Ports IPs and our Network

Mike Johnstone - 2025-04-03 - PBX, Peering, Ports and IPs

SIP Gateway Configuration and Network Details

Supported Protocols

Our SIP Gateway natively supports UDP and TCP as transport protocols, with optional security enhancements via TLS and SRTP:

1. **UDP (User Datagram Protocol)** - Default transport for SIP signaling and media.

2. **TCP (Transmission Control Protocol)** - Reliable transport option for SIP signaling and media.

3. **TLS (Transport Layer Security)** - Encrypts SIP signaling over TCP for secure communication.

4. **SRTP (Secure Real-time Transport Protocol)** - Encrypts media streams for privacy, compatible with UDP or TCP.

UDP (User Datagram Protocol):

UDP is our default protocol for SIP (Session Initiation Protocol), offering efficient, low-latency communication ideal for many setups. However, it requires frequent keep-alive messages (approximately every 30 seconds) to maintain NAT (Network Address Translation) table entries, which can be demanding in larger systems.

TCP (Transmission Control Protocol):

TCP provides a more reliable alternative to UDP, ensuring stable connections with fewer keep-alive messages (approximately every 15 minutes). This makes TCP particularly advantageous for enterprise environments, reducing network overhead while maintaining consistent performance. Applications like Microsoft Teams leverage TCP as a fallback for media and for secure signaling, enabling the use of TLS (Transport Layer Security) for encrypted communication and SRTP (Secure Real-time Transport Protocol) for protected voice data, enhancing both reliability and security.

Network Connectivity

For customers connecting to our services, we leverage Equinix Fabric to establish secure,

private virtual connections to multiple tier-one carriers serving the Australian market. This provides enhanced reliability, lower latency, and greater security compared to traditional public internet transit. Our BGP routing is configured to optimize path selection across these dedicated connections.

- Firewall IP Range: 103.55.116.0/24
- AS Number: AS63971
- SIP Peering IP: 103.55.116.65

Ports IPs and Network Setting

Proxy	call.sipcity.com.au
TCP/TLS Proxy	call.sipcity.com.au port 5061
SIP Peering	103.55.116.65 (or 103.55.116.0/24)
SIP Registration	103.55.116.65 (call.sipcity.com.au)
SIP Port – UDP	5060
SIP Port – TLS	5061 (ensure transport = TLS)
P-Asserted_ID	P-Asserted-Identity: <sip:+123456789@103.55.116.65:5060>

Other Ports

RTP and UDPTL	Set by your router (our port range is 30,000 – 40,000)
t.38 (faxing)	4000-6000
Fax	fax.sipcity.com.au
Primary NTP	au.pool.ntp.org

Network Connectivity via Equinix Fabric
For customers connecting to our services, we leverage Equinix Fabric to establish secure, private virtual connections to multiple tier one Australian carriers. Our BGP routing is configured to optimize path selection across these dedicated connections.