

CLOUD VOICE PLATFORM



Next-Generation Virtualized VoIP Solution for Cable MSOs, ISPs and Telcos

VOICE INFRASTRUCTURE AS A SERVICE

Alianza's comprehensive voice solution is purpose-built for service providers to deliver and monetize voice services. Alianza brings together virtualized web-scale technology and elastic SaaS business models to radically transform voice. It's a turnkey and integrated solution—every network and software function service providers—need to deliver and support a compelling VoIP and UC service portfolio.

EASY TO OPERATE AND INTEGRATE

Using Cloud Voice Platform, service providers focus on key business outcomes—on-boarding customers and making them happy—and avoid the complexity of VoIP technology. Alianza has designed a simple and streamlined approach to voice service management with intuitive web portals and APIs that facilitate the integration into back-office systems to automate and scale key business processes.

BETTER BUSINESS MODEL

Cloud Voice Platform eliminates CAPEX, reduces OPEX and better aligns costs with success. Service providers can reduce total cost of ownership for voice by up to 50%.

FEATURE RICH AND AGILE

Service providers can go to market with a strong voice services portfolio delivered over any broadband network. With continual innovation and frictionless cloud delivery, Alianza provides service providers with powerful new features frequently to best respond to residential and business market needs.

ELASTIC SCALABILITY

Leveraging the latest virtualization technology and state-of-the-art code, Cloud Voice Platform horizontally scales via off-the-shelf hardware. It's designed for limitless scale to support success.

CARRIER-CLASS CLOUD

Built with PSTN replacement in mind, Cloud Voice Platform is architected for exceptional quality of experience and service availability. The solution leverages geographically redundant data centers, best-of-breed security technologies and an active-active service architecture.

Key Features

- Virtualized, web-scale software
- Carrier grade
- SaaS business model
- Residential and business solutions
- OTT mobile and WiFi
- Extensive API
- Intuitive web portals
- Active-active service architecture

Benefits

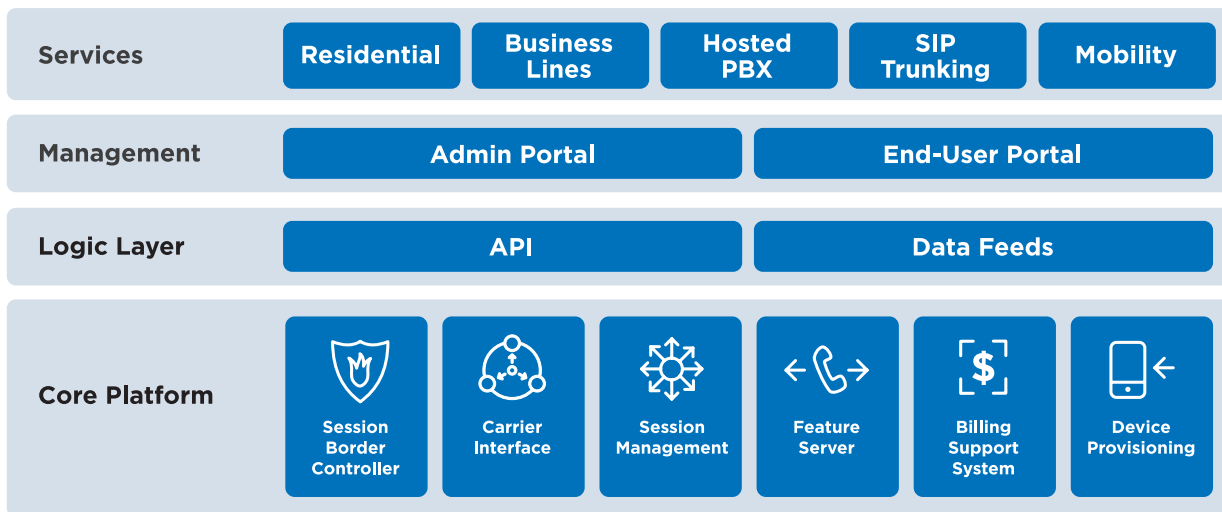
- Lower total cost of ownership
- Eliminate CAPEX
- Reduce risk
- Accelerate time to market
- Streamline operations
- Faster problem resolution
- Improve service agility and market responsiveness

ARCHITECTURE

Alianza Cloud Voice Platform consolidates all VoIP elements in a simplified, virtualized, managed environment. The horizontal integration of the solution results in a single management interface to manage, provision and troubleshoot voice services. Leveraging open standards, Alianza's Cloud Voice Platform supports a broad device, back-office and carrier services ecosystem.

Core Platform - Alianza provides the complete VoIP technology package, includes signaling, media, service logic, billing, provisioning and integration with carrier services.

Logic Layer - Binds all the software elements together and enables the platform to be managed as a single integrated system rather than as individual functions or boxes. Using REST APIs, Cloud Voice Platform can be integrated into back-office systems, allowing service providers to automate and scale business processes. This reduces error and further reduces operational expenditures. The data feeds provide business intelligence, invoicing information and data for operational planning.



Management - Leveraging the Logic Layer, Alianza provides web-based management portals for the operational staff and end-users. Admin Portal addresses every aspect of voice service management—spanning service definition and packaging, troubleshooting and support and managing carrier services and inventory. With secure rights-based permissions, multiple administrative roles can be enabled for all staff—product managers, customer service representatives, financial controllers and support technicians. For more on management functionality, see the Cloud Voice Platform Management datasheet.

Services - Alianza's rich set of end-user features and calling plans can be packaged in multiple ways to create a full suite of residential and business communication services.

CORE PLATFORM COMPONENTS

The Alianza core platform is standards-based, including support for SIP standards and common voice codecs. The six major components of the core platform include:



Session Border Controller –

Analyzes and modifies VoIP signaling and media flows to ensure interoperability, security and control across IP network boundaries. The SBC protects the Alianza voice core from external attacks and overloads. The SBC also provides NAT traversal and secure pinholes that enable VoIP delivery when end-user devices are located behind a firewall or use private IP address spaces.

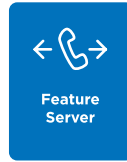


Carrier Interface –

Software and API set that manages carrier services including PSTN origination and termination. This interface facilitates and automates number inventory management, number portability, and compliance with emergency services and lawful intercept.



Session Management – Core softswitch functionality handles device registration, call routing, and setup and teardown for voice and video calls.



Feature Server – The application server that runs the service logic for processing and managing end-user features.

It also includes the media server to play and process prompts, tones and announcements and provides a complete voice mail system.



Billing Support System – Enables service providers to define rates, billing cycles and charges associated with the voice services. The system also rates individual call detail records (CDRs) and tracks monthly recurring charges, nonrecurring charges and other transactions. These transactions are calculated in real-time and compiled into reports available to both end-users and service provider staff. Includes built-in a power fraud detection and prevention system to reduce exposure and risk.



Device Provisioning – Facilitates the auto-provisioning of CPE (e.g., ATAs, IP phones, soft clients) directly from the Cloud Voice Platform or via third-party solutions. Handles future configuration changes such as scheduled updates or firmware upgrades.

FEATURES AND SPECIFICATIONS

STANDARDS

SIP
 REST
 HTTP
 XML
 G.711
 G.729

LANGUAGE SUPPORT

English
 French

SOLUTIONS

Residential VoIP
 Business Lines
 Hosted PBX/UCaaS
 SIP Trunking
 Over-the-top/voice over WiFi

SERVICE AVAILABILITY

Active-Active Architecture
 Geographically Redundant Data Centers
 Distributed Database with Real-time Replication
 Redundant Internet and Carrier Connections
 24 x 7 x 365 Monitoring from Alianza NOC

SESSION BORDER CONTROLLER

NAT Traversal
 Topology Hiding
 Overload and DoS Attack Prevention
 SIP Normalization
 SIP Interconnect/Peering

SOFTSWITCH

Call Authentication
 Call Processing and Routing
 Call Progress Tones

FEATURE SERVER

Voice Application Server
 Media Server
 Voicemail Server

CARRIER INTERFACE

Telephone Inventory Management - Local, Virtual, Toll-Free
 Number Portability Management
 Lawful Intercept Support
 E911 Support
 Call Redundancy and Failover
 Fraud Monitoring and Prevention
 Integration with Wholesale Carrier Services

BILLING INTERFACE

Real-Time Call Rating
 Call Detail Record Reporting
 Calling Plan Management
 Customizable Rate Tables
 Customizable Monthly Recurring Charges
 Customizable Non-Recurring Charges
 Account Status Management
 Authorization Status Management
 Billing Data Feed Management

ADMIN PORTAL

Lifecycle Service Management
 User Rights Management
 Real-Time Reports
 Troubleshooting Tools

END-USER PORTAL

Call History
 Call Handling
 Voicemail
 Custom Branding

DEVICE PROVISIONING

Auto-Provisioning of CPE
 Automated Device Updates
 Third-Party Provisioning Support