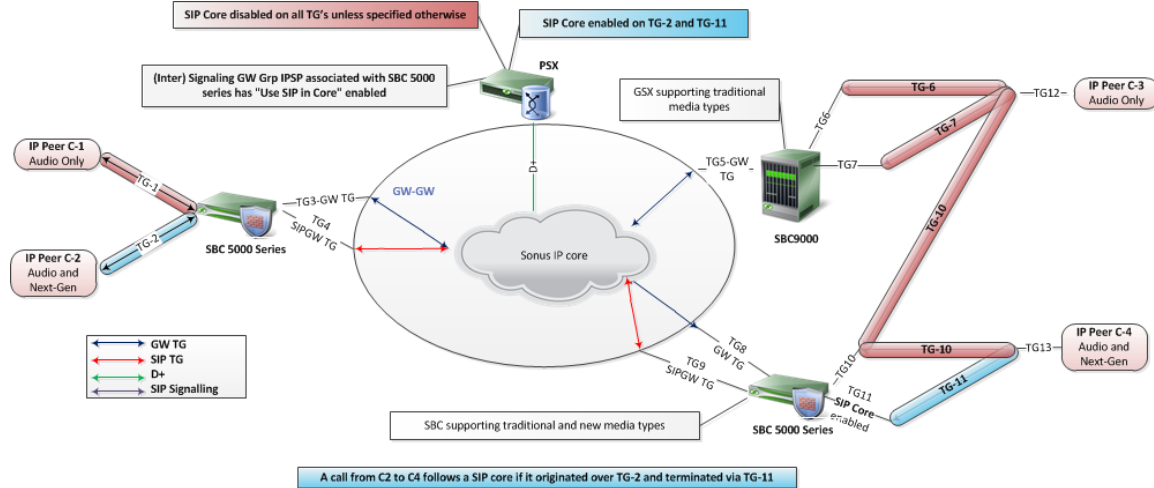


Configuring SBC to use SIP in the Sonus IP Core

The figure below demonstrates a scenario where SIP is used in the Sonus IP core with minimum routing configuration. The figure also depicts a parallel Gateway and SIP core.

Figure 1: Example of Network with SIP in Sonus IP Core



The basic configuration steps to use SIP in the core with minimum routing configuration are shown below. (for detailed PSX configuration information, please see the [PSX Provisioning Guide](#)).

1. Create a SIP Signaling Port (sipSigPort) and a named SIP Trunk Group (sipTrunkGroup) in the default Address Context (default) and default Signaling Zone (defaultSigZone) for ingress and egress SBCs.
2. Set the Call Routing useRouteSet received flag for default SIP Trunk Groups.
3. From the SBC, set signaling "skipDTGLookupForRouteHdr" on the ingress Trunk Group of both Gateways (SBCs) and on the default Trunk Groups (see [SIP Trunk Group - Signaling - CLI](#)).
4. Provision SBCs default SIP Signaling Port address in PSXs Gateway entity.
5. Create PSXs Signaling Gateway Groups and associate to ingress and egress SBCs Gateway entities. For using different IP Signaling Profiles (IPSP) based on the direction of the call, create an Inter Signaling Gateway Group.
 - a. Set "Use SIP in Core" flag in Inter-Gateway Signaling Group or Signaling Gateway Group IPSP used for the inter-SBC leg.
6. Set "Destination Trunk Group Options as Include DTG" in PSXs Signaling Gateway Group or the Inter Gateway Signaling Group, IPSP. The ingress SBC inserts the egress Trunk Group of the egress SBC as the Destination Trunk Group (DTG) in the Request URI of the INVITE. The egress SBC sends DTG to PSX for performing a light weight policy dip.
7. Set "Originating Trunk Group Options as Include OTG" in PSXs Signaling Gateway Group or the Inter Gateway Signaling Group, IPSP. The ingress SBC inserts the ingress Trunk Group as the Originating Trunk Group (OTG) in the From Header of the INVITE. The egress SBC sends OTG to PSX, PSX uses OTG as the ingress TG, ingress SBC as the ingress SBC for the light weight policy dip.
8. Set "Insert Peer Address As Top Route Header" in PSXs Signaling Gateway Group or the Inter Gateway Signaling Group, IPSP. The ingress SBC inserts IP Peer information in the top Route Header of the Invite. The egress SBC sends the IP Peer information from the Route Header

to PSX for PSX to return PSP and IPSP associated with the peer.

9. Set "Use SIP in Core" in PSXs ingress and egress IPSPs for SIP to be used in the Sonus IP core.

The Ingress IPSP is used for ingress leg, Inter Gateway Signaling Group or Signaling Gateway Group IPSP is used for the inter-SBC leg, and the egress IPSP is used for the egress leg. Similar logic applies for the Packet Service Profiles (PSP).

Below is an example SIP INVITE sent in a SIP enabled Sonus IP core:

```
INVITE sip:9786148389;phone-context=private@10.7.15.250:5060;user=phone;dtg=TG_AS SIP/2.0
Via: SIP/2.0/UDP 10.7.15.146:5060;branch=z9hG4bK00B000781cf6d40ae
From: "Unavailable" <sip:Restricted@10.7.15.146;otg=TG_IAD>;tag=gK00000701
To: <sip:9786148389@10.7.15.250;user=phone>
Call-ID: 4_133140212@10.7.15.146
CSeq: 574375236 INVITE
Max-Forwards: 70
Allow: INVITE,ACK,CANCEL,BYE,REGISTER,REFER,INFO,SUBSCRIBE,NOTIFY,PRACK,UPDATE,OPTIONS,MESSAGE,PUBLISH
Accept: application/sdp, application/isup, application/dtmf, application/dtmf-relay, multipart/mixed
Contact: "Unavailable" <sip:Restricted@10.7.15.146:5060>
P-Preferred-Identity: <sip:+16031234567@10.7.15.146:5060;user=phone>
Route: <sip:10.7.6.40:10107;lr>
Supported: timer,100rel,precondition,replaces
Session-Expires: 1800
Min-SE: 1800
Content-Length: 187
Content-Disposition: session; handling=required
Content-Type: application/sdp
v=0
o=Sonus_UAC_1833275753_1505414074_IN_IP4_10.7.15.146
s=SIP_Media_Capabilities
c=IN_IP4_10.7.15.145
t=0 0
m=audio 1028 RTP/AVP 8
a=rtpmap:8 PCMA/8000
a=sendrecv
a=maxptime:10
, msgLen = 1100.
```

