

The NGIN Platform



The Service Provider networks continue to evolve from legacy TDM to IP and 2G/3G to 4G/LTE/5G networks. The bandwidth consumption is increasing day by day. The networks now carry huge data and video traffic catering to the needs of a new generation of IP, video and mobile smartphone subscribers. This has changed the focus of the core network requirements. An application server is the key solution for the service providers to monetize the network investment and meet these new requirements.

The NGIN platform is a JSR 289 SIP servlet compliant carrier grade software platform. Built ground up, it supports many network protocol interfaces such as SS7, SIP, ISC, and Diameter thereby enabling the carriers to achieve application harmonization across networks and devices. The NGIN platform 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.

NGIN Platform in Service Provider Network

The NGIN platform is a unique multi-network software platform which telecom service providers can deploy in their core networks as it offers a host of real time use cases and provides robust solution to complex problems faced by them today. Some of the key use cases are as follows:

SCP REPLACEMENT

One of the most deployed NGIN use case is towards SCP replacement. CSPs can seamlessly retire their existing SCP and deploy applications with 100% feature parity using the NGIN platform in a very flexible and cost-effective manner.

IMS NETWORK DEPLOYMENT

The NGIN platform supports full integration with the core IMS networks. You can deploy converged applications on this platform. The converged applications provide a convenient path to the service providers for seamless user migration from legacy to IMS networks.

NETWORK TRANSFORMATION

CSPs can do away with multiple platforms and use a single NGIN platform for running the converged applications historically hosted on multiple networks. They can also consolidate applications from multiple disparate platforms to a single common platform.

SERVICE BROKER SUPPORT

Utilizing the service broker feature of the NGIN platform, the carriers can extend the life of their legacy equipment. They can also get the same legacy feature set from a pre-packaged NGIN application suite.

OPEN API's SUPPORT

The NGIN platform has an extensible framework for exposing northbound REST APIs to the 3rd party developers. CSPs can extend the API interface to the developer community for orchestrating applications using the telecom network resources.

VERTICAL AND CUSTOM APPLICATION DEVELOPMENT

CSPs can create customized and vertical applications that are specific to a particular industry vertical using the extensible connector framework of the NGIN platform.

NFV AND CLOUD NATIVE DEPLOYMENT

Easily deployable as VNF in NFV stack environments or as containers orchestrated using Kubernetes, it can seamlessly integrate with generic-VNFM for elastic scaling and self-healing.

NGIN Platform Highlights

OPEN STANDARDS BASED EXTENSIBLE FRAMEWORK

With multi-network and multi-application capabilities, the NGIN platform has been built using open standards such as JSR 289 and JAIN TCAP 1.1. The NGIN platform can be further enhanced with new protocol interfaces due to its extensible connector layer.

MULTI-PROTOCOL HANDLER SUPPORT

The multi-protocol handler feature of the NGIN platform hides the protocol level complexity by providing abstract APIs to the application developers. This feature simplifies and speeds up the converged application development.

APPLICATION ROUTER SUPPORT

You can easily deploy multiple applications on a single instance of the NGIN platform, control the application triggering rules, and application chaining through the built-in Application Router.

NFV AND CLOUD NATIVE DEPLOYMENT

Designed to run in NFV environments, the NGIN platform is perfectly integrated with generic and VNF environments. With hardware and cloud agnostic environments, the platform components are packaged in Docker containers and container orchestration is done using Kubernetes stack.

ARTIFICIAL INTELLIGENCE ENABLED

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

SCALABILITY

Horizontal and vertical scalability is supported for both call processing functional units and service provisioning modules (SMS). The NGIN platform is already deployed with 9+ million BHCA traffic, that supports 25 million toll free numbers and 47 million subscribers for global tier-1 telecom service providers.

RELIABILITY

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

INTEROPERABILITY

The NGIN platform provides field tested interoperability with major IMS core network vendors and is deployable in all geographic regions.



Interface Specifications

The NGIN platform supports the following interfaces:

- SIGTRAN (M3UA), Electrical SS7 (MTP)
- INAP CS 1, INAP CS 2, NTT-INAP
- AIN 0.1, AIN 0.2
- MAP, CAMEL v2, v3
- 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 APIs

Contact Us

We are here to help. Let us know if you are interested in a quote or if you have any questions.