SIP TRUNKING
YOUR RESPONSIBILITIES AND FAQ

BUSINESS

Your Responsibilities

Across the product portfolio, there are consistencies on what remains your liability throughout your Virgin Media Business SIP Trunking journey:

Connectivity

- Ensuring the necessary equipment is available and able to support the site connectivity requirements. Either the SBC, Gateway or IP PBX connecting to the service must be on the approval list.
- Ensuring adequate rack space, desktop space and electrical power for all CPE. This will be part of the access circuit provision.
- Providing access necessary for Virgin Media Business and assigned personnel to fulfil deployment services to all sites to be part of the access circuit provision.

Support

- Ensuring all requirements are fed through the account manager and detailed in the SIP Trunking order pack.
- Delegating a single administrative point of contact for Virgin Media Business service issues.
- Serving as the life-cycle maintenance contact. The Customer Administrator will be responsible for conducting the on-going activities required to maintain and administer the account.
- Activities include, but are not limited to:
  o Submitting feature account changes, user profile/parameter updates such as name and office location changes.
- It's imperative that any changes regarding 999 emergency databases are provided to Virgin Media Business.
- Contacting Virgin Media Business concerning all service issues.
- Assigning the Default Calling Number (DCN) to a person/agent who will be available to answer emergency calls from public safety personnel at each location.

Further guidance can be found in the below FAQs:

Ahead of sale

- Do you have an access circuit that suitable for SIP Trunking to be provided over?
  o The circuit needs to be Ethernet based and can be either a Virgin Media Business IPVPN circuit or Managed Internet circuit.
  o If you don't have a suitable circuit then please speak to us about ordering an appropriate service.

- Do you have an available port on the CE router of the access circuit?
  o If you are or intend to use the access circuit for shared services then you'll need to ensure that there is an available port to use for SIP trunking.
  o If you don't have an available port on the router then speak to us and we can discuss what is required to make your service SIP ready.

- Do you require an access resilient service?
  o If you require a resilient service to ensure you can continue to receive or make calls on failure of access circuit or equipment then you will require additional circuits.
  o If you don't have an available secondary circuit to use then please speak to us about available service and configurations to ensure the correct resilient solution to meet your needs.

- How many channels and what kind of SIP channel do you need?
  o The volume of channels can be from 15 up to 5000 channels.
  o The type of channel will determine the volume of call attempts per second (CAPS Rate) the service can manage.

- o The volume of channels will determine the volume of simultaneous calls the service will be able to manage.

- Do you require Dynamic SIP channels?
  - o Do you have seasonal or campaign driven increases in call traffic?
  - o Do you need to expand and decrease the volume of calls you can make and receive at short notice?
  - o If yes then dynamic channels can help you manage this demand.
- Do you have the available bandwidth to support the volume of channels you require?
  - o We have set a recommended maximum number of channels against the available upload bandwidth of the access circuit:
    - o 10Mbps upload – 28 channels
    - o 20Mbps upload – 69 channels
    - o 30Mbps upload – 104 channels
    - o 40Mbps upload – 138 channels
    - o 50Mbps upload – 173 channels
    - o 100Mbps upload – 345 channels
    - o 200Mbps upload – 694 channels
    - o 500Mbps upload – 1,736 channels
    - o 1Gbps upload – 3,400 channels

- Do you wish to keep your telephone numbers and therefore need numbers to be ported?
  - o If yes, you'll need to complete a Letter of Authority to authorise us to port the numbers away from your existing telecoms provider. The LOA form is within the order pack which can be provided to you.
  - o Even if you have existing numbers or voice services with Virgin Media Business, the numbers need to be ported. The porting enables the services to move from traditional voice telephony to new Voice over IP services.
  - o If you don't have numbers to port then we can provide you with new numbers from all geographic regions to support your requirements.

- What connectivity limitations would impact the SIP Trunking service?
  - o Delay Latency of more than 150ms.
  - o Jitter more than 30ms.
  - o Packet loss more than 1%.

- Do you have the correct equipment to support SIP Trunking?
  - o SIP Trunking requires a Session Border Controller (SBC), Media Gateway or IP PBX to connect to.
  - o If you do have any of the above equipment please refer to the authorised equipment list to ensure your equipment is supported.
  - o If you don't have any of the above equipment or don't have equipment on the authorised list then please speak to us as we can provide the appropriate tech to support your requirements.

Ahead of deployment

- Do you need Quality of Service (QoS) on your LAN?
  - o Though QoS is not mandatory for SIP Trunking service, any potential quality degradation can be reduced drastically by enabling end-to-end QoS.
  - o If you're concerned about your LAN infrastructure, a LAN audit Professional Service can be purchased from us.

- Do you need Quality of Service (QoS) outside of your LAN?
  - o Though QoS is not mandatory for the SIP Trunking service, any potential quality degradation can be reduced drastically by enabling end-to-end QoS.

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- o QoS is only available over Ethernet based IPVPN circuits within a WAN. Introductions/amendments of QoS on the WAN must be completed via the usual Virgin Media Business IPVPN alteration methods, completing a CR3 form.
  - o QoS is not available over Managed Internet Circuits.

- Have you requested service configuration to meet your requirements?
  - o SIP Trunking is a very tailorable service and can be configured to support a wide variety of requirements.
  - o The service can be configured to aggregate channels across trunk groups and trunks and it can support bandwidth and channel controls to protect your priority traffic.
  - o If you have any queries around available options and configurations then please refer to SIP trunking support documentation or speak to us.

- Do you have support to configure your equipment to work with the SIP Trunking Services?
  - o SIP equipment needs to be configured correctly to work with specific SIP Trunking. If you have already been using SIP Trunking it doesn't mean the same configuration will work with our SIP Trunking.
  - o We can provide you with the appropriate supporting configuration guide for your equipment to allow you to correctly set-up you service.

- Do you have an internal firewall?
  - o When deploying SIP, you may need to amend local firewall polices to allow SIP to function correctly. See table below with the TCP/UDP ports used:

Protocol	SBC IP Address	Customer SBC/PBX IP Address	Source Ports	Destination Ports	Customer Source & Destination Ports
SIP (Signalling)	See Trunk Order KCI	Configured on portal	UDP 5060 or TCP 1024-65535	UDP 5060 or TCP 5060	Configured on portal
RTP (Media)	See Trunk Order KCI	Any as negotiated in SDP	UDP 32768-65535	UDP 32768-65535	Any as negotiated in SDP

Day of deployment

- Do you have your equipment connected and configured?
  - o We won't be able to deploy the service unless you have your equipment connected to the access circuit and correctly configured.
  - o We will test and prove the service but we won't be able to support configuration issues for equipment that we have not provided.

- Do you have the appropriate support available?
  - o We would suggest your equipment maintainer is available on the day of deployment to support with any issues that may arise with configuration.
  - o If you have ordered equipment from us then we will ensure the service is provided and configured to support the deployment of SIP trunking.

In-life service

- What happens if SIP Trunking doesn't work?
  - o Please follow the Virgin Media Business fault support process as soon as a fault is found.

- Can I increase the volume of channels or DDI numbers allocated?

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- o Please contact your sales representative who will arrange this for you.
  - o You must make sure you have sufficient upload bandwidth to accommodate any additional channels.

- Can I change the configuration of the SIP Trunking?
  - o Yes, you can change the configuration of the service, please contact your sales representative to discuss this.

- Can I reduce the service I have?
  - o It's possible to reduce the service you have. If the service is still in contract term, early termination charges may be applied based on the remaining term left for the service.

- Can I end the service if it's no longer wanted?
  - o Please inform your sales representative or visit www.virginmediabusiness.co.uk and request to cease the service. If you're still in contract you may face early termination charges.