterisk 16) - Recommended >
FreePBX 15 Installation (Asterisk 13) >

FreePBX 15 Advanced Installation >
Advanced and Troubleshooting options >

Boot from local drive

Press [Tab] to edit options



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FreePBX 15 Installation (Asterisk 16) - Recommended

- Graphical Installation - Output to UGA >
- Graphical Installation via UNC - Output to Serial >
- Graphical Installation via UNC - Output to Serial and UGA >

- Fully Automatic Installation - Output to UGA
- Fully Automatic Installation - Output to Serial

Press [Tab] to edit options



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Graphical Installation - Output to UGA

FreePBX Standard

Press [Tab] to edit options

Automatic install of Asterisk 16 and FreePBX 15
Note that if more than two identically sized HDDs are detected,
a RAID will be created and they will assigned to it
This install deletes all existing data on this machine



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```
[ 0.215170] NetLabel: Initializing
[ 0.216003] NetLabel: domain hash size = 128
[ 0.217003] NetLabel: protocols = UNLABELED CIPSOv4
[ 0.218000] NetLabel: unlabeled traffic allowed by default
[ 0.219070] amd_nb: Cannot enumerate AMD northbridges
[ 0.220065] Switched to clocksource kvm-clock
[ 0.226167] pnp: PnP ACPI init
[ 0.227105] ACPI: bus type PNP registered
[ 0.228544] pnp: PnP ACPI: found 5 devices
[ 0.229550] ACPI: bus type PNP unregistered
[ 0.245151] NET: Registered protocol family 2
[ 0.247200] TCP established hash table entries: 16384 (order: 5, 131072 bytes
)
[ 0.251124] TCP bind hash table entries: 16384 (order: 6, 262144 bytes)
[ 0.253465] TCP: Hash tables configured (established 16384 bind 16384)
[ 0.255838] TCP: reno registered
[ 0.258032] UDP hash table entries: 1024 (order: 3, 32768 bytes)
[ 0.259116] UDP-Lite hash table entries: 1024 (order: 3, 32768 bytes)
[ 0.260310] NET: Registered protocol family 1
[ 0.262429] pci 0000:00:00.0: Limiting direct PCI/PCI transfers
[ 0.264355] pci 0000:00:01.0: PIIX3: Enabling Passive Release
[ 0.266315] pci 0000:00:01.0: Activating ISA DMA hang workarounds
[ 0.268678] ACPI: PCI Interrupt Link [LNKC] enabled at IRQ 11
[ 0.270792] Unpacking initramfs...
-
```



INSTALLATION SUMMARY

SANGOMAOS 7.6 2002 INSTALLATION

us

Help! (F1)

LOCALIZATION



DATE & TIME
Coordinated Universal Time timezone



KEYBOARD
English (US)



LANGUAGE SUPPORT
English (United States)

SOFTWARE



INSTALLATION SOURCE
Local media



SOFTWARE SELECTION
Custom software selected

SYSTEM



INSTALLATION DESTINATION
Custom partitioning selected



KDUMP
Kdump is enabled



NETWORK & HOST NAME
Wired (eth0) connected



SECURITY POLICY
No content found

Quit

Begin Installation

We won't touch your disks until you click 'Begin Installation'.

Enter Network and Host Name



CONFIGURATION

SANGOMAOS 7.6 2002 INSTALLATION

us

Help! (F1)

USER SETTINGS

 **ROOT PASSWORD**
Root password is not set

 **USER CREATION**
User asterisk will be created

Starting package installation process



Please complete items marked with this icon before continuing to the next step.

Enter Password for root access of FreePBX



us

Help! (F1)

USER SETTINGS



ROOT PASSWORD
Root password is set



USER CREATION
User asterisk will be created

Running post-installation scripts

Choose the Sangoma Phone
That Best Suits Your Needs



CONFIGURATION SANGOMAOS 7.6 2002 INSTALLATION

us Help!

USER SETTINGS



ROOT PASSWORD
Root password is set



USER CREATION
User asterisk will be created

Complete!

SangomaOS 7.6 is now successfully installed and ready for you to use!
Go ahead and reboot to start using it!

[Reboot](#)

 Use of this product is subject to the license agreement found at /usr/share/sangoma-release/EULA

Reboot

FreePBX Support | ISymphonyV3 Panel | UCP

Welcome to FreePBX Administration!

Initial Setup

Please provide the core settings that will be used to administer and update your system

Administrator User

Username

Password

Confirm Password

System Notifications Email

Notifications Email address

System Identification

System Identifier

System Updates

Automatic Module Updates Enabled Email Only Disabled

Automatic Module Security Updates Enabled Email Only

Send Security Emails For Unsigned Modules Enabled Disabled

Check for Updates every Saturday Between 4am and 8am

[Setup System](#)

Enter IP address in your Web Browser and begin entering the user credential information



FreePBX Administration



User Control Panel

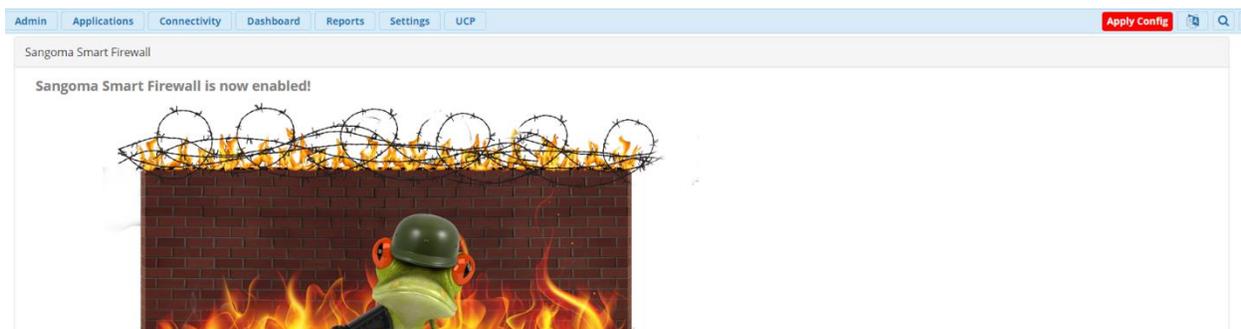


Operator Panel

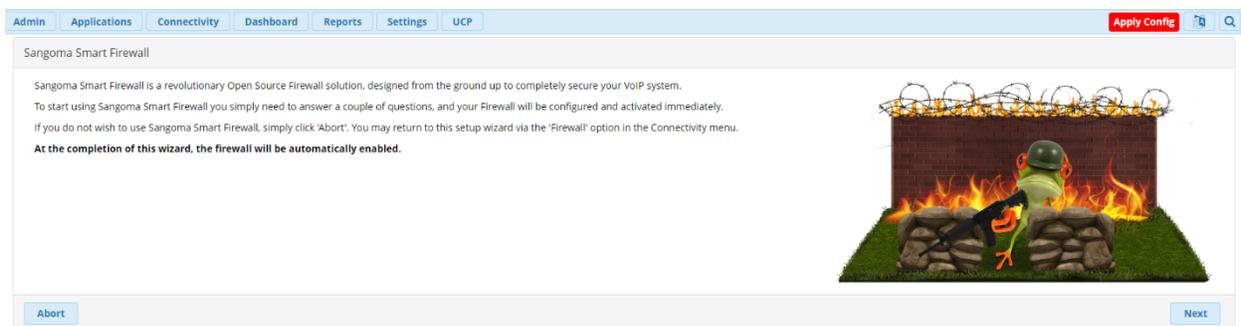


Get Support

Login to GUI by clicking FreePBX Administration



Sangoma Firewall will automatically open select continue



Next

Admin Applications Connectivity Dashboard Reports Settings UCP Apply Config

Sangoma Smart Firewall

Should the client you're using be trusted?

It is highly recommended that the client you're currently using [] should be marked as Trusted. This will ensure that you can not accidentally be locked out of this server.
You would normally select **Yes** to this question. The only time you would pick No is if you are not using the client machine you will be using in the future to manage this system.



Abort No Yes

Yes

Admin Applications Connectivity Dashboard Reports Settings UCP Apply Config

Sangoma Smart Firewall

Should your current network be trusted?

The network you are currently using [] to manage this server isn't marked as Trusted.
If this is a known secure network, you should add it to the Trusted zone

Please ensure that you are not inadvertently allowing unauthorized hosts access to your machine. You should only select 'Yes' if you are sure the network (above) is not accessible by any unknown third parties.



Abort Yes No

Yes

Admin Applications Connectivity Dashboard Reports Settings UCP Apply Config

Sangoma Smart Firewall

Enable Responsive Firewall?

Enabling Responsive Firewall allows remote clients to securely register to this server without explicitly whitelisting them.
It is recommended to turn this on if you have remote clients.
Further information is available at the PBX Wiki.



Abort No Yes

No

Admin Applications Connectivity Dashboard Reports Settings UCP Apply Config

Sangoma Smart Firewall

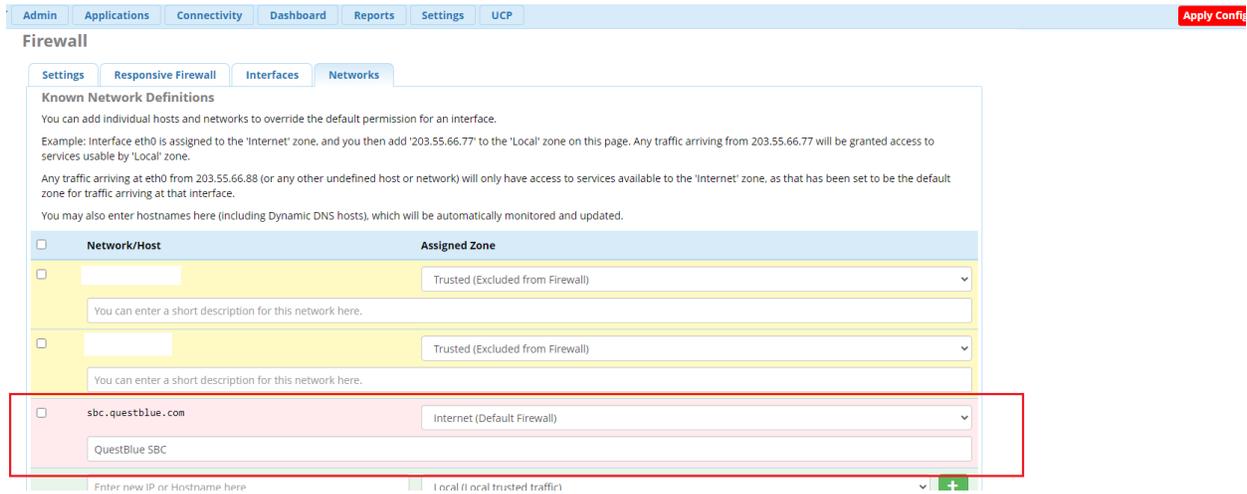
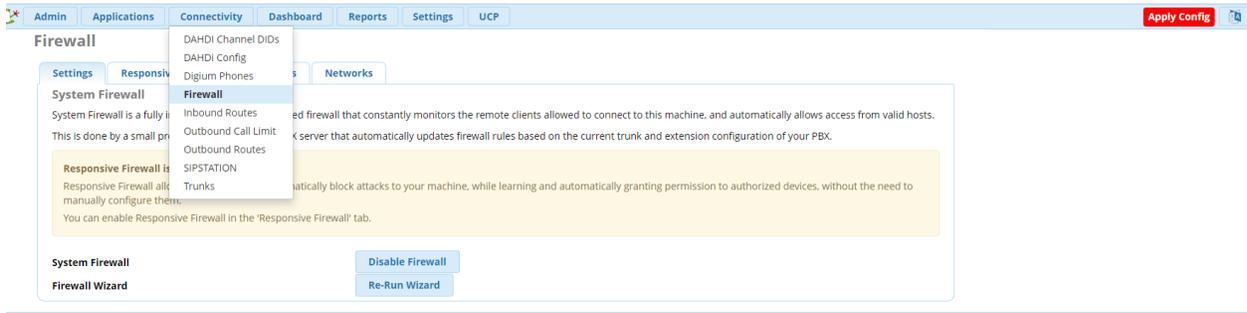
Automatically configure Asterisk IP Settings?

Firewall should now auto-detect and configure External IP settings. This will assist with NAT or Translation issues.
You should say 'Yes' to this, unless you have an extremely complex network with multiple external default gateways.
You can verify these settings in Sip Settings after this wizard is complete. If you have a non-static IP address, you may need to use a DDNS provider which will require manual configuration.

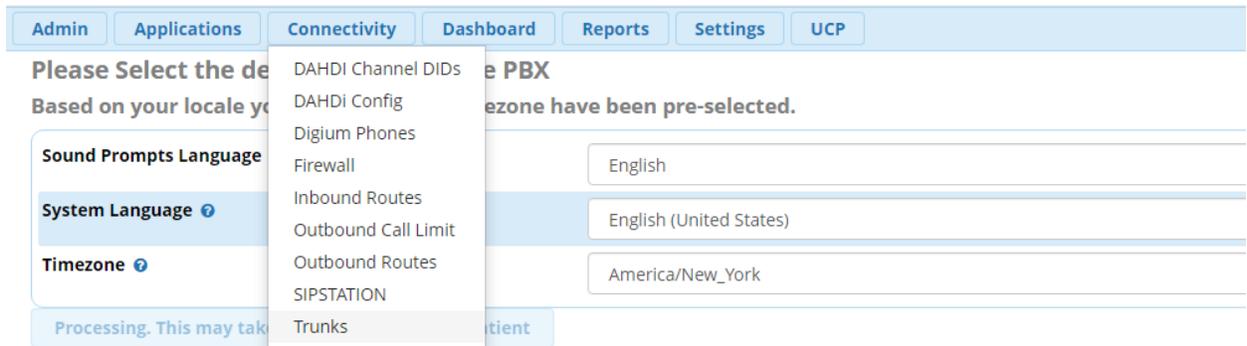


Abort No Yes

Yes



Enter sbc.questblue.com



Create your SIP Trunk

Add chan_sip Trunk

Tech	CallerID	Status	Actions
sip		Enabled	 

+ Add Trunk -

- + Add SIP (chan_pjsip) Trunk
- + Add SIP (chan_sip) Trunk
- + Add DAHDI Trunk
- + Add IAX2 Trunk
- + Add ENUM Trunk
- + Add DUNDI Trunk
- + Add Custom Trunk

SIP-accounts → Create New SIP Account

Create new SIP account or SIP Registration

Trunk name * [SIP-accounts]
Only alphanumeric value, no spaces

Trunk Type ▼

* required field

[Create SIP account](#)

In your customer.questblue.com account create a Registration Trunk
 Below follow the instructions for creating the SIP Trunk in FreePBX

General | Dialed Number Manipulation Rules | sip Settings

Trunk Name

Hide CallerID Yes No

Outbound CallerID

CID Options Allow Any CID Block Foreign CIDs Remove CNAM Force Trunk CID

Maximum Channels

Asterisk Trunk Dial Options
 Override System

Continue if Busy Yes No

Disable Trunk Yes No

Monitor Trunk Failures Yes No

General | Dialed Number Manipulation Rules | sip Settings

Dial Number Manipulation Rules

These rules can manipulate the dialed number before sending it out this trunk. If no rule applies, the number is not changed. The original dialed number is passed down from the route where some manipulation may have already occurred. This trunk has the option to further manipulate the number. If the number matches the combined values in the **prefix** plus the **match pattern** boxes, the rule will be applied and all subsequent rules ignored. Upon a match, the **prefix**, if defined, will be stripped. Next the **prepend** will be inserted in front of the **match pattern** and the resulting number will be sent to the trunk. All fields are optional.

Rules:
 X matches any digit from 0-9
 Z matches any digit from 1-9
 N matches any digit from 2-9
 [1237-9] matches any digit or letter in the brackets (in this example, 1,2,3,7,8,9)
 . wildcard, matches one or more characters (not allowed before a | or *)

[Dial patterns wizards](#)

<input type="text" value="1"/>	<input type="text" value="prefix"/>	<input type="text" value="NXXXXXXXXX"/>			+ 
<input type="text" value="prepend"/>	<input type="text" value="prefix"/>	<input type="text" value="1NXXXXXXXXX"/>			+ 
<input type="text" value="prepend"/>	<input type="text" value="prefix"/>	<input type="text" value="match pattern"/>			+ 

Outbound Dial Prefix

General | Dialed Number Manipulation Rules | sip Settings

Outgoing | Incoming

Trunk Name

PEER Details

General | Dialed Number Manipulation Rules | sip Settings

Outgoing | Incoming

USER Context

USER Details

Register String

When creating the Registration Trunk in the customer portal enter the information shown in the format above for Registration String

Apply setting and click Apply Config.

Next, create your inbound route from Connectivity > Inbound Routes

Admin | Applications | Connectivity | Dashboard | Reports | Settings | UCP Apply Config

Inbound Routes

Route: Test

Edit Extension 1000 (Test)

General | Advanced | Privacy | Fax | Other

Description

DID Number

CallerID Number

CID Priority Route Yes No

Alert Info

Ring Volume Override

CID name prefix

Music On Hold

Set Destination

Create your inbound route with DID number in the format NXXNXXXXXX

Submit, apply config