

Numbers

Release 2.0.0

The new release of AVAVoIP introduces a robust functionality that allows for number distribution and on-net billing of numbers for SIP trunking and Vonage type services. Numbers are origination DID's which are associated with accounts and can be forwarded to endpoints or external numbers. Numbers are managed within Number Sets - each set is associated with a Subscription Plan and can contain many numbers. Accounts can only purchase numbers from number sets associated with the plan the account is subscribed to. The system is able to create fake numbers for a number set. All usage in the system is performed by account members.

Residential Solutions

The residential functionalities provide a comprehensive package for telephony service providers to enter the residential and retail markets with minimum efforts and cost.

Functionality features:

- accounts can purchase numbers
- accounts can purchase lines
- account can assign lines per member
- accounts can assign lines per device
- accounts can purchase subscriptions (usage counters)
- accounts can purchase or create one or more members
- members can be associated with recurring charge from Subscription Plan
- member number is limited by account setting and inherited from subscription plan
- members can individual users of shared accounts
- members have properties such as name and address
- accounts can create devices
- accounts can enable members to make outbound calls
- accounts can assign members numbers
- accounts can assign members TF numbers
- accounts can enable call forwarding for members (Follow Me)
- accounts can enable Voicemail for members
- accounts can assign subscriptions (usage counters) to members
- accounts can see call history reports by member
- members can log in the CRM and: manage their properties; see their call history

User P2P Calling

The feature is similar to Skype-to-Skype service. The business case implements scenario in which users call other users on system (fake) numbers over the internet. Calls are connected between registered devices or soft phones. If Administrators are not interested to limit the distribution of numbers by subscription plan they can use the System Number Set, otherwise they can create a new number set and use that.

User Online Numbers

The feature is similar to the Skype Online Number. An Online Number is a number on which anyone can call users from their landline or mobile. Users answer calls on a registered

device or soft phone, no matter where they are physically located. Users purchase online numbers from the online CRM portal.

User Follow Me (Call forwarding)

The feature allows users to forward incoming calls to one or more registered devices or to one or more landline or mobile phones. Once setup the incoming calls can be forwarded either simultaneously to all destination targets or sequentially to targets based on forwarding priority.

User Local Numbers

The functionality solves 2 business cases:

1. User calls relatives on local for user number and calls friends and relatives internationally or long distance. This is the same as Skype To-Go-Number. Users purchase local numbers for friends, family and colleagues based abroad. Users associate those numbers with the respective international phone numbers of their friends and dial the local numbers to reach their friends abroad.
2. Relatives call user on local to relatives numbers and user pays for the services. In this scenario user purchases international numbers local for his/her friends or relatives to call him/her from their country. User is charged a flat fixed and/or per minute inbound rates.

The cases are similar to the Follow Me case but exclude forwarding to endpoints. International DIDs must be loaded in the number sets. Users should be able to purchase more than one number and setup call forwarding to their landline or mobile numbers. Users can manage the call forwarding to their landline or mobile number via the Manage Registered Numbers page.

Enterprise Solutions

The enterprise functionalities allow account holder to granularly manage one or multiple users and the features they have from the system. Enterprise functionalities can be configured to work individually or together to provide various enterprise services.

Functionality features:

- billing for services and features is per account
- accounts can purchase numbers
- accounts can purchase lines
- account can assign lines per member
- accounts can assign lines per device
- accounts can purchase subscriptions (usage counters)
- accounts can purchase or create one or more members
- members can be associated with recurring charge from Subscription Plan
- member number is limited by account setting and inherited from subscription plan
- members can be office locations or individual users
- members have properties such as name and address
- accounts can create devices
- accounts can enable members to make outbound calls
- accounts can assign members numbers
- accounts can assign members TF numbers
- accounts can enable call forwarding for members

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- accounts can enable Voicemail for members
- accounts can assign subscriptions (usage counters) to members
- accounts can see call history reports by member
- members can log in the CRM and: manage their properties; see their call history

SIP Trunking

The feature allows enterprises to reduce their telecommunication costs for outbound long distance/international calling by using VoIP providers instead of traditional (TDM/POTS) communication networks. In many cases it is possible for enterprises to use their existing PBX infrastructure by connecting to sip trunking provider with VoIP gateway.

VoIP Gateway is a device that converts one type of digital media like TDM voice to another type of media like VoIP. VoIP gateways are used by many businesses to convert their legacy TDM PBX voice traffic to VoIP allowing for a cost effective migration to SIP. Likewise, carriers deploy VoIP gateways in their networks to convert voice traffic to and from IP and TDM networks.

Typical scenarios include:

- Enterprises connect to SIP trunking provider by using a low cost CPE (VoIP telephony adapter) without changing their current infrastructure.
- Enterprises connect to SIP trunking provider by installing a VoIP gateway device between the customer's current PBX and the SIP trunking providers.
- Enterprises switch entirely to a VoIP PBX platform which directly connects to SIP trunking providers.
- Enterprises use SaaS PBX solutions which directly connect to SIP trunking providers.

Numbers Management

The feature is similar to the Residential Online Number but targeting enterprises. An online number is a VoIP number on which anyone can reach the enterprise from a landline or mobile phone. Enterprises purchase online numbers from the CRM Portal. AVAVoIP forwards calls to online numbers to the enterprise VoIP PBX systems, VoIP Gateway devices or CPEs. AVAVoIP allows easy bulk management of numbers.

Call Hunting/Failover

With the AVAVoIP Call Hunting and Failover solution enterprises have an increased level of flexibility as well as protection against disaster, whether from natural causes or mechanical problems like equipment failure or power outages. If one line should fail for any reason, redirecting calls through remaining available resources guarantees business continuity and recovery from the outage. The functionality allows enterprises transparently to the calling party to failover calls to alternative SIP devices or PSTN numbers. The solution allows configuration of up to 5 destination targets to be rung sequentially or simultaneously.

Management of Geographically Distributed Locations

Enterprises with geographically dispersed locations can eliminate or largely reduce telecommunications costs between those locations by using the on-net calling functionality AVAVoIP provides. Enterprises can manage locations, phone numbers and features from a single centralized portal. The functionality uses a combination of the SIP trunking, numbers management and call hunting/failover features. Enterprises can create multiple members

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which can call within the AVAVoIP system for free. In cases of IP connectivity failure of certain locations calls can be failed over to backup PSTN numbers.

Centralized Enterprise Call Management Tool

AVAVoIP provides a single web-based centralized Portal which allows enterprise users to manage their business telecommunications:

- Managing multiple members for business entities such as locations, departments etc.
- Purchase line ports and granularly distribute them among members.
- Purchase numbers and granularly distribute them among members.
- Manage endpoints access for devices which will connect to the system.
- Manage features such as call hunting/failover, call forwarding and voicemail.
- View online call reports.
- Download call records.

Other Functionalities

Subscription Calling

This is similar to Skype subscriptions feature and is implemented with AVAVoIP Usage Counters. Accounts select a destination to call unlimited or up to fixed limit per month at a discounted rate or at no fee. Accounts pay flat fee for the subscription. Once the fixed limit is exhausted accounts make calls based on the standard outgoing rates in the plan. Accounts can buy any number of subscription options at the same time and all subscriptions are tracked separately. Based on the subscription configurations users can carry over the unused minutes from one month to another. Subscriptions are assigned to Members.

Voice Mail

Residential and Enterprise users can purchase a Voicemail for a recurring fee. Voicemail will be charged only as recurring fee and not per voicemail. When accounts create a voicemail box they will be billed mailbox recurring charge. Residential users can purchase voicemail from the CRM. Residential users are able to access voicemails messages via web. Enterprise accounts can access voicemail of all members via web. Enterprise members can only access voicemail via IVR access number.