

Voca - AudioCodes Agile Conversational IVR lets your customers talk from start to finish using simple voice requests, seamlessly navigating through a phone menu.

Combined with AudioCodes industry-leading Telephony & Voice Networking technologies, Voca offers enterprise-class Voice Recognition technology all packed into one agile solution that instantly upgrades customer calling experiences on a company's main line, with no more tapping away on the phone keypad or waiting for an operator.

With a hybrid Voice Recognition Engine (Combining AudioCodes and Azure Speech Cognitive Services capabilities), Voca is designed to master custom organizational vocabularies – such as contact names, departments, job titles, product names, branches and services.

Voca seamlessly connects to Microsoft Teams, enabling companies to retain their legacy IVR features while instantly upgrading their main line with an advanced Conversational, voice-driven experience – all under the Teams' hood.

Whether an enterprise, SMB, or a System Integrator, Voca is designed to cater to all types of organizations from various business verticals: Healthcare, Entertainment, Education, Municipalities, Telecommunications, Retail, Industry manufacturers, Banking, Finance and more.

Voice Recognition Languages

Voca natively supports the following languages, including a wide range coverage of dialects and accents representing everyday regional population and speakers:

- English (US)
- Spanish (United States)
- German (Germany, Austria and Switzerland)
- Spanish (multi-dialect for Central & Latin America, Spain)

Additionally, Voca supports the following languages via Microsoft Azure Cognitive Services:

- English UK
- English AU
- Portuguese (Brazil)
- French
- Dutch
- Italian
- Russian
- Simplified Chinese

Custom Organizational Vocabulary Support

Voca includes built-in, industry-specific linguistic support, allowing companies to easily add and customize company related terms such as contacts names, products names, departments, job titles and services. The addition and optimization of custom terms is done using a simple short free-text field, on a pure self-serve approach, making sure voice requests are covered easily and seamlessly, in real-time.

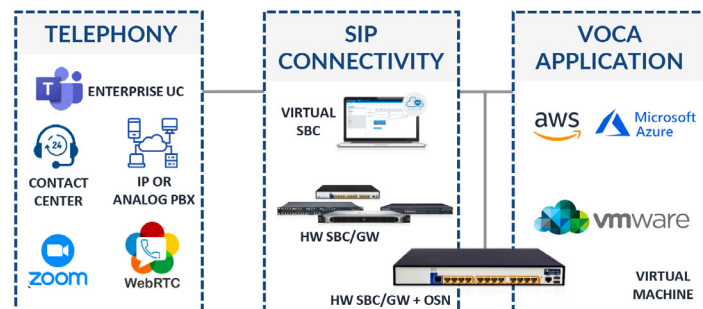
With support for unlimited voice entries and aliases, the Voca Web Management Interface, provides businesses with a real-time optimization of their linguistic coverage to make sure no voice request is missed.

Hybrid Voice Recognition for Multi-language Capabilities

To provide Voice Recognition for additional languages, Voca connects to cognitive services for multi-language Speech-to-text and Text-to-speech capabilities, allowing full scalability with a best-of-breed choice per a designated supported language.

Deployment Types

Voca is available either as a Cloud (AWS or Azure) deployment, or fully deployed On-Premise - over Virtual Machines or dedicated AudioCodes HW ([AudioCodes SBC with OSN](#)) which also provides seamless connectivity to the designated telephony PBX or UC.



Zero-to-Service Deployment

The Voca service can be easily deployed and configured in 3 basic steps:

- Basic deployment and PBX connectivity > 1 Day
- Build & define voice recognition lists and database synchronization - 0.5-1 Day
- Announcement prompts and advanced call flow configuration - 0.5-2 Days

With Voca's built-in telephony interfacing, quick zero-to-service deployment is made available and allows customers to have a live, running service in just a few days.

For companies looking for an even faster deployment, we created the Voca for Teams application. With the intuitive app wizard, your IVR can be up and running in just 5 minutes.

Integrated AudioCodes SBC/Gateway with Proven Interoperability

Voca on-premise solution deployments are based on either Virtual Machine deployment, or as HW deployment using AudioCodes dedicated [SBCs/Gateways](#), such as the AudioCodes [Mediant 800](#), providing instant, secured connectivity to any organizational PBX (analog/legacy or IP-PBX) and extended interoperability for various industry-standards and leading IP-PBXs widely available in the market.

Direct Routing SBC

The agile IVR solution, effortlessly taps into the organization's existing Teams Voice ecosystem, leveraging Direct Routing SBC connectivity, thereby eliminating the need for companies to add additional infrastructure or make any changes to their current one.

High Availability & Scalability

Voca provides Active-Active High-Availability for both On-Premise and cloud-based deployments. Coupled with AudioCodes [SBCs/Gateways](#), customers can enjoy complete interruption-free service when experiencing hardware or network connectivity issues.

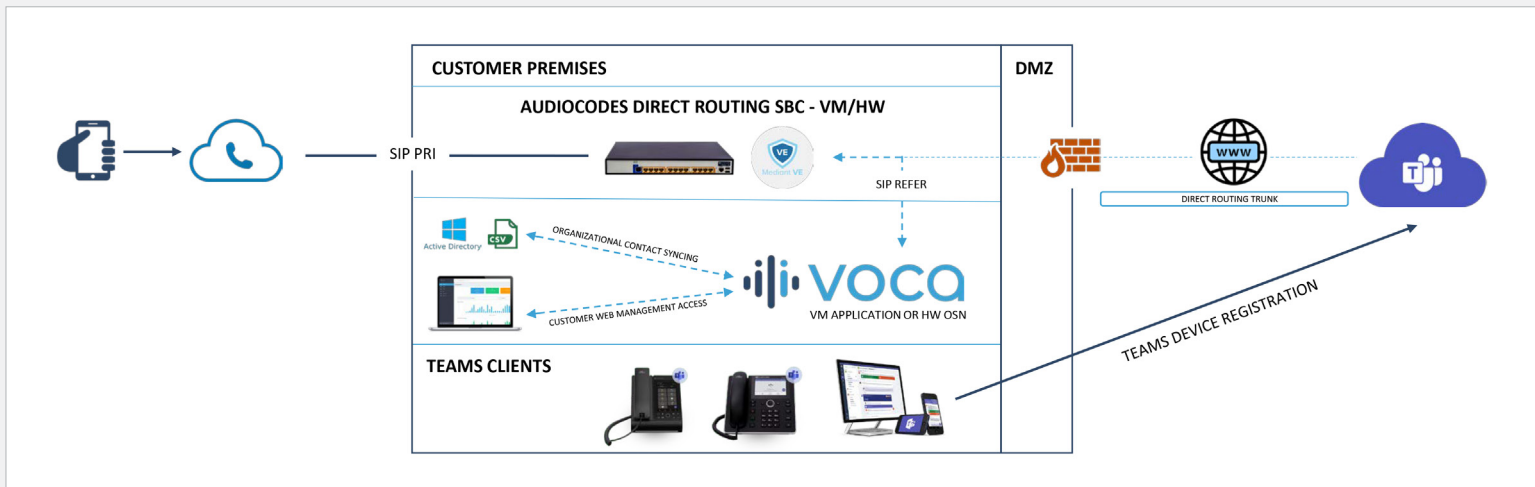
Voca is built in a multi-server and multi-client architecture, enabling easy scaling of solution deployments from single to multiple channels, effectively supporting larger call traffic volumes.

Multi-Tenancy

Voca is developed with a multi-tenant capability, providing multiple levels of administration and control from solution-providers to tenants (where a 'tenant' stands for an end-customer). Multi-Tenancy is available for all Voca deployment options.

Voca for Microsoft Teams

Voca can seamlessly integrate with Microsoft Teams, powering any Teams or hybrid Teams environments with Conversational IVR available on the company's main line, as well as accessible for internal Teams users. Utilizing the Direct Routing SBC, Voca connects seamlessly to the customer's Teams environment.



A Conversational IVR application for Microsoft Teams

The new Voca for Teams application offers an intuitive onboarding wizard that helps users get a quick taste of the full Voca experience and build a fully functional Conversational IVR in just a few minutes. The application was built for end customers - or partners that wish to onboard their end customers - to get a feel of what Voca, with its voice-driven interface, can do for companies already using Microsoft Teams as their primary Voice system.

Conversational IVR Website Integration

With Voca's integration to the [AudioCodes WebRTC solution](#), customers can place a WebRTC widget within their website, allowing web users to instantly communicate with the company using a seamless, in-browser click-to-call experience.

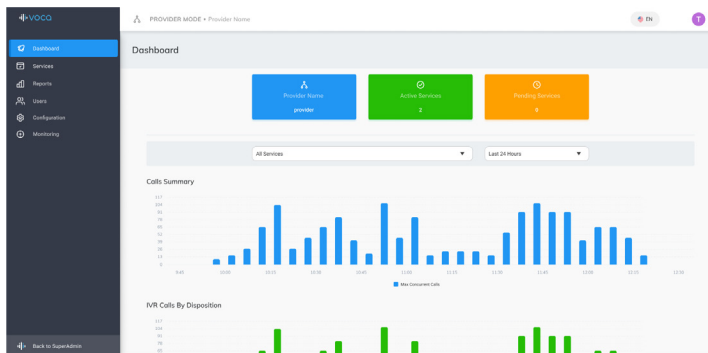
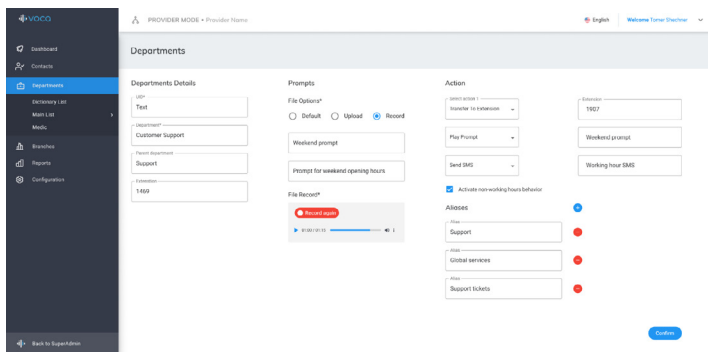


Web Management Interface

The Voca Web Management Interface provides end-customers, system integrators and service-providers with easy access to configure, manage and monitor the Voca service.

With no prior technical knowledge required, the Web Management Interface includes a flexible call flow builder for easy, real-time tailoring and optimization of call flows, menus, announcements, and Voice/DTMF support per each stage of the call flow.

With minimal training, anyone in the company can manage the Web Interface, to allow a later-stage handoff of the solution to the organizational entities who regularly maintain and handle customer calls.



Built-in Text-to-Speech and Voice Announcements

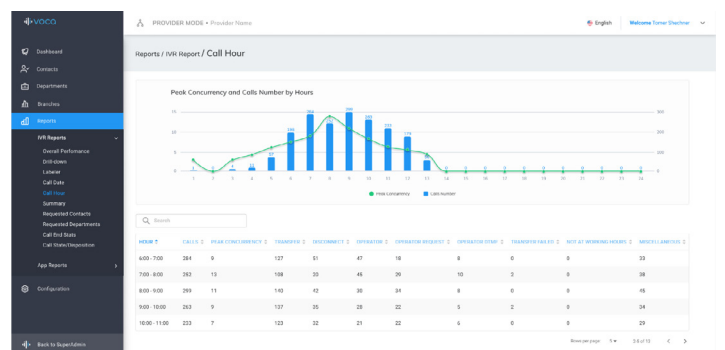
To handle voice replies to callers, Voca features a built-in set of system prompts pre-recorded by professional narrators in local language and accent. Customers can additionally record their own system prompts and greetings directly within the Voca Web Management Interface, or use the built-in Text-to-Speech engine for cases where recordings are not available.

Database Synchronization

Voca enables businesses to securely synchronize their organizational IVR database (contacts, departments and branches) from Active Directory or with a CSV file import directly to the Voca Web Management Interface. Where a continuous synchronization is needed, an automatic scheduling service is available for retrieving the most recent data available.

Real Time Analytics Reporting

The Voca Web Management Interface provides in-depth call traffic reports and analytics including: overall service performance, call details records (CDRs), on-demand playback of caller requests, calling peak times, call duration, transfer rates, peak concurrent channels usage and daily/hourly calling statistics. The detailed data captured by Voca allows for advanced linguistic and performance analysis enabling ongoing optimization, as well as providing business intelligence insights regarding the organization's customer and/or internal user call traffic.



Automated General Information Requests

By using Voca's built-in SMS GW, Text-to-Speech engine or recorded announcements, callers can get automatic answers to various general information requests such as opening hours, navigation instructions and more, by automated SMS (text message) or voice replies.

Analytical Linguistic Tools

Voca provides analytical and linguistic tools that offer a unique insight into your customers voice. With detailed usage and voice recognition performance reports, companies can quickly identify any potential service bottlenecks or mishandling of calls, and instantly monitor popular requested destinations.

Automated Call Flows and Triggers

Voca enables full and flexible customization of call flows, on a menu and sub-menu level, with limitless entities and interconnectivity within the IVR tree.

The solution not only supports voice recognition but can also handle DTMF flows and even a combination of both conversational and DTMF behavior within the same call flow stage

Additionally, Voca also provides built-in automated call flow features:

- For voice confirmations, fallbacks and for unsupported languages, Voca provides built-in DTMF menus
- In case the desired contact or destination is busy or unavailable during a call transfer, Voca triggers automated call hunting to reach contacts across multiple devices until the call is answered
- Where a customer wishes to make a response group available through the IVR, Voca can be integrated to shifts schedules to allows callers to reach general desks, transferring the call to a single on-duty contact (e.g. 'Helpdesk', 'Radiology' etc.)

Missed Call Notifications

Voca can notify organizational contacts via email whenever someone tried to reach them without success. When a caller tries to reach a contact destination that is not available, Voca will prompt the caller to leave a voice message. Once the call ended, the requested contact will get an email letting them know someone was looking for them. The email will include a time stamp of the call, the number that was calling, and a voice file with the recorded message.

Security & Data Protection

Voca meets the latest and most stringent data protection standards, including GDPR, with nation-specific local storage available to ensure that calling data stays safely secured.

Voca is based on the AudioCodes family of enterprise-grade Session Border Controllers (SBCs), deployed in some of the world's largest companies, thereby ensuring Voca's inbound and outbound call traffic remains fully secured and encrypted.



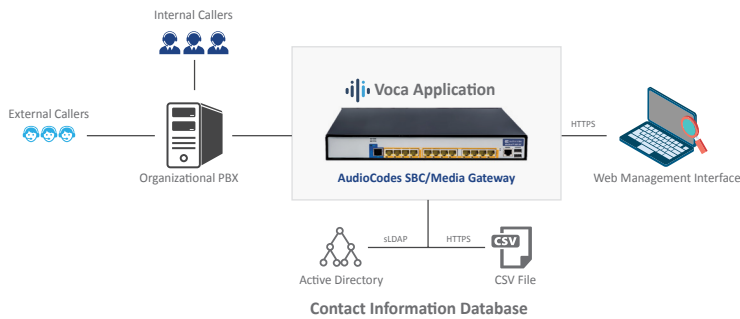
Connectivity, Management and Call Flow Specifications (On-Premise, Cloud)

Voca On-Premise

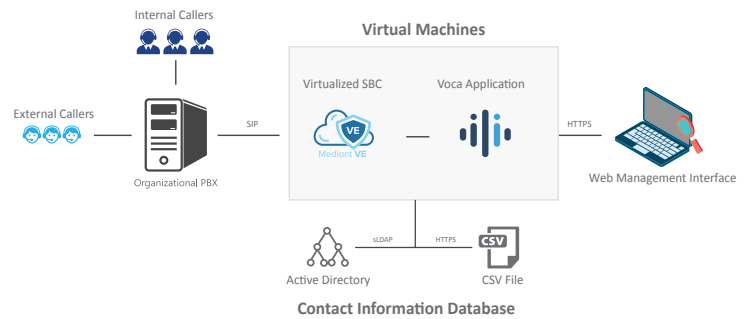
CONNECTIVITY AND MANAGEMENT

- The customer's PBX can be seamlessly connected to the Voca server through an analog (FXO) or SIP trunk interface
- Voca can fetch any organizational contact list from Active Directory or from a CSV file

Voca On-Premise Deployment (using AudioCodes SBC/Media Gateway)



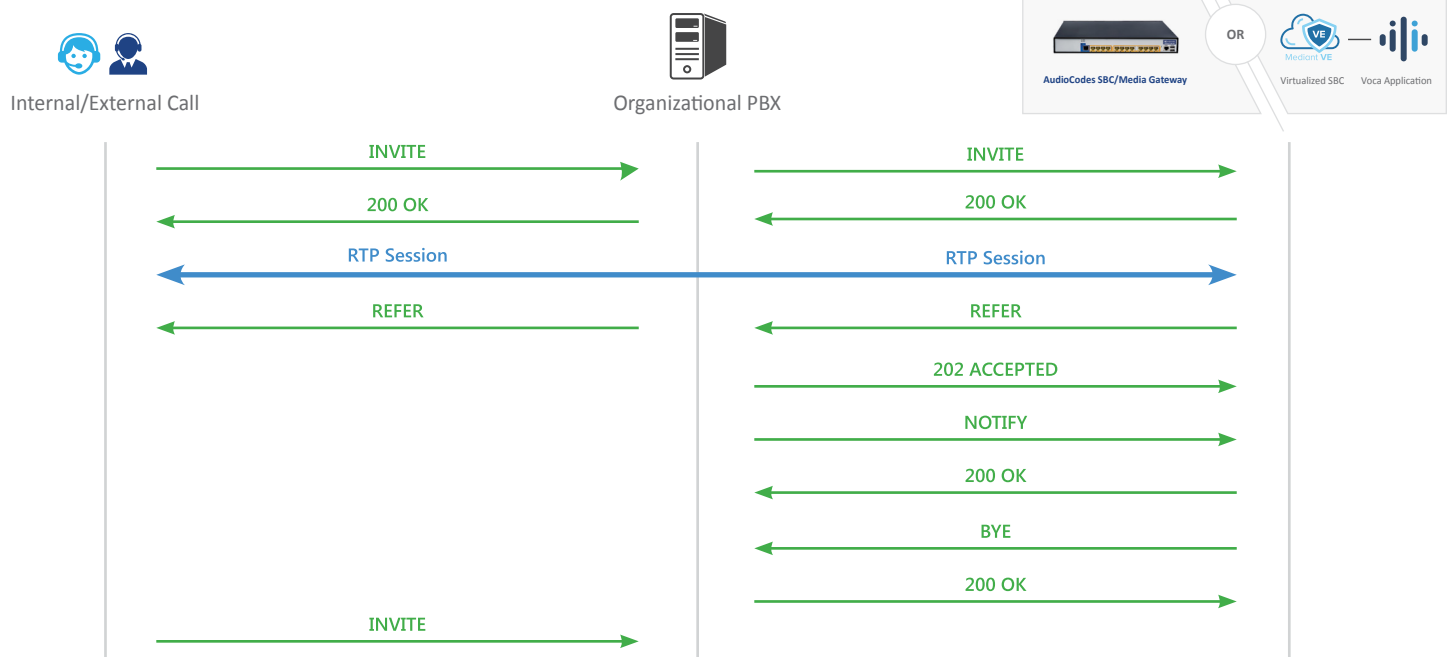
Voca On-Premise Deployment (using Virtual Machines)



SIP CALL FLOW

- The call arrives to the PBX on the Voca DID
- The PBX redirects the call to the Voca server
- Voca communicates with the caller and then sends the call back to the PBX with the required destination information (SIP REFER)
- The PBX transfers the call to the desired destination
- Voca disconnects the call with the PBX

Voca's On-Premise Call Flow (using AudioCodes Virtual Machines or Mediant 800 SBC/Gateway)

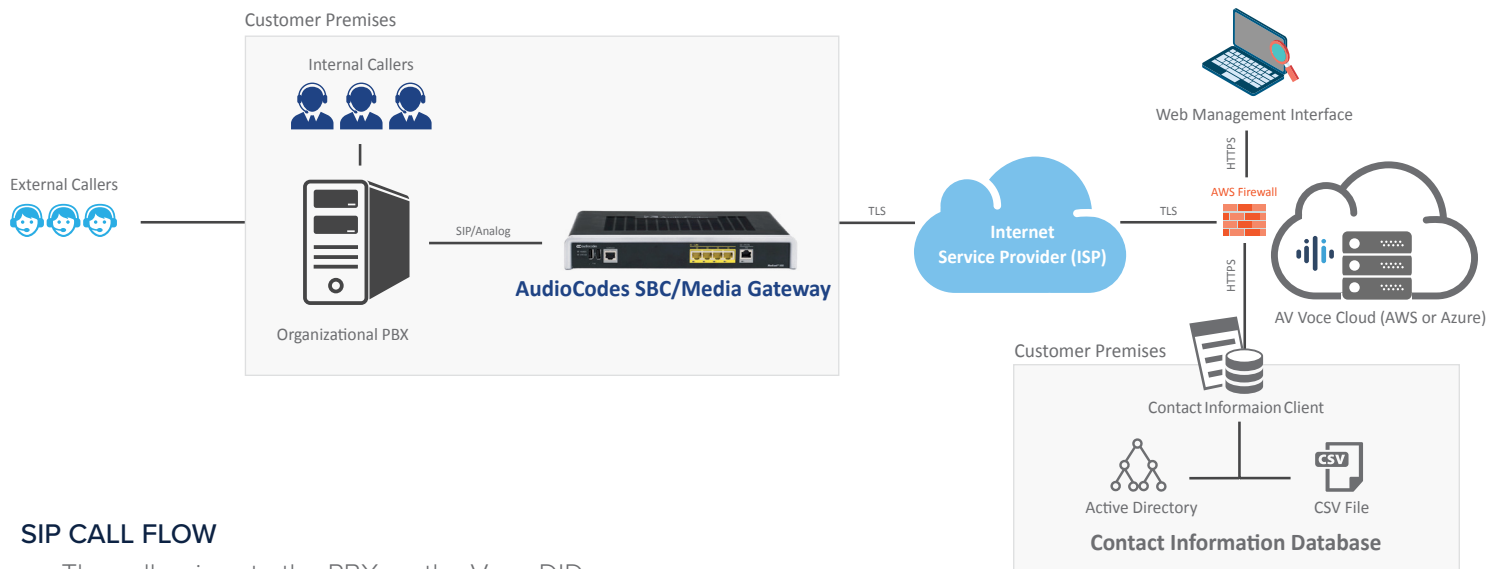


Voca Cloud

CONNECTIVITY AND MANAGEMENT

- The customer’s PBX is connected to AudioCodes or any other SBC/Gateway through an analog (FXO) or SIP trunk interface
- The SBC/Gateway allows secured access from the customer premises to the Voca cloud
- A sync application (contact list synchronization service) is installed on the customer’s site in order to retrieve the organizational contact list from Active Directory or from a CSV file, and delivers it to the Voca cloud server in a secured manner

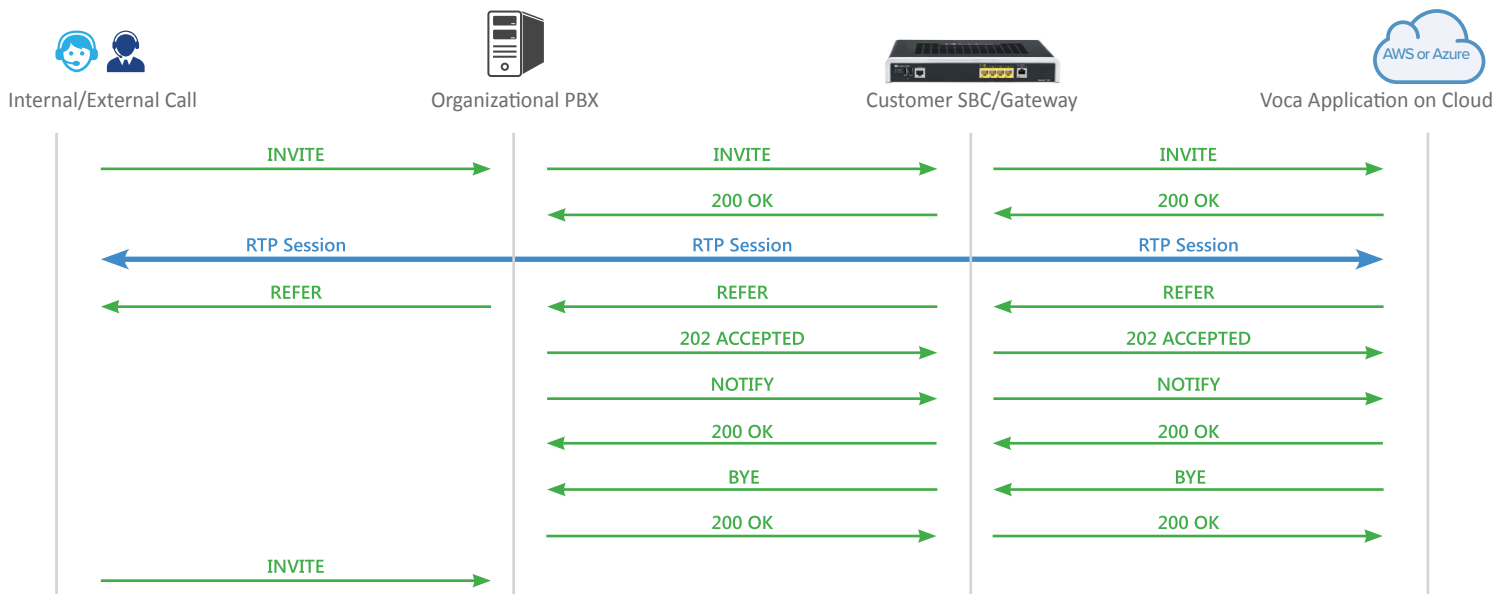
Voca Cloud (AWS or Azure) Deployment



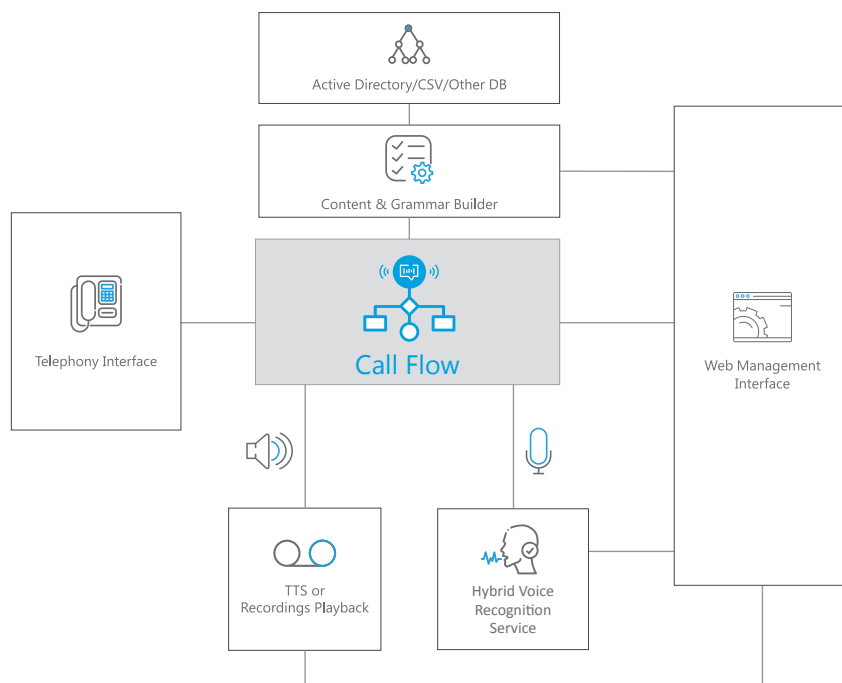
SIP CALL FLOW

- The call arrives to the PBX on the Voca DID
- The PBX redirects the call through the SBC/Gateway to the Voca cloud server
- The SBC communicates over SIP with the Voca application
- Voca communicates with the caller and then sends the call back to the PBX through the SBC/Gateway with the required destination information (SIP REFER)
- The PBX transfers the call to the desired destination
- Voca disconnects the call with the PBX

Voca Cloud (AWS or Azure) Call Flow



Voca Application Architecture



Voca Application Specifications

Organizational Contact List Size	
Cloud & On-premise	Up to 17,000 entries per tenant (for larger deployments, please contact your AudioCodes sales or technical representative)
Security	
Contact List Synchronization	Access to Active Directory via LDAP/LDAPs
Signaling and Media Transport	Secured & encrypted using TLS/SRTP
Web Management Interface	Secured over HTTPS
Connectivity to AWS or Azure	Secured and encrypted over HTTPS
General Features and Services	
Supported languages (STT/TTS)	Support for German, English US, Spanish US, Spanish ES, Spanish MX (with Central and Latin America dialects and coverage), English UK, English AU, Portuguese, French, Italian, Dutch, Russian and Simplified Chinese
Voice Prompts	Available built-in system prompts with an option to upload prompts for customized and professional recordings
Dialing Plan Manipulation	Supported for when there is a need to manipulate outgoing dialed numbers
Time-based Services	Flexible service configuration options for different solution behavior(s) during non-working hours or other time-schemes
Time Zone Support	Allows different time zone settings
Privacy Rules	Different flow and menu behavior for various caller groups
Web Services and REST API Support	For easy integration with external, 3rd party enterprise systems and applications
Remote Access	
The system can be accessed remotely for configuration, monitoring and maintenance	

AudioCodes' Mediant 800 Main Specifications

Operating System	
Microsoft Windows Server 2016 or higher	
Networking Interface	
4 ports 10/100/1000Base-T	
Telephony Interface	
8 analog FXO ports using RJ-11 connectors	
Control Protocols	
SIP-TCP, SIP-UDP, SIP-TLS	
Security for the Session Border Controller (SBC)	
SIP Header conversion SIP Normalization Survivability	
IP-to-IP routing translations of various SIP transport types: UDP, TCP, TLS	
Translation of RTP, SRTP	
Support SIP trunk with multi-ITSP (Registrations to ITSPs is invoked independently) Topology hiding	
Call Admission Control	
Call Black/White list	
OSN Server Platform	
Application	Voca software
CPU	Core i7 4 Core Hyperthreaded 2.7 Ghz
Memory	32GB RAM
Storage	512GB SSD
Hardware Specifications	
Power Supply	Single, universal 90-260 V AC
Physical Dimensions	320mm x 345mm x 1U
Regulatory Compliance	
Safety and EMC Standards	UL60950-1, EN60950-1, CB certification (TÜV Rheinland) including National deviations EN55024, EN55022 Class A, EN61000-3-2, EN61000-3-3, EN300 386, FCC 47 Part 15 Class A
Physical Dimensions	TIA/EIA-IS-968, ETSI ES 203 021 (FXO Interface)

Hardware Specifications for Voca on Virtual Machines

	On-Prem VM Specifications
OS	Windows Server 2016 or higher
CPU	Intel Core i7 @ 2.7GHz, 4 Cores (dedicate all cores, enable hyperthreading)
RAM	32GB
Storage	256GB SSD
NIC	1GB Ethernet card
Channel Capacity	<ul style="list-style-type: none"> For English (US) language - up to 30 concurrent channels per machine For German language - up to 16 concurrent channels per machine For Spanish language - up to 30 concurrent channels per machine <p>Via Microsoft Azure Cognitive Services:</p> <ul style="list-style-type: none"> For English UK, English AU, Portuguese, French, Italian, Dutch, Russian and Simplified Chinese - up to 50 concurrent channels per machine

Mixed Languages and Additional Voca Channels

For expanded scalability of concurrent Voca channels, additional machines may be used on cloud or on-premise. Please contact your AudioCodes Sales or Technical point of contact for more information.

Note: In cases of mixed languages under a single tenant, the service is limited by the lowest number of supported channels per language.

Hardware Specifications for AudioCodes Virtualized SBC

Detailed hardware specifications for the virtualized SBC can be found in the data sheet on the AudioCodes SBC Web page. www.audiocodes.com/solutions-products/products/session-border-controllers-sbcs/mediant-veve

About AudioCodes Voice.AI

AudioCodes Voice.AI business unit focuses on voice, the most fundamental form of human communication, to help enterprises automate workspace collaboration and customer experience, by leveraging state-of-the-art Conversational Voice technologies.

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