

AudioCodes Quick Reference Guide

Classification

Background

Classification allows the user to define how the SBC or gateway determines the source of a SIP INVITE request for routing, manipulation and for security.

What is classification?

Classification is the process in which the AudioCodes gateway or SBC uses to associate the source of a SIP dialog request with a IP Group. By associating the source of the call with a defined IP Group entity, the SBC can then use this association to determine how the call will be processed. The classification rules can not only be used to define the source of the SIP request for routing/manipulation purposes, but it can also be used to block unwanted call attempts.

How does AudioCodes classify incoming calls?

AudioCodes uses three stages when attempting to classify an incoming SIP dialog request.

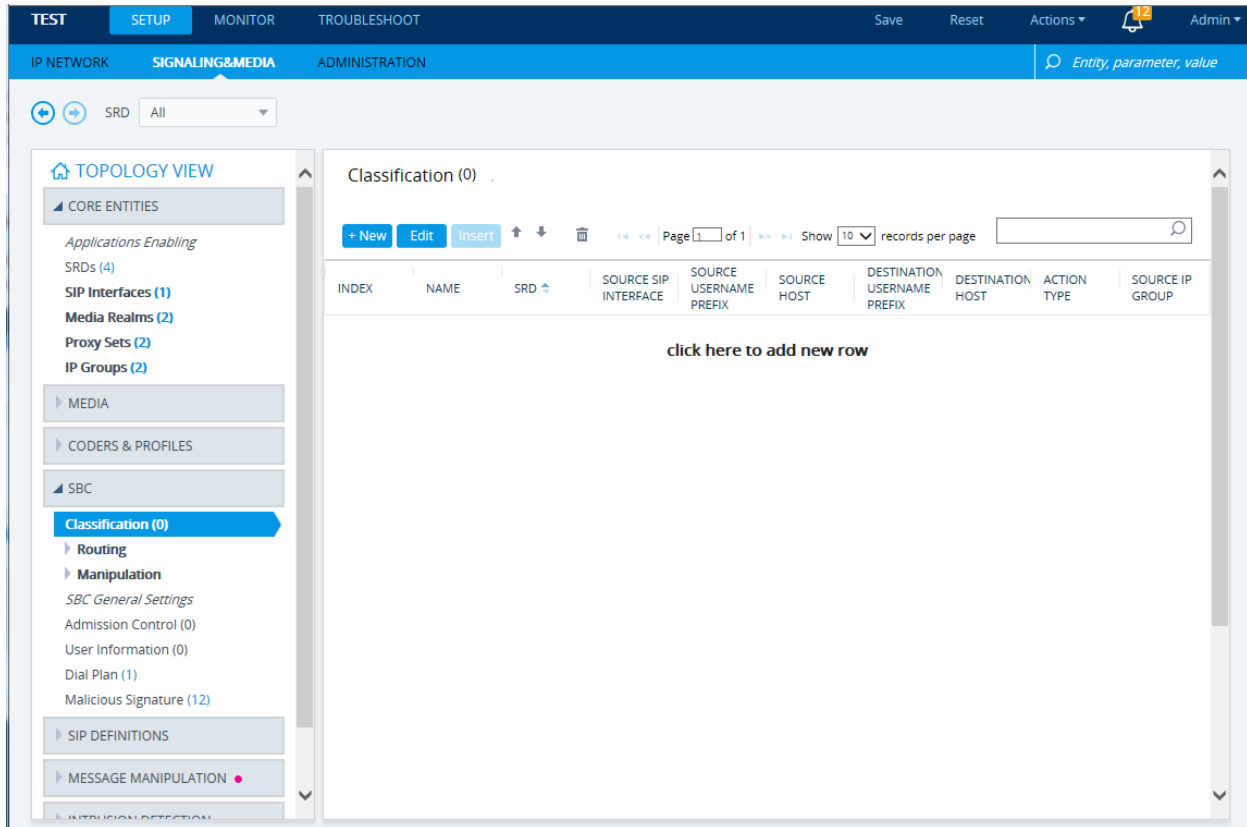
1. The first stage is to attempt to classify the SIP dialog by first comparing if the source of the request already exists in the device's registration database.
2. If the device is not found in the AOR/registration database, the source can then be compared against the defined IP Address/ports used in the ProxySets table. If the source is found to be a match with one of the defined ProxySet entries, the call will be then associated with the source IPGroup which uses that ProxySet. This option can be enabled through the "Classify by Proxy Set" definition found in the IPGroup table definition.
3. Finally, if the call does not match either the registration database or the definitions in the ProxySet table, the AudioCodes device will attempt to match the source by comparing the SIP request with the criteria defined in the Classification Table.

Are some classification options better than others?

For security purposes, it is recommended to use the Classification rules as defined in the Classification Table, as the Classification Rules allows the user to define additional SIP message characteristics that can be used to increase the strictness and security of the classification process. Classifying the SIP request source by the Proxy Set is allowed but is only recommended if the IP address of the IP Group is unknown or is configured with a FQDN.

How do I configure the classification options?

To classify calls based on the Classification Rules, the Classification table is located under Setup → Signaling & Media → SBC → Classification:



To classify calls based on the Proxy Set definitions, you will need to enable the “Classify by Proxy Set” option on the corresponding IPGroup. The IPGroup table can be found by selecting Setup → Signaling & Media → Core Entities → IP Groups:

The screenshot shows the Audiocodes Mediant 1000 management console. The main navigation bar includes 'SETUP', 'MONITOR', and 'TROUBLESHOOT'. The current page is 'SIGNALING & MEDIA' under 'ADMINISTRATION'. The left sidebar shows a 'TOPOLOGY VIEW' with 'CORE ENTITIES' expanded, listing 'SRDs (1)', 'SIP Interfaces (1)', 'Media Realms (1)', 'Proxy Sets (1)', and 'IP Groups (1)'. The 'IP Groups (1)' section is active, displaying a table with one entry: 'Default_IPG' (SRD: Default, Type: Server, SBC Operation Mode: Not Configured, Proxy Set: ProxySet_0). The 'CLASSIFY BY PROXY SET' dropdown menu is highlighted with a red circle, showing the 'Disable' option selected. Below the table, the configuration details for '#0[Default_IPG]' are shown, including 'GENERAL' (Name: Default_IPG, Type: Server, Proxy Set: # [ProxySet_0], IP Profile: # [-], Media Realm: # [-]) and 'QUALITY OF EXPERIENCE' (QoS Profile: # [-], Bandwidth Profile: # [-]).

For any further questions regarding this topic or other technical topics:

- Contact your AudioCodes Sales Engineer
- Visit our AudioCodes Services and support page at <https://www.audiocodes.com/services-support>
- Access our technical documentation library at <https://www.audiocodes.com/library/technical-documents>
- Access to AudioCodes Management Utilities is available at https://services.audiocodes.com/app/answers/detail/a_id/20
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