

SIP Trunking – Your Questions Answered



Alan Mackie, Senior Product Manager, Gamma Telecom discusses 10 things that Channel Partners should know about SIP Trunks.

1. SIP doesn't equal SIP.

Session Initiation Protocol (SIP) is fast becoming the standard term bandied around in the Telecoms Industry for the replacement of traditional TDM services with IP based solutions.

SIP however is not a standard solution in the way that ISDN has been deployed in the UK over the past few years.

SIP is defined in a number of Requests for Comment (RFCs) documents , and suppliers of SIP equipment and SIP Network services may have interpreted and deployed their solutions in a number of different ways.

Summary is that SIP is not a standard, and connecting SIP devices to a SIP Network is not necessarily "Plug and Play".

When looking to connect an IPPBX or SIP Gateway to a SIP service provider you should ensure that the device has been compatibility tested with the Service Providers network and that all service features are fully supported.

2. Focus on flexibility – numbers, speed, international

SIP Trunking has a major advantage over ISDN / PSTN connections, that is flexibility of numbering. In the traditional network provision the number that is provided by the Telephony operator is sourced from the local exchange. In IP Telephony services the linkage between numbering and location can be broken . This allows unique cost effective solutions to be delivered to cutomers that cannot be replicated within an ISDN network for example.

How powerful would it be to provide UK numbers overseas to reduce call costs for internal calls and customers calling the overseas office?

Think of the cost savings that can be made on a customer taking their number with them when they relocate their office.

Does the customer need to support numbers from different geographic locations from a single site ? What about a Glasgow number hosted from your office in Birmingham.

3. Access is key

In order to support SIP access to the customer's site you need to ensure that the IP connection on site can support the number of concurrent calls you require at a consistently good standard of voice quality. To do that follow these steps :

- Calculate the number of concurrent calls you need to support incoming/outgoing at the site
- Choose the CODEC , the voice encryption that you wish to provide for the service
- Assess the bandwidth that you would require to support the number of calls
- Use an IP connection dedicated for voice
- If using a broadband connection , use a service with a low contention ratio and one that prioritises voice across the network.

Or alternatively, work with a supplier who has the tools and expertise to do this with you !

4. Set expectations with customers

SIP Trunking Services are an alternative to ISDN , rather than a like for like replacement. SIP can provide a number of advantages over ISDN , but a key element is that the service must work and work reliable to be used in a Business environment. Therefore the service provided to the customer must be engineered to be reliable with an effective resilience mechanism in the event of a failure.

SIP trunking is not simply a cheap alternative to ISDN and should not be positioned as such.

5. Disaster recovery is a “killer application”

SIP Trunking solutions can offer a very flexible set up to provide Disaster Recovery / Business continuity solutions to customers. By creating a SIP account for a customer's PBX the telephone numbers associated with that account are now hosted with the SIP providers network.

In the event of a Disaster , rendering the site inaccessible , the account can be utilized in another PBX on another site and connected via an IP connection the service can instantaneously be recreated. Alternatively the PBX itself could be moved to another site any where there is an IP connection and service can automatically be restored.

There is no need to re-provision the network service and there are no additional network charges or remote call forwarding to pay !

6. Make sure you have the full product (service/router/hardware)

In taking SIP Trunking solutions to market you should ensure that the whole package is fully tested , documented and can be provisioned and supported. The full supported service package should include the following:

- The IPPBX or SIP Gateway that will be installed on the customers site
- The router that will be utilised to connect to the IP Network Provider
- The IP Network , or Internet Service Provider that will utilised to support the voice connections
- The SIP Trunking Service Provider

All elements of the overall solution must be compatible , and for the complete service you can provide effective support for the installation and ongoing fault management. The end customer is buying a complete solution, not a collection of parts.

7. Ensure SP and OEM are “joined up”

The relationship between the SIP provider and the SIP equipment manufacturer is vital to ensure a consistent quality of service. As well as the CPE devices being tested with the SIP providers network , you should examine the relationship that they have , are they working together at a Marketing , Product , Technical and Sales level to ensure that you can get the maximum support on new features and any ongoing support issues.

You do not want to be a “ping pong ball” between these two parties some check that they are working together effectively.

8. Don't sell on price

SIP Trunking is not about cheap channels and minutes. Cost savings can be made in implementing a SIP trunk connection, especially if deployed across multiple sites , where site to site calling cost reductions can apply.

But the main benefits of deploying SIP trunking are not price , but rather the following :

- Number portability , allowing customers to relocate their office and keep their number
- Number flexibility , supporting DR plans for customers at a fraction of existing ISDN costs
- Ease of System expansion , an additional number of SIP channels can be added to a site at the fraction of the cost and time that deploying ISDN would entail
- Site Resilience, by adding a SIP trunk connection at a customer's site and retaining ISDN , the availability of the voice service at the site can be enhanced without the need for major infrastructure to the site

9. Supplier scale is key – 999, BT, voice pedigree

A SIP trunking service is a Business Connectivity service and like any connection to the PSTN it must provide a highly available , and reliable service that will scale as SIP trunking moves from this initial market deployment stage to the mainstream connectivity mechanism within the UK.

In addition to service reliability and scalability , the SIP provider should also provide the basics of a telephony service:

- Emergency Services Calling Support
- Directory Enquiries support
- Online number management and access to CDRs

When choosing a SIP Provider you should ensure that the provider can support all these requirements both today and in the future as the services scale and become more complex.

10. Choose a service version that fits your skills and expertise

There is no one way to provide SIP services to the Telecoms Provider Channel. Some providers will wish to deliver the solution utilizing their own IP infrastructure or via their preferred ISP partner , whereas others would like a package that provides and manages the complete solution to the customer premises, leaving them to focus on the support of the PBX. There is no one correct model in delivering the a SIP trunk solution to a customer , the essential element is that the complete end to end solution can be supported.

Choose a SIP provider the suits your required delivery model.