Voice technologies are advancing and converging to meet enterprise demands for cost control, productivity, and scalability. Some of these technologies, like Hosted Voice, have been available for some time, and companies everywhere are reaping the benefits. Other advancements, such as cloud-provisioned sharing of calling plans and call paths across disparate locations and heterogeneous infrastructure, are just now emerging. Together, these technologies hold great promise for helping enterprises deploy a feature-rich communications and collaboration platform that scales to accommodate business needs and is easier to manage.
Multi-site enterprises face considerable challenges as they manage a diverse array of legacy premises-based voice technologies, calling plans, and carrier commitments scattered across multiple sites. Access fees and taxes compound. Location-specific call capacity and usage plans purchased from multiple carriers typically cannot be pooled and shared, so minutes go unused, and call capacity is underutilized. Long-distance charges between locations add up quickly.

Perhaps less visible, but no less costly, is the need to administer and maintain the voice infrastructure, which may include expensive leases or maintenance contracts. Enterprises find it increasingly difficult and costly to retain the skill sets to manage a mixed voice infrastructure through constant change. Plus, they are developing and maintaining two separate networks: one for computing and the other for voice.

Written for Enterprise IT and voice technology decision-makers, this paper discusses what companies are doing and the voice technology innovations they are using to address these challenges.

MegaPath keeps its commitments, and offers attentiveness and consistency of service that we don’t see in other, larger providers.

Marvin Powell III  
Co-Managing Director  
Idea Design Studio

customer snapshot

By consolidating locations on Business Internet and Voice services provided by MegaPath, Idea Design Studio ensures that its sales and other employees can give clients outstanding, professional service. “Clients put their ideas and future success into our hands, and we need to develop and maintain their trust remotely. The high-quality calling experience we get with MegaPath Hosted Voice is valuable in conveying a professional image and developing and keeping that trust,” says Marvin Powell III, Co-Managing Director, Idea Design Studio.
Faced with increasing competition, crippling budgetary constraints, and other challenges, many companies are trading their legacy voice technologies for next-generation, IP-based voice solutions. Various conditions or goals trigger enterprises to consider updating their voice infrastructure.

**Escalating costs, administrative burden.** With budgetary scrutiny becoming ever more customary and far-reaching, increasing numbers of companies are evaluating their telecommunications infrastructure for potential cost savings. They are looking for business-class phone systems that deliver next-generation features at an affordable price. With Hosted Voice solutions, companies don’t pay maintenance fees, and there are no charges or cabling requirements to move, add, or change employees. Instead, they can manage users and features centrally, through an intuitive portal. They also save month-to-month with a choice of long-distance options, with many providers allowing minutes to carry forward.

**Competitive pressures.** Competition sometimes factors into the decision process, especially if competitors have already upgraded to advanced voice systems that help employees deliver superior customer experiences. Hosted Voice offerings elevate a company’s professional image by giving users advanced calling features and capabilities such as Voice Conferencing, Visual Voicemail (voicemail transcription as email), Auto Attendant, and Find Me/Follow Me (user-defined call routing). In addition to simplifying daily tasks and enhancing communications and collaboration, these features support working outside the office and beyond normal business hours to help companies be more productive and differentiate on service.

**Desire to get more from the data network and existing voice infrastructure.** Companies may be underutilizing their data access and therefore have excess bandwidth. Adding services such as an IP-based phone solution is one way to get more from the broadband access they’re already paying for. Today’s IP-based voice solutions allow businesses to make phone calls using the same broadband connectivity they use to
connect to the Internet. SIP Trunking and Enterprise Shared Voice solutions make use of equipment they already own or lease, yet connect locations and pool call paths and minute bundles through the cloud. These cloud-based voice technology innovations further extend the value of existing heterogeneous voice infrastructure and enable next-generation, unified communications without requiring a wholesale rip-and-replace.

**PBX leases are expiring.** Bottom line: you don’t need to wait for your lease to expire to get the cost savings and other benefits of Enterprise Shared Voice. Enterprise Shared Voice will work with your existing PBX. When the time comes, you can make your decision regarding renewal, replacement, or switching that location to Hosted Voice. The transition is transparent now and it will still be transparent in the future.

Advancements in cloud-based voice technologies lower capital and operating expenditures and deliver an affordable, easy-to-manage communications and collaboration platform that traditional phone systems cannot match.

These exciting, cost-saving advancements in cloud-based voice technologies enable enterprises to achieve even greater efficiency, productivity, and collaboration while extending the value of their heterogeneous voice infrastructure.
This subscription-based communications service provides the powerful collaboration capabilities that businesses need, with a low initial investment, predictable monthly billing, and affordable administration by a service provider.

What it is: Cloud-based PBX for a Competitive Edge.

As shown in Figure 1, Hosted Voice solutions typically include everything a business needs including a voice gateway to manage voice and data traffic for optimal call quality; employee calling plans; long-distance options; and a choice of business-class connectivity. It delivers all the functionality of a traditional phone system, plus enhanced flexibility, effortless scalability, significant cost savings, and advanced features.

Figure 1. A Hosted Voice solution offers low start-up costs, affordable long distance, and advanced productivity-boosting features.

Advantages. Hosted Voice delivers more functionality than a traditional phone system, without the costs of managing and maintaining a PBX. Hosted VoIP solutions enable businesses to streamline how they communicate.

Lower start-up costs and monthly savings. With no PBX equipment to buy or lease, Hosted Voice offers lower start-up costs, a predictable fee for voice, and no maintenance contracts or fees for account changes. Companies that adopt Hosted Voice often save 20% up front and up to 50% off their monthly bill compared to traditional phone systems. Some providers offer free or discounted IP phones to help offset up-front cost.
MCMC, a nationwide provider of managed care, medical bill review, and integrated service programs, wanted to connect disparate offices and mobile workers. The company implemented Business Ethernet and is switching locations to MegaPath Hosted Voice as PBX leases expire, saving 50% in ongoing costs, primarily because of savings on long distance.

If you want to grow with a vendor, pick MegaPath. They really build a relationship, without pressure or false expectations, and work to help customers get to the next level.

Rich Pappa  
CIO, MCMC

Save money with flexible calling options. VoIP minutes plans fit business needs based on usage and commitment. Options include outbound Local and Long Distance, Toll-Free services, and International calling plans. Companies save even more with free calling between locations.

Simplify voice administration. Hosted Voice vastly simplifies administering users and resources. Administrators can manage much of the voice service from a Web portal—such as updating user details and phone assignments, accessing call records, and generating usage reports. Moving a user simply requires plugging the phone into the new network port. There’s no complicated rewiring or maintenance and management contracts.

Work smarter with advanced features. Flexible features save time and improve communication with customers and colleagues. Easy-to-use features include Hosted Voice Mobile for teleworkers and mobile employees, Visual Voicemail (voicemail transcribed as email), Find Me/Follow Me (user-defined call routing), and many more.

With MegaPath One, use any of your devices as your business phone, with the added convenience of real-time collaboration and conferencing tools. Improve productivity and mobility with features like video calling, IM and Presence, and online conferencing (including desktop sharing and guest access via web browser), integrated into a single application.
SIP TRUNKING AND ENTERPRISE TRUNKING

As we’ve grown over the past five years, MegaPath helped us save money and has given great support and services. Now that we have 450 employees and are pushing $70 million, I hope they will be with us the rest of the way.

Rich Pappa  
CIO, MCMC

Three Cost Saving Voice Technology Innovations for the Enterprise

This VoIP service delivers phone and Unified Communications Services. Compared to other trunk options, such as PRI and POTS lines, SIP Trunking is the newest option among high-capacity trunk services that provide voice communications. In fact, SIP Trunking is rapidly becoming the standard among multi-location businesses.

With SIP Trunking, businesses reduce costs and simplify IT management by combining voice and Internet access over a single Internet connection using their existing IP PBX system.

What it is: The Use of VoIP Technology to Facilitate the Connection of a PBX to the Internet.

Business adoption of SIP Trunking is growing because it lowers costs, supports traditional PBX voice features, and requires less equipment. With SIP Trunking, companies purchase only the trunks they need based on the maximum number of concurrent calls the business requires. SIP Trunks are significantly less expensive than analog lines, further helping businesses reduce costs. Single-site and multi-location businesses alike benefit from SIP Trunking offerings.

As shown in Figure 2 (page 9), multi-location (“Enterprise”) SIP Trunking optimizes network capacity across all locations by enabling businesses to use enterprise-level trunking resources to meet peak traffic requirements at each location. Often, users can share call capacity and receive free on-net calling between locations.
Three Cost Saving Voice Technology Innovations for the Enterprise

Figure 2. With an Enterprise SIP Trunking solution, a company reduces costs by sharing call capacity and avoiding the need to maintain multiple phone systems and vendors across all business locations.

**Fixed**

PBX trunks are ordered for each location based on the expected number of concurrent calls at each location – with no ability to use idle trunk capacity at one location to meet an increase in call traffic at another location.

- Location A: 20 SIP Trunks (max limit)
- Location B: 60 PBX Trunks (max limit)
- Location C: 40 PBX Trunks (max limit)

**Flexible Solution**

Cost Savings: Purchase fewer trunks at each location and share all trunks across locations.

Flexibility: Use idle capacity at one location to meet increased call activity at another location.

Efficiency: Customers don’t waste unused capacity at individual locations.

- Location A: PBX provisioned with a max call capacity of 100 SIP Trunks
- Location B: PBX provisioned with a max call capacity of 100 SIP Trunks
- Location C: PBX provisioned with a max call capacity of 100 SIP Trunks
Three Cost Saving Voice Technology Innovations for the Enterprise

ADVANTAGES

Reduce costs and simplify IT management by combining voice and data over a single Internet connection using the existing IP PBX.

> Reduce costs up to 50% by eliminating local access and the associated fees and taxes.
> Eliminate interoffice long-distance charges with free on-net calling. With Enterprise Trunking, companies can also pool calling plan minutes and share call capacity across locations.
> Converge voice and data facilities; manage only one network.
> Purchase the calling capacity (trunks) needed, rather than in 23-channel increments with PRI.
> Reduce the equipment that must be leased, managed, and maintained. SIP Trunking relies on a centralized IP PBX in one or more locations to provide voice services to all locations, typically over a secure MPLS network.

Streamline vendors and voice management.
Enterprise Trunking simplifies the management of voice services by eliminating the maintenance and support of multiple phone systems and vendors across business locations. Manage all voice services and locations through a single interface.

Prepare for disaster and business continuity.
Redundant trunks help ensure business continuity because voice traffic can be re-routed across another existing enterprise trunk if one fails.

Ideal candidates for SIP Trunking or Enterprise Trunking.
Figure 2 contrasts a typical premises-based voice infrastructure with an Enterprise SIP Trunking deployment. A multi-site enterprise can use one centrally located IP PBX instead of installing a separate PBX at each site. The ability to share call capacity means companies can purchase fewer trunks, and only the number of call paths required.
Distributed enterprises commonly have an array of voice technologies scattered across multiple sites. Costs for idle lines and unused calling minutes compound across multi-site operations. Enterprise Shared Voice enables companies to share cloud-provisioned voice resources, including concurrent call capacity and minutes plans, across all business locations regardless of the voice technology handoff in use.

What it is: Cloud-based Call Path and Calling Plan Sharing

In today’s distributed enterprise, every location must have dedicated capacity. Sites where trunks are in use must have enough trunks to meet that location’s peak call volume needs. Sites where Hosted VoIP or analog service is used get the dedicated call capacity for each line irrespective of usage. As a result, customers pay for excess call capacity that never gets used, as shown in Figure 3.

With Enterprise Shared Voice, companies with multiple sites or complex call capacity sharing needs benefit from the flexibility and scalability of this voice sharing platform. Like Enterprise SIP Trunking, an Enterprise Shared Voice solution provides resource consolidation and call capacity sharing across business locations.

With MegaPath Enterprise Shared Voice, customers buy only the call paths they need, as shown in Figure 4. Usage at locations relying on Hosted VoIP or analog lines can be limited to match the business needs for those locations. Trunk sites can be assigned the same maximum concurrent call capacity. Each location can have a minimum and maximum concurrent call capacity.
Three Cost Saving Voice Technology Innovations for the Enterprise

10 Analog Lines
20 PRI Trunks
30 SIP Trunks
PBX

110 Concurrent Calls bought for an actual 80 needed

50 Hosted Users

Figure 3. Typical multi-site legacy phone systems require dedicated line or trunk capacity, some of which goes unused.

0-5 Calls Allowed
10 Analog Lines
10-20 Calls Allowed
PBX
20-30 Calls Allowed
PBX
25-35 Calls Allowed
50 Hosted Users

MegaPath Cloud
80 Enterprise Call Paths

Figure 4. The flexibility of Enterprise Shared Voice enables customers to reduce call capacity requirements and avoid costs.
Enterprise Shared Voice provides flexibility above and beyond the capabilities of SIP Trunking by enabling the organization to share calling resources across a mix of technology handoff types to the LAN, including SIP Trunks, PRI Trunks, Analog Lines, and Hosted Voice, as shown in Figure 5.

The solution greatly reduces telecom costs by sharing cloud-provisioned voice resources, including concurrent call capacity and minutes plans, across all of an enterprise’s business locations, while supporting multiple technology handoff types. It delivers the ultimate in flexibility, functionality, and cost savings.

Figure 5. An Enterprise Shared Voice solution supports any mix of technology handoff types to the LAN, including SIP Trunking, PRI Trunking, Analog Lines, and Hosted Voice.
Three Cost Saving Voice Technology Innovations for the Enterprise

Reduce costs by sharing call paths and bundled minutes plans across locations.

> **Call Paths.** An Enterprise Shared Voice solution lets a company purchase, pool, and dynamically share only the number of concurrent call paths needed across the organization. All of the call paths and minutes bundles can be available to all users, regardless of location or voice technology type.

> **Calling Plans.** Similarly, avoid wasting unused toll-free and long-distance minutes by sharing cloud-provisioned long-distance calling plans across locations. Providers typically provide free on-net calling between locations, helping companies save even more.

**ADVANTAGES**

**Support a mix of technology voice handoff types across the organization.** An Enterprise Shared Voice solution supports call path sharing across any voice handoff technology at any location in any combination.

**Manage and allocate call paths dynamically to defined groups or locations.** An Enterprise Shared Voice solution puts an administrator in control by providing a way to efficiently manage and allocate minimum and maximum concurrent call paths dynamically to defined groups or individual locations. This provides independent capacity sharing within those groups and helps a company meet the business needs of teams or a subset of locations.

**Support growth and modernize voice services.** Give every user next-generation communications and collaboration features on day one, while enjoying the flexibility to gradually migrate locations off legacy voice technologies as needs and resources dictate.
Get productivity-enhancing, enterprise-grade voice features. Equip users with next-generation communications and collaboration features. With an Enterprise Shared Voice solution, features are provisioned in the cloud, so every user can access enterprise-grade calling features to help boost productivity, promote mobility, and improve communication with customers and colleagues. These features typically include Audio Conferencing, Visual Voicemail, and Find Me/Follow Me, among others. Give everyone immediate access to these advanced calling capabilities, regardless of location and the technology in use.

Extend the useful life of the existing equipment, and avoid capital expenditures. To extend an enterprise’s investment in its existing voice technologies, Enterprise Shared Voice solutions typically work with voice systems in use, connecting them through the cloud. A company can use its choice of equipment—including equipment it already owns or leases—and avoid costly investments in equipment purchases or upgrades until it’s ready to make them.

Simplify the management of voice services by eliminating the maintenance and support of multiple phone systems and vendors across all business locations.

Gain a truly flexible voice solution that’s more affordable and easier to manage. To simplify and consolidate voice management across the enterprise, an Enterprise Shared Voice solution empowers companies to dynamically allocate shared resources among locations or groups of locations through an easy-to-use portal.

1 Feature availability varies depending on voice handoff technology in use.
TYPICAL SOLUTION CANDIDATES AND EXAMPLE CUSTOMER SCENARIOS

Organizations that typically benefit from an Enterprise Shared Voice solution fall into two categories:

> Have two sites or more.
> Would benefit from using a solution based on oversubscription. Organizations that are using, or are nearly using, all of their current network capacity wouldn’t benefit from this solution.

The following are example scenarios of customers that would benefit from an Enterprise Shared Voice solution.

1. Companies that have a large chain of small offices or stores, with, for example, one or two analog lines at each location. The company never exceeds the peak load of 500 concurrent call paths across all locations. With Enterprise Shared Voice, this business can order 500 concurrent call paths and a usage package, sharing both call paths and calling plans across all of its locations.

2. Organizations considering replacing their legacy PBX with Hosted Voice that want to maintain a limited call capacity model, such as 200 concurrent call paths for 5,000 Hosted Voice users.

3. Companies that require a hybrid solution, for example, SIP or PRI Trunking for the headquarters and branch offices and Hosted Voice seats or Analog Lines for remote workers and satellite offices. With Enterprise Shared Voice, users at both the Trunk and Hosted Voice sites draw from the concurrent call path capacities allocated across the enterprise, or to a defined group.

4. Organizations with complex capacity sharing requirements. For example:

> Four locations total: Two call centers that require up to 200 concurrent call paths each and two branch offices that require 50 concurrent call paths each.
> The two call centers need to be provisioned in an active-active redundant manner so that if one of the call centers is offline, the other can handle the whole load, up to 400 concurrent call paths.
Because of its flexibility, an Enterprise Shared Voice solution supports very complex sharing scenarios.

Greatly reduce telecom costs by consolidating voice infrastructure and access, right-sizing usage plans and call paths, and reducing maintenance and administration. With Enterprise Trunking, companies reduce costs and simplify IT management by combining voice and Internet access over a single Internet connection. They can reduce costs even further and gain the flexibility and scalability they need by relying on MegaPath Enterprise Shared Voice. This industry-first cloud-based hybrid voice solution lets enterprises share voice resources, including concurrent call paths and minutes bundles, across all business locations regardless of the voice technology handoff in use.

**Gain a Complete Solution and Simplify Administration.** MegaPath offers calling plans, long-distance options, and a range of business-class connectivity options, all from a single provider. We deliver all the functionality of a traditional phone system, plus enhanced flexibility, effortless scalability, significant cost savings, and advanced features. Manage one less thing by consolidating voice and data on a single broadband connection.

**Get More Ways to Stay In Touch with MegaPath One.** Improve productivity and support mobility with features such as chat, presence, video calling, and screen sharing. MegaPath One features are available with MegaPath Hosted Voice and support desktop, mobile, and tablet devices.

**Experience Superior Voice Quality.** MegaPath’s voice network achieves 99.999% availability, providing customers with the highest level of reliability in the industry.

**Benefit from Flexible Install Options.** If you need to get up and running quickly, you can opt for self-install and get your phones within 7 days, the industry’s first installation SLA backed by service credits. Or if you’d rather have us perform the installation, you can choose a fully managed installation with a dedicated project manager who serves as your single point of contact throughout your Hosted Voice implementation.
Simplify the Transition with Free Training. Free customizable user and administrator training helps employees get the most out of Hosted Voice.

Enjoy No Minimums. Unlike other providers, we don’t place user or seat minimums on our 24/7 customer care availability, or 30-day satisfaction guarantee.

Use One Provider, Get One Bill. MegaPath’s voice network achieves 99.999% availability, providing customers with the highest level of reliability in the industry.

Experience Superior Voice Quality. Serve all of your locations with the convenience of a single provider.

NEXT STEPS

Visit www.megapath.com/voice to learn more, or contact a MegaPath Business Consultant today at 877-611-6342.