PortSIP PBX Administration Guide

Version: v16.0.0

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Trademarks

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Summary of Changes

Changes for Release v16.0.0

The following changes are included in this release:

- Rewrite all REST API

About This Guide

This document provides guidelines to help facilitate the administration of the PortSIP PBX Unified Communications solution. It includes important sections detailing installation, administration, and upgrade procedures in particular for the admin mode. Where applicable, it lists and references other guides that contain detailed information on administrative procedures for BroadWorks servers or client applications.

Overview

PortSIP PBX is a modern, complete Unified Communications solution, providing a comprehensive suite of services addressing both business and consumer needs. The solution includes the following features:

- Multi Tenant
- Dealers Management
- Audio Calling and Video Calling
- Conferencing
- Instant Messaging and Presence (IM&P)
- Voice and Video Messages
- File and Picture Share
- Service Management (call settings)
- Audio and Video Call Recording
- Recordings Management
- Desktop Share
- Address Books/Contact Management
- Push Notifications

- Billing
- Virtual Receptionst
- Ring Group
- Contact Center
- Queue Callback
- Call Report
- Call Park
- Music On Hold
- Call Pickup Group
- Voicemail and Shared Voicemail
- Automatic Callback
- WebRTC
- Microsoft Teams Direct Routing
- Integrated SBC
- Full Opened REST API
- Zero Touch Provisioning
- Custom Template
- Role and Permissions
- Trunk Management
- Centralized Service Configuration (Call Forwarding, Do not Disturb, and so on).
- Troubleshooting
- Free Client VoIP SDK
- Free Client apps

1 Architecture

Unlike a traditional phone, a VoIP phone is not directly conneted to the PSTN, but rather the internet. The VoIP provider communicates with the phone through the internet, and translates and sends the data to the PSTN.
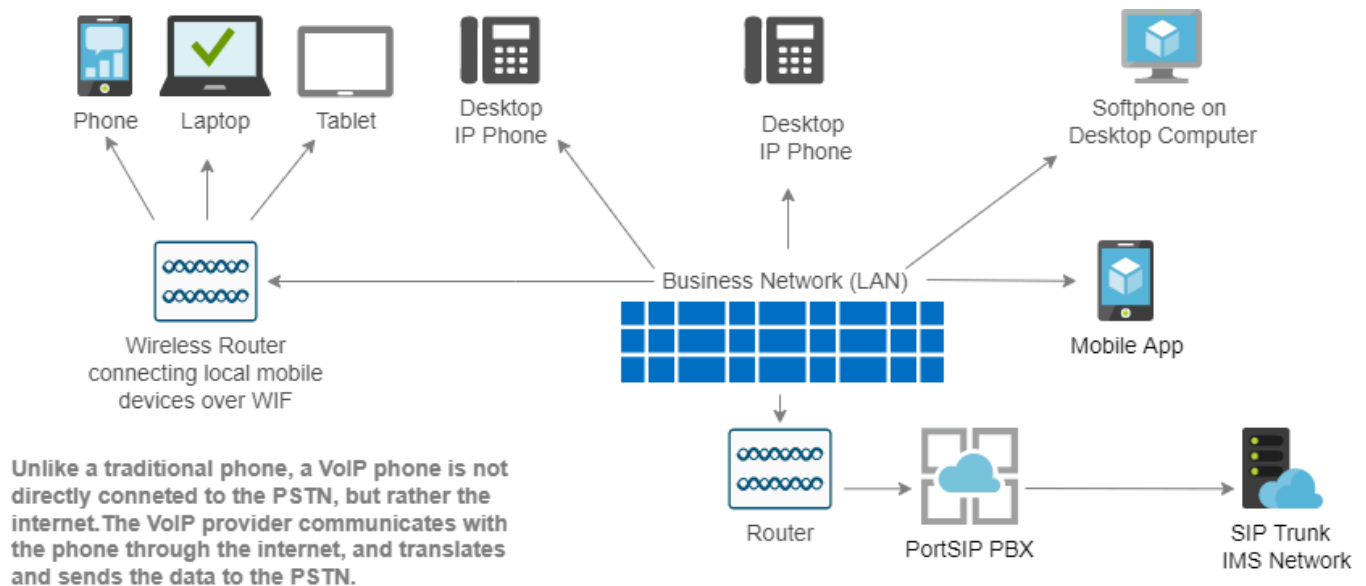
2 Install PortSIP PBX

2.1 Install PortSIP PBX for Linux

Supported Linux OS

- CentOS: 7.9
- Ubuntu: 18.04, 20.04, 22.04
- Debian: 10.x, 11.x

It only supports 64bit OS.

Preparing the Linux Host Machine for Installation

Tasks that MUST be completed before installing PortSIP PBX.

- If the Linux on which PBX will be installed is located in LAN, assign a `static LAN IP address` ; if it's in a public network, please assign a `static IP address` for the public network.
- Install all available updates & service packs before installing PortSIP PBX.
- Do not install PostgreSQL on your PortSIP PBX Server.
- Ensure that all power-saving options for your System and Network adapters are

disabled (by setting the system to High Performance).

- Do not install TeamViewer, VPN, and other similar software on the host machine.
- PortSIP PBX must not be installed on a host which is a DNS or DHCP server.
- Below ports must be permitted by your firewall.
  - UDP: 5060, 25000 - 35000, 45000 – 65000
  - TCP: 5065, 8883, 8885, 8887, 8888
    Please also ensure the above ports have not been used by other applications.
- Ensure server date-time is synced correctly
- Must execute all Linux commands by the root user, please su root first.

> ⚠️ **Warning**
>
> If the PBX running on a cloud platform such as AWS, and the cloud platform has the firewall itself, you MUST open the ports on the cloud platform firewall too.

Step 1 Download installation scripts

Execute the below commands.

```
mkdir /opt/portsip && cd /opt/portsip
curl https://raw.githubusercontent.com/portsip/portsip-pbx-sh/master/v16.x/install_pbx_docker.sh
curl https://raw.githubusercontent.com/portsip/portsip-pbx-sh/master/v16.x/portsip_pbx_ctl.sh
```

Step 2 Setup the docker environment

Execute the below command to install the `Docker-Compose` environment.

```
/bin/sh install_pbx_docker.sh
```

Step 3 Create and run the PortSIP PBX docker container instance

The below command is used to create and run the PBX on a server which the IP is `66.175.221.120` .

```
/bin/sh portsip_pbx_ctl.sh run -p /var/lib/portsip -a 66.175.221.120 -i portsip/pbx:16
```

If run the PBX in a LAN without public IP, just replace the `66.175.221.120` by private IP of the PBX server,.

Now you can use `https://66.175.221.120:8887` or `https://66.175.221.120:8888` to access the PBX Web portal, the default system administrator name and password both are `admin` .

Step 3 Setup the PortSIP SBC

PortSIP also provide a SBC that support