AGNITY CAS – The NGIN Platform

Service Provider networks continue to evolve from legacy TDM to IP and 3G to 4G/5G resulting in rapid increases in bandwidth consumption. Networks continue to carry more data and video traffic in order to cater to the needs of IP, video and mobile smartphone subscribers. This phenomenal growth is challenging and significantly altering core network requirements. Application Servers are the key components to meet these ever-transforming requirements and allow service providers to carry on monetizing their network investment.

AGNITY CAS (Communication Application Server) is a JSR 289 SIP Servlet compliant carrier grade Next Generation IN platform, built ground up, supporting many network protocol interfaces (such as SS7, SIP, ISC, and Diameter) thereby enabling the carriers to achieve application harmonization across networks and devices. AGNITY CAS is uniquely positioned to provide reduced time to market, inexpensive service development, and migration path with 100% feature parity through a flexible service delivery platform.

AGNITY CAS in Service Provider Network

AGNITY CAS is a unique multi-network IN platform which communication service providers (CSPs) can deploy in their core networks offering a host of real-time use cases and provides robust solution to complex problems faced by them today. A sample of key use cases are:

SCP REPLACEMENT
One of the most deployed AGNITY CAS use case is for legacy SCP replacement. CSPs can seamlessly retire their existing SCP in a very flexible and cost-effective manner, achieving 100% feature parity with existing applications and position their network for future NGIN expansion.

IMS NETWORK DEPLOYMENT
AGNITY CAS supports full integration with the core IMS. CSPs deploy NGIN and Converged applications on AGNITY CAS. Converged applications provide a path to service providers for seamless user migration from legacy to IMS networks.

NETWORK TRANSFORMATION
CSPs can deploy CAS as a single multi-purpose platform for hosting the converged and future NGIN applications. This deployment strategy consolidates applications from multiple disparate platforms to a single common platform simplifying ongoing network maintenance and reducing operational cost.

SERVICE BROKER SUPPORT
The service brokering feature of AGNITY CAS allows CSPs to extend the life of their legacy platforms by providing mediation and orchestration function between old legacy SCP and IMS network entities.

OPEN API's SUPPORT
AGNITY CAS has an extensible framework through northbound REST APIs for 3rd party development. Utilizing this capability, the CSP can orchestrate app development using telecom network resources.

VERTICAL AND CUSTOM APPLICATION DEVELOPMENT
CSPs can create customized and vertical applications that are specific to a particular industry by using the extensible connector framework of AGNITY CAS.

NFV AND CLOUD NATIVE
Agnity CAS flexibility to deploy as VNF in NFV stack or as container orchestrated using Kubernetes. Integrates with generic VNFM for elastic scaling and self-healing.

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CAS PLATFORM HIGHLIGHTS

OPEN STANDARD & EXTENSIBLE FRAMEWORK

With multi-network and multi-application platform built using the open standards such as JSR289 and JAIN TCAP1.1, AGNITY CAS can be enhanced with new protocol interfaces enabled by its extensible connector layer.

MULTI-PROTOCOL HANDLER SUPPORT

Multi-protocol handler feature of AGNITY CAS hides the protocol level complexity by providing abstract APIs to the application developers. This feature simplifies and accelerates converged application development.

APPLICATION ROUTER SUPPORT

Deploy multiple applications on a single instance of AGNITY CAS, control the application triggering rules, and application chaining through the *Application Router*.

NFV AND CLOUD NATIVE

Designed to run in NFV environment, AGNITY CAS supports integration with multi VNFs via generic VNFM. In addition, keeping hardware and cloud agnostic in mind the platform components are packaged in Docker containers where container orchestration is accomplished using Kubernetes.

ARTIFICIAL INTELLIGENCE ENABLED

Robust AI engine coupled with machine learning components are supported by AGNITY CAS for deploying the AI-enabled applications.

SCALABILITY

Horizontal and vertical scalability is supported for Call Processing and Component-provisioning nodes.

RELIABILITY

SLA of 99.999% availability is provided using local redundancy by N-active or 1+1 active/standby mode of deployment. A geo-redundant deployment in supported in both Active-Active and Active-Standby configurations.

INTEROPERABILITY

AGNITY CAS provides field tested interoperability with the core IMS networks of numerous OEMs including Ericsson IMS, Nokia IMS and Huawei IMS, CS2K, DMS-250, DMS-100, AXE, 5-ESS, GTD-5, NEC, Fujitsu, Hitachi, Ribbon (GSX, PSX, SBC).
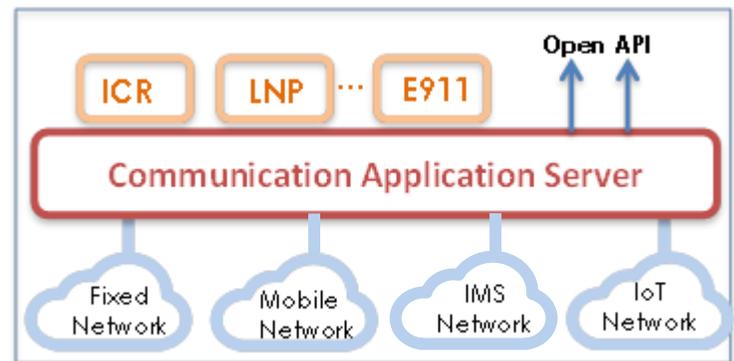
INTERFACES

AGNITY CAS supports the following interfaces:

- SIGTRAN (M3UA), Electrical SS7 (MTP)
- INAP CS1, INAP CS2, NTT-INAP
- AIN 0.1, AIN0.2
- CAMEL v2, v3
- MAP
- ISC, SIP, SIP-T
- MSML, VXML (for MRF, IVR, ASR, TTS)
- Diameter (Sh, Rf, Ro)
- WebSocket
- HTTP
- SMTP
- SMPP
- ENUM
- LDAP
- SOAP XML APIs
- RESTful API

For more information, contact AGNITY at sales@agnity.com.