

Cable Company Realizes Major Savings by Moving Voice Services In-House



Business Challenge:

While voice revenues are flat, the pressure to reduce costs has never been higher than today. A Tier 1 US c company had previously outsourced their entire voice network to an independent local exchange carrier and they were in the process of taking it back in-house. They were migrating from a legacy network that handed off calls using TDM to a SIP-based architecture. They knew that by building their own, in-house voice network they could save millions of dollars a month.

The cable company needed to design and size their network more accurately, while migrating the voice services to a different architecture. They needed to have their own end-to-end view of the network. They had been working with their independent local exchange carrier (ILEC) to migrate their network one market at a time and they wanted to speed up the process.

In order to guarantee an acceptable user experience for their voice service, a critical part of their triple play (voice, video and data) bundled offering the cable company had to oversize their network, which meant that they were investing in more CapEx than was necessary. In addition, large portions of the data required for the migration were incorrect, unavailable, or invalid and internal processes were not fully documented.

Solution:

Through the reclaiming all of its VoIP functions, VPIsystems helped this Tier 1 cable company implement an automated optimization and planning solution in order to ensure the cost efficiency and accuracy of its new inter-carrier call handling and to introduce rapid, accurate planning and optimization throughout their network.

The Tier 1 cable company utilizes VPIsystems' OnePlan network analytics software to perform the following technical requirements:

- Identify, design, and size the new network, including Network Equipment - Tandems, SBCs, MGXs, OADMs, DS3 Panels - and Links - Trunk Groups, DS1/DS3 circuits.
- Configure routing over the Transport Network
- Optimize the new Network
- Identify changes in network requirements based on subscriber growth and traffic type

OnePlan Voice provided a platform for aggregation and visualization of data from various sources including:

- Topology from the inventory system (in this case, Granite)
- CDRs from Billing Databases
- Forecasts from Network Planning Databases
- Performance data from various databases

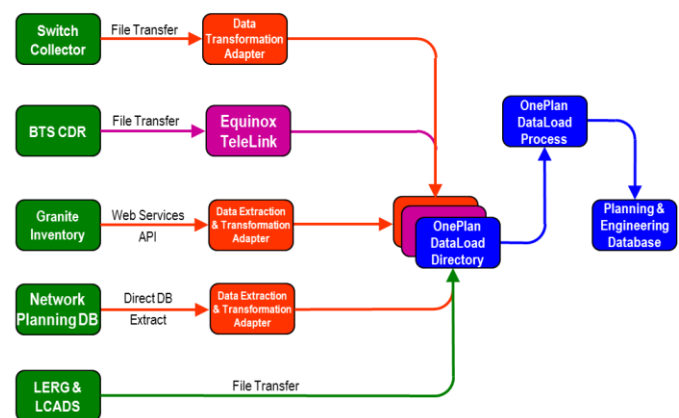
In addition to this, OnePlan Voice product features perform the following functions:

- Dataload facilities provide data validation and enables the cable company to identify errors in the source data
- Base Simulation loads applicable network entities and identifies available spare capacity for Pre-Migration Planning
- Traffic Donation and Rate Center Rehome functions provide the capability to analyze the impact of traffic and network changes

In summary, OnePlan Voice helped the cable company to:

- Design and size the logical network connectivity based on the input demands (CDRs, Subscriber data, Rate Center mapping)
- Design and size the physical TDM/VoIP connectivity, e.g., DS1/DS3 connections, SIP Session Sizes.
- Connect and route the new voice links onto the Transport Network
- Provide the capability to repack OC3/DS3 circuits and improve utilization of the Transport Network

The diagram below shows the **OnePlan Voice Integration Architecture**



Return on Investment:

With OnePlan's automated processes, this Tier 1 cable company was able to size the network much better than on a manual basis to maintain a better user experience and to

realize much greater cost efficiencies. OnePlan also greatly reduced the planning interval to migrate from this architecture to their internal network. Previously it took an interval of six months per market and now a market can be migrated in less than one month.

VPIsystems' OnePlan Voice offering enabled the cable company to achieve the following milestones:

- Required network capacity was accurately sized at 40% less than their manual estimate
- Equipment reuse saved 30% in CAPEX
- Ongoing Operational Costs (OPEX) were reduced by 30%
- The initial planning cycle was reduced from 2+ months to 3 days
- Staffing costs were reduced by 20%
- Network utilization and provisioning processes were made much more efficient by identifying inventory errors
- Additional efficiencies in the network design were realized by supporting larger migration plans

As a result of this the cable company plans to use VPIsystems' OnePlan for all future migrations.

About VPIsystems:

VPIsystems' software products provide optimization, analytics and planning solutions for mobile operators. Our solution translates subscriber, device and service uptake into network traffic demands to provide accurate views of the end to end network impact for interactive sensitivity analysis and optimization. Example use cases include cost optimized dimensioning and evolution of a Packet Core network to support LTE and 3G services while maintaining subscriber QoE.

With offices the US, Europe and Asia, VPIsystems' software is used by over 150 communications service providers, network equipment manufacturers and leading-edge research institutions to analyze and optimize QoS-constrained service networks and underlying network infrastructure. Learn more at: www.vpisystems.com