Migrating from IP-to-IP Application to SBC Application Guidelines

Commencing from Version 7.0 (inclusive), the "IP-to-IP" application is no longer supported. This application has been superseded by the "SBC" application, which offers a more comprehensive solution for VoIP deployments. Continued support for the IP-to-IP application will still be available (until further notice) to customers running firmware Version 6.8 or earlier.

Both the SBC and the IP-to-IP applications implement Back-to-Back User Agent (B2BUA). The device acts as a user agent for both ends (*legs*) of the SIP call (from call establishment to termination). The session negotiation is performed independently for each call leg.

The SBC application introduces more flexibility. It can work in both B2BUA as well as Stateful Proxy modes.

The main benefits of the SBC application over the IP-to-IP application include:

- The IP-to-IP application's implemented resource utilization (DSP's) is relatively higher. This is due to the fact that each call consists of two different SIP sessions and transcoding is always implemented.
- The SBC application provides the ability to increment capacity – an increasing number of simultaneous sessions.
- The SBC application provides greater capabilities to handle different types of media. For example, video, text and fax.
- The SBC application offers more enhanced security features, including advanced SIP firewall filtering rules (implemented using the Classification table).

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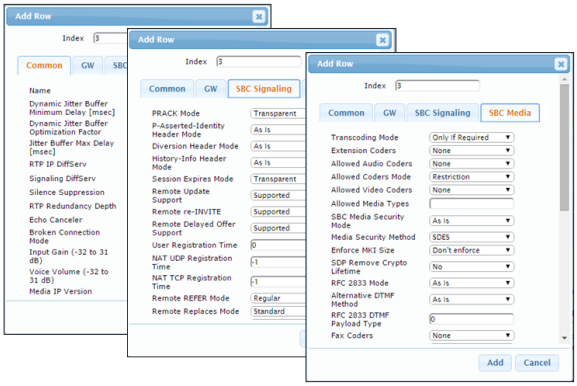
- The SBC application provides more advanced capabilities to handle SIP dialogs for both signaling and media per SIP entity, using the empowered SBC IP Profiles:



- Overall configuration is simplified in the SBC application – only a single SRD is required to represent the entire VoIP network; multiple SIP interfaces are used to represent the different SIP entities (e.g., SIP Trunk, IP PBX and remote users).

Thus, if your device is operating in the IP-to-IP application mode in Version 6.8 or earlier, AudioCodes highly recommends that you gradually migrate to the SBC application due to its inherent feature-rich benefits.

Migration Guidelines

This section provides typical guidelines for customers deploying devices running in the IP-to-IP application mode to upgrade to Version 7.0 using the SBC application.

Notes:

- This document provides only recommended guidelines; your network architecture may require additional and/or different configuration.
- This document provides examples for a partial SBC configuration; for detailed configuration, refer to the device's *User's Manual*.

Apart from the discontinued IP to IP mode of operation, release 7.0 includes additional configuration changes. Below are the main changes, which are not directly related to IP-to-IP, in the configuration model when upgrading to Version 7.0:

- Indices used in table fields for associating the field with an entity configured in a different table have been changed to row pointers using the entity's name.
- Specific tables are now associated (mandatory) with an SRD (SIP Interface, IP Group, Proxy Set, and Classification).

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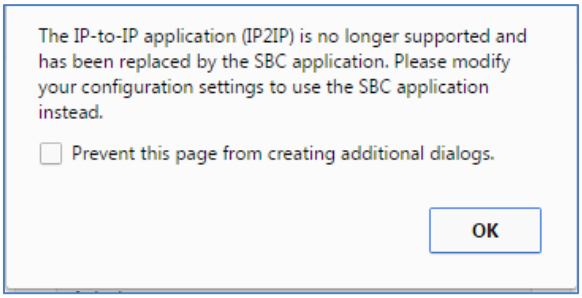
- The new SBC Routing Policy table has been added and some tables are associated (mandatory) with a Routing Policy (IP-to-IP Routing, Inbound Manipulation, and Outbound Manipulation).

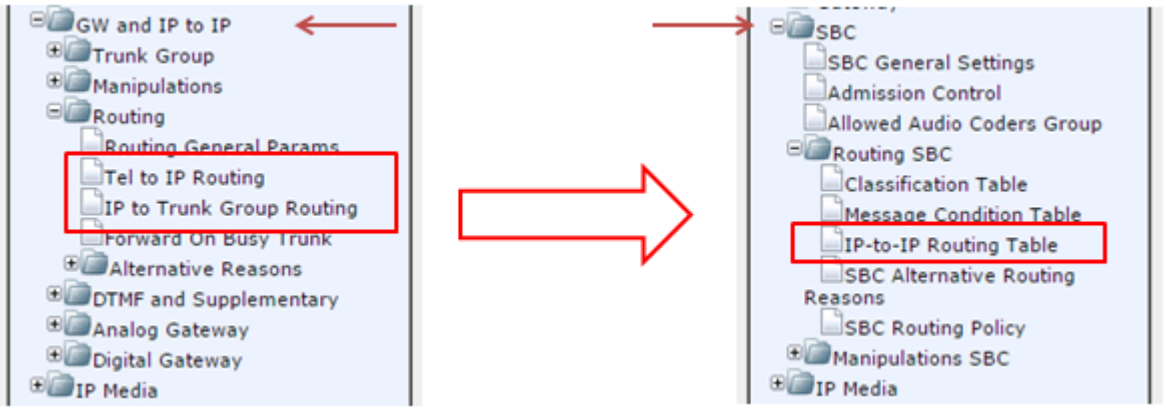
When a device which uses an IP-to-IP configuration is upgraded to 7.0, the following warning message appears on the web GUI:



The first step required when upgrading to release 7.0, is to enable the SBC application (Configuration tab > VoIP menu > Applications Enabling > Applications Enabling):

IP to IP and SBC applications have different configuration models; however, most of the configuration can be left unchanged i.e. IP Groups, Proxy Sets, PSTN fallback trunk configuration, Coder Groups and IP Profiles (if implemented). The following configuration changes are mandatory:

- As all the routing rules in the SBC application are centralized into a single table—SBC IP-to-IP Routing table—all your routing rules in the routing tables of the IP-to-IP application (Tel to IP Routing and IP to Trunk Group Routing tables) must be re-configured and combined into a single SBC IP-to-IP Routing table:



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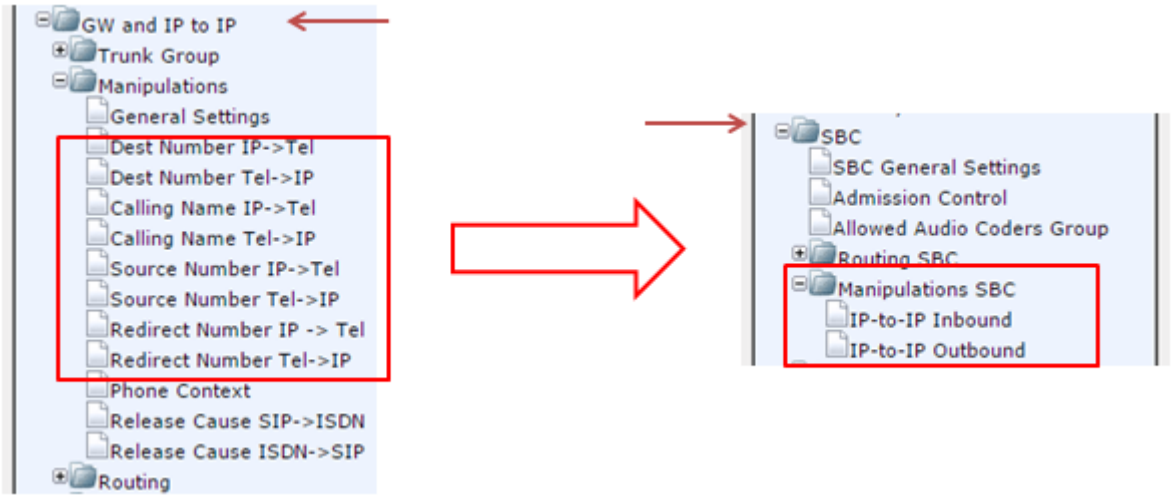
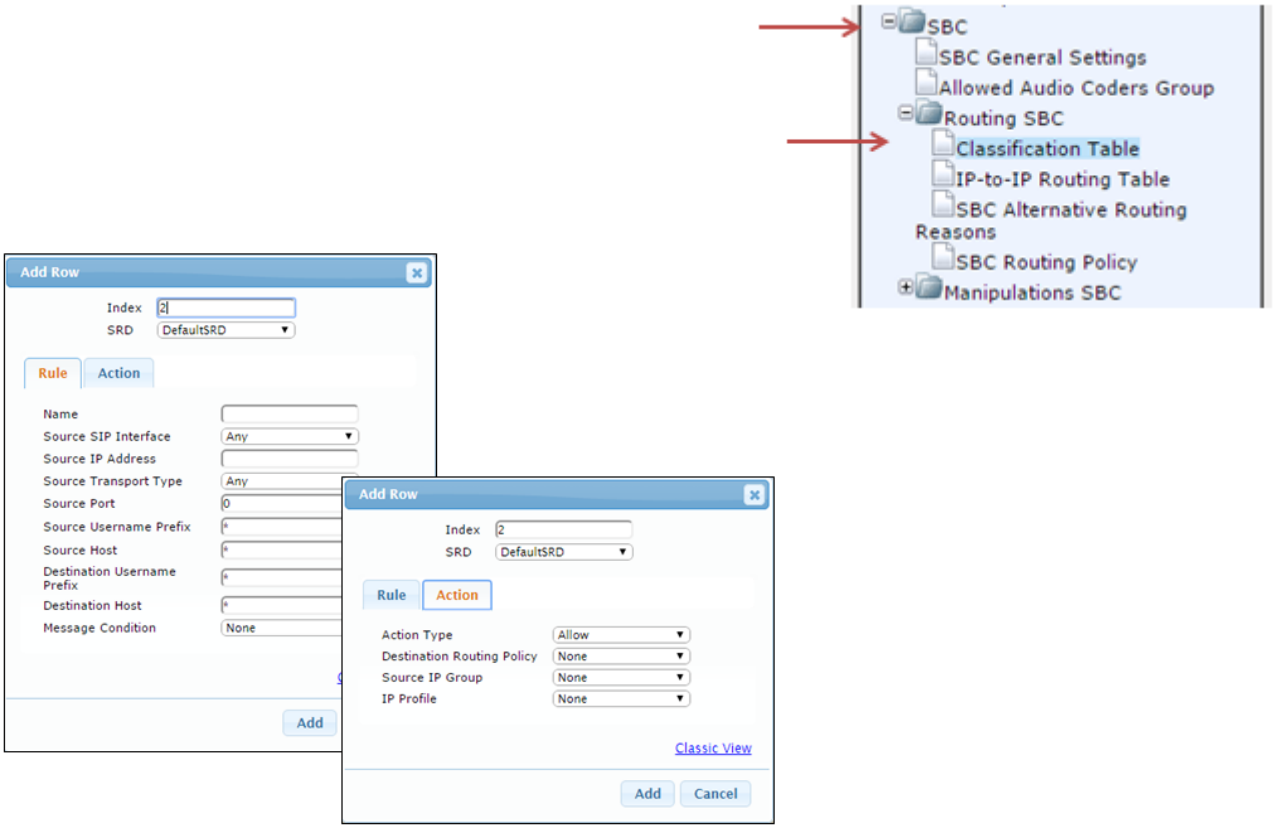
- Re-configure all your number manipulation rules (if existing) in the SBC IP-to-IP manipulation tables:



- Instead of classifying incoming SIP dialogs to IP Groups by Proxy Set, this action can now be performed using Classification rules (configured in the Classification table), thereby enhancing your VoIP security:



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