Services - NAT Traversal

This section describes the various parameters associated with network-hosted NAT/NAPT traversal for SIP endpoints.

To View and Edit Services

On the SBC main screen, go to Configuration > System Provisioning > Category: Trunk Provisioning > Trunk Group > Sip Trunk Group > Services > NAT Traversal. The NAT Traversal window is displayed.

Use the NAT Traversal window to check NAT Traversal settings for each Address Context, Zone and SIP Trunk Group created. Use the drop-down lists to select the desired Address Context, Zone and SIP Trunk Group. The Edit NAT Traversal window is displayed.

Figure 1: Sip Trunk Group - Services - Nat Traversal

The following fields are displayed:

Table 1: SIP Trunk Group - Services - NAT Traversal parameters

<p>| Parameter | Description |</p>
<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Signaling NAT</strong></td>
<td>Indicates whether or not NAT/NAPT support is required for signaling.</td>
</tr>
<tr>
<td></td>
<td>- disabled <em>(default)</em></td>
</tr>
<tr>
<td></td>
<td>- enabled</td>
</tr>
<tr>
<td><strong>Note</strong></td>
<td>The SBC Core does not support NAT traversal for IPv6 calls. Ensure NAT is disabled in pure IPv6 call scenarios.</td>
</tr>
</tbody>
</table>

| **Media NAT**           | Specifies whether or not NAT/NAPT support is required for media.                                  |
|                         | - disabled *(default)*                                                                           |
|                         | - enabled                                                                                        |
| **Note**                | Do not configure Media NAT and Ice Support flags on the same Trunk Group.                         |
| **Note**                | The SBC Core does not support NAT traversal for IPv6 calls. Ensure NAT is disabled in pure IPv6 call scenarios. |

| **Learn NAT For Rtp Only** | Enable flag to learn media NAT from the first RTP packet only.                                    |
|                           | If disabled, media NAT is learned from any first packet received.                                  |
|                           | For egress trunk groups, this flag is applicable only if Dynamic LRBT flag is disabled.           |
|                           | If Dynamic LRBT is enabled, NAPT learning occurs on arrival of RTP packet until the call is connected, at which point Learn NAT For Rtp Only applies even for egress Trunk Groups. The options are: |
|                           | - disabled *(default)*                                                                           |
|                           | - enabled                                                                                        |
| **Note**                  | The action of this flag does not apply to ICE NAT traversal.                                      |
### Ice Support

This parameter indicates the type of ICE method used for STUN packet check. The values are:

- **Ice Webrtc** - This setting is used when inter-working with WebRTC Gateways, for example the Sonus WRTC Gateway or in situations when the SBC is presented with an ICE SDP from a WebRTC Enabled Endpoint.

  **Note**

  When configured for this mode, SBC acts as a generic ICE-Lite agent.

- **Ice Lync** - This is used when inter-working with a Microsoft Lync 2010 or 2013 client.

- **Ice Full** - This is used when inter-working with a full ICE client which requires a STUN connectivity check to be generated by the SBC in response to its own STUN connectivity check.

  **Note**

  For MS Lync ICE (iceLync setting), keep-alive messages are sent only to RTP port.

  **Note**

  Sonus recommends to avoid configuring both Media Nat and ICE Support on the same Trunk Group because these configurations are independent mechanisms for solving NAT traversal issues. Because of this, these configurations should not coexist on the same Trunk Group.

  **Note**

  The parameter, Learn NAT For Rtp Only, does not apply to ICE and should not be enabled for the Trunk Group with ICE Support enabled.

Refer to **SDP Support** for a detailed description on Ice Support.

### Ice Keepalive Timer

Specifies the keep alive timer in full-ICE and MS-Lync ICE. The value ranges from 0 to 60 seconds and the default value is 15 seconds.

  **Note**

  Ice Keepalive Timer appears only when Ice Support flag is set to Ice Full or Ice Lync.

### TCP Keepalive Timer

This NAT TCP keep-alive timer sets the registration refresh rate (in seconds) for SIP over TCP. (default = 240).

### UDP Keepalive Timer

This NAT UDP keep-alive timer sets the registration refresh rate (in seconds) for SIP over UDP. (default = 60).

### Outbound Tcp Keepalive Timer

Specifies the NAT outbound keepalive timer (in seconds) for SIP over TCP. The value ranges from 0 to 32767 and the default value is 240.

### Outbound Udp Keepalive Timer

Specifies the NAT outbound keepalive timer (in seconds) for SIP over UDP. The value ranges from 0 to 32767 and the default value is 60.
Secure Media NAT Prefix

Use this parameter to match up to 'N' bits of the network IPv4 address obtained from signaling. If set to "0", feature is disabled, and no match of network IP address will occur. The value ranges from 0 to 32 and the default value is 0.

Ice TCP Role

Use this flag to specify if SBC initiates the TCP connection for ICE Lync. The options are:

- **Passive** (default): The SBC waits for the peer to initiate the TCP connection. Use this option when working directly with Lync endpoints.
- **Active**: Use this option for the SBC to initiate the TCP connection when connected to internal-facing trunk groups where the peer is not behind the NAT. Also, use this option when working with certain Unified Communication (UC) servers such as Acano which expect the peer to initiate the TCP connection. This is only supported when there are no NATs between the SBC and the UC server.

**Note**

Ice TCP Role appears only when Ice Support flag is set to Ice Full or Ice Lync.

Refer to Configuring SBC and LYNC in Media Environment for configuration details.

Make the required changes and click **Save** at the right-hand bottom of the panel.

Additional topics:

- **Services - Nat Traversal - Adaptive Learning**
- **Services - Nat Traversal - Ice Source Address Filter Priority**
- **Services - Nat Traversal - Qualified Prefix**