

## **GENESYS**

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## SIP Server Deployment Guide

SRV address support in Contact and Record-Route headers

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# SRV address support in Contact and Record-Route headers

Starting with version 8.1.102.50, SIP Server supports the SRV FQDN—FQDN resolving to SRV records—received in the Contact or Record-Route headers of a SIP message. SIP Server also supports the SRV FQDN in the **contact** option on a Trunk DN.

If the target destination received in the URI of the Contact or Record-Route headers of a 200 OK message is not a numeric IP address, and no port is present, SIP Server performs an SRV query to obtain the target's IP address:port. The OPTIONS messages are sent over all transports representing SRV records. The ACK messages and all further SIP requests are sent to the active transport with the highest priority. SIP Server uses the original transport if it is among the active transports with the highest priority. If no active SRV records are found, the SIP transaction fails.

If the target destination received in the URI of the Contact header of an INVITE message is not a numeric IP address, and no port is present, SIP Server performs an SRV query to obtain the target's IP address:port. The OPTIONS messages are sent over all transports representing SRV records. Further SIP requests are sent to the active transport with the highest priority. SIP Server uses the original transport if it is among the active transports with the highest priority. If no active SRV records are found, SIP Server uses the transport of the original INVITE message for further SIP requests.

When SIP Server is deployed with SIP Proxy (the Application-level option **sip-outbound-proxy** is set to true) and it must send a SIP request to a destination configured with the SRV FQDN or list of active transports, SIP Server selects an active target destination and adds the private X-Genesys-Route header with a value of sip:IpAddress:Port[;transport=tcp/tls]. SIP Proxy uses the value of the X-Genesys-Route header as the next destination for forwarding the request. For SIP Proxy, this header has priority over the target specified in Request-URI or Route headers. SIP Server uses the same transport value for the X-Genesys-Route header until a transport becomes out of service.

## Feature Configuration

To configure SIP Server to perform an SRV query:

- Set **sip-enable-gdns** to true (at an Application level).
- Set sip-enable-rfc3263 to true (at an Application level).
- If SIP Proxy is used, set **sip-enable-x-genesys-route** to true (on an Application level).
- In a multisite SRV/DNS-based configuration:
  - Set **sip-address-srv** to the SRV FQDN.
  - Set **sip-address** to the hostname of the SIP Server interface.
  - Set **sip-port** to any valid port.
  - Set the **contact** option to the SRV FQDN on inter-site Trunk DNs.

#### Configuration Options

sip-enable-x-genesys-route

Setting: **TServer**, Application level Default Value: false Valid Values: true, false Changes Take Effect: Immediately

Specifies if SIP Server adds the private X-Genesys-Route header to SIP messages when deployed with SIP Proxy. This is for backward compatibility to disable new functionality in old deployments.

sip-disable-via-srv

Setting: **TServer**, Application level Default Value: false Valid Values: true, false Changes Take Effect: Immediately

When set to true, SIP Server inserts a value of the **sip-address** option in the Via header. This option applies when the **sip-address-srv** option is configured.

#### contact

Setting: **TServer**, DN level Default Value: No default value Valid Values: Any alphanumeric string Changes Take Effect: For the next call

Contains the contact URI in the following format:

[sip:][number@]srvFQDN[;transport={tcp/udp}]

Where:

- sip: is an optional prefix.
- number is the DN number. This is currently ignored.
- srvFQDN is the SRV FQDN.
- transport=tcp or transport=udp is used to select the network transport. The default value is udp.

#### SIP Private Header

Header name: X-Genesys-Route

```
Value: sip:host_ip:port[;transport=tcp/tls]
```

This header applies only to a configuration with SIP Proxy. SIP Server adds this header when sending a SIP request to a SIP device located behind SIP Proxy, for which an active out-of-service check is enabled (**oos-check** is set to true). SIP Proxy uses the header value as the next destination to which the request is forwarded.

### Feature Limitations

SIP Server does not support the SRV FQDN in REGISTER messages.