Configuring RTCP to Support Held Calls Using RR and RS Bandwidth Modifiers

In this section:

Overview

This best practice provides guidance on configuring RTCP RR/RS Bandwidth modifiers from EMA to support held calls for a Multimedia Telephony Service for IMS (MTSI) environment as described on the page AMR and RTCP Enhancements.

⚠ This configuration is performed either on the PSX or SBC ERE.

SBC ERE Configuration

Configuring Packet Service Profile in ERE

Execute the following command to configure PSP:

```
set profiles media packetServiceProfile DEFAULT rtcpOptions rtcp enable
```

Enabling RTCP for HELD Calls

Execute the following command to configure the HELD calls:

```
set profiles media packetServiceProfile DEFAULT rtcpOptions rtcp enable enableRTCPForHeldCalls
enable
```

Configuring RR and RS Bandwidth Values

Execute the following command to configure RR and RS bandwidth values:

```
set profiles media packetServiceProfile DEFAULT rtcpOptions rtcp enable enableRTCPForHeldCalls
enable rrBandwidth 250 rsBandwidth 250
```

Configuring IP Signaling Profile

Execute the following command to send the RR and RS bandwidth information in the SDP offer:

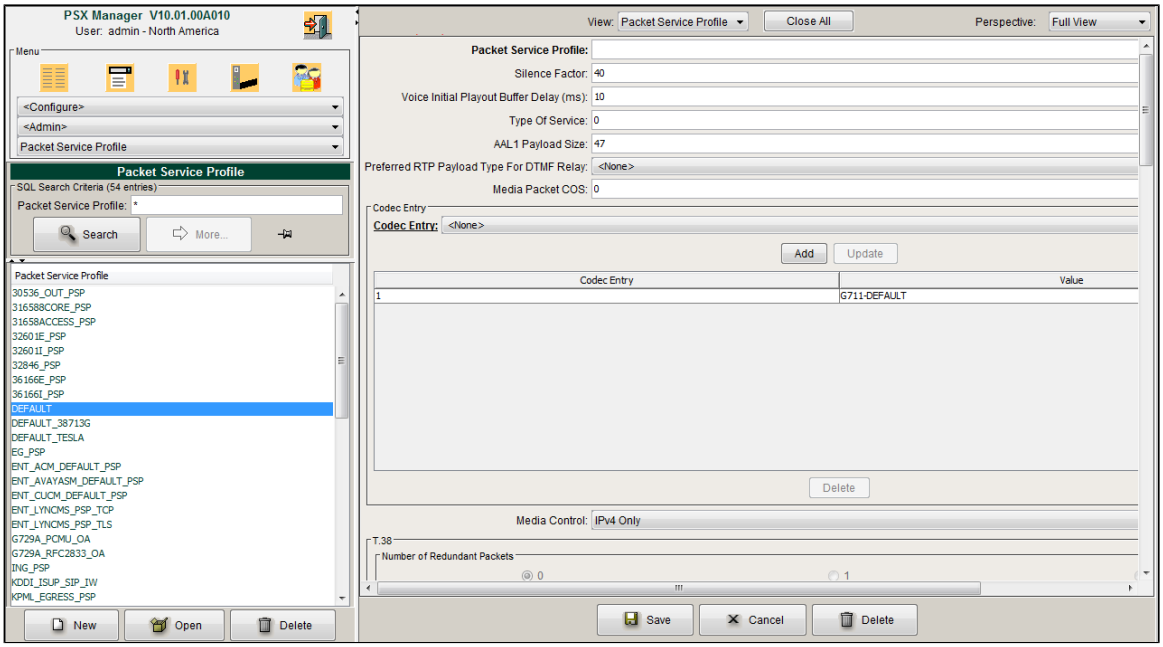
```
set profiles signaling ipSignalingProfile DEFAULT_SIP commonIpAttributes flags sendRTCPBandwidthInfo
enable
```

PSX Configuration

Configure Packet Service Profile on PSX

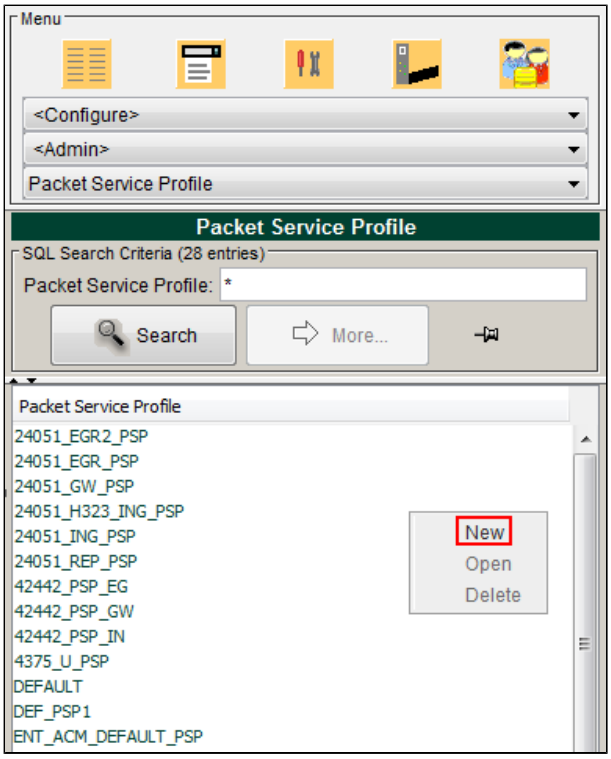
1. In the PSX Manager window, choose **Packet Service Profile** from the drop-down menu.

Figure 1: PSX - Packet Service Profile



2. To create Packet Service Profile, right click on the Selection Area.

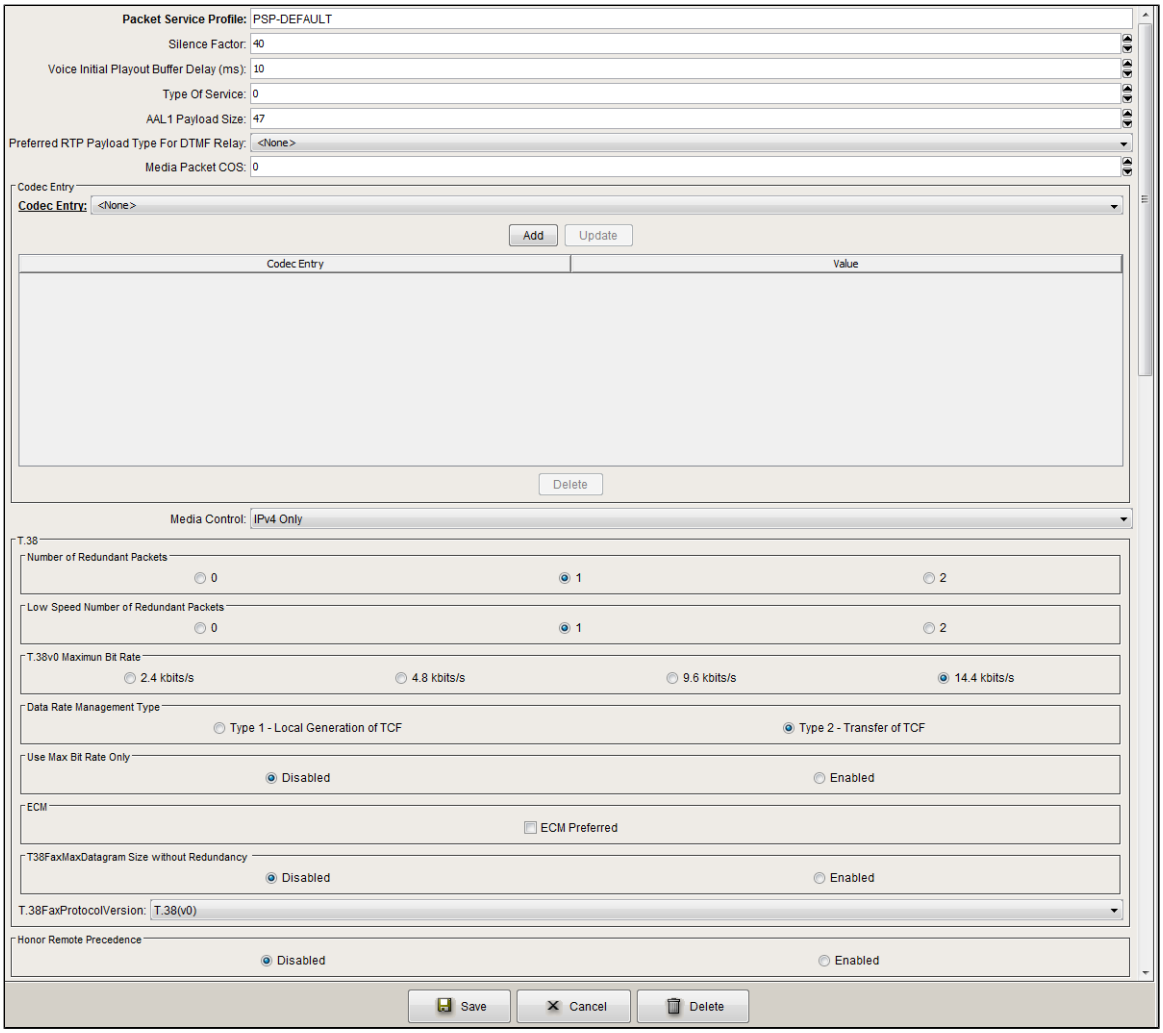
Figure 2: Selection Area



Select **New** from the resultant pop-up menu.

3. The **Packet Service Profile** window appears. Provide the **Packet Service Profile** name.

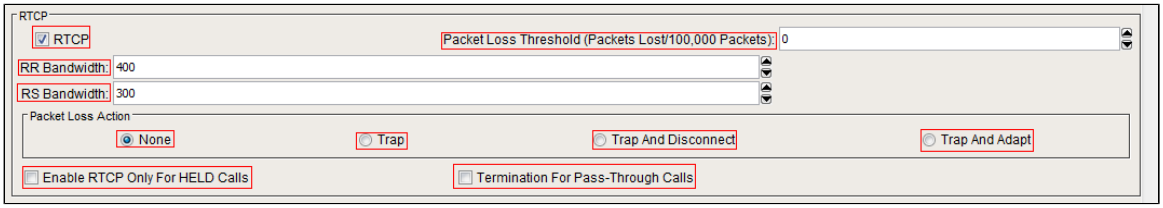
Figure 3: Packet Service Profile



Scroll down the display window to locate RTCP option.

4. Choose the RTCP option to enable it. This action enables the RTCP configurable flags.

Figure 4: PSX RTCP - Fields



The following parameters are displayed:

> All available parameters require RTCP to be enabled.

Table 1: PSX RTCP - Fields parameters

Parameter	Length/Range	Default	Description
RTCP	NA	Disabled	When selected, this option enables Real-time Transport Control Protocol (RTCP) for the channel. RTCP is used to report traffic congestion data.

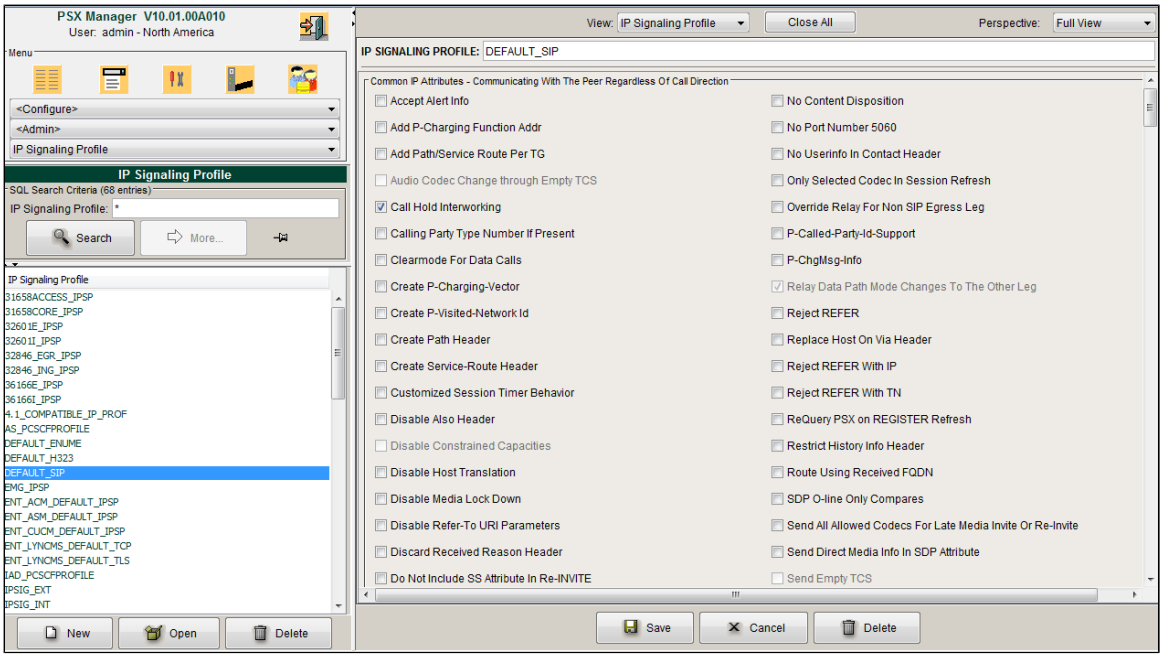
Packet Loss Threshold (Packets Lost/100,000 Packets)	NA	0	The packet loss threshold, measured in number of packets lost per 100,000 packets.
RR Bandwidth	100-4000	250	The RTCP bandwidth allocated to active data senders.
RS Bandwidth	100-3000	250	The RTCP bandwidth allocated for receivers.
Packet Loss Action	NA	None	The action to take when the packet loss threshold is exceeded on the channel. Possible actions are: • None—No action. • Trap—Generate an SNMP trap. • Trap and Disconnect—Generate an SNMP trap and disconnect the call. • Trap and Adapt—(applies to GSX only) Generate an SNMP trap and invoke an adaptation mechanism.
Enable RTCP Only For HELD Calls	NA	Disabled	If this parameter is enabled, SBC ignores the configured RR/RS values in the Packet Service Profile and send RR/RS = 0 in the offer/answer and disables RTCP when the call is active. When the call is HELD, and a RE-INVITE is sent, the CPN (SBC) uses the configured values in the Packet Service Profile for RTCP bandwidth and enables RTCP. When the call is RESUMED, the CPN (SBC) again disables RTCP by sending RR/RS=0 in the RE-INVITE. If disabled the older behavior of SBC is applicable.
Termination For Pass-Through Calls	NA	NA	When enabled, RTCP is terminated and generated locally even for pass-through calls.

5. Make the desired changes to these parameters.
6. Click **Save** to save the configuration.

Configure IP Signaling Profile on PSX

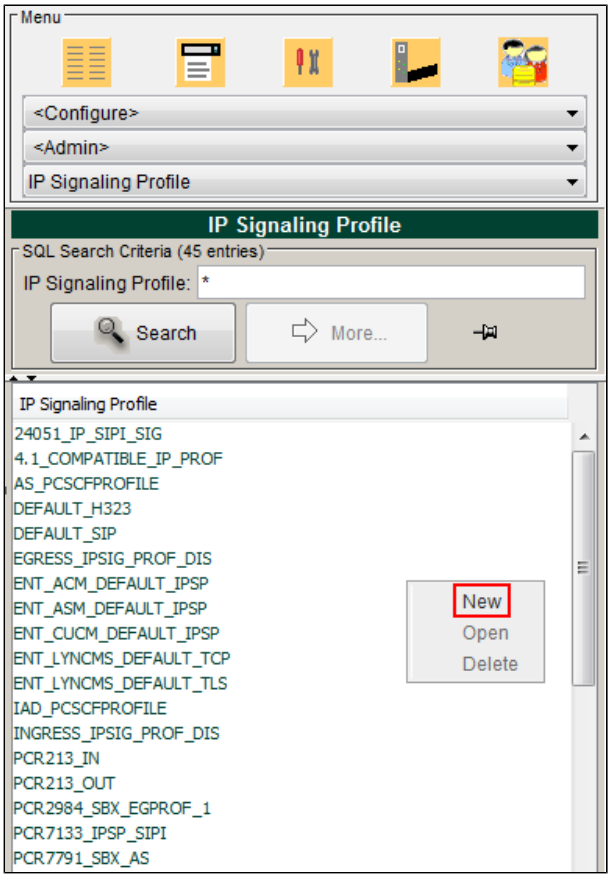
1. In the PSX Manager window, choose **IP Signaling Profile** from the drop-down menu.

   Figure 5: PSX Codec - IP Signaling Profile



2. To create IP Signaling Profile, right click on the Selection Area.

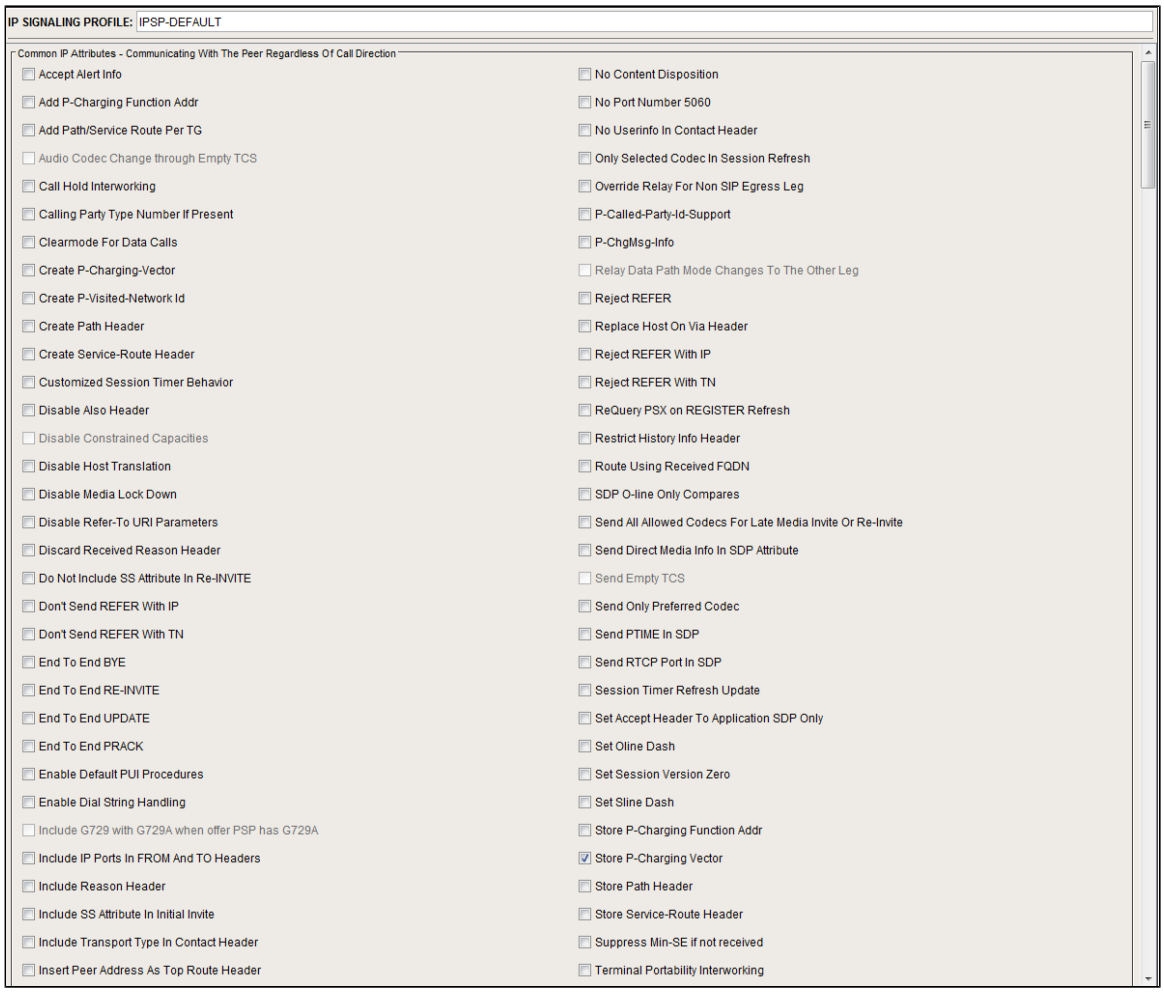
Figure 6: Selection Area



A pop-up menu appears. Select **New** from the pop-up menu.

3. The **IP Signaling Profile** window appears. Provide the **IP Signaling Profile** name.

Figure 7: IP Signaling Profile



Scroll down the display window to locate **Common IP Attributes - Communicating With The Peer Regardless Of Call Direction** sectio n.

4. Enable the "Send RTCP Bandwidth Info" flag identified in the screen capture below:

Figure 8: PSX IP Signaling Profile - Fields

The following flag is now enabled:

Table 2: PSX IP Signaling Profile - Fields parameter

Parameter	Length/Range	Default	Description
Send RTCP Bandwidth Info	NA	NA	When this flag is enabled, the RR and RS bandwidth information, b=RR: and b=RS:, is sent in the SDP offer.

5. Click **Save** to save your changes.