



White Paper

Cable VoIP 2.0

Voice Moves to the Cloud



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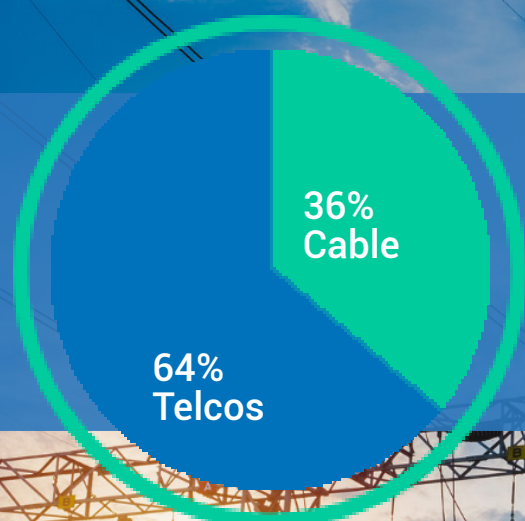
Time for the Cloud

Voice is a key service offering for cable operators; however, **legacy solutions are complex, expensive, and it's time for a change.** The cloud voice platform enables cable service providers to boost voice profitability and rapidly launch new services with a number of initiatives.

Cable companies were some of the first service providers to fully embrace VoIP to deliver voice services to their subscribers as part of the vaunted triple-play package. In the last decade MSOs, elevated their ARPU and won customers through voice services. SNL Kagan reports that U.S. cable providers had nearly 28 million VoIP subscribers in 2013 and grabbed a 36% share of the overall wireline voice market. But **cable VoIP 1.0 solutions are obsolete or have reached end of life**—and the voice market dynamics dictate that a change be made in order to revitalize the residential market and win new business customers.

The cloud voice platform is the new solution that meets these requirements and does so with a zero-CAPEX, success-based business model. The **SaaS cloud model reduces risk for transformation** and empowers cable companies with strong margins and resources to invest in strategic growth opportunities. This white paper builds explores the cloud voice platform use cases and applications for cable MSOs.

U.S. WIRELINE VOICE SHARE



The requirements for a next-generation voice solution should include:

- Reduced total cost of ownership
- Streamlined operations
- Elastic/virtualized infrastructure
- Service agility

Evolving Voice in the NFV Era

For cable operators that have previously built hardware-based VoIP and IMS networks, the move to all-virtualized, web-scale architecture is a matter of time. **The cloud voice platform accelerates that transition and does so with a superior cost model and a more elegant, easier-to-manage solution.**

Continuing to operate softswitches and VoIP 1.0 is fraught with risk with end-of-life equipment, rising cost per user, and slow or zero feature development. Vendors are now urging these providers to transform their networks with network functions virtualization (NFV) VoIP and IMS solutions. While promising cost savings, these solutions do not go far enough; they require significant capital expenditures and add substantial complexity, time and organizational distraction. Plus, **NFV software solutions are not ready** for prime time given the state of standards and vendor technology development.

Cloud voice platforms provide a comprehensive, tightly integrated elastic next-gen voice solution: hosted NFV VoIP. The integration of the functional elements and API exposure makes it easy to manage. It is not only cloud technology, but also a cloud business model: success-based SaaS maximizes margins and reduces risks for residential and business VoIP services. **Voice becomes an agile and always evolving app delivered over cable broadband networks without requiring the cumbersome infrastructure.**

Cable Voice Evolution Options

	Softswitch/IMS (VoIP 1.0)	NFV VoIP	Cloud Voice Platform (Hosted NFV VoIP)
CAPEX	Dereciated or CAPEX Hit	CAPEX hit	None
OPEX	Fixed + Variable	Fixed + Variable	Success-based
Facilities Cost	N/A	>25% space and power 100% savings savings	
Service Agility	Slow, near End-of-Life	Fast	Fastest
Operating Model	Complex	More Complex	Simple, Intuitive
Maturity/ Readiness	Past peak, near End-of-Life	Immature	Ready

MSOs & the Cloud Voice Platform

The cloud voice platform is a great enabler of cable operator growth strategies and cost-reduction initiatives. While the fixed voice market is mature and flat-to-declining in aggregate, at \$75 billion in revenue in North America (2014), there are pockets of new revenue opportunity and a broad opportunity to simplify operations and maximize margins for existing services.

Cloud voice platforms enable multiple applications for growth and cost reduction, both in-region, and out-of-region. These applications can be launched over time, eventually collapsing all residential and business voice across the entire footprint onto the cloud voice platform.

For instance, a cable MSO can start with launching new hosted IP PBX services in its traditional market in year one, expand into adjacent markets later that year, and then retire the legacy voice solution and migrate all subscribers to the cloud in a following year—all the while streamlining operations and gaining new features and the ability to easily extend VoIP over WiFi and LTE.

MARKET OPPORTUNITIES WITH CLOUD COMMUNICATIONS



New Revenue

1. Launch new business services
2. Expand to new markets
3. Add VoIP to FTTx



Cost Reduction

1. VoIP 1.0 & IMS replacement
2. TDM-IP migration
3. Consolidate on universal platform

When a cable company has a compelling event to change their voice network infrastructure (e.g., end-of-life network, cost reduction initiative, launching new services) they are increasingly looking to the cloud.

Launch New Business Services

The majority of businesses in North America are SOHOs and SMBs, and they have largely been underserved when it comes to IP voice or are still stuck on TDM solutions. The demand for hosted IP PBX and SIP trunking services is strong and growing, and many businesses prefer local service that cable operators can offer. Heavy Reading states that cable HFC lines already pass more than three-quarters of the SMBs in the U.S.

Many installed voice solutions lack the features to deliver these new business VoIP services or are complex and cost prohibitive to bring in-house. Private label solutions can lack the ability to customize so that MSOs can address specific market needs, and they provide inadequate margins. The **cloud voice platform enables a rapid market launch, flexible service definition and the success-based OPEX model to reduce risks and ensure profitability.** Cloud-based approaches also make it easy to combine hosted VoIP with the broader trend to adopt cloud collaboration suites (e.g., UCaaS for Google for Work).

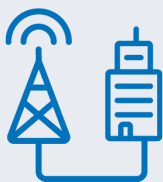
Expand to New Markets

Many cable companies are looking to grow beyond their traditional serving areas. Through market expansion, they aim to deliver voice and broadband services to consumers and businesses in adjacent markets; however, the voice infrastructure investment and CLEC/carrier service requirements (e.g., DIDs, organization, termination, etc.) can be daunting. These expansions tend to be into more competitive markets, and getting the feature set and price point is especially important.

The cloud voice platform provides an easy service launch solution with rapid time to market. With a zero-CAPEX, pay-as-you-grow model, it's ideal for these growth gambits. The cloud voice platform can simultaneously help cable operators bring new business VoIP services to market in the traditional area and be able to serve businesses with employees or locations in adjacent markets or even across the country.

For example, consider a 10-branch bank with eight branches in the cable footprint and two branches in other areas. **Employing the cloud voice platform, a cable operator could easily serve that entire bank and secure larger monthly recurring revenue streams.**

VOICE PENETRATION RATES FOR MSOS



21M

21 million sole proprietorships and 5.9 million SMBs.



45M

North American market for hosted VoIP and UC seats to each over 45 million in 2024.

Add Wireless VoIP

There are two ways for cable operators to think of adding wireless to their portfolios. First, given the wireless-only household trend—especially among younger generations—this might be the only way to sell a triple play package. Or, second, it's a way to expand beyond triple play to quad play and make customers stickier and more profitable with wireless services.

There is a spectrum of mobile plays—from a simple landline extension to smartphones and tablets via OTT soft clients to a full mobile play with MVNO-enabled VoIP with LTE. **The cloud voice platform provides an easy-to-add VoIP complement to mobile broadband and WiFi.** With the cloud voice platform, cable operators are not constrained by their traditional serving areas. Services can be extended to the next town, another city, and across the country.

MARKET OPPORTUNITIES & END USER BENEFITS



40%

two of every five U.S. households only have wireless phone service

Source: CDC



50%

Churn falls sharply with the addition of a service. Churn for users with three services is about half that of two-service customers.

Source: Chetan Sharma



MSOs can serve residential, SMBs, and enterprises nationwide using a single cloud voice platform.

Replace VoIP 1.0 & Private Label Solutions

Networks and white label solutions built on softswitches from last decade are rapidly reaching their end of life and must be replaced to properly align costs and boost service agility. VoIP 1.0 networks often lack specific features and the operational complexity creates a drag on the company, demanding a next-gen solution. **For many MSOs, building a new voice network or investing in another white label solution does not make business sense: it's low impact and high risk.** New build-outs are CAPEX and OPEX intensive with uncertain paybacks. White label VoIP generally has higher prices and complex management.

Unpredictable market dynamics—evolving subscriber preferences, regulatory changes and competitive threats—add risk and uncertainty. Instead of yielding a competitive advantage, investing in a next-gen voice network substantially diverts time, capital investments and organizational resources from strategic business initiatives. But at the same time, cable operators cannot abandon voice.

The cloud voice platform helps MSOs rapidly move to next-gen voice solutions, eliminate CAPEX and reduce overall total cost of ownership. **MSOs can deliver high-quality, feature-rich voice to residential and business customers with a success-based SaaS model.** They benefit from the scalability and resiliency of NFV solution, but leverage it in the cloud with a simple operating model and a compelling business case today. Cable operators can also easily extend voice beyond a fixed line service and deliver the same service to smartphones, tablets and PCs with branded soft clients.

Consolidate on a Universal Platform

Some cable companies have grown through mergers and acquisitions. While cost savings and synergies are often used as justifications for this consolidation strategy, often MSOs end up with disparate and disjointed voice systems. With different vendors and functionality, there is neither a common feature set and service offering nor a common management solution or expertise that can be leveraged across the organization.

This duplication adds costs in terms of spares, training, integration expenses and more. **To drive down costs, cable companies need to use a common platform that is leveraged across the entire footprint.** The cloud voice platform is this universal platform that can power voice everywhere and enable cable operators to realize those synergies. The cloud voice platform provides cable operating companies with a common management approach, yet also the ability to customize the specific services brought to market. Expertise and know-how can be shared across the properties. **The cloud voice platform can also plug into the unique back-office environments at each property.**



MSOs can free up capital and resources to fund faster broadband, and other strategic initiatives.

Key Cloud Requirements

With the cloud source model, a trusted software partner delivers VoIP as a cloud-based service.

By cloud sourcing VoIP services, broadband providers can accelerate time-to market, avoid lopsided business models with high upfront costs and long paybacks, and free up resources to focus on premium services. Unlike conventional wholesale VoIP solutions, new cloud voice platforms leverage the latest virtualization technology, bringing all the benefits of the cloud—web scalability, unrivaled service agility and pay-as-you-grow economics—to the telecom world. All the VoIP network elements that a service provider normally needs to buy, build and operate are **virtualized, securely hosted in the cloud and managed by the cloud provider. And the cloud provider integrates with CLEC carrier services, simplifying the operational environment.**

Best-of-breed cloud voice platforms provide easy-to-use web portals to simplify service provisioning and customer lifecycle management, and deep and flexible APIs to streamline integration with back-office systems and other third-party integrations. They let broadband service providers launch VoIP services quickly and cost-effectively, while maintaining strict control over branding, pricing and customer relationships.

- **Feature-Rich.** Power all use cases with pricing models and features for residential and business customers.
- **Ease of Management.** Simple, intuitive web-based portal for voice lifecycle management (product definition, subscriber sign-up and customer care) and APIs for back-office integration.
- **Turnkey Carrier Services.** Manage carrier services (e.g., LNP, 911, PSTN, local and long distance minutes) via tightly integrated CLEC partners.
- **Active-Active Operation.** Data is replicated between data centers and VoIP traffic is automatically redirected to another cluster in the event of a failure.

NFV IMS VoIP Delivered via the Cloud

Voice equipment vendors are focused on designing and selling cloud technology solutions, most notably NFV. This evolution is a network-wide, multiyear transition and requires significant capital and operational investment.

Cloud and NFV are not synonymous. NFV is a technology and network evolution. The cloud and X-as-a-service solutions are focused on service delivery and business model transformation built on this elastic and virtual technology.

NFV is used to build a cloud. This means CAPEX, fixed OPEX and the same complex (if not more so) operational model. Instead, with the cloud voice platform cable operators can “cloud source” NFV technology with a success-based business model and simpler operations.

Cable next-gen voice solutions require NFV at the core, but service providers need more than NFV to succeed. Given the state of voice today, MSOs should turn to IMS and VoIP NFV solutions delivered from the cloud.

Conclusion

Voice remains an essential service element for cable service providers. But they need to deliver innovation faster and rein in voice infrastructure and operational costs. Residential voice is becoming a checklist feature that is part of a multi-technology service bundle versus a stand-alone subscription service. The cost to deliver voice must be in line with that reality.

As these existing networks age, next-gen solutions are required and they must enable multiple cost-saving and growth initiatives. There is an increasing opportunity for MSOs to cloud source their voice network to deliver significant savings, simpler operations, excellent service experience and strong product leadership. The cloud voice platform is specifically designed to help cable providers reduce cost of ownership, provide better service agility, and build a high-margin, low-risk business case for VoIP and UC. MSOs can launch new services in-and out-of-region and retire legacy networks with confidence in a solution that will evolve and expand with their success.

The next-generation voice network belongs in the cloud.



Get Started!

Request a demo — experience the easy to manage, easy to consume, and highly profitable platform powered by our team of experts.



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