Four Levels of Control, User Separation, & Many Other Exciting Features

TECHNICAL BENEFITS

Four Levels of Control

The system features four levels of control:

- **Administrator** - The owner of the system, has full control over the system
- **Reseller** - The reseller of the VoIP services
- **Client** - The reseller's customer, typically a company
- **Extension** - The end user of the system, usually the person who uses the phone terminal

With four levels of control, the reselling options are practically unlimited. The client level user can be a company that has multiple phone terminals or can be another reseller who sells VoIP services to end-users directly.

Asterisk does not include support for such multi-level operations. 4PSA VoipNow solves this issue and introduces advanced permissions and limits.

Quota for All Users

Storage space is a limited resource and hosting providers know this. 4PSA VoipNow has advanced quota options. Every extension mailbox can be set to a certain quota (for example 5Mb). The sound files uploaded to the system must also fit within certain limits. Every extension has an assigned disk space for recorded phone conversations.

Channel Cost Routing Daemon

4PSA VoipNow has an advanced routing engine. Every channel used to route calls outside the system advertises different costs for area codes. Vdialroute daemon builds an area code dictionary that contains all available channels. The system interrogates the daemon to obtain the best cost for a dialed number. While records are managed by a low overhead daemon, routing can be performed in real time.

Designed for Flexibility

4PSA VoipNow can be used in many environments to provide hosted VoIP services or as a standalone PBX in the company office.

Latest Technology

4PSA VoipNow was designed based on the latest technology available. Open Source is the core of the system. The new MySQL 5 version is used in order to implement advanced database techniques like stored procedures, functions, views or triggers. The interface is programmed entirely in PHP 5.1, while the low level system is programmed in C. The layered system design increases robustness and scalability.

Software PBX

The telephony functions are based on Asterisk, the leading Open Source software PBX. 4PSA VoipNow uses the Asterisk 1.2 branch, the latest stable version available.

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Routing can be based on dialed number, call cost, and time of call. Time based routing is quite important because some providers offer better rates in selected time intervals.

Choose from a Wide Range of Providers

With 4PSA VoipNow, you can use any provider that supports SIP connectivity. You can choose popular carriers that offer connection options to all areas around the globe or dedicated carriers that provide the best cost to a certain destination. Due to the routing rules, it is possible to use multiple carriers and always route through the best cost route.

Easy Installation

Installing and configuring 4PSA VoipNow is an easy task even for non-technical people. The system can be installed as easy as executing a Linux binary. The auto-installer resolves all the operating system dependencies, downloads the software from the Rack-Soft repository, and installs it.

4PSA VoipNow can also be installed using an ISO image based on CentOS 4.4 operating system. Using the ISO CD, the installation process is simplified and trouble-free, especially when multiple 4PSA VoipNow servers are deployed.

Powerful Billing

4PSA VoipNow integrates a flexible billing engine. Billing is a sensitive matter because the server owner must pay its carrier. The system performs billing based on a predefined billing plan and according to these parameters:

- Time interval when the call was performed
- Call destination

Billing can be prepaid and postpaid, charges can be defined by the account owner or determined from the call cost.

Every billing plan is associated with an outgoing routing rule set, which means that you can allow calls only to certain destinations and deny others.

Charging is performed based on call duration, according to the billing plan options. For example, you can setup the system to bill per minute for the first minute and then at every ten seconds.

The same advanced billing features can be used by all customers because not only the administrator, but also resellers and clients can define billing plans for their users.

Integrated Update Engine

On an installed system, updates can be scheduled from the 4PSA VoipNow interface by the administrator. The install/update engine is highly reliable (RPM tests are performed before the actual installation takes place).

Scalable Web Interface

The web interface is template based, skin-able, and fully localizable. Users can choose the interface language independently as well as the preferred skin. Documentation and SDK tools are provided for translators and third-party skin developers. The system can be branded based on the owner's business profile.

The interface implements dynamic methods like AJAX in order to provide the output to the customer as quickly as possible. Due to dynamic forms, similar objects can be added in a single step in the majority of cases.

Call Queue

Call queues are currently the most efficient way to deliver customer support, sales or any other service that involves multiple company employees answering to the same phone line.

The size of a 4PSA VoipNow queue can be setup by the user. When the queue is full, users are rejected or directed to a predefined extension.

Calls can be distributed between agents according to the business profile (Ring All, Distribute calls evenly, List recently called, Fewest calls, Random).

The owner can setup how agents will take calls (the minimum time interval between calls, voice announcements, queue identification, etc). It is also possible to setup how the system will behave when a user stays for more than a predefined time in a queue.

Call queues are business engines and require powerful reporting. In any moment the queue owner can see which extensions are logged in, the average time callers wait in the queue, how many callers abandon the queue, review the service level agreement figures, etc.

Call Screening and Filtering

4PSA VoipNow users can screen calls based on the caller ID. They can select from a list of predefined actions how the system must handle calls from those phone numbers. The user can choose to give a Busy signal, Congestion, Hang-up or to transfer the caller to another extension.

Phone Extensions

Phone extensions can be hardware VoIP phones or software SIP agents. Most functions are phone independent and work even on traditional terminals connected to analog to VoIP conversion boxes like Cisco ATA186.

Some of the most important features supported by the system:

• **Caller ID** - The system sends caller ID and caller Name. The client can choose to remain anonymous.

• **Call forwarding** - All calls forwarding, on busy forwarding, and on no answer forwarding available

• **Call waiting** - The caller can be put on hold, when the called user is busy.

• **Call authentication** - Useful when the extension wants to accept only calls from third parties that enter a predefined PIN

• **Do not disturb** - The caller is welcomed with a custom 'Do not disturb' message or he is directed to voicemail.

• **Attended** and **blind call transfer** - Incoming calls can be transferred to another extension.

• **Call cascading** - After X1 seconds extension Y1 is ringing, after X2 seconds extension Y2, and so on.

• **Ring all** - When an extension is contacted all other extensions in the list are also contacted.

• **Voicemail** - Every phone terminal can have a mailbox associated. The user can define a PIN for this mailbox in order to listen to messages over the phone. Messages can be sent directly to extension owner's email address or a new message notification can be dispatched. Existing voicemail messages can be managed in the online interface and over the phone.

• **Conference** - Any user can start a conference. Conference rooms can be protected with a PIN. A predefined number of users can join a conference.

• **Call recording** - Users can start call recording by pressing a button. The system can play a call recording notice sound in order to comply with local call recording regulations.

Sound File Management

Sound files are used by the system in order to answer phone requests. 4PSA VoipNow implements a multi-language design; therefore, the sound file administration is performed based on the phone extension language. At installation, the system comes with a collection of sound files, which can be used for most standard operations.

Sound files can be used in call prompts, music on hold, standard menus, etc. Users can r other users on the system.