SIP Trunking vs. Hosted PBX: What's the Difference?

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Voice-over-IP (VoIP) telephony can feel like a sea of acronyms. For many business administrators who are hoping to achieve lower costs on business communications, it can be difficult to make sense of all the options available. Without a technical background in VoIP, it's hard to make sense of things like SIP Trunking and a PBX, and the relative pros and cons of all options available.

Customers often ask about SIP Trunking versus Hosted PBX, but that's not the right question to be asking. The truth is, the right business communications system is not a choice between Hosted PBX and SIP Trunking. They are different terms as Hosted PBX service uses SIP to connect to VoIP endpoints (such as a VoIP telephone or a mobile app) and a PBX at a customer premises can use SIP trunks (in lieu of an expensive PRI service). In this blog post, we'll define both Hosted PBX and SIP trunking, so you can see how they might fit into your VoIP decision.

SIP Trunking and Hosted PBX: What You Need to Know

One of the biggest decisions organizations make when using VoIP is between a hosted private branch exchange (PBX) or a PBX that is hosted on your premises. If you use a Hosted PBX, your vendor handles the technical aspects of providing service. The vendor will provide SIP licenses to enable you to make telephone calls either over an Internet connection or a separate Ethernet connection specifically for voice.

Organizations who opt to have a premise-based PBX will manage the PBX themselves. Choosing between premise-based or Hosted PBX options offers some trade-offs in flexibility, security, pricing, and ability to scale.

To learn more, we recommend Hosted PBX vs. Traditional On-Premise PBX: Which is Better?

Hosted PBX

A hosted private branch exchange (PBX) provides PBX functionality (such as automated attendant, automatic call distribution, voicemail, call transfer, etc.) without having to own or maintain all necessary equipment onsite. A PBX works by routing calls to extensions, while allowing your VoIP service provider to maintain all necessary equipment and software.

Pros of Hosted PBX

- Includes "standard PBX" services, including voicemail, conference calls, and call records
- Can include add-on services such as conferencing or mobility features, depending on your business's needs
- Not required to purchase, maintain, or upgrade PBX equipment
- Power for equipment is not required. So, if a thunderstorm knocks out power to your building, your PBX is still up!
- Minimal onsite equipment is required, typically just handsets and a gateway
- High degree of scalability and flexibility, depending on vendor
- Potential for greater cost savings with bundling unified business communications

Cons of Hosted PBX

- Quality of service (QoS) depends on the consistency of your connection to the vendor's hosted service
- Service provider maintains a high degree of control
- Vendor feature and add-on service offerings can vary

Cost of Hosted PBX

The cost of Hosted PBX services can vary between carriers. Typically, businesses can anticipate a small setup fee, some equipment investment costs, and a monthly recurring fee. Both will vary according to the number of users, add-on features, and other factors. If you already have handsets that interoperate with your carrier, your equipment investment costs will be significantly lower.

Pricing can vary according to add-on services but will typically be in the range of $20–$40 monthly per phone line for unlimited local and long distance calling.

SIP Trunking

SIP Trunking uses VoIP to connect a PBX between the Internet and the Public Switched Telephone Network (PSTN), replacing a traditional "phone trunk" such as a Primary Rate Interface (PRI) or analog line. This solution requires an on-premise PBX and a gateway to connect your Internet telephony service provider to a PBX.

Trunking to a Hosted PBX is typically done using SIP.

SIP Trunking's primary functions include:

- Locating the user
- Selecting the end system for a session
- Learning user availability
- Determining the capability of the end-user system
- Establishing a session (call)
- Managing the call session, including termination, transfers, and more

SIP Trunking Pros

- Leverages your IP Network, turning voice into an application on the network
- Potential for improved cost efficiency and cost savings
- Additional call appearances can be added quickly without having to wait for more circuits to be installed
- Call appearances can be routed to other sites quickly so you have flexibility with where phone service is being provided

SIP Trunking Cons

- Effective bandwidth analysis to protect QoS is especially important, due to multimedia transmissions
- Can require higher investment costs, due to need to acquire new equipment and retire old equipment
- The newness of this technology can make finding talent and troubleshooting help more challenging

Alternatives to SIP Trunking

SIP Trunking isn't an alternative to hosted or on-premise PBX. It's an alternative to publicly-switched telephone network (PSTN) technologies, which include:

- T1
- Primary Rate Interface (PRI)
- Analog lines

Getting the Best for Your Business

Which flavor of VoIP is right for your business? If you're having trouble identifying the features and technologies your business needs, you're not alone. Atlantech has successfully helped many businesses navigate the confusing waters of technology to match the right system with the need.

To learn more about Atlantech Online's convenient and quality hosted voice services for businesses of all sizes, click here to contact an expert representative.