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SIP Endpoint SDK Developer's Guide

NAT Traversal

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NAT Traversal

SIP Endpoint SDK supports NAT traversal for restrictive firewalls and routers in the following general scenarios:

- Enterprise to Cloud
- Consumer to Cloud
- Home Agent to Cloud
- Mobile to Enterprise
- Mobile to Cloud

To configure NAT, see the nat section of the [Default Configuration Settings](#).

Important

- Double NAT is not supported.
- NAT translation will not occur with a NAT server that does not support UDP fragmentation. An example of such a server is Microsoft RRAS (Routing and Remote Access Service).
- NAT functionality was tested with the following NAT and STUN/TURN servers:
 - NAT Server—Windows 2008 NAT Server using RRAS service
 - STUN/TURN Server—<https://code.google.com/p/rfc5766-turn-server/>
- When using UDP transport for an endpoint behind the NAT, you must set the **reg_timeout** option to a value not exceeding twice the binding timeout for your particular NAT implementation.

Periodic REGISTER messages serve as a keep-alive mechanism necessary to keep the NAT channel open. Genesys recommends a value of 60 for **reg_timeout** (REGISTER sent every 30 seconds) which should work with most NAT implementations.

Re-registration

Use the `reg_match_received_rport` setting in the `proxyN` section to control re-registration in cases where the `received/rport` values in the REGISTER response do not match local values. A value of 0 (default) disables this feature and a value of 1 enables re-registration.

```
<domain name="proxies">
  <section name="proxyN">
    <setting name="reg_match_received_rport" value="0 or 1"/>
  </section>
</domain>
```

</domain>

Important

For re-registration to work correctly, the registrar must support RFC 3581. Genesys SIP Server **does not** support RFC 3581. In cases where re-registration may interfere with NAT traversal, the `reg_match_received_rport` setting can be used to turn off re-registration.