Mapping From Header to ISUP GAP Parameter and ISUP Calling Party Number

Overview

The SBC supports to populate the encapsulated ISUP calling party even when it is not mapped to P-Asserted-Identity in the INPUT DATA that is sent to the PSX.

Mapping From Header to ISUP GAP Parameter

The SBC supports mapping the From header to ISUP Generic Address Parameter (GAP) using the SIP Trunk Group Calling Party flag Map From Header To ISUP GAP.

The following scenarios are supported:

- SIP - SBC - SIP-I
- SIP-I - SBC - SIP-I
- SIP - SBC - GWGW - SBC - SIP-I
- SIP-I - SBC - GWGW - SBC - SIP-I

The SBC maps the From header to ISUP under the following conditions:

- The From header user part is mapped to GAP address digits with E.164 format.
- The GAP numbering plan is set to "Isdn Numbering Plan".
- The GAP screening indicator is set to "user provided not screened".
- The GAP presentation indicator is set as per existing SBC procedure.

The SBC adds or modifies the GAP parameter in the ISUP message if it receives a SIP or SIP-I INVITE request under the following conditions:

- The parameter mapFromHeaderToIsupGap is enabled.
- The received SIP message has a valid From header value which is mapped to GAP parameter.
- The received SIP message has ISUP GAP parameter which is not the same as From header value.

Perform the following steps to map From header to ISUP GAP parameter:

- Configuring PSX or ERE
- Mapping From Header To ISUP Gap

Configuring PSX or ERE

PSX Configuration
On the PSX main screen, navigate to **IP Signaling Profile > Egress IP Attributes > Common IP Attributes** and Disable the flag **Enable Default PUI Procedures**.

**Figure 1**: PSX Configuration

To disable the flag `enableDefaultPUIProcedures`, execute the following command:

```bash
% set profiles signaling ipSignalingProfile DEFAULT_SIP commonIpAttributes flags enableDefaultPUIProcedures disable
% commit
```

### Mapping From Header To ISUP Gap

To map From header to ISUP GAP parameter, execute the following command:

```bash
% set addressContext default zone defaultSigZone sipTrunkGroup SipTrnkGrp1 signaling callingParty mapFromHeaderToIsupGAP enabled
```

### Mapping ISUP Calling Party Number to SIP From and PAI Headers

The SBC supports mapping the ISUP Calling Party Number to SIP **From** and **PAI** headers using the SIP Trunk Group Calling Party flag **Map ISUP Cgpn To PAI**. The SBC sends the ISUP calling party to the PSX in the policy request and uses the PSX returned Calling Party Number to create the PAI Header and process it to the Egress side. It sends the PRIVACY header on the egress side using the presentation indicator.

The SBC supports only the following scenarios:
The SBC maps the ISUP Calling Party Number to SIP From and PAI headers under the following conditions:

- The SBC receives SIP-I INVITE message.
- The parameter mapIsupCgpnToPAI is enabled on the ingress side.
- The SIP PAI/PPI/RPID headers are not received.
- The ISUP MIME contains the Calling Party Number.
- The SIP variant used on Ingress side is either sonus or Q1912.

**Note**

When the SBC receives the privacy information as "restricted", the PSX omits the Calling Party Number in the output data. To include the Calling Party Number, enable the PSX parameter: Don't Strip Calling Number For Restricted Presentation.

The SBC sends the Calling Party Number in the ISUP, if it receives SIP-I INVITE under the following conditions:

- The parameter mapIsupCgpnToPAI is enabled.
- The Privacy headers (PAI, PPI, and RPID) are not received.
- The received message has a valid Calling Party Number in the ISUP.

Perform the following steps to map ISUP calling party number to SIP From and PAI headers:

- Configuring PSX or ERE
- Mapping ISUP Calling Party Number to SIP From and PAI Headers

**Configuring PSX or ERE**

**PSX Configuration**

1. On the PSX main screen, navigate to IP Signaling Profile>Egress IP Attributes>Common IP Attributes and disable the flag Enable Default PUI Procedures.

**Figure 2:** Disable the flag Enable Default PUI Procedures
2. Navigate to Ingress signaling profile > Calling Party/Billing Number and enable the flag Don't Strip Calling Number For Restricted Presentation.

**Figure 3**: Enable the flag Don't Strip Calling Number For Restricted Presentation

3. Navigate to IP Signaling Profile > Egress IP Attributes > Flags > Privacy > Privacy Information > Flags and enable the following flags:
a. P-Asserted-Id  
b. Include Privacy

**Figure 4: Enable the Flags P-Asserted-Id and Include Privacy**

Navigate to IP Signaling Profile > Egress IP Attributes > Flags > Privacy and disable the flag Transparency:

**Figure 5: Disable the Flag Transparency**

or

ERE Configuration

1. To disable the flag `enableDefaultPUIProcedures`, execute the following command:

```
% set profiles signaling ipSignalingProfile DEFAULT_SIP commonIpAttributes flags enableDefaultPUIProcedures disable
% commit
```

2. To enable the flag `dontStripClgNumberForRestrictedPresentation`, execute the following command:
% set profiles signaling signalingProfile DEFAULT_IP_PROFILE accessTransport enable egress callingNumber dontSend egressFlags dontStripClgNumberForRestrictedPresentation enable
% commit

3. To enable the flag `includePrivacy`, execute the following command:

% set profiles signaling ipSignalingProfile DEFAULT_SIP egressIpAttributes privacy
privacyInformation pAssertedId flags includePrivacy enable
% commit

4. To disable the flag `transparency`, execute the following command:

% set profiles signaling ipSignalingProfile DEFAULT_SIP egressIpAttributes privacy
transparency disable
% commit

Mapping ISUP Calling Party Number to SIP From and PAI Headers

To map ISUP calling party number to SIP From and PAI headers, execute the following command:

% set addressContext default zone defaultSigZone sipTrunkGroup SipTrnkGrp1 signaling callingParty
mapIsupCgpnToPAI enabled
% commit