



# Driving the Migration from TDM to IP in West Africa

ICN is using Orchid One as the foundation for its migration from TDM to IP as Nigeria prepares for a 4G future

**Interconnect** Clearinghouse Nigeria (ICN) serves Africa's largest telecommunications market as a clearing house delivering interconnect services to mobile, fixed line and Value Added service providers and is in the process of migrating its network from TDM to IP. Fixed line and mobile customers across Nigeria are increasingly adopting IP communications services and ICN's service provider customers have been challenged to deliver next-generation infrastructure seamlessly.

Since the first GSM licenses were issued in 2001, Nigeria has become one of the fastest growing communications markets in the world with over 130 million mobile subscribers. It is within the top 10 largest mobile markets by subscribers with intense domestic competition.

While ICN's customers are gradually making the move to IP and preparing for the widespread launch of LTE in the country, it sees an opportunity to be at the forefront of enabling IP interconnect services in Nigeria. In a country where mobile is such a critical communications tool, LTE will place significant demand on backhaul infrastructure to support high-performance applications and deliver on customer expectations for quality of service (QoS) and quality of Experience (QoE).

To prepare for the future and ensure it is positioned to serve growing traffic demand, ICN deployed Cataleya's Orchid One Network Session and Application Manager. With Orchid One in place, ICN is ready with intelligent network infrastructure as well as the ability to offer partitioning capabilities to offer hosted services to its service provider customers.

## The Challenge

ICN needed to prepare for the migration from TDM to IP while guaranteeing that its IP services matched the quality of legacy networks. The safe and controlled world of TDM has offered service providers reliable QoS and QoE for decades. The world of the internet or IP has long been based on "best effort" and has delivered inconsistent quality.

For ICN's migration from TDM to IP to be successful, it needed a way to give its customers the reliability of TDM on IP.

With these challenges in mind, ICN looked for a solution that could help them to meet their SLAs on IP while ensuring that their customers could deliver high performance applications and IP communications services to their customers.

## The Solution

ICN deployed Cataleya's Orchid One Network Session and Application Manager after a successful trial period beginning in May 2014. The adoption of Orchid One allowed ICN to leverage the functionality of a Session Border Controller with increased control, intelligence and real-time automation.

Orchid One offers full visibility from the transport to the application layer allowing ICN to monitor QoS and QoE end-to-end. This enables it to maintain and enhance network performance and ensure that its IP services meet strict requirements for quality. Orchid also offers real-time performance monitoring and analytics, which allow faults to be fixed before they impact on customer network performance.

ICN customers receive the best of both TDM and IP with high quality network performance matched with the flexibility and scalability of IP. It enables Nigeria's fixed line and mobile operators to deliver high performance applications and IP communications services reliably and consistently through ICN's interconnect network. With this as its foundation, ICN will help to grow IP adoption in Nigeria and demonstrate the power of IP in one of the most demanding markets in the world.

In addition, the partitioning capabilities of Orchid One will allow ICN to resell hosted services to Nigeria's Tier 2 service providers.



Orchid One solves one of the primary challenges around the migration from TDM to IP and enables us to guarantee QoS for our customers. West Africa is ready to embrace IP services delivered via LTE and with the support of Orchid One, we will be able to serve this new demand with confidence that our customers will see immediate benefit.

Uche Onwudiwe, Chief Operating Officer, ICN 

### Benefits



#### One Platform

ICN has access to the best of security, session management and service management in single easy-to-use platform



#### End-to-End QoS

Orchid One delivers service level QoS for IP interconnection that enable the delivery of services like VoLTE and other high performance applications



#### Enhanced Analytics and Reporting

ICN can manage its network operations with near real-time statistics and trending stats on session, service, application, MOS/R-factor scores, network and end-to-end SLAs



#### Cloud-Ready

Orchid One supports cloud-based Platform as a Service (PaaS) offerings as well as Intelligent Network as a service (iNaaS) and other telco-in-a-cloud models



#### Service and Network Interworking Platform

Service providers can interface VoLTE IMS to non IMS network interconnections using a powerful Signalling Adaptation Framework (SAF)

### The Future

ICN is in the process of developing its business across Africa beginning with West Africa, then South, East and North Africa. Orchid one will provide the proper SIP based infrastructure to ensure customers get the same service level regardless of where they connect to the network from. It also offers extreme scalability to support the growth of ICN business as well as the on-going growth of the Nigerian and African communications market.

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Nigeria and the whole market in West Africa is maturing rapidly and wants dependable IP services. The challenge for ICN and operators like it is to efficiently enable high performance applications with a high quality of service and this is what Orchid One delivers. It's purpose built to make the migration from TDM to IP simple, efficient and profitable across the communications value chain.

Jay Jayasimha, Chief Technology Innovation Officer, Cataleya 

