



FROM CLOUD PBX TO SIP TRUNKING: THE ENTERPRISE GUIDE TO IP COMMUNICATIONS SOLUTIONS

Evolving Enterprise Communications

The enterprise communications market has made a huge leap toward virtual, IP-based solutions and unified communications & collaboration (UC&C) in recent years, and major trends such as business mobility, video conferencing and workplace messaging have disrupted the landscape. As Jon Arnold points out in this TechTarget article¹, the pace of business increased so much with the advent of the Internet that the switched phone systems + email, PC and fax combination simply couldn't keep up.

Gartner forecasted that global IT spending would reach \$3.7 trillion in 2018, a jump of 4.5 percent from the previous year, PCMag reported². Communication services, such as cloud PBX and Voice over IP (VoIP) are predicted to account for \$1.4 billion, the most profitable of any category by far. But while many organizations are clearly looking to tap into the benefits of cloud and IP solutions, most businesses are currently stuck somewhere in the middle, hoping for guidance. “*Most organizations find themselves somewhere between the legacy world of on-premises, ‘silo’d’ communications, and unified, cloud-based services,*” states a 2017 white paper from Wainhouse Research³.

Enterprise communications are constantly evolving, so the one tried-and-true method for staying up-to-date is to work with service providers that are keeping up with the changes. This e-book offers a quick look at some of the current and emerging IP-based UC&C solutions, as well as a few tips on what to consider and what to avoid when making these decisions.

¹ <http://searchunifiedcommunications.techtarget.com/tip/The-evolution-of-unified-communications-technologies>

² <https://www.pcmag.com/article/358672/it-spending-to-eclipse-3-7-trillion-in-2018-gartner>

³ <https://cp.wainhouse.com/content/enterprise-communications-keys-successful-transition>

Cloud PBX

definition

Cloud private branch exchange (cloud PBX) is a phone solution that you would compare with on-premises PBX, other VoIP offerings or a legacy service, such as landlines that rely on the public switched telephone network (PSTN). A cloud PBX is an IP telephony (or VoIP) system that is delivered and managed through the internet by a service provider. Unlike an on-premises PBX, a cloud PBX allows you to leverage the benefits of a feature-rich business phone system without expensive hardware and maintenance, helping to reduce operating costs.

What's the quickest growing market for hosted PBX? You guessed it – enterprises. That's according to No Jitter's series about Eastern Management Group's "Worldwide Hosted PBX Market 2017-2022" report, which predicts that "companies with more than 1,000 employees will double their market share of hosted systems by 2022."⁴ The move to hosted PBX is especially swift among large enterprises with 20,000+ employees and certain verticals, including healthcare, banking, education and utilities.

Who's the right customer? If you're looking for a phone system that's low maintenance, grows alongside your business and leaves you receiving a predictable and stable bill with limited upfront costs (and no hardware to buy or upgrade), cloud PBX is the way to go. It works well for businesses that need to constantly have the latest voice capabilities and standardize them across multiple locations. Plus, hosted PBX systems come with built-in business continuity, mobile capabilities and seamless call center integration (so your corporate numbers can forward to call centers without your customer knowing).



⁴ <https://www.nojitter.com/post/240173274/large-enterprises-fastestgrowing-hosted-pbx-market>

SIP Trunking

definition

Session initiation protocol trunking (SIP trunking) links a PBX to an Internet Telephony Service Provider (ITSP) via VoIP. It's a virtual connection that delivers voice via Internet, versus the legacy primary rate interface (PRI) setup, which is a physical option. All PBXs, regardless of whether they're on-premises or hosted, must connect to the ITSP. For cloud PBXs, SIP trunking is built in to the solution and the third party service provider handles it, but it needs to be completed onsite by the enterprise for on-premises PBXs. So when talking about SIP trunking here, we're referring to a solution that couples with on-premises PBX to deliver VoIP and other UC&C services to enterprises.

SIP, the backbone for SIP trunking, likely won't be a choice for much longer; some of the world's largest carriers have announced plans to phase out their legacy voice networks – public switched telephone network (PSTN) and integrated services digital network (ISDN) – by 2025, 2020 or even sooner. Roughly half of the network traffic from large enterprises and small businesses travels via SIP, according to GetVoIP.com. For the enterprise segment with 5,001-20,000 seats, 44 percent of network traffic was SIP in 2016, and about 71 percent is expected to be SIP in 2020, according to Eastern Management Group data reported by GetVoIP.com⁵. That's a huge jump in only four years! Clearly, SIP is quickly becoming the industry standard, and adoption will continue to pick up in pace.

Skype for Business: This offering often comes paired with SIP trunking for a powerful UC&C solution. More than 10,000 companies have implemented Skype for Business, which is backed by Microsoft technology and allows for easy collaboration resulting in extreme productivity. In order to sell Skype for Business SIP Trunking, service providers must undergo rigorous testing to certify that their products deliver the best quality and most reliable connections to customers' Skype environments.

Who's the right customer? SIP trunking is generally more cost-effective, scalable and easier to maintain than PRI. It's ideal for enterprises that have invested in on-premises PBX systems and have a great Internet connection. Some argue that PRI has better call quality and security, but modern technologies and practices allow SIP to exceed PRI in both departments. For enterprises with very little internal IT support, SIP trunking is definitely the way to go (and these organizations should look into hosted PBX).



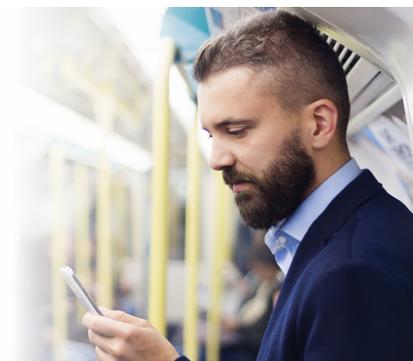
⁵ <https://getvoip.com/blog/2017/05/17/state-of-sip/>

Messaging

It's not all talk! Messaging is, of course, a vital part of communication these days, for individuals and businesses alike. For enterprises, short message service (SMS) and multimedia messaging service (MMS) are important across verticals, with contact center messaging having its own specific use case. As the titles imply, MMS allows for more content: audio, video and photos. As another No Jitter article explains, mobile operators and texting platforms such as Facebook Messenger and WhatsApp provide messaging, but where UC&C comes in is with employee-to-employee texting and customer-facing communications. Messaging is a feature of UC&C platforms such as Skype for Business. Be sure to ask your UC&C partner about its messaging features.

Emerging Solutions

APIs: Advanced communication platform as a service (CPaaS) providers have started to offer API access, allowing enterprises to piece together custom solutions. If you only need three of the 10 features in a portal, for instance, or you'd like to build an in-house app to let employees know the offices are closed for snow, that's now possible. According to the Wainhouse Research white paper, CPaaS *"solutions enable a software development team to create new, communications-enabled applications without the need for specialized tools or expertise."*



Solution Integration: Enterprise communications, and the UC&C products being offered, are becoming more and more integrated even as you read this. Maybe you use one product for most business meetings, another if you need to screen share and another to managed your hosted PBX. Service providers are working to end this chaos.

UC as a Service (UCaaS): This refers to cloud-only UC providers. UCaaS providers *"are consistently reporting double-digit growth,"* No Jitter states, but warns: *"do not mistake this for the end of the premises-based model."*⁸ Many large enterprises still leverage a fully on-premises or hybrid model, and there are still viable use cases for on-premises solutions.

Hybrid: As it relates to enterprise communications, this refers to those businesses using some combination of on-premises and cloud platforms, usually as they're in the process of cloud migration. *"In this model, the cloud solution delivers a user's application experience, while leveraging on-premises PBX's for call routing,"* Wainhouse Research explains.⁹

Artificial Intelligence (AI): AI seems to be impacting every aspect of business, and the communications sphere is no different. An AI engine could gather and send relevant information needed before calls or display past communications with a coworker, customer or prospect when that person calls or texts, a TechTarget article explains.¹⁰ The use cases go on and on, and we're only in the beginning stages of seeing them unfold.

⁶ <https://www.nojitter.com/post/240173290/text-the-hottest-mobile-topic-at-ec18>

⁷ <https://cp.wainhouse.com/content/enterprise-communications-keys-successful-transition>

⁸ <https://www.nojitter.com/post/240172886/6-disruptive-forces-to-talk-about-in-enterprise-communications>

⁹ <https://cp.wainhouse.com/content/enterprise-communications-keys-successful-transition>

¹⁰ <http://searchunifiedcommunications.techtarget.com/tip/How-AI-services-are-converging-with-unified-communications>

Considerations for Moving to IP Solutions

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Consider Bandwidth: If you're moving from a traditional setup to an IP-based phone solution, make sure to consider your company's internal network. The network through which you once ran purely data will now be home to all of your voice and data traffic, so it's very possible that you'll need to re-evaluate your bandwidth. Some enterprises, especially in certain verticals such as manufacturing, will have undersized connectivity to remote offices to support a cloud PBX solution. If video conferencing with clients and prospects is interrupted, it will become obvious very quickly that you need more bandwidth!

Consider IP Support Role: Another consideration for moving to an IP telephony solution is your in-house support role. The skillset is very different for managing a legacy time-division multiplexing (TDM) setup, which requires more of a cut-and-dry telco position, versus IP, which is more closely aligned with an IT professional. Your enterprise may need to retrain, reassign or hire in order to have the right team member in place moving forward.

Common Mistakes to Avoid

One Size Fits All, Right Off the Shelf

One of the biggest mistakes we see enterprises make when choosing IP solutions, especially when they aren't up-to-date on the latest offerings and nuances of the industry, is picking a one-size-fits-all product off the shelf because they're familiar with the company name. Many enterprise execs think their budgets won't allow for a more custom approach or simply correlate the big brand name with quality and security, when that's not always the case. Even on a relatively light budget, your IP communications partner should create a custom solution for you that takes into account your current and future needs.

Stopping at Software

Another major mishap that befalls unsuspecting enterprises occurs when they choose a software provider that has pieced together solutions from various disjointed locations. Maybe enterprises are drawn into such a solution due to low cost and/or flexibility, but the problems often arise when a trouble ticket is needed (and the software provider then has to open trouble tickets with three or more of its own providers) or when the customer asks for a bit more transparency. The moral of this story is to look beyond the immediate offering – ask questions about the IP solutions provider's network and what the company's able to see and fix itself.



Brightlink IP's Take

At [Brightlink IP](#), we own our network so we're able to see every transaction, start to finish – and we let our customers see that data, too. Carriers have traditionally kept their clients in the dark when it comes to customer experience, statistics and real-time network traffic data, but we know that companies can no longer afford to be blind to their traffic. Through Brightlink IP's innovative and award-winning [Liveview](#) platform, we share these important statistics with you as they come in, because we know the more information you have, the better equipped you are to serve your customers and focus on your core mission. We believe in the power of transparency, efficiency and deep insight at your fingertips.

As the premier IP communications provider delivering carrier-grade voice, messaging, and application-based services to enterprises and carriers around the world, Brightlink IP offers [cloud PBX](#), [SIP trunking](#), [Skype for Business](#), [messaging](#) and more. From carrier, OTT and enterprise voice services, to SMS and MMS messaging solutions, we provide cost-effective, customizable and easily-accessible solutions.

Contact us [here](#) or at 1-888-871-4575 to learn more.

OUR CORE PRODUCTS



Voice Origination

Brightlink offers all origination services through our full feature API and online portal. These allow our customers to order their own numbers, search available inventory, request numbers in other areas not currently available and activate new services in real time.



Voice Termination

With over 100 peering partners, in market facilities and multiple geo-redundant datacenters, Brightlink provides its customers with unmatched route customization and call handling capabilities.



Messaging

Providing a unique product in a highly competitive market like messaging is challenging. Brightlink has built a nationwide wireless network to do just that, providing our customers with messaging services that are not available from other carriers.



Hosted Cloud / UCC

World-class, cloud-based unified communications PBX platform, capable of servicing carriers and enterprise customers from 20 to 20,000 users. Our platform is enabled with WebRTC, REST, API's, HD Audio and mobile apps, helping our customers build solutions for the future.



SIP Trunking

SIP trunking has quickly become the normal method for business to deploy voice services to their phone systems and calling platforms. Brightlink has multiple types of geo-redundant and OEM certified SIP trunking solutions built for business and priced to drive adoption.

ABOUT BRIGHTLINK IP

Brightlink IP is the premier IP communications provider delivering carrier-grade voice, messaging, and application-based services to enterprises and carriers around the world. As one of the largest IP-based communications providers globally, we are committed to innovation, customer satisfaction and exceeding expectations. We power our UC&C customers' products and services in the most critical industry verticals through a seamless, next-generation environment.

From carrier, OTT and enterprise voice services, to SMS and MMS messaging solutions, Brightlink IP provides cost-effective, customizable and easily-accessible solutions. We pride ourselves on industry-leading quality and efficient delivery of reliable services, built specifically for next-generation networks and applications. Our 24x7 Network Operations Center (NOC), customer portals and APIs monitor all customer traffic and network services from end to end, ensuring flawless execution. Our trusted partnerships include the largest global carriers and most sophisticated enterprises and we consistently deliver world-class services to these partners every day.

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