

Sonus & Audiocodes SBC Configuration Notes

Need Help?

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Introduction

Algo IP products support the open SIP telephony standard, which is not directly supported by the Microsoft Skype for Business / Teams platform.

In order to interface a SIP endpoint with a Skype for Business environment, a third-party SIP Gateway device can be used. This gateway accepts the SIP registration from the endpoint, and then also communicates with the Microsoft server, thus acting as an interface between the two.

The SIP endpoint just sees the SIP Gateway, the actual phone system behind is invisible. On the Algo device, configure the "SIP Domain (Proxy Server)" with the address of the SIP Gateway, and provide the appropriate credentials for this account (Extension, Authentication ID & Password).

This document provides an overview of registering an Algo SIP Endpoint with both Sonus & AudioCodes gateways.

Sonus SBC

Ensure that the Sonus SBC used is a SIP Gateway: specifically, that it allows a third-party SIP endpoint to register with it via SIP.

Sonus SIP Registrar – get a SIP license from Sonus. A license installed allows an endpoint to become a registered SIP client.

- SIP Domain (Proxy Server) = SBC name/address
- Extension = extension number created on Sonus
- Authentication ID = not mandatory, dependant on SBC configuration
- Authentication Password = not mandatory, dependant on SBC configuration

Note: make sure to allow inbound and/or outbound calls on the Sonus SBC.

AudioCodes SBC

Please note the configuration shown below is an example and might have more or less steps than necessary, depending on the environment.

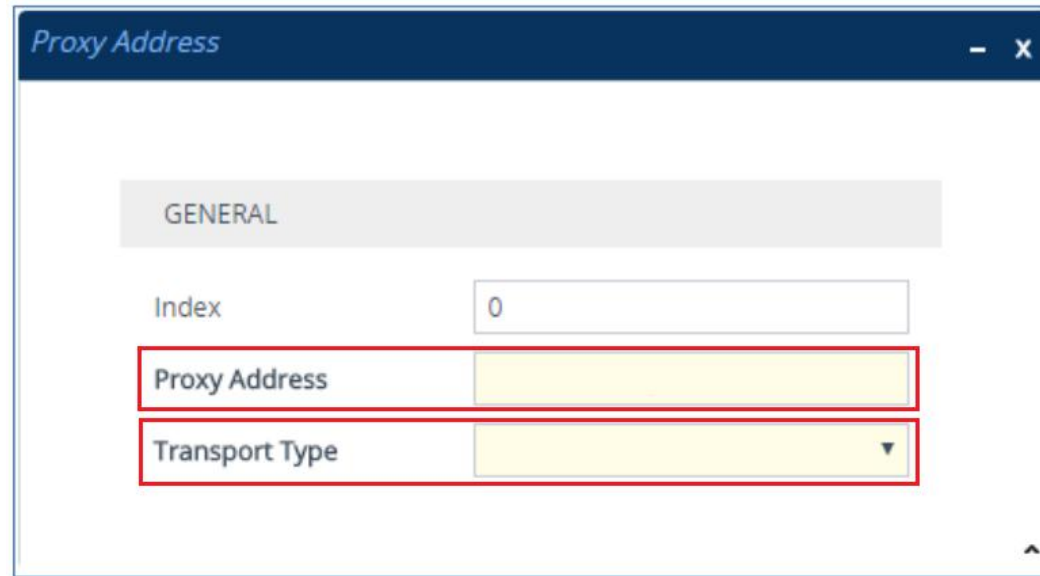
1. Navigate to Proxy Sets and configure a SIP Interface (Setup menu -> Signaling & Media tab -> Core Entities folder -> SIP Interfaces).

Parameter	Value
Index	1
Name	Algo-SIPint (suggested)
Network Interface	LAN-IF-Skype
Application Type	SBC
UDP Port	5070
TCP and TLS	0

2. Configure two Proxy Sets. One to define the destination address of the Skype for Business server and a second one for the Algo endpoint. Open the Proxy Sets table (Setup menu -> Signaling & Media tab -> Core Entities folder -> Proxy Sets).

The screenshot shows the 'Proxy Sets' configuration window. At the top, there is a dropdown menu labeled 'SRD'. Below this, the configuration is organized into several sections: 'GENERAL', 'REDUNDANCY', 'KEEP ALIVE', and 'ADVANCED'. In the 'GENERAL' section, the 'Index' is set to 1, and the 'Name' field is highlighted with a red box. Below it, the 'Gateway IPv4 SIP Interface' and 'SBC IPv4 SIP Interface' dropdown menus are also highlighted with red boxes. The 'REDUNDANCY' section includes fields for 'Redundancy Mode', 'Proxy Hot Swap', 'Proxy Load Balancing Method', and 'Min. Active Servers for Load Balancing' (set to 1). The 'KEEP ALIVE' section has fields for 'Proxy Keep-Alive', 'Proxy Keep-Alive Time [sec]', and 'Keep-Alive Failure Responses'. The 'ADVANCED' section includes 'Classification Input' (set to 'IP Address only') and 'DNS Resolve Method'. At the bottom of the window, there are 'Cancel' and 'APPLY' buttons.

3. In Proxy Address, enter the IP address of the Skype for Business server and set transport type as required. Repeat the step for the Algo endpoint.



The image shows a software window titled "Proxy Address" with a dark blue header bar containing a minus sign and a close button. Below the header is a light gray tab labeled "GENERAL". The main content area contains three input fields:

- An "Index" field with a text input containing the number "0".
- A "Proxy Address" field with a yellow highlighted text input, outlined in red.
- A "Transport Type" field with a yellow highlighted dropdown menu, outlined in red.

A small upward-pointing arrow is visible in the bottom right corner of the window's content area.

- To create an IP Group, open the IP Groups table (Setup menu -> Signaling & Media tab -> Core Entities folder -> IP Groups). Give it a Name, Type = "User", Proxy Set = use the one just created, IP Profile = Skype Interface.

The screenshot displays the ALGO web interface for configuring IP Groups. The top navigation bar includes 'ocaudiocodes', 'SETUP', 'MONITOR', and 'TROUBLESHOOT'. Below this, there are tabs for 'IP NETWORK', 'SIGNALING & MEDIA', and 'ADMINISTRATION'. The left sidebar shows a navigation tree with 'CORE ENTITIES' expanded, and 'IP Groups (14)' selected. The main content area is titled 'IP Groups (14)' and features a dropdown menu for 'SRD'. The configuration is organized into three panels: 'GENERAL', 'QUALITY OF EXPERIENCE', and 'MESSAGE MANIPULATION'. The 'GENERAL' panel includes fields for 'Index' (14), 'Name', 'Topology Location' (Down), 'Type' (User), 'Proxy Set', 'IP Profile', and 'Media Realm'. The 'QUALITY OF EXPERIENCE' panel includes 'QoS Profile' and 'Bandwidth Profile'. The 'MESSAGE MANIPULATION' panel includes 'Inbound Message Manipulation Set', 'Outbound Message Manipulation Set', and 'Message Manipulation User Defined String 1'.

5. Create the IP-to-IP Call Routing Rules, to define the routes for forwarding SIP messages received from one IP entity to another. Source IP Group is the Group created in step 4 with the Request Type = "REGISTER".

The screenshot displays the Audiocodes administration console. The top navigation bar includes 'ocaudiocodes', 'SETUP', 'MONITOR', and 'TROUBLESHOOT'. Below this, there are tabs for 'IP NETWORK', 'SIGNALING&MEDIA', and 'ADMINISTRATION'. The main content area is titled 'IP-to-IP Routing (45)'. On the left, a 'TOPOLOGY VIEW' sidebar lists various entities: Applications End, SRDs (1), SIP Interfaces (4), Media Realms (3), Proxy Sets (15), IP Groups (15), MEDIA, CODERS & PROF, SBC, Classification (0), and Routing. Under 'Routing', 'IP-to-IP Routing' is selected. The main configuration panel shows 'Alternative Route Options' set to 'Route Row'. A 'MATCH' section contains several fields: 'Source IP Group' (highlighted with a red box), 'Request Type' (also highlighted with a red box), 'Source Username Prefix', 'Source Host', 'Source Tag', 'Destination Username Prefix', 'Destination Host', and 'Destination Tag'. To the right, there are fields for 'Destination SIP Interface', 'Destination Address', 'Destination Port', 'Destination Transport Type', 'IP Group Set', 'Call Setup Rules Set ID', 'Group Policy', 'Cost Group', 'Routing Tag Name', and 'Internal Action'.

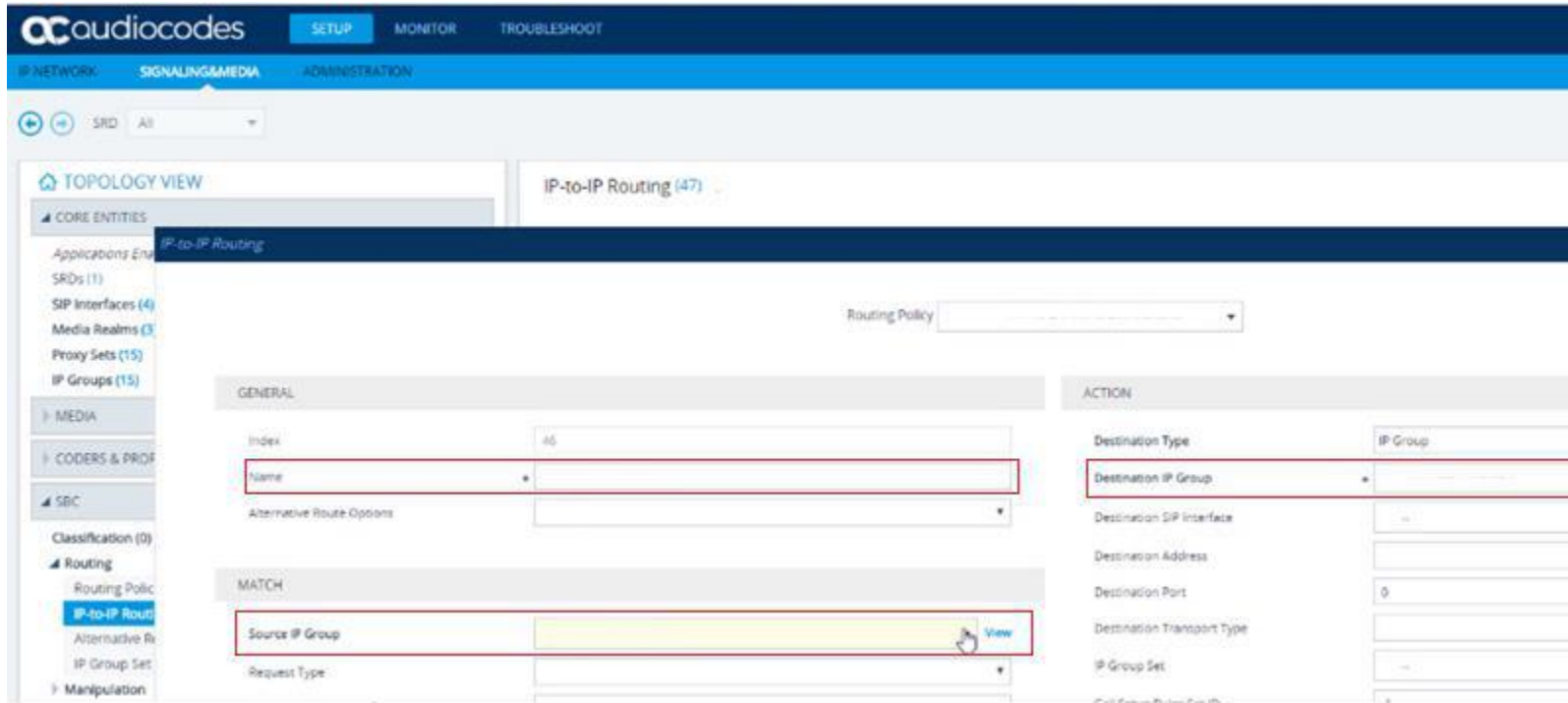
6. Highlight the IP Routing just created and use the arrows to move it to the top of the list and click save in the top right corner.

The screenshot shows the Algorouter web interface. The top navigation bar includes 'audiocodes', 'SETUP', 'MONITOR', and 'TROUBLESHOOT'. Below this, there are tabs for 'IP NETWORK', 'SIGNALING/MEDIA', and 'ADMINISTRATION'. The left sidebar is titled 'TOPOLOGY VIEW' and contains a tree structure of entities. Under 'CORE ENTITIES', there are sections for 'Applications Routing', 'SIP Interfaces (4)', 'Media Realms (3)', 'Proxy Sets (15)', and 'IP Groups (13)'. Under 'SBC', there are sections for 'Classification (2)', 'Routing', and 'Manipulation'. The 'Routing' section is expanded, showing 'Routing Policies (1)', 'IP-to-IP Routing (46)', 'Alternative Reasons (1)', and 'IP Group Set (0)'. The 'IP-to-IP Routing (46)' item is highlighted in blue. The main content area is titled 'IP-to-IP Routing (46)' and shows a table with the following columns: INDEX, NAME, ROUTING POLICY, ALTERNATIVE ROUTE OPTIONS, SOURCE IP GROUP, REQUEST TYPE, SOURCE USERNAME PREFIX, DESTINATION USERNAME PREFIX, DESTINATION TYPE, and DESTINATION GROUP. Above the table, there are buttons for 'New', 'Edit', and 'Import', along with a 'Page 1 of 3' indicator and a 'Show 20 records per page' dropdown. A mouse cursor is pointing at the 'New' button.

7. To create a new Ip-to-Ip Routing use the “+New” button on the top of the list. Enter the new extension in the Destination Username Prefix.

The screenshot displays the Algorouter web interface for configuring IP-to-IP Routing. The interface includes a top navigation bar with 'audiocodes' logo and tabs for 'SETUP', 'MONITOR', and 'TROUBLESHOOT'. Below this is a secondary navigation bar with 'IP NETWORK', 'SIGNALING & MEDIA', and 'ADMINISTRATION'. The main content area is titled 'IP-to-IP Routing' and contains a 'MATCH' section with various fields. The 'Destination Username Prefix' field is highlighted with a red box. To the right of the 'MATCH' section is a 'Destination' section with fields for 'Destination SIP Interface', 'Destination Address', 'Destination Port', 'Destination Transport Type', 'IP Group Set', 'Call Setup Rules Set ID', 'Group Policy', 'Cost Group', 'Routing Tag Name', and 'Internal Action'. A left sidebar shows a 'TOPOLOGY VIEW' with a tree structure of entities including 'CORE ENTITIES', 'MEDIA', 'CODERS & PROFILES', and 'SEC'. The 'SEC' section is expanded to show 'Routing' and 'IP-to-IP Routing (44)'.

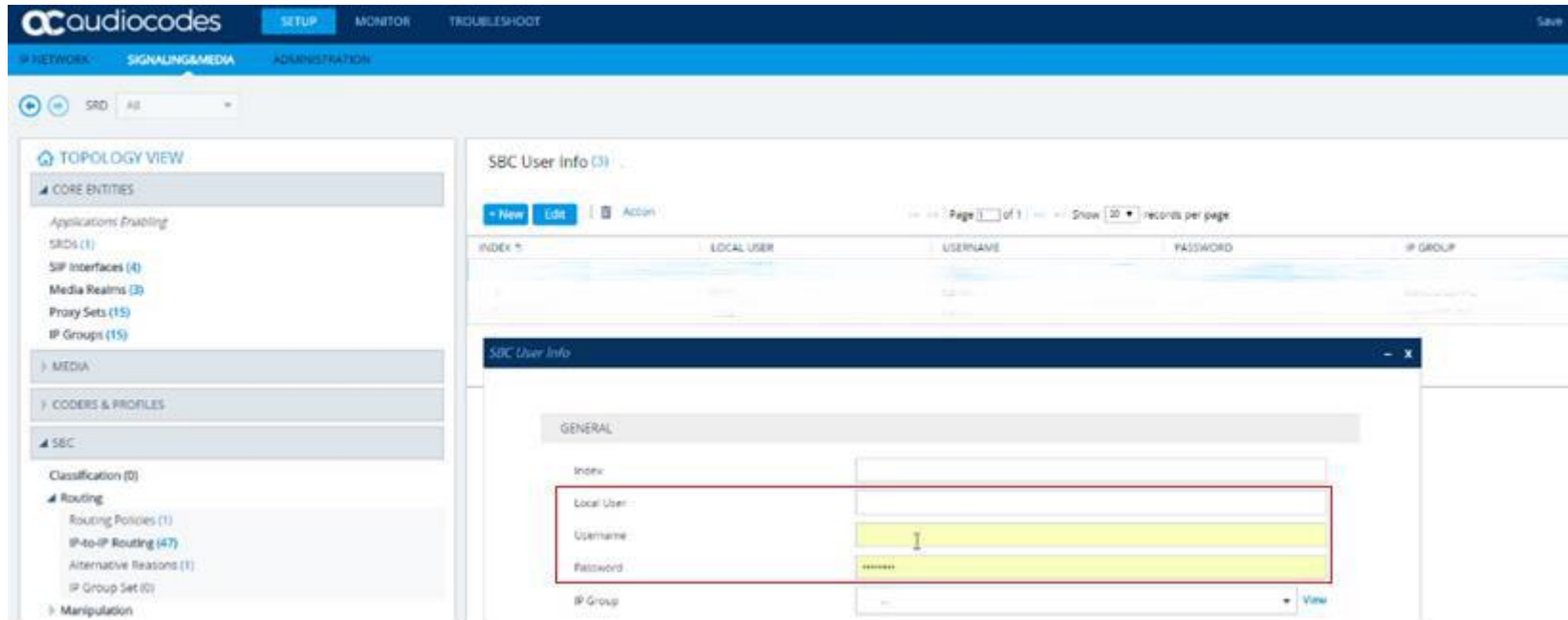
8. Set the Name, Destination IP Group (use the Group created in step 4) and Source IP Group (Skype).



9. Highlight the IP Routing just created and use the arrows to move it to the top of the list and click save in the top right corner.

The screenshot shows the Algorouter web interface. At the top, there is a navigation bar with 'audiocodes' logo and tabs for 'SETUP', 'MONITOR', and 'TROUBLESHOOT'. Below this is a sub-navigation bar with 'IP NETWORK', 'SIGNALING/MEDIA', and 'ADMINISTRATION'. A 'Save' button is highlighted in the top right corner. The main content area is titled 'IP-to-IP Routing (47)'. On the left, a 'TOPOLOGY VIEW' sidebar lists various entities, with 'IP-to-IP Routing (47)' highlighted under the 'Routing' section. The main area contains a table with columns: INDEX #, NAME, ROUTING POLICY, ALTERNATIVE ROUTE OPTIONS, SOURCE IP GROUP, REQUEST TYPE, SOURCE USERNAME PREFIX, DESTINATION USERNAME PREFIX, DESTINATION TYPE, and DESTINATION GROUP. The table lists 47 entries, with the first few rows visible. A 'New' button is visible above the table.

10. Navigate to Setup menu -> Signaling & Media tab -> SBC folder -> User Information, to create the SBC User Info. Local User will be the destination prefix created in step 7.



11. On the Algo Endpoint, under Basic Settings -> SIP, set:

- SIP Domain = SBC address and port number
- Extension = Local User
- Authentication ID = Username
- Authentication Password = Password