

## SBCs and Media Gateways

### Latest Release (LR) Versions

Version 7.6

---

## Table of Contents

---

<b>Notice</b> .....	<b>v</b>
Security Vulnerabilities.....	v
WEEE EU Directive.....	v
Customer Support.....	v
Stay in the Loop with AudioCodes.....	v
Abbreviations and Terminology.....	v
Related Documentation.....	v
Document Revision Record.....	vii
Documentation Feedback.....	vii
<b>1 Introduction</b> .....	<b>2</b>
1.1 Software Revision Record.....	2
1.2 Supported Products.....	3
1.3 Terms Representing Product Groups.....	4
1.4 Criteria per Severity Level for Constraints.....	4
<b>2 What's New!</b> .....	<b>5</b>
2.1 Version 7.60A.100.022.....	5
2.1.1 New Features.....	5
2.1.1.1 New Deployment Environment.....	5
2.1.1.2 Security and Encryption.....	5
2.1.1.3 Web Interface and CLI Enhancements.....	9
2.1.1.4 Networking.....	11
2.1.1.5 Call Handling and SIP Enhancements.....	12
2.1.1.6 Emergency Services.....	13
2.1.1.7 High Availability and System Management.....	13
2.1.1.8 Monitoring and SNMP.....	14
2.1.1.9 Debugging Improvements.....	15
2.1.1.10 Miscellaneous Updates.....	17
2.1.2 Known Constraints.....	18
<b>3 Session Capacity</b> .....	<b>19</b>
3.1 SIP Signaling and Media Capacity.....	19
3.2 Capacity per Feature.....	24
3.3 Detailed Capacity.....	26
3.3.1 Mediant 500 E-SBC.....	26
3.3.1.1 Non-Hybrid (SBC) Capacity.....	26
3.3.1.2 Hybrid (with Gateway) Capacity.....	26
3.3.2 Mediant 500L Gateway and E-SBC.....	27
3.3.2.1 Non-Hybrid (SBC) Capacity.....	27
3.3.2.2 Hybrid (with Gateway) Capacity.....	27

3.3.3	Mediant 800 Gateway & E-SBC .....	28
3.3.3.1	Mediant 800B Gateway & E-SBC .....	28
3.3.3.2	Mediant 800C Gateway & E-SBC .....	31
3.3.4	Mediant 1000B Gateway & E-SBC .....	33
3.3.4.1	Analog (FXS/FXO) Interfaces .....	33
3.3.4.2	BRI Interfaces .....	34
3.3.4.3	E1/T1 Interfaces .....	35
3.3.4.4	Media Processing Interfaces .....	36
3.3.5	Mediant 3100 Gateway & E-SBC .....	37
3.3.5.1	Gateway Capacity .....	37
3.3.5.2	Non-Hybrid (SBC) Transcoding Capacity .....	38
3.3.6	MP-1288 Analog Gateway & E-SBC .....	39
3.3.7	Mediant 2600 E-SBC .....	40
3.3.8	Mediant 4000 SBC .....	41
3.3.8.1	Forwarding Session Capacity per Feature without Transcoding .....	42
3.3.9	Mediant 4000B SBC .....	43
3.3.9.1	Forwarding Session Capacity per Feature without Transcoding .....	44
3.3.10	Mediant 9000 Rev. B / 9080 SBC .....	45
3.3.10.1	Forwarding Session Capacity per Feature without Transcoding .....	46
3.3.11	Mediant 9000 Rev. B / 9080 SBC with Media Transcoders .....	47
3.3.12	Mediant 9030 SBC .....	49
3.3.12.1	Forwarding Session Capacity per Feature without Transcoding .....	50
3.3.13	Mediant Cloud Edition (CE) SBC .....	51
3.3.13.1	Mediant CE SBC for AWS EC2 .....	51
3.3.13.2	Mediant CE SBC for Azure .....	52
3.3.13.3	Mediant CE SBC for VMware .....	53
3.3.13.4	Mediant CE SBC for GCP .....	55
3.3.14	Mediant Virtual Edition (VE) SBC .....	56
3.3.14.1	Mediant VE SBC for Hypervisors with Hyper-Threading .....	56
3.3.14.2	Mediant VE SBC for Amazon AWS EC2 .....	58
3.3.14.3	Mediant VE SBC for Azure .....	62
3.3.14.4	Mediant VE SBC for GCP .....	63
<b>4</b>	<b>Configuration Table Capacity .....</b>	<b>65</b>
<b>5</b>	<b>Supported SIP Standards .....</b>	<b>72</b>
5.1	Supported SIP RFCs .....	72
5.2	SIP Message Compliancy .....	76
5.2.1	SIP Functions .....	76
5.2.2	SIP Methods .....	76
5.2.3	SIP Headers .....	77
5.2.4	SDP Fields .....	78
5.2.5	SIP Responses .....	79

**This page is intentionally left blank.**

## Notice

Information contained in this document is believed to be accurate and reliable at the time of printing. However, due to ongoing product improvements and revisions, AudioCodes cannot guarantee accuracy of printed material after the Date Published nor can it accept responsibility for errors or omissions. Updates to this document can be downloaded from <https://www.audiocodes.com/library/technical-documents>.

This document is subject to change without notice.

Date Published: May-07-2025

## Security Vulnerabilities

All security vulnerabilities should be reported to [vulnerability@audiocodes.com](mailto:vulnerability@audiocodes.com).

## WEEE EU Directive

Pursuant to the WEEE EU Directive, electronic and electrical waste must not be disposed of with unsorted waste. Please contact your local recycling authority for disposal of this product.

## Customer Support

Customer technical support and services are provided by AudioCodes or by an authorized AudioCodes Service Partner. For more information on how to buy technical support for AudioCodes products and for contact information, please visit our website at <https://www.audiocodes.com/services-support/maintenance-and-support>.

## Stay in the Loop with AudioCodes



## Abbreviations and Terminology

Each abbreviation, unless widely used, is spelled out in full when first used.

## Related Documentation

Document Name
<b>Installation Manuals</b>
MP-1288 High-Density Analog Media Gateway Hardware Installation Manual
Mediant 500 E-SBC Hardware Installation Manual
Mediant 500L Gateway and E-SBC Hardware Installation Manual
Mediant 800 Gateway and E-SBC Hardware Installation Manual
Mediant 1000B Gateway and E-SBC Hardware Installation Manual
Mediant 3100 Gateway & E-SBC Hardware Installation Manual

<b>Document Name</b>
Mediant 2600 E-SBC Hardware Installation Manual
Mediant 4000 SBC Hardware Installation Manual
Mediant 9000 SBC Hardware Installation Manual
Mediant Cloud Edition SBC for Amazon AWS Installation Manual Ver. 7.6
Mediant Cloud Edition SBC for Microsoft Azure Installation Manual
Mediant Cloud Edition SBC for Google Cloud Installation Manual
Mediant Cloud Edition SBC for OpenStack-VMware-Private Cloud Installation Manual
Mediant Virtual Edition SBC for Amazon AWS Installation Manual
Mediant Virtual Edition SBC for Microsoft Azure Installation Manual
Mediant Virtual Edition SBC for Google Cloud Installation Manual
Mediant Virtual Edition SBC for VMware-KVM-HyperV Installation Manual
Mediant Virtual Edition SBC for Container Environments Installation Manual
<b>User's Manuals</b>
Mediant 500L Gateway and E-SBC User's Manual
Mediant 500 E-SBC User's Manual
Mediant 800 Gateway and E-SBC User's Manual
Mediant 1000B Gateway and E-SBC User's Manual
MP-1288 High-Density Analog Media Gateway User's Manual
Mediant 3100 Gateway & E-SBC User's Manual
Mediant 2600 E-SBC User's Manual
Mediant 4000 SBC User's Manual
Mediant 9000 SBC User's Manual
Mediant Software SBC User's Manual
SBC-Gateway CLI Reference Guide
Stack Manager for Mediant VE-CE SBC User's Manual
<b>Complementary Documents</b>
SBC-Gateway Performance Monitoring Reference Guide
SBC-Gateway SNMP Alarms Reference Guide
SBC-Gateway SNMP Reference Guide
SBC-Gateway-MSBR REST API Reference Guide
SBC-Gateway Recommended Security Guidelines
SIP Message Manipulation Syntax Reference Guide
CAS Protocol Table Configuration Note
Automatic Provisioning of Mediant VE-CE SBC via Cloud-Init Configuration Note

## Document Revision Record

LTRT	Description
27756	Initial document release for Version 7.6 (7.60A.100.022).

## Documentation Feedback

AudioCodes strives to provide high-quality documentation. If you have any suggestions or notice any errors in this document, please complete the Documentation Feedback form available on our website at <https://online.audiocodes.com/documentation-feedback>.

# 1 Introduction

This document describes the Latest Release (LR) 7.6 versions of AudioCodes' Session Border Controllers (SBC) and Media Gateways.



- Some of the features mentioned in this document are available only if the relevant software License Key has been purchased from AudioCodes and is installed on the device. For a list of available License Keys that can be purchased, please contact your AudioCodes sales representative.
- Open-source software may have been added and/or amended. For further information, contact your AudioCodes sales representative.
- Updates to this document may be made due to significant information discovered after the release or too late in the release cycle to be otherwise included in this release documentation. For an updated document version, go to AudioCodes [website](#).



For Mediant 90xx, Mediant VE, and Mediant CE SBCs:

If you are upgrading from a version earlier than 7.40A.250.001, please note that the software update files (.cmp) are now digitally signed.

Before proceeding with the upgrade, review the upgrade prerequisites and instructions in the document [Mediant SW-90xx SBC Signed-CMP Upgrade Procedure Configuration Note](#).



The Media Transcoding Cluster (MTC) feature is supported **only** on Mediant 9080 Rev. **A/B** SBC models.

## 1.1 Software Revision Record

The following table lists the released 7.6 LR software versions. It also shows the OVOC and Stack Manager versions that are compatible per release.



The latest software versions are available in [AudioCodes' Services Portal](#) (registered Customers only).

**Table 1: Software Revision Record**

Device Version	Release Date	Compatible Versions	
		OVOC	Stack Manager
7.60A.100.022 (7.6.100)	7 May, 2025	<ul style="list-style-type: none"> <li><b>Ver. 8.2:</b> 8.2.3122 or later</li> <li><b>Ver. 8.4:</b> 8.4.591 or later</li> </ul> <p><b>Note:</b> OVOC is not compatible with Containerized SBCs.</p>	3.8.9 or later



- If you plan to use AudioCodes One Voice Operations Center (OVOC) with a specific device version, first upgrade your OVOC to a compatible version (see table above) before upgrading your device to the specific device version.
- If you're using OVOC to manage a centralized license pool (Fixed, Floating, or Flex), first upgrade OVOC to a compatible version (see table above) before upgrading the devices in the pool to the specific device version. Failure to do this removes the devices from the centralized license pool.



## 1.2 Supported Products

The following table lists the SBC and Media Gateway products supported in this release.



- Product support and hardware configurations may change without notice. Currently available hardware configurations are listed in AudioCodes Price Book. For further enquiries, contact your AudioCodes sales representative.
- Figures shown in the table below are maximum values per interface. For available hardware configurations, including combinations of supported interfaces, contact your AudioCodes sales representative.

**Table 2: SBC and Media Gateway Products Supported in Release 7.6**

Product	Telephony Interfaces			Ethernet Interfaces	USB	OSN
	FXS/FXO	BRI	E1/T1			
<b>Hybrid SBC and Gateway Series</b>						
Mediant 500 Gateway & E-SBC	-	-	1/1	4 GE	1	-
Mediant 500L Gateway & E-SBC	4/4	4	-	4 GE	1	-
Mediant 800B Gateway & E-SBC	12/12	8	2	4 GE / 8 FE	2	√
Mediant 800C Gateway & E-SBC	12/12	8	4	4 GE / 8 FE	2	√
Mediant 1000B Gateway & E-SBC	24/24	20	6/8	7 GE	-	√
MP-1288 Gateway & E-SBC	288/0	-	-	2 GE	1	-
Mediant 3100 Gateway & E-SBC	-	-	64	8 GE	1	-
<b>SBC Series</b>						
Mediant 2600 E-SBC	-	-	-	8 GE	-	-
Mediant 4000 SBC	-	-	-	8 GE	-	-
Mediant 4000B SBC	-	-	-	8 GE	-	√
Mediant 9030 SBC	-	-	-	12 GE	-	-
Mediant 9080A/B SBC	-	-	-	12 GE	-	-
Mediant 9080C SBC	-	-	-	12 GE	-	-
Mediant VE SBC	-	-	-	12 GE	-	-
Mediant CE SBC	-	-	-	12 GE	-	-

## 1.3 Terms Representing Product Groups

Throughout this document, the following terms are used to refer to groups of AudioCodes products for feature applicability. Where applicability is specific to a product, the name of the product is used.

**Table 3: Terms Representing Product Groups**

Term	Product
<i>Analog</i>	Products with analog interfaces (FXS or FXO): <ul style="list-style-type: none"> <li>■ MP-1288</li> <li>■ Mediant 500L Gateway &amp; E-SBC</li> <li>■ Mediant 800 Gateway &amp; E-SBC (Rev. B and C)</li> <li>■ Mediant 1000B Gateway &amp; E-SBC</li> </ul>
<i>Device</i>	All products
<i>Digital</i>	Products with digital PSTN interfaces (ISDN BRI or PRI): <ul style="list-style-type: none"> <li>■ Mediant 500 Gateway &amp; E-SBC</li> <li>■ Mediant 500L Gateway &amp; E-SBC</li> <li>■ Mediant 800 Gateway &amp; E-SBC (Rev.</li> <li>■ Mediant 1000B Gateway &amp; E-SBC B and C)</li> <li>■ Mediant 3100 Gateway &amp; E-SBC</li> </ul>
<i>Mediant 90xx</i>	<ul style="list-style-type: none"> <li>■ Mediant 9000</li> <li>■ Mediant 9000 Rev. B</li> <li>■ Mediant 9030</li> <li>■ Mediant 9080 Rev. A/B/C</li> </ul>
<i>Mediant Software</i>	Software-based products: <ul style="list-style-type: none"> <li>■ Mediant VE SBC</li> <li>■ Mediant CE SBC</li> </ul>

## 1.4 Criteria per Severity Level for Constraints

The severity level for known and resolved constraints is determined according to the criteria below:

**Table 4: Criteria per Severity Level for Known and Resolved Constraints**

Severity Level	Criteria
<b>Low</b>	Minor impact on service capacity, functionality, or degradation in voice quality.
<b>Medium (Default)</b>	Reduces capacity, limits functionality, or degradation in voice quality, but maintaining customer service.
<b>High</b>	May disrupt Customer service in the described scenario.
<b>Critical</b>	May disrupt Customer service regardless of the specific usage scenario.

## 2 What's New!

This section describes the new features, known constraints and resolved constraints of the released 7.6 software versions.



Currently, Containerized SBCs don't support the Floating and Flex licensing features.

### 2.1 Version 7.60A.100.022

This is the initial version of Release 7.6 and includes new features and known constraints.

#### 2.1.1 New Features

This section describes the new features introduced in this version.

##### 2.1.1.1 New Deployment Environment

###### 2.1.1.1.1 Mediant VE/CE Deployment using Docker Containers

Mediant VE and CE SBCs can be deployed as Docker containers on generic Linux host machines. Customers can choose Linux OS distribution from a list of supported ones, access the Linux terminal on the host machine, and install third-party utilities or agents alongside the Mediant VE / CE software.

For hardware and software requirements for host machines, refer to the *Mediant VE for Container Environment Installation Manual*.



Currently, this installation method is officially supported only in Microsoft Azure environments.

**Applicable Applications:** SBC

**Applicable Products:** Mediant VE/CE

##### 2.1.1.2 Security and Encryption

###### 2.1.1.2.1 FIPS Mode Support by Mediant 9080 and Mediant VE/CE SBCs

FIPS mode is now officially supported by the Mediant 9080, Mediant VE, and Mediant CE SBCs. These devices comply with Federal Information Processing Standards (FIPS) 140-3, which is a security standard specified by the United States Government used to validate cryptographic modules.

The FIPS standards specify best practices and security requirements for implementing crypto algorithms, encryption schemes, handling important data, and working with various operating systems and hardware, whenever cryptographic-based security systems must be used to protect sensitive, valuable data.

**Applicable Application:** SBC.

**Applicable Products:** Mediant 9080; Mediant VE/CE

### 2.1.1.2.2 Secured HA Maintenance Communication

High Availability (HA) systems now support secured communication between active and redundant devices. This feature encrypts all data exchanges, including file transfers and other packets, using TLS (HTTPS). Communication through the HA Maintenance interface, which manages all maintenance operations between HA devices, is now fully secured.

This feature is enabled using the following new parameter:

- **Web:** 'HA Secured Connectivity Mode'
- **CLI:** `configure network > high-availability settings > ha-secured-connectivity`
- **ini File:** [HASecuredConnectivityMode]



The device must be restarted with a flash-to-burn operation for these parameter settings to take effect.

**Applicable Applications:** SBC

**Applicable Products:** HA

### 2.1.1.2.3 Password Obfuscation Configurable through Web Interface

Password obfuscation using an encryption key can now be configured through the device's Web interface. Previously, this feature could only be configured through CLI or the Configuration Package file.

Configuration for password obfuscation is done on the Security Settings page (**Setup** menu > **IP Network** tab > **Security** folder > **Security Settings**) and includes the following new parameters and buttons:

- 'Encryption Key' - manually defines the encryption key.
- **Generate Encryption Key** button – triggers the device to generate an encryption key.
- **Clear Encryption Key** button - deletes the encryption key and disables password obfuscation.

**Applicable Applications:** All

**Applicable Products:** All

### 2.1.1.2.4 Enhanced Security with Additional SSH Cipher Key Algorithms

To strengthen secure access to the device's CLI over SSH, new key exchange algorithms have been added. These enhancements improve cryptographic security and compatibility with the latest security standards.

The newly supported algorithms include the following:

- **Diffie-Hellman (DH):**
  - diffie-hellman-group14-sha256
  - diffie-hellman-group16-sha512
- **Elliptic-Curve Diffie-Hellman (ECDH):**
  - ecdh-sha2-nistp256
  - ecdh-sha2-nistp384
  - ecdh-sha2-nistp521
- **Curve25519:**
  - curve25519-sha256

These algorithms can be chosen using the existing 'Kex Algorithms String' parameter (`configure system > cli-settings > sshkex-algorithms-string / [SSHKexAlgorithmsString]`).

Previously, only these algorithms were supported: `diffie-hellman-group-exchange-sha256`, `diffie-hellman-group14-sha1`, and `diffie-hellman-group1-sha1`.

**Applicable Applications:** All

**Applicable Products:** All

#### 2.1.1.2.5 Mutual TLS (mTLS) Authentication for REST-Based Management

The device's REST-based management interface now supports Mutual TLS Authentication (mTLS), enabling secure access based on the certificate's subject name—either the Subject Alternative Name (SAN) or Common Name (CN).

When a client attempts to connect to the REST interface via TLS, the device checks whether the subject name in the client's certificate matches a TLS subject name configured for any user in the Local Users table. If a match is found, the client is automatically authenticated, without needing to provide credentials (username or password). The authenticated client is granted the user level of the matching user in the Local Users table.

This feature is configured using the following new parameter in the Local Users table:

- **Web:** 'TLS Subject Name'
- **CLI:** `tls-subject-name`

**Note:**

- The TLS Subject Name for each user in the Local Users table must be unique.
- Password configuration is not mandatory for users with a configured TLS Subject Name in the Local Users table.
- Additional configuration steps include:
  - The client's TLS certificate must be imported into the device's trusted root certificate store.
  - The relevant Web Interface in the Web Interfaces table must be assigned a TLS Context and the 'Require Client Certificate' set to **Yes**.
  - The client-side TLS certificate and key must be added to the third-party REST management tool (e.g., Postman) or web browser.
- The `[HTTPSRequireClientCertificate]` parameter is now obsolete.

**Applicable Applications:** All

**Applicable Products:** All

### 2.1.1.2.6 TLS Private Keys Stored Encrypted

The device can now be configured to store the private TLS keys in encrypted format, enhancing security, particularly in container-based deployments where host disk files may be accessible to users.

This feature can be configured by the following new parameter:

- **CLI:** `configure network > security-settings > encrypt-private-key-files`
- **Ini File:** [EncryptPrivateKeyFiles]



- For new device installations of Version SBC7.6.100 and later, private TLS keys are stored on disk in encrypted format. For devices that are upgraded from an earlier version, the feature is disabled by default (and can be manually enabled as described previously).
- If the feature is enabled and you downgrade to an earlier version, the TLS keys are deleted. To prevent this, disable the feature prior to downgrading.

**Applicable Applications:** SBC

**Applicable Products:** Mediant Software

### 2.1.1.2.7 Enhanced Zeroization with Deletion of TLS Certificates

The `write factory` CLI command provides a new option `clear-keys-and-certs`, which deletes all security files--private keys (pkey), certificates (cert), and trusted root certificates (root)—of all the configured TLS Contexts:

```
# write factory clear-keys-and-certs
```

The existing command `clear security-files` has been updated to also delete these files (and then triggers a device restart).

**Applicable Applications:** All

**Applicable Products:** All

### 2.1.1.2.8 Authority Information Access (AIA) Field Extension in TLS Certificates

The device now supports configuring the Authority Information Access (AIA) field when generating X.509 Certificate Signing Requests (CSRs). The AIA extension provides a URL that clients can use during the TLS handshake to verify the validity of the device's certificate.

For example, the AIA field can include:

- CA Issuers URL to the issuing CA's certificate, enabling clients to download and validate the full certificate chain. This is useful when the client lacks the intermediate or root CA certificate in its trusted store.
- OCSP Responder URL to an OCSP server, allowing clients to check if the certificate is valid or has been revoked.

This feature is configured by the following new parameter on the TLS Contexts > Change Certificate page:

- **Web Interface:** 'Authority Information Access - OCSP URI'
- **CLI:** `configure network > tls > certificate create set-authority-information-access-ocsp`

**Applicable Applications:** All

**Applicable Products:** All

### 2.1.1.3 Web Interface and CLI Enhancements

#### 2.1.1.3.1 Improved User Experience in Web Interface

The following enhancements have been made to the device's Web interface:

- **Simplified Boolean Parameter Selection:** Check boxes have replaced drop-down lists for parameters with Enable/Disable or Yes/No options, improving ease of use.
- **Redesigned Tables:** The following tables have been redesigned to align with the standard table style of the Web interface:
  - **Coders table** (Setup menu > Signaling & Media tab > Coders & Profiles folder > Coders Groups)
  - **Management Access List table** (Setup menu > Administration tab > Web & CLI folder > Management Access List)



The access list is deleted if the device is downgraded to a version earlier than 7.40A.501.230.

- **Enhanced Row Selection for Global Parameters:** Parameters referencing configuration table rows now feature drop-down lists to select row names directly, replacing the previous requirement to enter row index numbers manually.
- **Improved Numerical Value Entry:** Numeric parameter fields now include spin boxes (up/down arrows), allowing users to easily select values without typing them.
- **Real-Time Validation Feedback:** Entering an invalid parameter value triggers a pop-up message displaying the valid options.
- **Hover-Over Tooltips:** All fields now include tooltips that appear when hovering the mouse over them, offering quick guidance.
- **Password Entry Enhancements:** Password fields now include a toggle (eye) icon to show or hide when typing the passwords. Note that after clicking **Apply**, the password is masked (asterisks or dots), and the toggle will no longer reveal it.
- **Password Confirmation:** A Confirm Password field appears for highly sensitive password fields, ensuring users type the correct password. This is also supported in the CLI.
- **Conditional Apply Button Activation:** The **Apply** button becomes available only when all parameters' values on the page are valid; otherwise, it remains grayed out.
- **Improved Reversion Behavior:** Clicking the **Cancel** button (instead of **Apply**) restores parameters to their previously saved values.
- **Autocomplete:** Parameters referencing rows in tables (row pointers) now support autocomplete, enabling users to quickly find and select the row name from the drop-down list as they type.
- **Interface Simplifications:**
  - The SRD filter box has been removed to reduce clutter and free up space.
  - The back and forward navigation arrows for previously opened pages have been removed for a cleaner interface (browser's back and forward buttons can be used instead).
- **Full Page Path in URI:** The browser's address bar now displays the complete path and page name of the currently opened page., ensuring users can see their exact location within the Web interface (e.g., <http://10.15.8.91/setup/signaling/lpGroups>).

- **Parameter Search Update:**
  - Searches can now be done using the corresponding CLI command name. Previously, only the Web name or ini file parameter name were supported.
  - Searches now apply only to parameter names and manually typed in values such as IP addresses, row name or description. Previously, it also applied to all value types.
- **Customized Access Levels for All Web Pages:** Read-write and read-only privileges for management user levels (Monitor, Administrator, and Security Administrator) can now be configured on all Web interface pages, providing greater control over user access and permissions.

**Applicable Applications:** All

**Applicable Products:** All

#### 2.1.1.3.2 Easier-to-Use Software Upgrade Wizard in Web Interface

The Software Upgrade wizard in the Web interface has been enhanced to simplify the device software upgrade process. The wizard is now dedicated solely to upgrading the device's software (.cmp file). Previously, it also supported uploading ini and Auxiliary files (e.g., Dial Plan file). Uploading ini files is now uploaded using the Configuration File page, while auxiliary files are uploaded using the Auxiliary Files page.

**Applicable Applications:** All

**Applicable Products:**

#### 2.1.1.3.3 Copy-to-Clipboard Icon for TLS Certificate Signing Requests

The device now provides a seamless way to copy the generated Certificate Signing Request (CSR), eliminating the risk of accidentally omitting lines or text. This enhancement includes the following:

- **Web Interface:** The Change Certificates page (TLS Contexts table > Change Certificate link) now features a copy-to-clipboard icon alongside the generated CSR, allowing users to copy it effortlessly.
- **CLI:** The `certificate create signing-request` command has been enhanced to enable users to send the CSR directly to a remote server, by specifying the server's URL and the CSR file name (e.g., my.csr).

**Applicable Applications:** All

**Applicable Products:** All

#### 2.1.1.3.4 CLI Error Message for Out-of-Range Values

For CLI commands that require an integer within a specific range, the CLI's error message now displays the valid range when the user enters a value outside of it, for example:

```
(cli-settings)# window-height 70000
Invalid argument "70000". Value must be in range [0-65535]
```

**Applicable Application:** All.

**Applicable Products:** All



### 2.1.1.3.5 Display of Configured Users through CLI

The existing `show users` CLI command, which previously only displayed currently logged-in users, now includes a new optional sub-command `all`. This optional sub-command displays not only the currently logged-in users, but also all the configured users (in the Local Users table).

The output shows important password-related details, including the last password change, password expiration date, and status.

```
# show users all
[Active Sessions]:
[0]*   ssh      Admin      10.11.2.2      0d00h00m12s
[0]    WEB      Admin      10.11.2.2      0d00h17m06s

[All Users]:
Index  Username  PW Last Change      PW Expr. Date  Status
[0]    Admin    2025-02-23 07:25:05  Unlimited      Unlimited
[1]    User     2025-02-23 07:25:05  Unlimited      Unlimited
```

**Applicable Applications:** All

**Applicable Products:** All

### 2.1.1.3.6 FAE Page Replaced by Admin Page

The FAE page, which was accessed by appending "FAE" to the device's IP address in the browser's URL field (e.g., 10.1.1.1/FAE) has been deprecated and replaced with the Admin Page. The Admin Page is accessed by appending "AdminPage" to the device's IP address in the browser's URL field (e.g., 10.1.1.1/AdminPage). The Admin Page now consolidates all the functionality that the FAE page offered.

**Applicable Applications:** All

**Applicable Products:** All

## 2.1.1.4 Networking

### 2.1.1.4.1 DHCP Support for IPv4 IP Interfaces

The device now supports dynamic IPv4 addressing for local IP network interfaces configured in the IP Interfaces table. With this enhancement, the device can function as a DHCP client, automatically obtaining an IPv4 address and prefix length from an external DHCP server. Additionally, it can retrieve optional parameters such as DNS addresses and the Default Gateway address.

This feature is enabled by the new **IPv4 DHCP** option for the 'Interface Mode' parameter in the IP Interfaces table.

The feature also introduces a new SNMP alarm, `acIPv4ErrorAlarm` (OID 1.3.6.1.4.1.5003.9.10.1.21.2.0.158), which is raised (critical severity) if an IP interface fails to receive an IPv4 address from the DHCP server within 10 seconds. The alarm also applies when an address lease expires and cannot be renewed.



- Only one DHCPv4 client configuration can be configured per VLAN network device (*Ethernet Device*) in the IP Interfaces table.
- This feature is not supported in High Availability (HA) mode.

**Applicable Applications:** All

**Applicable Products:** All

## 2.1.1.5 Call Handling and SIP Enhancements

### 2.1.1.5.1 Asynchronous Queries of Call Setup Rules Triggered by SIP Interfaces

Call Setup Rules (CSR) triggered by SIP Interfaces (in the SIP Interfaces table) now support asynchronous queries for services (e.g., LDAP, ENUM, and HTTP). Previously, only synchronous queries (e.g., Dial Plan) were supported.

This enhancement allows, for example, the running of a Call Setup Rule from a SIP Interface to asynchronously query an external HTTP server (third-party routing server or AudioCodes ARM) for a source tag. This tag can then be used to classify the incoming SIP INVITE request to a source IP Group.

**Applicable Applications:** All

**Applicable Products:** All

### 2.1.1.5.2 Call Sessions with BFCP Streams behind NAT

The device can now handle calls with voice and Binary Floor Control Protocol (BFCP) media received from behind NAT. The device latches onto the first incoming voice packet to determine the IP address and applies it to the BFCP stream. This approach allows the device to relay the BFCP packets to the remote side, based on the assumption that both voice and BFCP streams originate from the same source.

The BFCP, as defined in RFC 8855, manages access to shared resources in multiparty conferencing environments. BFCP allows users to share presentations or desktops within an ongoing video conversation. Desktop sharing video stream runs in addition to the actual call which already has audio and video streams.

This feature is configured by the new global and IP Profile parameter:

- Global:
  - Web: 'BFCP IP from Audio Media' (Setup > Signaling & Media > Media > Media Settings)
  - CLI: `configure voip > sbc settings > bfcf-ip-from-audio`
  - INI: [BFCPNatFromAudio]
- IP Profile:
  - Web: 'BFCP IP from Audio Media'
  - CLI: `bfcf-ip-from-audio`
  - INI: [SBCBFCPNatFromAudio]

**Applicable Applications:** SBC

**Applicable Products:** All

### 2.1.1.5.3 IP-to-Tel Emergency Calls Identification using SIP Alert-Info Header

The device can now identify IP-to-Tel calls as emergency calls based on the SIP Alert-Info header in the incoming SIP INVITE request. If the header's value matches that configured by the new parameter below, the call is classified as an emergency call. If the parameter is not configured, the presence of the header alone doesn't trigger emergency call classification.

- CLI: `configure voip > sip-definition settings > emerg-alert-info-uri`
- INI: [EmergencyCallAlertInfoUri]

**Applicable Applications:** Gateway

**Applicable Products:** Analog; Digital

## 2.1.1.6 Emergency Services

### 2.1.1.6.1 Device Restarts Blocked for Emergency Calls

The device now supports blocking restarts triggered through the CLI (`reload` command) during active emergency calls (IP-to-Tel or Tel-to-IP). In addition, restarts can be prevented for a user-defined period after the call has ended—whether successfully established or failed (e.g., SIP 403).

The timeout duration for blocking restarts is configurable using the following new parameter:

- **CLI:** `configure voip > sip-definition settings > reload-timeout-for-emergency-call`
- **INI:** `[ReloadTimeoutForEmergencyCall]`

**Applicable Applications:** Gateway

**Applicable Products:** Analog; Digital

## 2.1.1.7 High Availability and System Management

### 2.1.1.7.1 Configurable Ports for HA File Transfer

This feature allows users to configure the ports used for file transfer between active and redundant devices in High Availability (HA) mode. Previously, these ports were fixed at 80 (unsecured) and 443 (secured). With this update, users can define custom ports based on their security and network requirements.

This feature is configured using the following new parameters:

- **Unsecured Port:**
  - **Web:** 'HA File Transfer Port'
  - **CLI:** `configure network > high-availability settings > ha-file-transfer-port`
  - **Ini File:** `[HaFileTransferPort]`
- **Secured Port:**
  - **Web:** 'HA Secure File Transfer Port'
  - **CLI:** `configure network > high-availability settings > ha-secure-file-transfer-port`
  - **Ini File:** `[HaSecureFileTransferPort]`



The device must be restarted with a flash-to-burn operation for these parameter settings to take effect.

**Applicable Applications:** SBC

**Applicable Products:** HA

### 2.1.1.7.2 CLI Script File Upload through REST during HA Synchronization

Devices operating in High Availability (HA) mode can now be configured by a CLI Script file that is uploaded through the REST API during the HA synchronization phase. Previously, configuration by CLI Script file upload through REST during synchronization was blocked.

**Applicable Applications:** SBC

**Applicable Products:** HA

## 2.1.1.8 Monitoring and SNMP

### 2.1.1.8.1 New SNMP Alarm for Resource Pool Utilization

A new SNMP alarm has been introduced to monitor resource pool utilization and warn of high resource usage. By default, the alarm is triggered (with major severity level) when a specific resource pool reaches or exceeds 95% utilization and is automatically cleared when utilization drops to 90% or below. These alarm thresholds are configurable.

Alarm details:

- **Alarm Name:** acResourcePoolAlarm
- **OID:** 1.3.6.1.4.1.5003.9.10.1.21.2.0.162

The alarm thresholds are configured by the following new parameters:

- **Threshold to raise alarm:**
  - **CLI:** `configure troubleshoot > pool-thresholds settings > alarm-raise-threshold`
  - **Ini File:** [PoolAlarmRaise]
- **Threshold to clear alarm:**
  - **CLI:** `configure troubleshoot > pool-thresholds settings > alarm-clear-threshold`
  - **Ini File:** [PoolAlarmClear]

**Applicable Applications:** All

**Applicable Products:** All

### 2.1.1.8.2 New Performance Monitoring for SSH Login Failures

The device now offers enhanced performance monitoring for tracking failed SSH login attempts. Users can now monitor both real-time and historical data to improve security visibility and troubleshooting:

- **Real-time monitoring (current count):** `mgmt/ssh/global/sshFailedLoginAttemptsTotal`
- **Historical monitoring:** `mgmt/ssh/global/sshFailedLoginAttempts`.

**Applicable Applications:** All

**Applicable Products:** All

### 2.1.1.8.3 New SNMP Alarm for Login Password Expiration

The device provides a new SNMP alarm `acExpiredPasswordAlarm` (OID 1.3.6.1.4.1.5003.9.10.1.21.2.0.161) which is sent to notify when at least one of the passwords in the `Local Users` table is nearing expiration. The alarm is sent with Minor severity level.

By default, the alarm is sent 14 days before the password expires. This period can be configured, using the following new parameter:

- **Web:** 'Password Expired Alarm'
- **CLI:** `configure system > mgmt-auth > password-expired-alarm`
- **ini File:** [RaiseAlarmXDaysBeforePwExpired]

The alarm is sent with Major severity level when at least one of the passwords have expired.

The alarm is automatically cleared when the user successfully changes the password.

In addition, the Local Users table now provides the following new read-only fields:

- 'Password Expiration Date': Displays the date and time the user's password will expire.
- 'Password status': Displays the status of the password (expired, still valid, or unlimited).

**Applicable Applications:** All

**Applicable Products:** All

#### 2.1.1.8.4 Improved SNMP Configuration User Experience

An intuitive and improved user interface has been introduced to streamline the SNMP configuration process, ensuring a more efficient and user-friendly experience when managing SNMP. The key points and updates of this feature are summarized below:

- The SNMP Community Settings page has been renamed **SNMP Settings**, and includes the following changes:
  - The 'Read-Only' and 'Read-Write' community string fields have been removed and are now configured in the new SNMP Community Strings table (see below).
  - The 'Trap Manager Host Name' field (SNMPTrapManagerHostName) is now obsolete. Hostname can now be configured in the SNMP Trap Destinations table (see below).
- A new table called **SNMP Community Strings** now configures the SNMP community strings (passwords). These were previously configured in the 'Read-Only' and 'Read-Write' fields on the SNMP Community Settings page.
- The **SNMP Trap Destinations** page has been redesigned into the standard table format (i.e., rows added using the New button). This table also includes the following new fields:
  - 'SNMP Version' - selects the SNMP user type (SNMPv2 or SNMPv3).
  - 'SNMPv3 User' - row pointer to the SNMPv3 Users table.
- The **SNMP Trusted Managers** page has been redesigned into the standard table format (i.e., rows added using the New button).

**Applicable Applications:** All

**Applicable Products:** All

#### 2.1.1.9 Debugging Improvements

##### 2.1.1.9.1 Enhanced Device Information in Debug File

The downloaded Debug file now includes the following improvements:

- **Dedicated Folders for Different Restart Reasons:**

Device restarts are now categorized into separate folders based on their type. Previously, both normal and exception-induced restarts were stored together under reset-history/<Restart Counter>. Now:

  - Normal restarts are saved in reset-history/<Restart Counter>\_Reset.
  - Exception-related restarts are saved in reset-history/<Restart Counter>\_Exception.
- **INI Configuration File Inclusion:**

Each device restart now includes its corresponding ini file, stored in the respective restart folder - reset-history/<Restart Counter>\_Reset/\*\_ini file.

### ■ Time and Date:

New files have been introduced under the status folder (Device/status.tar.gz) to provide device time details:

- *date-u.info* – UTC time
- *date.info* – Local time

### ■ Device Uptime:

The Debug file now records device uptime, which represents the duration (in seconds) that the device was operational before a restart.

The uptime is included in the following files:

- New *uptime.info* file in the status folder (Device/status.tar.gz).
- Existing *reset-table-of-content.txt* file in the reset-history folder.

In addition, device uptime is now displayed in the output of the existing `show debug-file reset-info` CLI command, for example:

```
# show debug-file reset-info list
** Current Reset Counter [84] **

***** Reset          *****
Reset Counter:83
Up Time (seconds): 237890
Reset Reason: a hardware reset
Reset Time: 5.3.2025 2:24:18
SwVersion: ramMP500_ESBC_SIP 760A-092-799
*****
```

### ■ Disk Free Space:

New files under the status folder (Device/status.tar.gz) provide details on disk usage:

- *df.info* – Available (free) disk space
- *du.info* – Utilized disk space

### ■ Hardware Version (Applicable to All Products Except Mediant Software):

The device's hardware version is now included in the new *HardwareVersionsInfo.txt* file, located under the Device folder (root).

### ■ App Processes in Core Dump: Crashes of the device's internal app processes (e.g., DTLS and NGINX) are now also logged in the Core Dump file.

- Send a specific logged process crash a remote destination:

```
copy ext-core-dumps to <URL> interface <IP Interface> name
<App Process Name>
```

- Erase all or a specific logged process crash in the Core Dump file:

```
erase ext-core-dumps [name <Process Name>]
```

**Applicable Applications:** All

**Applicable Products:** All

### 2.1.1.9.2 DSP Core Dump File Downloadable through Web Interface

The device's Web interface now enables users to download the DSP Core Dump file for debugging. This is done by clicking the new **Save DSP Core Dump File** button, located on the Debug Files page (**Troubleshoot** menu > **Troubleshoot** tab > **Debug** folder > **Debug Files**).

The device automatically creates a DSP Core Dump file whenever a DSP restart occurs. This file captures information about DSP processes prior to the restart. The file is temporarily stored on the device's RAM (and therefore, deleted upon a device restart).

**Note:** This functionality appears in the Web interface only if:

- the device has generated a DSP Core Dump file, or
- the logged-in user is an Administrator or a Security Administrator.

**Applicable Applications:** All

**Applicable Products:** All

### 2.1.1.10 Miscellaneous Updates

#### 2.1.1.10.1 Parameter Name Changes

The names of the following parameter have changed:

Old Name	New Name
'AS Subscribe IP Group ID' as-subs-ipgroupid [ASSubscribeIPGroupID]	'AS Subscribe IP Group Name' as-subs-ipgroupname [ASSubscribeIPGroupName]
Notification IP Group ID configure voip > gateway digital settings > notification-ip- group-id [NotificationIPGroupID]	Notification IP Group Name configure voip > gateway digital settings > notification-ip-group- name [NotificationIPGroupName]
'Presence Publish IP Group ID' presence-publish-ip-group-id [PresencePublishIPGroupID]	'Presence Publish IP Group ID' presence-publish-ip-group-name [PresencePublishIPGroupName]
'TDM Bus Local Reference' configure voip > media tdm > tdm-bus-local-reference [TDMBusLocalReference]	'TDM Bus Local Reference' pstn-bus-local-reference [TDMBusPSTNLocalReference]
[CountryCoefficients]	[FXOCountryCoefficients]

### 2.1.1.10.2 Obsolete Parameters

The following IP Profile table's CLI commands and ini file parameters, which were retained for backward compatibility in previous releases are now obsolete:

CLI Command	Ini File Parameter
<code>configure voip/coders-and-profiles ip-profile/coders-group-id</code>	[IpProfile_CodersGroupID]
<code>configure voip/coders-and-profiles ip-profile/sce</code>	[IpProfile_SCE]
<code>configure voip/coders-and-profiles ip-profile/remote-base-udp-port</code>	[IpProfile_RemoteBaseUDPPort]
<code>configure voip/coders-and-profiles ip-profile/sbc-ext-coders-group-id</code>	[IpProfile_SBCExtensionCodersGroupID]
<code>configure voip/coders-and-profiles ip-profile/sbc-fax-coders-group-id</code>	[IpProfile_SBCFaxCodersGroupID]
<code>configure voip/coders-and-profiles ip-profile/sbc-allowed-coders-group-id</code>	[IpProfile_SBCAllowedCodersGroupID]

## 2.1.2 Known Constraints

This section lists known constraints.

**Table 5: Known Constraints in Version 7.60A.100.022**

Incident	Description	Impact	Severity	Affected Products	Affected Environments
-	The CLI command <code>configure network &gt; http-proxy &gt; http-proxy-cache</code> is not available. The HTTP proxy cache feature must be enabled manually through the ini file parameter (HTTPCacheEnable) or Web interface.	HTTP cache can be enabled via CLI	Low	All	All



## 3 Session Capacity

This section provides capacity figures.

### 3.1 SIP Signaling and Media Capacity

The following table lists the maximum, concurrent SIP signaling sessions, concurrent media sessions, and registered users per product.

**Table 6: SIP Signaling and Media Capacity per Product**

Product	Signaling Capacity		Media Sessions				
	SIP Sessions	Registered Users	Session Type	RTP	SRTP	Detailed Media Capabilities	
Mediant 500	250	1,500	Hybrid	250	200	Transcoding: n/a GW: Table 9	
			GW-Only	30	30		
Mediant 500L	60	200	Hybrid	60	60	Transcoding: n/a GW: Table 11	
			GW-Only	8	8		
Mediant 800B	250	1,500	Hybrid	250	250	GW & Transcoding: Table 13 SBC Only: Table 12	
			GW-Only	64	64		
Mediant 800C	400	2,000	Hybrid	400	250	GW & Transcoding: Table 15	
			GW-Only	124	124		
Mediant 1000B	150	600	Hybrid	150	120	Transcoding: Table 19 GW: Tables Table 16, Table 17, Table 18	
			GW-Only	192	140		
Mediant 3100	5,000	20,000	Hybrid	5,000	5,000	Transcoding: Table 21 GW: Table 20	
	960	20,000	GW-Only	960	960		
MP-1288	588	350	Hybrid	588	438	Transcoding: n/a GW: Table 22	
			SBC-Only	300	300		
			GW-Only	288	288		
Mediant 2600	600	8,000	SBC-Only	600	600	Transcoding: Table 23	
Mediant 4000	5,000	20,000	SBC-Only	5,000	3,000	Transcoding: Table 24	
Mediant 4000B	5,000	20,000	SBC-Only	5,000	5,000	Transcoding: Table 26	
Mediant 9000 Rev. B	SIP Performance Profile	50,000	500,000	SBC-Only	50,000	30,000	Transcoding: n/a
		70,000	0	SBC-Only	70,000	30,000	Transcoding: n/a
	DSP Performance Profile	50,000	0	SBC-Only	50,000	28,000	Transcoding: Table 28
	SRTP Performance Profile	70,000	0	SBC-Only	70,000	40,000	Transcoding: n/a
Mediant 9030	SIP Performance Profile	30,000	200,000	SBC-Only	30,000	30,000	Transcoding: n/a
	DSP Performance Profile	30,000	200,000	SBC-Only	30,000	15,000	Transcoding: Table 31
Mediant 9080	SIP Performance Profile	50,000	500,000	SBC-Only	50,000	30,000	Transcoding: n/a
		70,000	0	SBC-Only	70,000	30,000	Transcoding: n/a
	DSP Performance Profile	50,000	0	SBC-Only	50,000	28,000	Transcoding: Table 28
	SRTP Performance Profile	70,000	0	SBC-Only	70,000	40,000	Transcoding: n/a
Mediant 9000 Rev. B with Media Transcoders (MT-type)	60,000	200,000	SBC-Only	60,000	40,000	Transcoding: Table 30	

Product		Signaling Capacity		Media Sessions				
		SIP Sessions	Registered Users	Session Type	RTP	SRTP	Detailed Media Capabilities	
Mediant 9080 with Media Transcoders (MT-type)		60,000	200,000	SBC-Only	60,000	40,000	Transcoding: Table 30	
Mediant CE	AWS / EC2	50,000	100,000	SBC-Only	50,000	50,000	Forwarding: Table 33 Transcoding: Table 34	
	Azure	50,000	100,000	SBC-Only	50,000	50,000	Forwarding: Table 35 Transcoding: Table 36	
	VMware	12,000	100,000	SBC-Only	12,000	12,000	Forwarding: Table 37 Transcoding: Table 38	
	GCP	50,000	100,000	SBC-Only	50,000	40,000	Forwarding: Table 39 Transcoding: Table 41	
Mediant VE	VMware	1 vCPU 2-GB RAM (HT)	250	1,000	SBC-Only	250	250	Transcoding: n/a
		1 vCPU 8-GB RAM (HT)	4,000	15,000	SBC-Only	4,000	2,600	Transcoding: n/a
		4 vCPU 16-GB RAM (HT)	10,000	75,000	SBC-Only	10,000	8,000	Transcoding: n/a
		2 vCPUs 8-GB RAM (HT)	4,000	15,000	SBC-Only	2,200	1,900	Transcoding: Table 42
		4 vCPU 8-GB RAM (HT)	4,000	15,000	SBC-Only	1,800	1,600	Transcoding: Table 42
		8 vCPU 16-GB RAM (HT)	9,000	75,000	SBC-Only	6,000	5,000	Transcoding: Table 42
		16 vCPU 16-GB RAM (HT)	9,000	75,000	SBC-Only	6,500	5,000	Transcoding: Table 42
	KVM / OpenStack	1 vCPU 2-GB RAM (HT)	250	1,000	SBC-Only	250	250	Transcoding: n/a
		1 vCPU 8-GB RAM (HT)	2,500	15,000	SBC-Only	2,500	1,700	Transcoding: n/a
		4 vCPU 16-GB RAM (HT)	4,500	75,000	SBC-Only	4,500	3,500	Transcoding: n/a
		2 vCPUs 8-GB RAM (HT)	1,900	15,000	SBC-Only	1,900	1,400	Transcoding: Table 42
		8 vCPU 16-GB RAM (HT)	5,800	75,000	SBC-Only	5,800	4,800	Transcoding: Table 42
		16 vCPU 16-GB RAM (HT)	3,800	75,000	SBC-Only	3,800	2,800	Transcoding: Table 42
		8 vCPU 32-GB RAM SR-IOV Intel NICs (non-HT)	24,000	75,000	SBC-Only	24,000	10,000	Transcoding: n/a
	Hyper-V	1 vCPU 2-GB RAM (HT)	250	1,000	SBC-Only	250	250	Transcoding: n/a
		1 vCPU 8-GB RAM (HT)	1,500	15,000	SBC-Only	1,500	1,200	Transcoding: n/a
		4 vCPU 8-GB RAM (HT)	2,500	15,000	SBC-Only	2,500	2,300	Transcoding: n/a
		2 vCPUs 8-GB RAM (HT)	1,900	15,000	SBC-Only	1,900	1,400	Transcoding: Table 42
		8 vCPU 16-GB RAM (HT)	2,500	75,000	SBC-Only	2,500	2,300	Transcoding: Table 42

Product			Signaling Capacity		Media Sessions				
			SIP Sessions	Registered Users	Session Type	RTP	SRTP	Detailed Media Capabilities	
AWS / EC2	m5n.large		3,200	30,000	SBC-Only	3,200	2,700	Transcoding: n/a	
			2,500	20,000	SBC-Only	2,100	1,100	Transcoding: Table 43	
	c5n.2xlarge		5,500	75,000	SBC-Only	5,500	5,000	Transcoding: n/a	
			4,500	75,000	SBC-Only	3,700	2,400	Transcoding: Table 44	
	c5n.9xlarge		7,000	75,000	SBC-Only	7,000	6,000	Transcoding: n/a	
			7,000	75,000	SBC-Only	6,700	4,500	Transcoding: Table 45	
	Azure	DS1_v2		600	1,000	SBC-Only	600	500	Transcoding: n/a
				300	1,000	SBC-Only	300	300	Transcoding: Table 47
		D2ds_v5		3,200	15,000	SBC-Only	3,200	2,700	Transcoding: n/a
				2,500	15,000	SBC-Only	2,500	1,600	Transcoding: Table 47
D4ds_v5			7,000	50,000	SBC-Only	7,000	6,000	Transcoding: n/a	
			4,800	50,000	SBC-Only	4,800	3,200	Transcoding: Table 47	
D8ds_v5			12,000	75,000	SBC-Only	12,000	9,000	Transcoding: n/a	
			4,600	75,000	SBC-Only	4,600	3,000	Transcoding: Table 47	
GCP	n2-standard-2		3,500	15,000	SBC-Only	3,500	2,400	Transcoding: n/a	
			1,500	15,000	SBC-Only	1,500	1,100	Transcoding: Table 48	
	n2-standard-4		4,000	75,000	SBC-Only	4,000	3,000	Transcoding: n/a	
			2,400	75,000	SBC-Only	2,400	1,800	Transcoding: Table 48	
	n2-standard-8		2,400	75,000	SBC-Only	2,400	1,800	Transcoding: Table 48	
	n2-highcpu-32		3,600	75,000	SBC-Only	3,600	3,400	Transcoding: Table 48	



- Capacities are accurate at the time of publication of this document. However, they may change due to a later software update. For the latest capacities, please contact your AudioCodes sales representative.
- **GW** refers to Gateway functionality.
- **SIP Sessions** refers to the maximum concurrent signaling sessions for both SBC and Gateway (when applicable). Whenever signaling sessions is greater than the maximum media sessions, the remaining signaling sessions can be used for Direct Media.
- **Session Type** refers to Gateway-only sessions, SBC-only sessions, or Hybrid sessions which is any mixture of SBC and Gateway sessions under the limitations of Gateway-only or SBC-only maximum values.
- **RTP Sessions** refers to the maximum concurrent RTP sessions when all sessions are RTP-RTP (SBC sessions) or TDM-RTP (Gateway sessions).
- **SRTP Sessions** refers to the maximum concurrent SRTP sessions when all sessions are RTP-SRTP (for SBC sessions) or TDM-SRTP (for Gateway sessions).
- **Registered Users** refers to the maximum number of users that can be registered with the device. This applies to the supported application (SBC or CRP).
- Regarding signaling, media, and transcoding session resources:
  - A signaling session is a SIP dialog session between two SIP entities, traversing the device and using one signaling session resource.
  - A media session is an audio (RTP or SRTP), fax (T.38), or video session between two SIP entities, traversing the device and using one media session resource.

- A gateway session (TDM-RTP or TDM-SRTP) is considered as a media session for the calculation of media sessions. In other words, the maximum media sessions shown in the table refer to the sum of Gateway and SBC sessions.
  - For direct media (i.e., anti-tromboning or non-media anchoring) where only SIP signaling traverses the device and media flows directly between the SIP entities, only a signaling session resource is used. Thus, for products with a greater signaling session capacity than media, even when media session resources have been exhausted, additional signaling sessions can still be handled for direct-media calls.
  - For call sessions requiring transcoding, one transcoding session resource is also used. For example, for a non-direct media call in which one leg uses G.711 and the other G.729, one signaling, one media, and one transcoding session resources are used.
- Cloud Resilience Package (CRP) application capacity appears under **Registered Users**.
  - Lync Analog Device (LAD) application capacity appears under **Media Sessions**.

**For MP-1288:**

- The maximum number of media and signaling sessions is the sum of the maximum 300 RTP-to-RTP (SBC) sessions and the maximum 288 TDM-RTP (Gateway) sessions.
- The maximum number of SRTP sessions is the sum of the maximum 150 RTP-to-SRTP (SBC) sessions and the maximum 288 TDM-SRTP (Gateway) sessions.

**For Mediant 90xx SBC:**

- Mediant 90xx SBC with Media Transcoders limitations:
  - To allow DSP capabilities (such as transcoding), the 'Performance Profile' parameter must be configured to the DSP profile. Each transcoding session is weighted as two RTP-RTP sessions without transcoding. Therefore, the number of sessions without transcoding plus the doubled number of sessions with transcoding must be less than the maximum RTP-RTP figure specified in the table. As a result, if all sessions involve transcoding, the maximum number of sessions is half the maximum RTP-RTP sessions without transcoding specified in the table.
  - The maximum number of SRTP-RTP sessions is also affected by the above limitations. For example, if sessions involve transcoding, the maximum number of SRTP-RTP sessions is also limited by half of the maximum SRTP-RTP sessions without transcoding.
- The Media Transcoding Cluster (MTC) feature is supported only on Mediant 9080 SBC.



#### For Mediant VE SBC:

- **Mediant VE SBC on VMware:** Capacity was measured with ESXi Version 7.0.3 and a host of CPU Xeon 6226R with Hyper-Threading enabled. For example, a 4-vCPU virtual machine allocates only 2 physical cores. For minimum requirements, see Section 'Mediant VE SBC for Hypervisors with Hyper-Threading'.
- **Mediant VE SBC on KVM:** Capacity for virtual machine instance with SR-IOV was done with Intel 82599 NIC.
- **Mediant VE SBC on Azure:**
  - Azure DS\_v2 virtual machine series in general and DS1\_v2 virtual machine size in particular are scheduled for retirement in May 2028. Therefore, it's recommended **not** to use them for new deployments, and to migrate existing deployments to the Dds\_v5 (D2ds\_v5, D4ds\_v5, or D8ds\_v5) virtual machine series.
  - Capacity for virtual machine instances D2ds\_v5, D4ds\_v5, D8ds\_v5 is with Accelerated Networking enabled.
  - When operating in HA mode, it's not recommended to exceed 5,000 sessions because of the duration required for processing a failover.
- **Mediant VE SBC on AWS:**
  - Network performance on AWS cloud is subject to network conditions, which may depend on time and region.
  - Capacity shown in the table are based on lowest capacities found during performance testing.
  - It's recommended to use the m5n and c5n instance types as they provide more stable network characteristics. However, the m5 and c5 instance types are still supported.



#### For Mediant CE SBC:

Mediant CE SBC is based on the following instances:

- **AWS:**
  - Signaling Components (SC): m5.2xlarge
  - Media Components (MC) - forwarding only: m5n.large
  - MC - forwarding and transcoding: c5.4xlarge
- **Azure:**
  - SC: D4ds\_v5 (up to 10,000 sessions and 50,000 users) or D8ds\_v5 (up to 50,000 sessions and 100,000 users)
  - MC - forwarding only: D2ds\_v5, D4ds\_v5, and D8ds\_v5
  - MC - forwarding and transcoding: D2ds\_v5, D4ds\_v5, and D8ds\_v5

It's not recommended to exceed 5,000 sessions per MC because of the duration required for processing an MC failover.
- **VMware:**
  - SC: 8 vCPU (Hyper-Threading), 16-GB RAM
  - MC - forwarding only: 2 vCPU (Hyper-Threading), 8-GB RAM
  - MC - forwarding and transcoding: 8 vCPU (Hyper-Threading), 8-GB RAM
- **GCP:**
  - SC: n2-standard-8 (8 vCPU, 32-GB RAM)
  - MC - forwarding only: n2-standard-2 (2 vCPU, 8-GB RAM)
  - MC - forwarding and transcoding: n2-standard-2 (2 vCPU, 8-GB RAM), n2\_highcpu-8 (8 vCPU, 8-GB RAM)



For Customers using Mediant SE based on DL360 Gen10, see Mediant 9000 Rev. B capacity.

## 3.2 Capacity per Feature

The table below lists maximum capacity per feature.

**Table 7: Maximum Capacity per Feature**

Product	Concurrent WebRTC Sessions		One-Voice Resiliency (OVR) Users	Concurrent SIPREC Sessions	Concurrent TLS Connections	Concurrent MSRP Sessions
	Click-to-Call	Registered Agents				
MP-1288	-	-	-	150	350	100
Mediant 500	-	-	-	125	300	100
Mediant 500L	-	-	-	30	100	100
Mediant 800B	100	100	100	200	300	100
Mediant 800C	100	100	150	200	450	100
Mediant 1000B	-	-	50	-	300	100
Mediant 3100	1,000	1,000	-	2,500	6,000	100
Mediant 2600	600	600	-	300	2,500	100
Mediant 4000/B	1,000	1,000	-	2,500	2,500	100
Mediant 9030	5,000	16,000	-	15,000	16,000	100
Mediant 9080	8,000	25,000	-	20,000	25,000	100
Mediant VE (see note #2)	5,000	5,000	2,000	12,000	<ul style="list-style-type: none"> <li>■ 2 GB: 100</li> <li>■ 3 GB: 500</li> <li>■ 4 GB: 5,000</li> <li>■ 8-16 GB: 6,000</li> <li>■ 32 GB: 16,000</li> <li>■ 64 GB: 25,000</li> </ul>	100
Mediant CE (see note #2)	5,000	<ul style="list-style-type: none"> <li>■ SC with 8 vCPUs: 16,000</li> <li>■ SC with 4 vCPUs: 5,000</li> </ul>	-	20,000	<ul style="list-style-type: none"> <li>■ 2 GB: 100</li> <li>■ 3 GB: 500</li> <li>■ 4 GB: 5,000</li> <li>■ 8-16 GB: 6,000</li> <li>■ 32 GB: 16,000</li> <li>■ 64 GB: 25,000</li> </ul>	100



- WebRTC sessions:
  - The maximum number of concurrent WebRTC sessions can't be more than the maximum number of concurrent SRTP sessions (specified in Section 'SIP Signaling and Media Capacity'). Therefore, the actual maximum number of concurrent WebRTC sessions per deployment environment is less than the numbers shown in the table below.
  - The maximum number of concurrent WebRTC sessions can't be greater than the maximum number of concurrent TLS connections.
- Capacity assumes that a TLS key size of 2048-bit is used for WebSocket and DTLS negotiations.

- SIPREC capacity assumes that there are no other concurrent, regular (non-SIPREC) voice sessions. SIPREC sessions are counted as part of the SBC session capacity. The maximum number of SIPREC sessions can't be more than the number of RTP sessions, as indicated in Section 'SIP Signaling and Media Capacity'. Therefore, the actual maximum number of SIPREC sessions per deployment environment is less than the numbers shown in the table below.
- For TLS capacity, each registered user is assigned a TLS connection even if there are no ongoing SIP dialogs or transactions using the same connection.

### 3.3 Detailed Capacity

This section provides detailed capacity figures.

#### 3.3.1 Mediant 500 E-SBC

The SBC session capacity and DSP channel capacity for Mediant 500 E-SBC are shown in the tables below.

##### 3.3.1.1 Non-Hybrid (SBC) Capacity

**Table 8: Mediant 500 E-SBC (Non-Hybrid) - SBC Capacity**

H/W Configuration	TDM-RTP Sessions				Max. SBC Sessions (RTP-RTP)
	DSP Channels Allocated for PSTN	Wideband Coders			
		G.722	AMR-WB (G.722.2)	SILK-WB	
SBC	n/a	n/a	n/a	n/a	250

##### 3.3.1.2 Hybrid (with Gateway) Capacity

**Table 9: Mediant 500 Hybrid E-SBC (with Gateway) - Media and SBC Capacity**

H/W Configuration	TDM-RTP Sessions				Max. SBC Sessions (RTP-RTP)
	DSP Channels Allocated for PSTN	Wideband Coders			
		G.722	AMR-WB (G.722.2)	SILK-WB	
1 x E1/T1	30 (full E1)	√	-	-	220
	24 (full T1)				226
	26 (partial E1)	√	√	-	224
	24 (full T1)	√	√	-	226
	26 (partial E1)	√	√	√	224
	24 (full T1)	√	√	√	226



### 3.3.2 Mediant 500L Gateway and E-SBC

The SBC session capacity and DSP channel capacity for Mediant 500L Gateway and E-SBC is shown in the tables below.

#### 3.3.2.1 Non-Hybrid (SBC) Capacity

Table 10: Mediant 500L E-SBC (Non-Hybrid) - SBC Capacity

H/W Configuration	TDM-RTP Sessions			Max. SBC Sessions (RTP-RTP)
	DSP Channels Allocated for PSTN	Wideband Coders		
		G.722	AMR-WB (G.722.2)	
SBC	n/a	n/a	n/a	60

#### 3.3.2.2 Hybrid (with Gateway) Capacity

Table 11: Mediant 500L Hybrid E-SBC (with Gateway) - Media and SBC Capacity

H/W Configuration	DSP Channels Allocated for PSTN	Additional Coders				Max. SBC Sessions
		Narrowband	Wideband			
		Opus-NB	G.722	AMR-WB (G.722.2)	Opus-WB	
2 x BRI / 4 x BRI	4/8	-	-	-	-	56/52
	4/8	-	√	-	-	56/52
	4/6	√	-	√	-	56/54
	4	-	-	-	√	56

### 3.3.3 Mediant 800 Gateway & E-SBC

This section describes capacity for Mediant 800 Gateway & E-SBC.

#### 3.3.3.1 Mediant 800B Gateway & E-SBC

The DSP channel capacity and SBC session capacity for Mediant 800B Gateway & E-SBC are shown in the tables below.

##### 3.3.3.1.1 Non-Hybrid (SBC) Capacity

**Table 12: Mediant 800B Gateway & E-SBC - SBC Session Capacity per Capabilities (SBC Only)**

H/W Configuration	DSP Channels for PSTN	SBC Transcoding Sessions							To Profile 1	To Profile 2	Max. SBC Sessions
		From Profile 2 with Additional Advanced DSP Capabilities									
		AMR-NB / G.722	AMR-WB (G.722.2)	SILK-NB / ILBC	SILK-WB	Opus-NB	Opus-WB				
SBC	n/a	-	-	-	-	-	-	57	48	250	
	n/a	√	-	-	-	-	-	51	42	250	
	n/a	-	-	√	-	-	-	39	33	250	
	n/a	-	√	-	-	-	-	36	30	250	
	n/a	-	-	-	√	-	-	27	24	250	
	n/a	-	-	-	-	√	-	27	24	250	
	n/a	-	-	-	-	-	√	21	21	250	



"Max. SBC Sessions" applies to scenarios without registered users. When registered users are used, "Max. SBC Sessions" is reduced according to the main capacity table (see Section 'SIP Signaling and Media Capacity').

## 3.3.3.1.2 Hybrid (with Gateway) Capacity

Table 13: Mediant 800B Gateway &amp; E-SBC - Channel Capacity per Capabilities (with Gateway)

Telephony Interface Assembly	DSP Channels Allocated for PSTN	SBC Transcoding Sessions								Conf. Participants	Max. SBC Sessions
		From Profile 2 with Additional Advanced DSP Capabilities						To Profile 1	To Profile 2		
		AMR-NB / G.722	AMR-WB (G.722.2)	SILK-NB	SILK-WB	Opus-NB	Opus-WB				
2 x E1/T1	60/48	-	-	-	-	-	-	3/15	2/13	-	190/202
2 x T1	48	-	-	-	-	-	-	11	9	-	202
1 x E1/T1 8 x FXS/FXO	38/32	-	-	-	-	-	-	22/28	18/22	-	212/218
	38/32	-	-	√	-	-	-	8/12	7/11	-	212/218
1 x E1/T1	30/24	-	-	√	-	-	-	14/18	12/16	-	220/226
1 x E1 4 x BRI	38	-	-	-	-	-	-	22	18	-	212
1 x E1 4 x FXS	34	-	-	-	-	-	-	26	21	-	216
2 x E1 4 x FXS	64	-	-	-	-	-	-	0	0	-	186
4 x BRI 4 x FXS 4 x FXO	16	-	-	-	-	-	-	5	4	-	234
8 x BRI 4 x FXS	20	-	-	-	-	-	-	1	1	-	230
8 x BRI	16	-	-	-	-	-	-	5	4	-	234
12 x FXS	12	-	-	√	-	-	-	3	3	-	238
4 x FXS 8 x FXO	12	-	-	√	-	-	-	3	3	-	238
8 x FXS 4 x FXO	12	-	-	√	-	-	-	3	3	-	238
4 x BRI 4 x FXS	12	-	-	√	-	-	-	3	3	-	238
4 x FXS 4 x FXO	8	-	-	-	-	-	-	7	5	6	242
	8	-	-	√	-	-	-	6	6	-	242
4 x BRI	8	-	-	-	-	-	-	7	5	6	242

Telephony Interface Assembly	DSP Channels Allocated for PSTN	SBC Transcoding Sessions								Conf. Participants	Max. SBC Sessions
		From Profile 2 with Additional Advanced DSP Capabilities						To Profile 1	To Profile 2		
		AMR-NB / G.722	AMR-WB (G.722.2)	SILK-NB	SILK-WB	Opus-NB	Opus-WB				
	8	-	-	√	-	-	-	6	6	-	242
1/2/3 x BRI	2/4/6	-	-	-	-	-	-	17/15 /14	14/13 /11	-	248/246 / 244
	2/4/6	-	-	√	-	-	-	11/10 /8	10/8/7	-	248/246 / 244
4 x FXS or 4 x FXO	4	-	-	√	-	-	-	10	8	-	246
	4	√	-	-	-	-	-	12	10	4	246
	4	-	-	√	-	-	-	6	6	4	246
	4	-	√	√	-	-	-	4	4	4	246
	4	-	√	√	√	-	-	3	3	4	246
	4	-	-	-	-	√	-	1	0	4	246
	4	-	-	-	-	-	√	0	0	3	246
FXS, FXO, and/or BRI, but not in use	0	-	-	-	-	-	-	19	16	-	250



- "Max. SBC Sessions" for Mediant 800B applies to scenarios without registered users. When registered users are used, "Max. SBC Sessions" is reduced according to the main capacity table (see Section 'SIP Signaling and Media Capacity').
- Profile 1: G.711 at 20ms only, with In-band signaling (in voice channel), DTMF transcoding (RFC 2833 to in-band signaling), and Silence Suppression (no fax detection or T.38 support).
- Profile 2: G.711, G.726, G.729 (A / AB), and G.723.1, T.38 with fax detection, In-band signaling (in voice channel), and Silence Compression.
- All hardware assemblies also support the following DSP channel capabilities: echo cancellation (EC), CID (caller ID), RTCP XR reporting, and SRTP.
- SBC enhancements (e.g., Acoustic Echo Suppressor, Noise Reduction) are also available for these configurations. For more information, please contact your AudioCodes sales representative.
- Automatic Gain Control (AGC) and Answer Detector / Answer Machine Detector (AD/AMD) are also available for these configurations. For more information, please contact your AudioCodes sales representative.
- Transcoding Sessions represents part of the total SBC sessions.
- Conference Participants represents the number of concurrent analog ports in a three-way conference call.
- For availability of the telephony assemblies listed in the table above, please contact your AudioCodes sales representative.

### 3.3.3.2 Mediant 800C Gateway & E-SBC

The DSP channel capacity and SBC session capacity for Mediant 800C Gateway & E-SBC are shown in the tables below.

#### 3.3.3.2.1 Non-Hybrid (SBC) Capacity

Table 14: Mediant 800C Gateway & E-SBC - SBC Session Capacity per Capabilities (SBC Only)

H/W Configuration	SBC Transcoding Sessions							To Profile 1	To Profile 2	Max. SBC Sessions
	From Profile 2 with Additional Advanced DSP Capabilities									
	AMR-NB / G.722	AMR-WB (G.722.2)	SILK-NB / iLBC	SILK-WB	Opus-NB	Opus-WB				
SBC	-	-	-	-	-	-	120	96	400	
	√	-	-	-	-	-	108	84	400	
	-	-	√	-	-	-	78	66	400	
	-	√	-	-	-	-	72	60	400	
	-	-	-	√	-	-	54	48	400	
	-	-	-	-	√	-	54	48	400	
	-	-	-	-	-	√	42	42	400	
	<b>From Profile 1</b>							156	120	400



- "Max. SBC Sessions" applies to scenarios without registered users. When registered users are used, "Max. SBC Sessions" is reduced according to the main capacity table (see Section 'SIP Signaling and Media Capacity').
- The maximum SBC sessions with DTMF transcoding (Profile 1 in-band DTMF to Profile 1 RFC 2833) is 156 sessions (RTP-RTP or RTP-SRTP).

## 3.3.3.2.2 Hybrid (with Gateway) Capacity

Table 15: Mediant 800C Gateway &amp; E-SBC - SBC Session Capacity per Capabilities with Gateway

Telephony Interface Assembly	DSP Channels Allocated for PSTN	SBC Transcoding Sessions							Max SBC Sessions
		From Profile 2	From Profile 2 with SILK-NB / iLBC	From Profile 2 with SILK-WB	From Profile 2 with OPUS-NB	From Profile 2 with OPUS-WB	To Profile 1	To Profile 2	
4 x E1/T1 4 x FXS	124/100	√	-	-	-	-	2/23	2/18	276/300
	102/100	-	√	-	-	-	0	0	298/300
	78	-	-	√	-	-	0	0	322
	72	-	-	-	√	-	0	0	328
	54	-	-	-	-	√	0	0	346
1 x E1/T1 4 x FXS	35/29	√	-	-	-	-	25/30	20/25	365/371
	35/29	-	√	-	-	-	10/15	9/13	365/371
	35/29	-	-	√	-	-	1/5	1/5	365/371
	35/29	-	-	-	√	-	0/4	0/3	365/371
	27	-	-	-	-	√	0	0	373
8 x BRI 4 x FXS	20	√	-	-	-	-	38	31	380
	20	-	√	-	-	-	22	19	380
	20	-	-	√	-	-	12	11	380
	20	-	-	-	√	-	11	9	380
	20	-	-	-	-	√	4	3	380
Not in use	-	√	-	-	-	-	114	96	400
	-	-	√	-	-	-	78	66	400
	-	-	-	√	-	-	54	48	400
	-	-	-	-	√	-	54	48	400
	-	-	-	-	-	√	42	42	400



- "Max. SBC Sessions" applies to scenarios without registered users. When registered users are used, "Max. SBC Sessions" is reduced according to the main capacity table (see Section 'SIP Signaling and Media Capacity').
- Profile 1: G.711 at 20ms only, with In-band signaling (in voice channel), DTMF transcoding (RFC 2833 to in-band signaling), and Silence Suppression (no fax detection or T.38 support).
- Profile 2: G.711, G.726, G.729 (A / AB), and G.723.1, T.38 with fax detection, In-band signaling (in voice channel), and Silence Compression.
- All hardware assemblies also support the following DSP channel capabilities: echo cancellation (EC), CID (caller ID), RTCP XR reporting, and SRTP.
- SBC enhancements (e.g., Acoustic Echo Suppressor, Noise Reduction) are also available for these configurations. For more information, please contact your AudioCodes sales representative.

- Automatic Gain Control (AGC) and Answer Detector / Answer Machine Detector (AD/AMD) are also available for these configurations. For more information, please contact your AudioCodes sales representative.
- Transcoding Sessions represent part of the total SBC sessions.
- Conference Participants represents the number of concurrent analog ports in a three-way conference call.
- For the availability of the telephony assemblies listed in the table above, please contact your AudioCodes sales representative.

### 3.3.4 Mediant 1000B Gateway & E-SBC

This section lists the channel capacity and DSP templates for Mediant 1000B Gateway & E-SBC DSP.



- The maximum number of channels on any form of analog, digital, and MPM module assembly is 192. When the device handles both SBC and Gateway call sessions, the maximum number of total sessions is 150. When the device handles SRTP, the maximum capacity is reduced to 120.
- Installation and use of voice coders is subject to obtaining the appropriate license and royalty payments.
- For additional DSP templates, contact your AudioCodes sales representative.

#### 3.3.4.1 Analog (FXS/FXO) Interfaces

The channel capacity per DSP firmware template for analog interfaces is shown in the table below.

**Table 16: Mediant 1000B Analog Series - Channel Capacity per DSP Firmware Template**

	DSP Template	
	0, 1, 2, 4, 5, 6	10, 11, 12, 14, 15, 16
	Number of Channels	
	4	3
Voice Coder		
G.711 A/Mu-law PCM	√	√
G.726 ADPCM	√	√
G.723.1	√	√
G.729 (A / AB)	√	√
G.722	-	√

### 3.3.4.2 BRI Interfaces

The channel capacity per DSP firmware template for BRI interfaces is shown in the table below.

**Table 17: Mediant 1000B BRI Series - Channel Capacity per DSP Firmware Template**

DSP Template						
0, 1, 2, 4, 5, 6			10, 11, 12, 14, 15, 16			
Number of BRI Spans						
4	8	20	4	8	20	
Number of Channels						
8	16	40	6	12	30	
Voice Coder						
G.711 A/Mu-law PCM	√					√
G.726 ADPCM	√					√
G.723.1	√					√
G.729 (A / AB)	√					√
G.722	-					√



### 3.3.4.3 E1/T1 Interfaces

The channel capacity per DSP firmware template for E1/T1 interfaces is shown in the table below.

**Table 18: Mediant 1000B E1/T1 Series - Channel Capacity per DSP Firmware Templates**

	DSP Template																								
	0 or 10					1 or 11					2 or 12					5 or 15					6 or 16				
	Number of Spans																								
	1	2	4	6	8	1	2	4	6	8	1	2	4	6	8	1	2	4	6	8	1	2	4	6	8
	Number of Channels																								
Default Settings	31	62	120	182	192	31	48	80	128	160	24	36	60	96	120	24	36	60	96	120	31	60	100	160	192
With 128- ms Echo Cancellation	31	60	100	160	192	31	48	80	128	160	24	36	60	96	120	24	36	60	96	120	31	60	100	160	192
With IPM Features	31	60	100	160	192	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	31	60	100	160	192
Voice Coder																									
G.711 A-Law/M- Law PCM		✓					✓					✓					✓					✓			
G.726 ADPCM		✓					✓					✓					✓					-			
G.723.1		✓					-					-					-					-			
G.729 (A / AB)		✓					✓					✓					✓					✓			
GSM FR		✓					✓					-					-					-			
MS GSM		✓					✓					-					-					-			
iLBC		-					-					-					✓					-			
EVRC		-					-					✓					-					-			
QCELP		-					-					✓					-					-			
AMR		-					✓					-					-					-			
GSM EFR		-					✓					-					-					-			
G.722		-					-					-					-					✓			
Transparent		✓					✓					✓					✓					✓			



"IPM Features" refers to Automatic Gain Control (AGC), Answer Machine Detection (AMD) and Answer Detection (AD).

### 3.3.4.4 Media Processing Interfaces

The transcoding session capacity according to DSP firmware template (per MPM module) is shown in the table below.



- The device can be housed with up to four MPM modules.
- The MPM modules can only be housed in slots 1 through 5.

**Table 19: Mediant 1000B - Transcoding Session Capacity per MPM According to DSP Firmware Template**

	DSP Template				
	0 or 10	1 or 11	2 or 12	5 or 15	6 or 16
IPM Detectors Automatic Gain Control (AGC), Answer Machine Detection (AMD) and Answer Detection (AD)	<b>Number of Transcoding Sessions per MPM Module</b>				
-	24	16	12	12	20
✓	20	-	-	-	20
<b>Voice Coder</b>					
G.711 A-law / M $\mu$ -law PCM	✓	✓	✓	✓	✓
G.726 ADPCM	✓	✓	✓	✓	-
G.723.1	✓	-	-	-	-
G.729 (A / AB)	✓	✓	✓	✓	✓
GSM FR	✓	✓	-	-	-
MS GSM	✓	✓	-	-	-
iLBC	-	-	-	✓	-
EVRC	-	-	✓	-	-
QCELP	-	-	✓	-	-
AMR	-	✓	-	-	-
GSM EFR	-	✓	-	-	-
G.722	-	-	-	-	✓
Transparent	✓	✓	✓	✓	✓

### 3.3.5 Mediant 3100 Gateway & E-SBC

This section describes the capacity of Mediant 3100 Gateway & E-SBC.

#### 3.3.5.1 Gateway Capacity

The following table shows the maximum number of Gateway sessions when there are no SBC transcoding sessions.

**Table 20: Mediant 3100 - Gateway Channel Capacity per Capability Profile**

Profile	Hardware Assembly							
	E1				T1			
	8 x E1	16 x E1	32 x E1	64 x E1	8 x T1	16 x T1	32 x T1	64 x T1
Profile 1	240	480	960	1920	192	384	768	1536
Profile 2	240	480	960	1920	192	384	768	1536
Profile 2 + G.722 / AMR-NB	240	480	960	1920	192	384	768	1536
Profile 2 + AMR-WB	240	480	960	1920	192	384	768	1536
Profile 2 + SILK-NB	240	480	960	1920	192	384	768	1536
Profile 2 + SILK-WB	208	416	832	1664	192	384	768	1536
Profile 2 + Opus-NB	240	480	960	1920	192	384	768	1536
Profile 2 + Opus-WB	240	480	960	1920	192	384	768	1536



- Profile 1: G.711 at 20ms only, with in-band signaling (in voice channel), DTMF transcoding (RFC 2833 to in-band signaling), and Silence Suppression (no fax detection or T.38 support).
- Profile 2: G.711, G.726, G.729 (A / AB), G.723.1, T.38 with fax detection, in-band signaling (in voice channel), and Silence Compression.
- Acoustic Echo Suppressor reduces performance. For more information, contact your AudioCodes sales representative.

### 3.3.5.2 Non-Hybrid (SBC) Transcoding Capacity

The following table shows the maximum number of SBC transcoding sessions when there are no Gateway sessions.

**Table 21: Mediant 3100 - SBC Transcoding Capacity per Coder Capability Profile**

Transcoding Session Coders		8 x E1/T1	16 x E1/T1	32 x E1/T1	64 x E1/T1
From Coder	To Coder				
Profile 1	Profile 1	460	925	1,855	3,700
Profile 1	Profile 2	400	800	1,600	3,200
Profile 2	Profile 2	350	700	1,405	2,800
Profile 1	Profile 2 + G.722 / AMR-NB	400	800	1,600	3,200
Profile 2	Profile 2 + G.722 / AMR-NB	350	700	1,405	2,800
Profile 1	Profile 2 + AMR-WB	255	510	1,020	2,025
Profile 2	Profile 2 + AMR-WB	240	480	960	1,900
Profile 1	Profile 2 + SILK-NB	260	525	1,055	2,100
Profile 2	Profile 2 + SILK-NB	245	495	990	1,975
Profile 1	Profile 2 + SILK-WB	180	365	735	1,450
Profile 2	Profile 2 + SILK-WB	175	350	700	1,400
Profile 1	Profile 2 + Opus-NB	220	445	895	1,775
Profile 2	Profile 2 + Opus-NB	205	415	830	1,650
Profile 1	Profile 2 + Opus-WB	205	415	830	1,650
Profile 2	Profile 2 + Opus-WB	190	380	765	1,525



- *Profile 1*: G.711 at 20ms only, with in-band signaling (in voice channel), DTMF transcoding (RFC 2833 to in-band signaling), and Silence Suppression (no fax detection or T.38 support).
- *Profile 2*: G.711, G.726, G.729 (A / AB), G.723.1, T.38 with fax detection, in-band signaling (in voice channel), and Silence Compression.
- Acoustic Echo Suppressor reduces performance. For more information, contact your AudioCodes sales representative.

### 3.3.6 MP-1288 Analog Gateway & E-SBC

Session capacity includes Gateway sessions as well as SBC sessions without transcoding capabilities. The maximum capacity of Gateway sessions for MP-1288 Gateway & E-SBC is shown in the table below.

**Table 22: MP-1288 - Session Capacity**

Coder	Gateway Sessions Capacity	
	Single FXS Blade	Fully Populated (4 x FXS Blades)
Basic: G.711, G.729 (A / AB), G.723.1, G.726 / G.727 ADPCM	72	288
G.722	72	288
AMR-NB	72	288
Opus-NB	60	240



- Quality Monitoring and Noise Reduction are not supported.
- SRTP is supported in all configurations.

### 3.3.7 Mediant 2600 E-SBC

The maximum number of supported SBC sessions is shown in Section ‘SIP Signaling and Media Capacity’. These SBC sessions also support SRTP and RTCP XR. When DSP capabilities are required, the number of sessions that can use DSP capabilities is reduced, as shown in the table below:

**Table 23: Mediant 2600 E-SBC - Transcoding Capacity per Coder Capability Profile**

Session Coders		Max. Sessions	
From Coder Profile	To Coder Profile	Without MPM4	With MPM4
Profile 1	Profile 1	400	600
Profile 2	Profile 1	300	600
Profile 2	Profile 2	250	600
Profile 1	Profile 2 + AMR-NB / G.722	275	600
Profile 2	Profile 2 + AMR-NB / G.722	225	600
Profile 1	Profile 2 + AMR-WB (G.722.2)	200	600
Profile 2	Profile 2 + AMR-WB (G.722.2)	175	525
Profile 1	Profile 2 + iLBC	175	575
Profile 2	Profile 2 + iLBC	150	500
Profile 1	Profile 2 + SILK-NB	200	600
Profile 2	Profile 2 + SILK-NB	175	525
Profile 1	Profile 2 + SILK-WB	100	350
Profile 2	Profile 2 + SILK-WB	100	350
Profile 1	Profile 2 + Opus-NB	125	425
Profile 2	Profile 2 + Opus-NB	125	375
Profile 1	Profile 2 + Opus-WB	100	300
Profile 2	Profile 2 + Opus-WB	75	275



- *Profile 1:* G.711 at 20ms only, with in-band signaling (in voice channel), DTMF transcoding (RFC 2833 to in-band signaling), and Silence Suppression (no fax detection or T.38 support).
- *Profile 2:* G.711, G.726, G.729 (A / AB), G.723.1, T.38 with fax detection, in-band signaling (in voice channel), and Silence Compression.
- Acoustic Echo Suppressor reduces performance. For more information, contact your AudioCodes sales representative.
- MPM is the optional, Media Processing Module that provides additional DSPs, allowing greater capacity.

### 3.3.8 Mediant 4000 SBC

The maximum number of supported SBC sessions is listed in Section ‘SIP Signaling and Media Capacity’. These SBC sessions also support SRTP and RTCP XR. When DSP capabilities are required, the number of sessions that can use DSP capabilities is reduced, as shown in the table below.

**Table 24: Mediant 4000 SBC - Transcoding Capacity per Coder Capability Profile**

Session Coders		Max. Sessions	
From Coder Profile	To Coder Profile	Without MPM8	With MPM8
Profile 1	Profile 1	800	2,400
Profile 2	Profile 1	600	1,850
Profile 2	Profile 2	500	1,550
Profile 1	Profile 2 + AMR-NB / G.722	550	1,650
Profile 2	Profile 2 + AMR-NB / G.722	450	1,350
Profile 1	Profile 2 + AMR-WB (G.722.2)	400	1,200
Profile 2	Profile 2 + AMR-WB (G.722.2)	350	1,050
Profile 1	Profile 2 + iLBC	350	1,150
Profile 2	Profile 2 + iLBC	300	1,000
Profile 1	Profile 2 + SILK-NB	400	1,200
Profile 2	Profile 2 + SILK-NB	350	1,050
Profile 1	Profile 2 + SILK-WB	200	700
Profile 2	Profile 2 + SILK-WB	200	700
Profile 1	Profile 2 + Opus-NB	250	850
Profile 2	Profile 2 + Opus-NB	250	750
Profile 1	Profile 2 + Opus-WB	200	600
Profile 2	Profile 2 + Opus-WB	150	550



- *Profile 1:* G.711 at 20ms only, with in-band signaling (in voice channel), DTMF transcoding (RFC 2833 to in-band signaling), and Silence Suppression (no fax detection or T.38 support).
- *Profile 2:* G.711, G.726, G.729 (A / AB), G.723.1, T.38 with fax detection, in-band signaling (in voice channel), and Silence Compression.
- Acoustic Echo Suppressor reduces performance. For more information, contact your AudioCodes sales representative.
- MPM is the optional, Media Processing Module that provides additional DSPs, allowing greater capacity.

### 3.3.8.1 Forwarding Session Capacity per Feature without Transcoding

The table below lists the maximum number of concurrent forwarding sessions per feature without using transcoding.

**Table 25: Mediant 4000 SBC - Forwarding Capacity per Feature**

Feature	Max. Sessions
Fax Detection	5,000
AD/AMD/Beep Detection	5,000
CP Detection	5,000
Jitter Buffer	5,000



- All figures were calculated for call duration of 100 seconds.
- For fax detection, figures are based on the following assumptions:
  - Timeout for fax detection is 10 seconds (default)
  - Fax detection is required on both legs of the call
- Figures for Call Progress (CP), AD, AMD, and Beep detection assume that detection is only on one leg of the call (if not, figures will be reduced).



### 3.3.9 Mediant 4000B SBC

The maximum number of supported SBC sessions is listed in Section ‘SIP Signaling and Media Capacity’. These SBC sessions also support SRTP and RTCP XR. When DSP capabilities are required, the number of sessions that can use DSP capabilities is reduced, as shown in the table below.

**Table 26: Mediant 4000B SBC - Transcoding Capacity per Coder Capability Profile**

Session Coders		Max. Sessions				
From Coder Profile	To Coder Profile	Without MPM	1 x MPM8B	1 x MPM12B	2 x MPM12B	3 x MPM12B
Profile 1	Profile 1	800	2,400	3,250	5,000	5,000
Profile 2	Profile 1	600	1,850	2,450	4,350	5,000
Profile 2	Profile 2	500	1,550	2,100	3,650	5,000
Profile 1	Profile 2 + AMR-NB / G.722	550	1,650	2,200	3,850	5,000
Profile 2	Profile 2 + AMR-NB / G.722	450	1,350	1,800	3,150	4,550
Profile 1	Profile 2 + AMR-WB (G.722.2)	400	1,200	1,600	2,850	4,050
Profile 2	Profile 2 + AMR-WB (G.722.2)	350	1,050	1,400	2,500	3,600
Profile 1	Profile 2 + iLBC	400	1,200	1,600	2,850	4,050
Profile 2	Profile 2 + iLBC	350	1,050	1,400	2,500	3,600
Profile 1	Profile 2 + SILK-NB	400	1,200	1,600	2,850	4,050
Profile 2	Profile 2 + SILK-NB	350	1,050	1,400	2,500	3,600
Profile 1	Profile 2 + SILK-WB	200	700	950	1,650	2,400
Profile 2	Profile 2 + SILK-WB	200	700	950	1,650	2,400
Profile 1	Profile 2 + Opus-NB	250	850	1,150	2,000	2,850
Profile 2	Profile 2 + Opus-NB	250	750	1,050	1,800	2,600
Profile 1	Profile 2 + Opus-WB	200	600	850	1,500	2,150
Profile 2	Profile 2 + Opus-WB	150	550	750	1,300	1,900



- *Profile 1*: G.711 at 20ms only, with In-band signaling (in voice channel), DTMF transcoding (RFC 2833 to in-band signaling), and Silence Suppression (no fax detection or T.38 support).
- *Profile 2*: G.711, G.726, G.729 (A / AB), G.723.1, AMR-NB, T.38 with fax detection, In-band signaling (in voice channel), and Silence Compression.
- Acoustic Echo Suppressor reduces performance by about 30%. For more information, contact your AudioCodes sales representative.
- MPMB is the optional, Media Processing Module that provides additional DSPs, allowing greater capacity.

### 3.3.9.1 Forwarding Session Capacity per Feature without Transcoding

The table below lists the maximum number of concurrent forwarding sessions per feature without using transcoding.

**Table 27: Mediant 4000B SBC - Forwarding Capacity per Feature**

Feature	Max. Sessions
Fax Detection	5,000
AD/AMD/Beep Detection	5,000
CP Detection	5,000
Jitter Buffer	5,000



- All figures were calculated for call duration of 100 seconds.
- For fax detection, figures are based on the following assumptions:
  - Timeout for fax detection is 10 seconds (default)
  - Fax detection is required on both legs of the call
- Figures for Call Progress (CP), AD, AMD, and Beep detection assume that detection is only on one leg of the call (if not, figures will be reduced).

### 3.3.10 Mediant 9000 Rev. B / 9080 SBC

The maximum number of supported SBC sessions is listed in Section 'SIP Signaling and Media Capacity'. These SBC sessions also support SRTP and RTCP XR. When DSP capabilities are required, the number of sessions that can use DSP capabilities is reduced, as shown in the table below.

**Table 28: Mediant 9000 Rev. B / 9080 - Transcoding Capacity per Coder Capability Profile**

Session Coders		Max. Sessions	
From Coder Profile	To Coder Profile	Basic	Extended
Profile 1	Profile 1	9,600	6,625
Profile 2	Profile 1	4,400	3,625
Profile 2	Profile 2	2,875	2,500
Profile 1	Profile 2 + AMR-NB / G.722	2,925	2,600
Profile 2	Profile 2 + AMR-NB / G.722	2,150	1,950
Profile 1	Profile 2 + AMR-WB (G.722.2)	950	925
Profile 2	Profile 2 + AMR-WB	850	825
Profile 1	Profile 2 + SILK-NB	2,750	2,500
Profile 2	Profile 2 + SILK-NB	2,050	1,900
Profile 1	Profile 2 + SILK-WB	1,575	1,475
Profile 2	Profile 2 + SILK-WB	1,300	1,250
Profile 1	Profile 2 + Opus-NB	1,700	1,450
Profile 2	Profile 2 + Opus-NB	1,375	1,200
Profile 1	Profile 2 + Opus-WB	1,375	1,200
Profile 2	Profile 2 + Opus-WB	1,175	1,025



- *Profile 1*: G.711 at 20ms only, without T.38 support.
- *Profile 2*: G.711, G.726, G.729 (A / AB), G.723.1, T.38.
- *Basic*: Excludes in-band signaling (in voice channel), VAD, Silence Suppression and fax detection.
- *Extended*: Includes DTMF transcoding (RFC 2833 to in-band signaling), VAD, Silence Suppression and fax detection
- Acoustic Echo Suppressor may reduce capacity. For more information, contact your AudioCodes sales representative.
- For transcoding capabilities, the 'SBC Performance Profile' (SBCPerformanceProfile) parameter must be configured to **Optimized for Transcoding (2)**.

### 3.3.10.1 Forwarding Session Capacity per Feature without Transcoding

The table below lists the maximum number of concurrent forwarding sessions per feature without using transcoding.

**Table 29: Mediant 9000 Rev. B / 9080 SBC - Forwarding Capacity per Feature**

Feature	Max. Sessions
Fax Detection	45,000
AD, AMD, and Beep Detection	45,000
CP Detection	45,000
Jitter Buffer	6,000



- All figures were calculated for call duration of 100 seconds.
- For fax detection, figures are based on the following assumptions:
  - Timeout for fax detection is 10 seconds (default)
  - Fax detection is required on both legs of the call
- Figures for Call Progress (CP), AD, AMD, and Beep detection assume that detection is only on one leg of the call (if not, figures will be reduced).

### 3.3.11 Mediant 9000 Rev. B / 9080 SBC with Media Transcoders

Mediant 9000, Mediant 9000 Rev. B, or Mediant 9080 SBC with Media Transcoders allows increasing the number of transcoding sessions by using Media Transcoders. The maximum number of transcoding sessions depends on the following:

- Number of Media Transcoders in the media transcoding cluster. (The cluster can have up to eight Media Transcoders.)
- Cluster operation mode (Best-Effort or Full-HA mode).
- Maximum transcoding sessions. Each transcoding session is weighted as two RTP-RTP sessions without transcoding. Therefore, the number of sessions without transcoding plus the doubled number of sessions with transcoding must be less than the maximum RTP-RTP value specified in the table. As a result, if all sessions are with transcoding, the maximum number of sessions is half the maximum RTP-RTP sessions without transcoding as specified in Section 'SIP Signaling and Media Capacity'.

The following table lists maximum transcoding sessions capacity of a single Media Transcoder.

**Table 30: Mediant 9000B/9080 Single Media Transcoder (MT) - Transcoding Capacity per Profile**

Session Coders		Max. Sessions		
From Coder Profile	To Coder Profile	1 x MPM12B	2 x MPM12B	3 x MPM12B
Profile 1	Profile 1	2,875	5,000	5,000
Profile 2	Profile 1	2,300	4,025	5,000
Profile 2	Profile 2	1,800	3,175	4,550
Profile 1	Profile 2 + AMR-NB / G.722	2,000	3,525	5,000
Profile 2	Profile 2 + AMR-NB / G.722	1,625	2,850	4,075
Profile 1	Profile 2 + AMR-WB (G.722.2)	1,425	2,500	3,600
Profile 2	Profile 2 + AMR-WB (G.722.2)	1,225	2,175	3,100
Profile 1	Profile 2 + SILK-NB	1,425	2,500	3,600
Profile 2	Profile 2 + SILK-NB	1,225	2,175	3,100
Profile 1	Profile 2 + SILK-WB	850	1,500	2,150
Profile 2	Profile 2 + SILK-WB	850	1,500	2,150
Profile 1	Profile 2 + Opus-NB	1,050	1,825	2,625
Profile 2	Profile 2 + Opus-NB	950	1,675	2,400
Profile 1	Profile 2 + Opus-WB	750	1,325	1,900
Profile 2	Profile 2 + Opus-WB	650	1,175	1,675



- *Profile 1:* G.711 at 20ms only, with In-band signaling (in voice channel) and Silence Suppression (no fax detection or T.38 support).
- *Profile 2:* G.711, G.726, G.729 (A / AB), G.723.1, AMR-NB, T.38 with fax detection, In-band signaling (in voice channel), and Silence Compression.
- Acoustic Echo Suppressor reduces performance by about 30%. For more information, contact your AudioCodes sales representative.
- MPM12B is a Media Processing Module in the Media Transcoder that provides additional DSPs, allowing higher capacity.
- For best cluster efficiency, all Media Transcoders in the Cluster should populate the same number of MPM12Bs.
- The SBC employs load balancing of transcoding sessions among all Media Transcoders in the Cluster. Each Media Transcoder can handle up to 200 calls (transcoded sessions) per second (CPS).

### 3.3.12 Mediant 9030 SBC

The maximum number of supported SBC sessions is listed in Section 'SIP Signaling and Media Capacity'. These SBC sessions also support SRTP and RTCP XR. When DSP capabilities are required, the number of sessions that can use DSP capabilities is reduced, as shown in the table below.

**Table 31: Mediant 9030 SBC - Transcoding Capacity per Coder Capability Profile**

Session Coders		Max. Sessions	
From Coder Profile	To Coder Profile	Basic	Extended
Profile 1	Profile 1	4,025	2,775
Profile 2	Profile 1	1,825	1,525
Profile 2	Profile 2	1,200	1,050
Profile 1	Profile 2 + AMR-NB / G.722	1,200	1,075
Profile 2	Profile 2 + AMR-NB / G.722	875	825
Profile 1	Profile 2 + AMR-WB (G.722.2)	400	375
Profile 2	Profile 2 + AMR-WB	350	350
Profile 1	Profile 2 + SILK-NB	1,150	1,050
Profile 2	Profile 2 + SILK-NB	850	775
Profile 1	Profile 2 + SILK-WB	650	625
Profile 2	Profile 2 + SILK-WB	525	525
Profile 1	Profile 2 + Opus-NB	700	600
Profile 2	Profile 2 + Opus-NB	575	500
Profile 1	Profile 2 + Opus-WB	575	500
Profile 2	Profile 2 + Opus-WB	475	425



- *Profile 1*: G.711 at 20ms only, without T.38 support.
- *Profile 2*: G.711, G.726, G.729 (A / AB), G.723.1, T.38.
- *Basic*: Excludes in-band signaling (in voice channel), VAD, Silence Suppression and fax detection.
- *Extended*: Includes DTMF transcoding (RFC 2833 to in-band signaling), VAD, Silence Suppression and fax detection
- Acoustic Echo Suppressor may reduce capacity. For more information, contact your AudioCodes sales representative.
- For transcoding capabilities, the 'SBC Performance Profile' (SBCPerformanceProfile) parameter must be configured to **Optimized for Transcoding (2)**.

### 3.3.12.1 Forwarding Session Capacity per Feature without Transcoding

The table below lists the maximum number of concurrent forwarding sessions per feature without using transcoding.

**Table 32: Mediant 9030 SBC - Forwarding Capacity per Feature**

Feature	Max. Sessions
Fax Detection	23,000
AD/AMD/Beep Detection	23,000
CP Detection	23,000
Jitter Buffer	3,000



- All figures were calculated for call duration of 100 seconds.
- For fax detection, figures are based on the following assumptions:
  - Timeout for fax detection is 10 seconds (default)
  - Fax detection is required on both legs of the call
- Figures for Call Progress (CP), AD, AMD, and Beep detection assume that detection is only on one leg of the call (if not, figures will be reduced).



### 3.3.13 Mediant Cloud Edition (CE) SBC

The Media Components (MC) in the media cluster of the Mediant CE must all be of the same instance type: either forwarding-only, or forwarding and transcoding. A maximum of 21 MCs can be used.

#### 3.3.13.1 Mediant CE SBC for AWS EC2

##### 3.3.13.1.1 Forwarding Sessions

The number of concurrent forwarding sessions per MC is shown in the following table.

**Table 33: Mediant CE for AWS EC2 - Forwarding Capacity per MC Instance Type**

MC Instance Type	Max. Forwarding Sessions
m5n.large	3,200
c5.4xlarge	4,000



Forwarding performance was tested in AWS Ireland Region.

##### 3.3.13.1.2 Transcoding Sessions

For transcoding capabilities, the Media Component (MC) must be of the AWS instance type c5.4xlarge. The number of supported transcoding sessions per MC is shown in the following table.

**Table 34: Mediant CE for AWS EC2 - Transcoding Capacity per c5.4xlarge MC**

Session Coders		Max. Sessions	
From Coder Profile	To Coder Profile	Basic	Extended
Profile 1	Profile 1	3,500	2,825
Profile 2	Profile 1	2,375	1,900
Profile 2	Profile 2	1,625	1,425
Profile 1	Profile 2 + AMR-NB / G.722	1,500	1,300
Profile 2	Profile 2 + AMR-NB / G.722	1,150	1,050
Profile 1	Profile 2 + AMR-WB (G.722.2)	475	475
Profile 2	Profile 2 + AMR-WB	425	425
Profile 1	Profile 2 + SILK-NB	1,400	1,250
Profile 2	Profile 2 + SILK-NB	1,100	1,025
Profile 1	Profile 2 + SILK-WB	775	750
Profile 2	Profile 2 + SILK-WB	675	675
Profile 1	Profile 2 + Opus-NB	850	725
Profile 2	Profile 2 + Opus-NB	725	650
Profile 1	Profile 2 + Opus-WB	700	600
Profile 2	Profile 2 + Opus-WB	625	550



- *Profile 1:* G.711 at 20ms only, without T.38 support.
- *Profile 2:* G.711, G.726, G.729 (A / AB), G.723.1, T.38.
- *Basic:* Excludes in-band signaling (in voice channel), VAD, Silence Suppression and fax detection.
- *Extended:* Includes DTMF transcoding (RFC 2833 to in-band signaling), VAD, Silence Suppression and fax detection
- Acoustic Echo Suppressor may reduce capacity. For more information, contact your AudioCodes sales representative.

### 3.3.13.2 Mediant CE SBC for Azure

#### 3.3.13.2.1 Forwarding Sessions

The number of concurrent forwarding sessions per Media Component (MC) is shown in the following table.

**Table 35: Mediant CE for Azure - Session Capacity per MC**

MC VM Size	Max. Forwarding-Only Sessions	Max. Forwarding & Transcoding Sessions
D2ds_v5	3,000	3,000
D4ds_v5	6,500	5,500
D8ds_v5	12,000	6,000



It's not recommended to exceed 5,000 sessions per MC because of the duration required for processing an MC failover.

#### 3.3.13.2.2 Transcoding Sessions

For transcoding capabilities, the Media Component (MC) must be Azure virtual machine size D2ds\_v5, D4ds\_v5, or D8ds\_v5. The number of supported transcoding sessions per MC is shown in the following table.

**Table 36: Mediant CE for Azure - Transcoding Capacity per MC**

Session Coders		D2ds_v5		D4ds_v5		D8ds_v5	
From Coder Profile	To Coder Profile	Basic	Extended	Basic	Extended	Basic	Extended
Profile 1	Profile 1	275	175	575	350	1,725	1,100
Profile 2	Profile 1	150	125	300	250	925	750
Profile 2	Profile 2	100	75	200	175	625	550
Profile 1	Profile 2 + AMR-NB / G.722	75	75	175	150	575	500
Profile 2	Profile 2 + AMR-NB / G.722	75	50	150	125	450	400
Profile 1	Profile 2 + AMR-WB (G.722.2)	25	25	50	50	175	175
Profile 2	Profile 2 + AMR-WB	25	25	50	50	175	175
Profile 1	Profile 2 + SILK-NB	75	75	175	150	550	500

Session Coders		D2ds_v5		D4ds_v5		D8ds_v5	
From Coder Profile	To Coder Profile	Basic	Extended	Basic	Extended	Basic	Extended
Profile 2	Profile 2 + SILK-NB	50	50	125	125	425	400
Profile 1	Profile 2 + SILK-WB	50	50	100	100	300	300
Profile 2	Profile 2 + SILK-WB	25	25	75	75	275	250
Profile 1	Profile 2 + Opus-NB	50	25	100	75	325	275
Profile 2	Profile 2 + Opus-NB	25	25	75	75	275	250
Profile 1	Profile 2 + Opus-WB	25	25	75	75	275	225
Profile 2	Profile 2 + Opus-WB	25	25	75	50	250	200



- *Profile 1*: G.711 at 20ms only, without T.38 support.
- *Profile 2*: G.711, G.726, G.729 (A / AB), G.723.1, T.38.
- *Basic*: Excludes in-band signaling (in voice channel), VAD, Silence Suppression and fax detection.
- *Extended*: Includes DTMF transcoding (RFC 2833 to in-band signaling), VAD, Silence Suppression and fax detection
- Acoustic Echo Suppressor may reduce capacity. For more information, contact your AudioCodes sales representative.

### 3.3.13.3 Mediant CE SBC for VMware

The following tables list maximum forwarding and transcoding capacities for Mediant CE SBC running on VMware hypervisor with Hyper-Threading.

Each vCPU refers to a single thread of a physical core. For example, a 4-vCPU virtual machine is allocated by only two physical cores.



- The profiles below require the following minimum requirements:
  - Intel Xeon Scalable Processors or later. The capacity listed in the following table refers to 3.3 GHz all-core Turbo speed. When using different all-core Turbo speed, capacity is increased or decreased accordingly.
  - Hyper-Threading is enabled on host.
  - VMware ESXi 6.7 or later.
  - CPUOverrideHT ini file parameter is configured to 1.
- CPU Affinity is recommended. For more information, refer to the *Installation Manual*.
- For Server Failure redundancy, the maximum active media sessions (before failure) on each server must not exceed 4,000 media sessions.

### 3.3.13.3.1 Forwarding Sessions

The number of concurrent forwarding sessions per Media Component (MC) is shown in the following table.

**Table 37: Mediant CE on VMware - Forwarding Capacity per MC Instance Type**

MC Instance Type	Max. Sessions
2 vCPUs, 8GB	4,000 (Forwarding Only)
8 vCPUs, 8GB	4,000 (Forwarding and Transcoding)

### 3.3.13.3.2 Transcoding Sessions

For transcoding capabilities, the Media Component (MC) must be a virtual machine of 8 vCPUs and 8 GB. The number of supported transcoding sessions per MC is shown in the following table.



For transcoding capabilities, the 'Media Component Profile' parameter on all Media Components must be configured to **Transcoding Enabled** (MCProfile = 1).

**Table 38: Mediant CE SBC for VMware with Hyper-Threading - Transcoding Capacity**

Session Coders		Max. Sessions 8 vCPU 8-GB RAM	
From Coder Profile	To Coder Profile	Basic	Extended
Profile 1	Profile 1	1,800	1,175
Profile 1	Profile 2	975	775
Profile 2	Profile 2	675	575
Profile 1	Profile 2 + G.722 / AMR-NB	600	525
Profile 2	Profile 2 + G.722 / AMR-NB	475	425
Profile 1	Profile 2 + AMR-WB	200	175
Profile 2	Profile 2 + AMR-WB	175	175
Profile 1	Profile 2 + SILK-NB	575	525
Profile 2	Profile 2 + SILK-NB	450	425
Profile 1	Profile 2 + SILK-WB	325	300
Profile 2	Profile 2 + SILK-WB	275	275
Profile 1	Profile 2 + Opus-NB	350	300
Profile 2	Profile 2 + Opus-NB	300	275
Profile 1	Profile 2 + Opus-WB	300	250
Profile 2	Profile 2 + Opus-WB	250	225



- *Profile 1*: G.711 at 20ms only, without T.38 support.
- *Profile 2*: G.711, G.726, G.729 (A / AB), G.723.1, T.38.
- *Basic*: Excludes in-band signaling (in voice channel), VAD, Silence Suppression and fax detection.

- *Extended*: Includes DTMF transcoding (RFC 2833 to in-band signaling), VAD, Silence Suppression and fax detection
- Acoustic Echo Suppressor may reduce capacity. For more information, contact your AudioCodes sales representative.

### 3.3.13.4 Mediant CE SBC for GCP

#### 3.3.13.4.1 Forwarding Sessions

The number of concurrent forwarding sessions (RTP-RTP) per Media Component (MC) is shown in the following table.

**Table 39: Mediant CE for GCP - Session Capacity per MC**

MC VM Size	Max. Forwarding-Only Sessions
n2-standard-2	3,500

#### 3.3.13.4.2 Transcoding Sessions

For transcoding capabilities, the MC should be of the n2-standard-2 or n2\_highcpu-8 instance types. When the transcoding session is at maximum, the total sessions is reduced as shown in the following table.

**Table 40: Mediant CE for GCP - Transcoding Sessions per MC**

MC VM Size	Max. Forwarding and Transcoding Sessions
n2-standard-2	1,500 (up to 300 transcoding sessions)
n2-highcpu-8	1,600 (up to 1,500 transcoding sessions)

The number of supported transcoding sessions per MC is shown in the following table.

**Table 41: Transcoding Capacity per MC**

Session Coders		n2-standard-2		n2-highcpu-8	
From Coder Profile	To Coder Profile	Basic	Extended	Basic	Extended
Profile 1	Profile 1	300	175	1,500	1,175
Profile 2	Profile 1	150	125	975	775
Profile 2	Profile 2	100	75	675	575
Profile 1	Profile 2 + AMR-NB / G.722	100	75	625	525
Profile 2	Profile 2 + AMR-NB / G.722	75	50	475	425
Profile 1	Profile 2 + AMR-WB (G.722.2)	25	25	200	175
Profile 2	Profile 2 + AMR-WB	25	25	175	175
Profile 1	Profile 2 + SILK-NB	75	75	575	525
Profile 2	Profile 2 + SILK-NB	75	50	450	425
Profile 1	Profile 2 + SILK-WB	50	50	325	300
Profile 2	Profile 2 + SILK-WB	25	25	275	275

Session Coders		n2-standard-2		n2-highcpu-8	
From Coder Profile	To Coder Profile	Basic	Extended	Basic	Extended
Profile 1	Profile 2 + Opus-NB	50	50	350	300
Profile 2	Profile 2 + Opus-NB	50	25	300	275
Profile 1	Profile 2 + Opus-WB	50	25	300	250
Profile 2	Profile 2 + Opus-WB	25	25	250	225



- *Profile 1:* G.711 at 20ms only, without T.38 support.
- *Profile 2:* G.711, G.726, G.729 (A / AB), G.723.1, T.38.
- *Basic:* Excludes in-band signaling (in voice channel), VAD, Silence Suppression and fax detection.
- *Extended:* Includes DTMF transcoding (RFC 2833 to in-band signaling), VAD, Silence Suppression and fax detection
- Acoustic Echo Suppressor may reduce capacity. For more information, contact your AudioCodes sales representative.

### 3.3.14 Mediant Virtual Edition (VE) SBC

The maximum number of supported SBC sessions is listed in Section 'SIP Signaling and Media Capacity'. These SBC sessions also support SRTP and RTCP XR. When DSP capabilities are required (DSP Performance Profile), the number of sessions that can use DSP capabilities is reduced, as shown in the tables in this section.

#### 3.3.14.1 Mediant VE SBC for Hypervisors with Hyper-Threading

The following tables list maximum transcoding capacity for Mediant VE SBC running on the following hypervisors with Hyper-Threading: VMware, KVM/OpenStack, and Hyper-V.

Each vCPU refers to a Hyper-Threaded core (logical). For example, a 4-vCPU virtual machine allocates only 2 physical cores.



- The transcoding profiles below require the following minimum requirements:
  - Intel Xeon Scalable Processors or later. The capacity listed in the table below refer to 3.3 GHz all-core Turbo speed. When using different all-core Turbo speed, the capacity is increased or decreased accordingly.
  - Hyper-Threading enabled on host.
  - VMware Hypervisor:
    - VMware ESXi 6.7 or later. Capacities in Section 'SIP Signaling and Media Capacity' were achieved using ESXi Version 7.0.3.
    - CPUOverrideHT ini file parameter is configured to 1.
    - KVM Hypervisor/OpenStack: Host-Passthrough mode must be used. For more information, refer to the *Installation Manual*.
  - CPU Affinity is recommended. For more information, refer to the *Installation Manual*.
  - For transcoding capabilities, the 'SBC Performance Profile' (SBCPerformanceProfile) parameter must be configured to Optimized for Transcoding (2).

**Table 42: Mediant VE SBC on Hypervisors with Hyper-Threading - Transcoding Capacity**

Session Coders		Max. Sessions							
		2 vCPU 8-GB RAM		4 vCPU 8-GB RAM (VMware Only)		8 vCPU 16-GB RAM		16 vCPU 16-GB RAM (Not Hyper-V)	
From Coder Profile	To Coder Profile	Basic	Extended	Basic	Extended	Basic	Extended	Basic	Extended
Profile 1	Profile 1	300	200	800	600	1,200	825	2,400	2,400
Profile 1	Profile 2	150	125	500	400	675	550	2,075	1,650
Profile 2	Profile 2	100	100	350	300	475	400	1,425	1,250
Profile 1	Profile 2 + G.722 / AMR-NB	100	75	325	275	425	375	1,300	1,150
Profile 2	Profile 2 + G.722 / AMR-NB	75	75	250	225	325	300	1,000	925
Profile 1	Profile 2 + AMR-WB	25	25	100	100	125	125	425	400
Profile 2	Profile 2 + AMR-WB	25	25	75	75	125	125	375	375
Profile 1	Profile 2 + SILK-NB	100	75	300	275	400	350	1,225	1,100
Profile 2	Profile 2 + SILK-NB	75	75	225	225	325	300	975	900
Profile 1	Profile 2 + SILK-WB	50	50	175	150	225	200	700	650
Profile 2	Profile 2 + SILK-WB	50	50	150	150	200	200	600	600
Profile 1	Profile 2 + Opus-NB	50	50	175	150	250	200	750	650
Profile 2	Profile 2 + Opus-NB	50	25	150	125	200	175	650	575
Profile 1	Profile 2 + Opus-WB	50	25	150	125	200	175	625	525
Profile 2	Profile 2 + Opus-WB	25	25	125	100	175	150	550	475



- Profile 1: G.711 at 20ms only, without T.38 support.
- Profile 2: G.711, G.726, G.729 (A / AB), G.723.1, T.38.
- Basic: Excludes in-band signaling (in voice channel), VAD, Silence Suppression and fax detection.

- *Extended*: Includes DTMF transcoding (RFC 2833 to in-band signaling), VAD, Silence Suppression and fax detection
- Acoustic Echo Suppressor may reduce capacity. For more information, contact your AudioCodes sales representative.

### 3.3.14.2 Mediant VE SBC for Amazon AWS EC2

The following tables list maximum channel capacity for Mediant VE SBC on the Amazon EC2 platform.

#### 3.3.14.2.1 Transcoding Sessions



For transcoding capabilities, the 'SBC Performance Profile' (SBCPerformanceProfile) parameter must be configured to **Optimized for Transcoding (2)**.

##### 3.3.14.2.1.1 m5n.large

**Table 43: Mediant VE SBC on m5n.large - Transcoding Capacity**

Session Coders		Max. Sessions	
From Coder Profile	To Coder Profile	Basic	Extended
Profile 1	Profile 1	250	150
Profile 2	Profile 1	125	100
Profile 2	Profile 2	75	75
Profile 1	Profile 2 + AMR-NB / G.722	75	75
Profile 2	Profile 2 + AMR-NB / G.722	50	50
Profile 1	Profile 2 + AMR-WB	25	25
Profile 2	Profile 2 + AMR-WB	25	25
Profile 1	Profile 2 + SILK-NB	75	50
Profile 2	Profile 2 + SILK-NB	50	50
Profile 1	Profile 2 + SILK-WB	25	25
Profile 2	Profile 2 + SILK-WB	25	25
Profile 1	Profile 2 + Opus-NB	50	25
Profile 2	Profile 2 + Opus-NB	25	25
Profile 1	Profile 2 + Opus-WB	25	25
Profile 2	Profile 2 + Opus-WB	25	25



- *Profile 1*: G.711 at 20ms only, without T.38 support.
- *Profile 2*: G.711, G.726, G.729 (A / AB), G.723.1, T.38.
- *Basic*: Excludes in-band signaling (in voice channel), VAD, Silence Suppression and fax detection.
- *Extended*: Includes DTMF transcoding (RFC 2833 to in-band signaling), VAD, Silence Suppression and fax detection



- Acoustic Echo Suppressor may reduce capacity. For more information, contact your AudioCodes sales representative.

### 3.3.14.2.1.2 c5n.2xlarge

**Table 44: Mediant VE SBC on c5n.2xlarge - Transcoding Capacity**

Session Coders		Max. Sessions	
From Coder Profile	To Coder Profile	Basic	Extended
Profile 1	Profile 1	1,950	1,275
Profile 2	Profile 1	1,050	850
Profile 2	Profile 2	725	625
Profile 1	Profile 2 + AMR-NB / G.722	675	575
Profile 2	Profile 2 + AMR-NB / G.722	500	475
Profile 1	Profile 2 + AMR-WB	200	200
Profile 2	Profile 2 + AMR-WB	175	175
Profile 1	Profile 2 + SILK-NB	625	550
Profile 2	Profile 2 + SILK-NB	500	450
Profile 1	Profile 2 + SILK-WB	350	325
Profile 2	Profile 2 + SILK-WB	300	300
Profile 1	Profile 2 + Opus-NB	375	325
Profile 2	Profile 2 + Opus-NB	325	300
Profile 1	Profile 2 + Opus-WB	300	275
Profile 2	Profile 2 + Opus-WB	275	250



- *Profile 1*: G.711 at 20ms only, without T.38 support.
- *Profile 2*: G.711, G.726, G.729 (A / AB), G.723.1, T.38.
- *Basic*: Excludes in-band signaling (in voice channel), VAD, Silence Suppression and fax detection.
- *Extended*: Includes DTMF transcoding (RFC 2833 to in-band signaling), VAD, Silence Suppression and fax detection
- Acoustic Echo Suppressor may reduce capacity. For more information, contact your AudioCodes sales representative.

## 3.3.14.2.1.3 c5n.9xlarge

Table 45: Mediant VE SBC on c5n.9xlarge - Transcoding Capacity

Session Coders		Max. Sessions	
From Coder Profile	To Coder Profile	Basic	Extended
Profile 1	Profile 1	7,000	6,800
Profile 2	Profile 1	5,725	4,575
Profile 2	Profile 2	3,925	3,450
Profile 1	Profile 2 + AMR-NB / G.722	3,600	3,125
Profile 2	Profile 2 + AMR-NB / G.722	2,775	2,550
Profile 1	Profile 2 + AMR-WB	1,175	1,150
Profile 2	Profile 2 + AMR-WB	1,050	1,000
Profile 1	Profile 2 + SILK-NB	3,400	3,025
Profile 2	Profile 2 + SILK-NB	2,675	2,475
Profile 1	Profile 2 + SILK-WB	1,900	1,800
Profile 2	Profile 2 + SILK-WB	1,650	1,625
Profile 1	Profile 2 + Opus-NB	2,075	1,775
Profile 2	Profile 2 + Opus-NB	1,775	1,600
Profile 1	Profile 2 + Opus-WB	1,725	1,450
Profile 2	Profile 2 + Opus-WB	1,500	1,325



- *Profile 1*: G.711 at 20ms only, without T.38 support.
- *Profile 2*: G.711, G.726, G.729 (A / AB), G.723.1, T.38.
- *Basic*: Excludes in-band signaling (in voice channel), VAD, Silence Suppression and fax detection.
- *Extended*: Includes DTMF transcoding (RFC 2833 to in-band signaling), VAD, Silence Suppression and fax detection
- Acoustic Echo Suppressor may reduce capacity. For more information, contact your AudioCodes sales representative.

### 3.3.14.2.2 Forwarding Session Capacity per Feature without Transcoding

The table below lists the maximum number of concurrent forwarding sessions per feature without using transcoding.

**Table 46: Mediant VE SBC on Amazon EC2 - Forwarding Capacity per Feature**

Feature	Max. Sessions	
	c5.2xlarge	c5.9xlarge
Fax Detection	5,500	7,000
AD/AMD/Beep Detection	5,500	7,000
CP Detection	5,500	7,000
Jitter Buffer	1,800	7,000



- All figures were calculated for call duration of 100 seconds.
- For fax detection, figures are based on the following assumptions:
  - Timeout for fax detection is 10 seconds (default)
  - Fax detection is required on both legs of the call
- Figures for Call Progress (CP), AD, AMD, and Beep detection assume that detection is only on one leg of the call (if not, figures will be reduced).

### 3.3.14.3 Mediant VE SBC for Azure

The following tables list maximum channel capacity for Mediant VE SBC on the Azure platform.

**Table 47: Mediant VE SBC on Azure DS1\_v2, D2ds\_v5, D4ds\_v5, D8ds\_v5 - Transcoding Capacity**

Session Coders		Max. Sessions							
		DS1_v2		D2ds_v5		D4ds_v5		D8ds_v5	
From Coder Profile	To Coder Profile	Basic	Extended	Basic	Extended	Basic	Extended	Basic	Extended
Profile 1	Profile 1	200	200	300	175	600	375	1,800	1,175
Profile 2	Profile 1	100	100	150	125	325	250	975	775
Profile 2	Profile 2	75	50	100	75	225	175	675	575
Profile 1	Profile 2 + AMR-NB / G.722	100	100	100	75	200	175	600	525
Profile 2	Profile 2 + AMR-NB / G.722	75	50	75	50	150	125	475	425
Profile 1	Profile 2 + AMR-WB (G.722.2)	25	25	25	25	50	50	200	175
Profile 2	Profile 2 + AMR-WB	25	25	25	25	50	50	175	175
Profile 1	Profile 2 + SILK-NB	100	75	75	75	175	175	575	525
Profile 2	Profile 2 + SILK-NB	50	50	75	50	150	125	450	425
Profile 1	Profile 2 + SILK-WB	50	50	50	50	100	100	325	300
Profile 2	Profile 2 + SILK-WB	50	25	25	25	75	75	275	275
Profile 1	Profile 2 + Opus-NB	50	50	50	50	100	100	350	300
Profile 2	Profile 2 + Opus-NB	50	50	50	25	100	75	300	275
Profile 1	Profile 2 + Opus-WB	50	25	50	25	100	75	300	250
Profile 2	Profile 2 + Opus-WB	25	25	25	25	75	75	250	225



- Azure DS\_v2 virtual machine series in general and DS1\_v2 virtual machine size in particular are scheduled for retirement in May 2028. Therefore, it's recommended **not** to use them for new deployments, and to migrate existing deployments to the Dds\_v5 (D2ds\_v5, D4ds\_v5, or D8ds\_v5) virtual machine series.
- *Profile 1*: G.711 at 20ms only, without T.38 support.
- *Profile 2*: G.711, G.726, G.729 (A / AB), G.723.1, T.38.
- *Basic*: Excludes in-band signaling (in voice channel), VAD, Silence Suppression and fax detection.
- *Extended*: Includes DTMF transcoding (RFC 2833 to in-band signaling), VAD, Silence Suppression and fax detection
- Acoustic Echo Suppressor may reduce capacity. For more information, contact your AudioCodes sales representative.
- For transcoding capabilities, the 'SBC Performance Profile' (SBCPerformanceProfile) parameter must be configured to **Optimized for Transcoding (2)**.

### 3.3.14.4 Mediant VE SBC for GCP

The following tables list maximum channel capacity for Mediant VE SBC on the GCP platform.

**Table 48: Mediant VE SBC for GCP - Transcoding Capacity**

Session Coders		n2-standard-2		n2-standard-4		n2-standard-8		n2-highcpu-32	
From Coder Profile	To Coder	Basic	Extended	Basic	Extended	Basic	Extended	Basic	Extended
1	Profile 1	300	200	625	400	1900	1225	3600	3600
2	Profile 1	150	125	325	275	1025	825	3600	3600
2	Profile 2	100	100	225	200	700	625	3350	2925
1	Profile 2 + AMR-NB / G.722	100	75	200	175	650	575	3075	2675
2	Profile 2 + AMR-NB / G.722	75	75	150	150	500	450	2375	2175
1	Profile 2 + AMR-WB	25	25	50	50	200	200	1000	975
2	Profile 2 + AMR-WB	25	25	50	50	175	175	900	875
1	Profile 2 + SILK-NB	100	75	200	175	600	550	2900	2600
2	Profile 2 + SILK-NB	75	75	150	150	475	450	2275	2125
1	Profile 2 + SILK-WB	50	50	100	100	350	325	1650	1550
2	Profile 2 + SILK-WB	50	50	100	100	300	300	1425	1400
1	Profile 2 + Opus-NB	50	50	125	100	375	325	1775	1525
2	Profile 2 + Opus-NB	50	25	100	75	325	275	1525	1350

Session Coders		n2-standard-2		n2-standard-4		n2-standard-8		n2-highcpu-32	
From Coder Profile	To Coder	Basic	Extended	Basic	Extended	Basic	Extended	Basic	Extended
1	Profile 2 + Opus-WB	50	25	100	75	300	250	1475	1250
2	Profile 2 + Opus-WB	25	25	75	75	275	225	1275	1125



- *Profile 1:* G.711 at 20ms only, without T.38 support.
- *Profile 2:* G.711, G.726, G.729 (A / AB), G.723.1, T.38.
- *Basic:* Excludes in-band signaling (in voice channel), VAD, Silence Suppression and fax detection.
- *Extended:* Includes DTMF transcoding (RFC 2833 to in-band signaling), VAD, Silence Suppression and fax detection
- Acoustic Echo Suppressor may reduce capacity. For more information, contact your AudioCodes sales representative.
- For transcoding capabilities, the 'SBC Performance Profile' (SBCPerformanceProfile) parameter must be configured to **Optimized for Transcoding (2)**.

## 4 Configuration Table Capacity

The maximum rows (indices) that can be configured per configuration table is listed in the table below.

**Table 49: Capacity per Configuration Table**

Configuration Table	Mediant 500 / 500L / 800 / 1000B / 3100 MP-1288	Mediant 2600 / 4000B	Mediant 90xx	Mediant VE / CE
Accounts	<ul style="list-style-type: none"> <li>■ MP-1288: 288</li> <li>■ Mediant 500 / 500L / 800 / 1000: 102</li> <li>■ Mediant 3100: 1,500</li> </ul>	625	5,000	<ul style="list-style-type: none"> <li>■ 2-32 GB: 1,500</li> <li>■ 64 GB: 5,000</li> </ul>
Allowed Audio Coders Groups	10 (20 for Mediant 3100)	20	20	20
Allowed Video Coders Groups	5	5	5	5
Alternative Routing Reasons	20	20	20	20
Bandwidth Profile	486 (1,724 for Mediant 3100)	1,009	1,884	1,884
Call Admission Control Profile	102	1,500	1,500	1,500
Call Admission Control Rule (per Profile)	8	8	8	8
Call Setup Rules	<ul style="list-style-type: none"> <li>■ MP-1288 / Mediant 1000/3100: 64</li> <li>■ Mediant 500/500L/800: 100</li> </ul>	400	1,000	<ul style="list-style-type: none"> <li>■ 2-8 GB: 500</li> <li>■ 16-64 GB: 1,000</li> </ul>
Calling Name Manipulation for IP-to-Tel Calls	120	n/a (Gateway only)	n/a (Gateway only)	n/a (Gateway only)
Calling Name Manipulation for Tel-to-IP Calls	120	n/a (Gateway only)	n/a (Gateway only)	n/a (Gateway only)
Char Conversion	40	n/a (Gateway only)	n/a (Gateway only)	n/a (Gateway only)
Charge Codes	25	n/a (Gateway only)	n/a (Gateway only)	n/a (Gateway only)
Classification	102 (1,500 for Mediant 3100)	1,500	1,500	<ul style="list-style-type: none"> <li>■ 2 GB: 750</li> <li>■ 3.5-64 GB: 1,500</li> </ul>
Coders Groups	11 (21 for Mediant 3100)	21	21	21
Coders Groups > Coders	10 (per Coders Group)	10 (per Coders Group)	10 (per Coders Group)	10 (per Coders Group)
Cost Groups	10	10	10	10

Configuration Table	Mediant 500 / 500L / 800 / 1000B / 3100 MP-1288	Mediant 2600 / 4000B	Mediant 90xx	Mediant VE / CE
Custom DNS Servers	n/a	n/a	-	32
Custom MTU	n/a	n/a	-	16
Destination Phone Number Manipulation for IP-to-Tel Calls	120	n/a (Gateway only)	n/a (Gateway only)	n/a (Gateway only)
Destination Phone Number Manipulation for Tel-to-IP Calls	120	n/a (Gateway only)	n/a (Gateway only)	n/a (Gateway only)
DHCP Servers	1	1	1	1
Dial Plan	10 (25 for Mediant 3100)	25	50	50
Dial Plan Rule	2,000 (10,000 for Mediant 3100)	10,000	100,000	<ul style="list-style-type: none"> <li>■ &lt; 16 GB: 2,000</li> <li>■ ≥ 16 GB: 100,000</li> </ul>
Ethernet Devices	16 (1,024 for Mediant 3100)	1,024	1,024	1,024
External Media Source	1	1	1	1
Firewall	50 (500 for Mediant 3100)	500	500	500
Forward On Busy Trunk Destination	<ul style="list-style-type: none"> <li>■ MP-1288: 288</li> <li>■ Mediant 500/500L/800: 100</li> <li>■ Mediant 1000: 240</li> <li>■ Mediant 3100: 512</li> </ul>	n/a (Gateway only)	n/a (Gateway only)	n/a (Gateway only)
Gateway CDR Format	128 Syslog; 40 RADIUS (128 for Mediant 3100); 64 Locally Stored & JSON	n/a (Gateway only)	n/a (Gateway only)	n/a (Gateway only)
HA Network Monitor	10	10	10	10
HTTP Directive Sets	30	30	30	30
HTTP Directives	500	500	500	500
HTTP Locations	40	40	120	<ul style="list-style-type: none"> <li>■ &lt; 8 GB: 40</li> <li>■ ≥ 8 GB: 120</li> </ul>
HTTP Proxy Servers	10	10	40	<ul style="list-style-type: none"> <li>■ &lt; 8 GB: 10</li> <li>■ ≥ 8 GB: 40</li> </ul>
HTTP Remote Hosts	10 (per Remote Web Service)	10 (per Remote Web Service)	10 (per Remote Web Service)	10 (per Remote Web Service)
IDS Matches	20	20	20	20
IDS Policies	20	20	20	20
IDS Rule	100 (20 per Policy)	100 (20 per Policy)	100 (20 per Policy)	100 (20 per Policy)



Configuration Table	Mediant 500 / 500L / 800 / 1000B / 3100 MP-1288	Mediant 2600 / 4000B	Mediant 90xx	Mediant VE / CE
Inbound Manipulations	205 (3,000 for Mediant 3100)	3,000	3,000	3,000
Internal DNS	20	20	20	20
Internal SRV	10	10	10	10
IP Group Set	51 (350 for Mediant 3100)	350	2,500	<ul style="list-style-type: none"> <li>■ 2 GB: 40</li> <li>■ 3.5 GB: 500</li> <li>■ 4-16 GB: 750</li> <li>■ 32-64 GB: 2,500</li> </ul>
IP Groups	80 (700 for Mediant 3100)	700	5,000	<ul style="list-style-type: none"> <li>■ 2 GB: 80</li> <li>■ 3.5 GB: 1,000</li> <li>■ 4-16 GB: 1,500</li> <li>■ 32-64 GB: 5,000</li> </ul>
IP Interfaces	16 1,024 (Mediant 3100)	1,024	1,024	1,024
IP Profiles	<ul style="list-style-type: none"> <li>■ MP-1288/Mediant 500/500L/800: 20</li> <li>■ Mediant 1000: 40</li> <li>■ Mediant 3100: 300</li> </ul>	300	<ul style="list-style-type: none"> <li>■ Mediant 9030: 300</li> <li>■ Mediant 9000/9080/SE: 1,500</li> </ul>	<ul style="list-style-type: none"> <li>■ 2 GB: 150</li> <li>■ 5-32 GB: 300</li> <li>■ 64 GB: 1,500 (5,000 if License Key includes VoiceAI Connect)</li> </ul>
IP-to-IP Routing	615 (9,000 for Mediant 3100)	9,000	9,000	<ul style="list-style-type: none"> <li>■ 2 GB: 4,500</li> <li>■ 3.5-64 GB: 9,000</li> </ul>
IP-to-Tel Routing	120 (288 for MP-1288)	n/a (Gateway only)	n/a (Gateway only)	n/a (Gateway only)
LDAP Server Groups	41 (600 for Mediant 3100)	600	600	600
LDAP Servers	82 (1,200 for Mediant 3100)	1,200	1,200	1,200
Local Users	20	20	20	20
Logging Filters	60	60	60	60
Login OAuth Servers	1	1	1	1
Malicious Signature	20	20	20	20
Management Access List	50	50	50	50
Media Realm Extension	<ul style="list-style-type: none"> <li>■ MP-1288 / Mediant 500/500L/800: 2 x Max. Media Realms</li> <li>■ Mediant 3100: 5 x Max. Media Realms</li> </ul>	<ul style="list-style-type: none"> <li>■ Mediant 2600: 2 x max. Media Realms</li> </ul>	5 x Max. Media Realms	5 x Max. Media Realms

Configuration Table	Mediant 500 / 500L / 800 / 1000B / 3100 MP-1288	Mediant 2600 / 4000B	Mediant 90xx	Mediant VE / CE
		<ul style="list-style-type: none"> <li>■ Mediant 4000B: 5 x max. Media Realms</li> </ul>		
<b>Media Realms</b>	12 (1,024 for Mediant 3100)	1,024	1,024	1,024
<b>Message Conditions</b>	82 (1,200 for Mediant 3100)	1,200	1,200	1,200
<b>Message Manipulations</b>	<ul style="list-style-type: none"> <li>■ MP-1288 / Mediant 500/500L/800: 100</li> <li>■ Mediant 1000: 200</li> <li>■ Mediant 3100: 500</li> </ul>	500	500	500
<b>Message Policies</b>	20	20	20	20
<b>NAT Translation</b>	32	32	32	32
<b>OAuth Servers</b>	1	1	1	1
<b>Outbound Manipulations</b>	205 (3,000 for Mediant 3100)	3,000	3,000	3,000
<b>OVOC Services</b>	1	1	1	1
<b>Phone Contexts</b>	20	n/a (Gateway only)	n/a (Gateway only)	n/a (Gateway only)
<b>Pre-Parsing Manipulation Rules</b>	30	30	30	30
<b>Pre-Parsing Manipulation Sets</b>	10	10	10	10
<b>Proxy Sets</b>	80 (700 for Mediant 3100)	700	5,000	<ul style="list-style-type: none"> <li>■ 2 GB: 80</li> <li>■ 3.5 GB: 1,000</li> <li>■ 4-16 GB: 1,500</li> <li>■ 32-64 GB: 5,000</li> </ul>
<b>Proxy Sets &gt; Proxy Address</b> (per Proxy Set)	10	10	50	<ul style="list-style-type: none"> <li>■ 2 GB: 10</li> <li>■ 3.5 GB: 10</li> <li>■ 8-16 GB: 10</li> <li>■ 32-64 GB: 50</li> </ul>
<b>Proxy Sets &gt; Proxy Address</b> (DNS-resolved IP addresses per Proxy Set)	15	15	50	<ul style="list-style-type: none"> <li>■ 2 GB: 15</li> <li>■ 3.5 GB: 15</li> <li>■ 8-16 GB: 50</li> <li>■ 32-64 GB: 50</li> </ul>
<b>Proxy Sets &gt; Proxy Address</b> (DNS-resolved IP addresses for all Proxy Sets combined)	500	2,100	20,000	<ul style="list-style-type: none"> <li>■ 2 GB: 500</li> <li>■ 3.5 GB: 3,000</li> <li>■ 4 GB: 4,500</li> <li>■ 8-16 GB: 6,000 (20,000 for VAIC feature)</li> </ul>

Configuration Table	Mediant 500 / 500L / 800 / 1000B / 3100 MP-1288	Mediant 2600 / 4000B	Mediant 90xx	Mediant VE / CE
				■ 32-64 GB: 20,000
QoS Mapping	64	64	64	64
Quality of Experience Color Rules	256	256	256	256
Quality of Experience Profile	256	256	256	256
Quality Of Service Rules	510 (3,500 for Mediant 3100)	3,500	7,500	7,500
RADIUS Servers	3	3	3	3
Reasons for IP-to-Tel Alternative Routing	10	n/a (Gateway only)	n/a (Gateway only)	n/a (Gateway only)
Reasons for Tel-to-IP Alternative Routing	10	n/a (Gateway only)	n/a (Gateway only)	n/a (Gateway only)
Redirect Number IP-to-Tel	20	n/a (Gateway only)	n/a (Gateway only)	n/a (Gateway only)
Redirect Number Tel-to-IP	20	n/a (Gateway only)	n/a (Gateway only)	n/a (Gateway only)
Release Cause ISDN->ISDN	10	n/a (Gateway only)	n/a (Gateway only)	n/a (Gateway only)
Release Cause Mapping from ISDN to SIP	12	n/a (Gateway only)	n/a (Gateway only)	n/a (Gateway only)
Release Cause Mapping from SIP to ISDN	12	n/a (Gateway only)	n/a (Gateway only)	n/a (Gateway only)
Remote Media Subnet	5	5	5	5
Remote Web Services	7	7	7	7
Routing Policies (SBC)	20 (600 for Mediant 3100)	600	600	■ 2 GB: 20 ■ 3.5 GB: 70 ■ 4 GB: 100 ■ 8 GB: 200 ■ 16 GB: 400 ■ 32-64 GB: 600
Routing Policies (Gateway)	1	n/a (Gateway only)	n/a (Gateway only)	n/a (Gateway only)
RTP-Only	n/a	n/a	-	3,000

Configuration Table	Mediant 500 / 500L / 800 / 1000B / 3100 MP-1288	Mediant 2600 / 4000B	Mediant 90xx	Mediant VE / CE
SBC CDR Format	128 Syslog; 40 RADIUS (128 for Mediant 3100); 64 Locally Stored & JSON	128 (Syslog); 128 (RADIUS); 64 (Locally Stored & JSON)	128 (Syslog); 128 (RADIUS); 64 (Locally Stored & JSON)	128 (Syslog); 128 (RADIUS); 64 (Locally Stored & JSON)
SBC User Information	<ul style="list-style-type: none"> <li>■ Mediant 500: 1,600</li> <li>■ Mediant 500L/800: 2,000</li> <li>■ Mediant 1000: 800</li> <li>■ Mediant 3100: 20,000</li> <li>■ MP-1288: 350</li> </ul>	20,000	50,000	<ul style="list-style-type: none"> <li>■ 2 GB: 1,000</li> <li>■ 3-4 GB: 3,000</li> <li>■ 8 GB: 20,000</li> <li>■ 16-64 GB: 50,000</li> </ul>
	<b>Note:</b> The device limits the maximum number of users that can use a TLS connection:			
	<ul style="list-style-type: none"> <li>■ Mediant 500: 300</li> <li>■ Mediant 500L: 100</li> <li>■ Mediant 800: 300</li> <li>■ Mediant 1000: 300</li> <li>■ Mediant 3100: 6,000</li> <li>■ MP-1288: 350</li> </ul>	1,000	25,000	<ul style="list-style-type: none"> <li>■ 2 GB: 100</li> <li>■ 3 GB: 500</li> <li>■ 4 GB: 5,000</li> <li>■ 8-16 GB: 6,000</li> <li>■ 32 GB: 16,000</li> <li>■ 64 GB: 25,000</li> </ul>
SIP Interfaces	80 (1,200 for Mediant 3100)	700	1,200	<ul style="list-style-type: none"> <li>■ 2 GB: 40</li> <li>■ 3 GB: 200</li> <li>■ 4 GB: 400</li> <li>■ 8 GB: 800</li> <li>■ 16 GB: 1,200</li> <li>■ 32-64 GB: 1,200</li> </ul>
SIP Recording Rules	30	30	50	50
SNI-to-TLS Mapping	12 (15 for Mediant 1000; 100 for Mediant 3100)	100	100	100
SNMP Trap Destinations	5	5	5	5
SNMP Trusted Managers	5	5	5	5
SNMPv3 Users	10	10	10	10
Source Phone Number Manipulation for IP-to-Tel Calls	120	n/a (Gateway only)	n/a (Gateway only)	n/a (Gateway only)
Source Phone Number Manipulation for Tel-to-IP Calls	120	n/a (Gateway only)	n/a (Gateway only)	n/a (Gateway only)
SRDs	20 (600 for Mediant 3100)	600	600	<ul style="list-style-type: none"> <li>■ 2 GB: 20</li> <li>■ 3.5 GB: 70</li> <li>■ 4 GB: 100</li> <li>■ 8 GB: 200</li> <li>■ 16 GB: 400</li> <li>■ 32-64 GB: 600</li> </ul>
SSH Interfaces	16	16	16	16

Configuration Table	Mediant 500 / 500L / 800 / 1000B / 3100 MP-1288	Mediant 2600 / 4000B	Mediant 90xx	Mediant VE / CE
Static Routes	30	30	30	30
Supplementary Services	100	n/a (Gateway only)	n/a (Gateway only)	n/a (Gateway only)
Syslog Servers	4	4	4	4
TCP/UDP Proxy Servers	10	10	10	10
Tel Profiles	9 (40 for Mediant 3100)	n/a (Gateway only)	n/a (Gateway only)	n/a (Gateway only)
Tel-to-IP Routing	180	n/a (Gateway only)	n/a (Gateway only)	n/a (Gateway only)
Telnet Interfaces	16	16	16	16
Test Call Rules	5 (default)	5 (default)	5 (default)	5 (default)
Time Band	70 (21 per Cost Group)	70 (21 per Cost Group)	70 (21 per Cost Group)	70 (21 per Cost Group)
TLS Contexts	<ul style="list-style-type: none"> <li>■ MP-1288 / Mediant 500/500L/800: 12</li> <li>■ Mediant 1000: 15</li> <li>■ Mediant 3100: 100</li> </ul>	100	100	100
Tone Index	50	n/a (Gateway only)	n/a (Gateway only)	n/a (Gateway only)
Trunk Group	<ul style="list-style-type: none"> <li>■ MP-1288: 288</li> <li>■ Mediant 500/500L/800: 24</li> <li>■ Mediant 1000: 240</li> <li>■ Mediant 3100: 512</li> </ul>	n/a (Gateway only)	n/a (Gateway only)	n/a (Gateway only)
Trunk Group Settings	<ul style="list-style-type: none"> <li>■ MP-1288: 289</li> <li>■ Mediant 500/500L/800: 101</li> <li>■ Mediant 1000: 241</li> <li>■ Mediant 3100: 512</li> </ul>	n/a (Gateway only)	n/a (Gateway only)	n/a (Gateway only)
Upstream Groups	10	10	10	10
Upstream Hosts	50 (5 per Upstream Group)	50 (5 per Upstream Group)	50 (5 per Upstream Group)	50 (5 per Upstream Group)
Weak Passwords List	150	150	150	150
Web Interfaces	20	20	20	20

## 5 Supported SIP Standards

This section lists SIP RFCs and standards supported by the device.

### 5.1 Supported SIP RFCs

The table below lists the supported RFCs.

**Table 50: Supported RFCs**

RFC	Description	Gateway	SBC
draft-choudhuri-sip-info-digit-00	SIP INFO method for DTMF digit transport and collection	√	√
draft-ietf-bfcpbis-rfc4583bis-12	Session Description Protocol (SDP) Format for Binary Floor Control Protocol (BFCP) Streams	×	√ (forwarded transparently)
draft-ietf-sip-connect-reuse-06	Connection Reuse in SIP	√	√
draft-ietf-sipping-cc-transfer-05	Call Transfer	√	√
draft-ietf-sipping-realtimefax-01	SIP Support for Real-time Fax: Call Flow Examples	√	√ (forwarded transparently)
draft-ietf-sip-privacy-04.txt	SIP Extensions for Network-Asserted Caller Identity using Remote-Party-ID header	√	√
draft-johnston-sipping-cc-uu-04	Transporting User to User Information for Call Centers using SIP	√	√ (forwarded transparently)
draft-levy-sip-diversion-08	Diversion Indication in SIP	√	√
draft-mahy-iptel-cpc-06	The Calling Party's Category tel URI Parameter	√	√ (forwarded transparently)
draft-mahy-sipping-sigaled-digits-01	Signaled Telephony Events in the Session Initiation Protocol	√	√
draft-sandbakken-dispatch-bfcp-udp-03	Revision of the Binary Floor Control Protocol (BFCP) for use over an unreliable transport	×	√ (forwarded transparently)
ECMA-355, ISO/IEC 22535	QSIG tunneling	√	√ (forwarded transparently)
RFC 2327	SDP	√	√
RFC 2617	HTTP Authentication: Basic and Digest Access Authentication	√	√
RFC 2782	A DNS RR for specifying the location of services	√	√
RFC 2833	Telephone event	√	√
RFC 2976	SIP INFO Method	√	√
RFC 3261	SIP	√	√
RFC 3262	Reliability of Provisional Responses	√	√

RFC	Description	Gateway	SBC
RFC 3263	Locating SIP Servers	√	√
RFC 3264	Offer/Answer Model	√	√
RFC 3265	(SIP)-Specific Event Notification	√	√
RFC 3310	Hypertext Transfer Protocol (HTTP) Digest Authentication Using Authentication and Key Agreement (AKA)	√	×
RFC 3311	UPDATE Method	√	√
RFC 3323	Privacy Mechanism	√	√
RFC 3325	Private Extensions to the SIP for Asserted Identity within Trusted Networks	√	√
RFC 3326	Reason header	√	√ (forwarded transparently)
RFC 3327	Extension Header Field for Registering Non-Adjacent Contacts	√	×
RFC 3361	DHCP Option for SIP Servers	√	×
RFC 3362	Real-time Facsimile (T.38) - image/t38 MIME Sub-type Registration	√	√
RFC 3372	SIP-T	√	√ (forwarded transparently)
RFC 3389	RTP Payload for Comfort Noise	√	√ (forwarded transparently)
RFC 3420	Internet Media Type message/sipfrag	√	√
RFC 3455	P-Associated-URI	√	√ (using user info \ account)
RFC 3489	STUN - Simple Traversal of UDP	√	√
RFC 3515	Refer Method	√	√
RFC 3550	RTP: A Transport Protocol for Real-Time Applications	√	√
RFC 3578	Interworking of ISDN overlap signalling to SIP	√	×
RFC 3581	Symmetric Response Routing - rport	√	√
RFC 3605	RTCP attribute in SDP	√	√ (forwarded transparently)
RFC 3608	SIP Extension Header Field for Service Route Discovery During Registration	√	×
RFC 3611	RTCP-XR	√	√
RFC 3665	SIP Basic Call Flow Examples	√	√
RFC 3666	SIP to PSTN Call Flows	√	√ (forwarded transparently)
RFC 3680	A SIP Event Package for Registration (IMS)	√	×
RFC 3711	The Secure Real-time Transport Protocol (SRTP)	√	√

RFC	Description	Gateway	SBC
RFC 3725	Third Party Call Control	√	√
RFC 3824	Using E.164 numbers with SIP (ENUM)	√	√
RFC 3842	MWI	√	√
RFC 3891	"Replaces" Header	√	√
RFC 3892	The SIP Referred-By Mechanism	√	√
RFC 3903	SIP Extension for Event State Publication	√	√
RFC 3911	The SIP Join Header	Partial	×
RFC 3960	Early Media and Ringing Tone Generation in SIP	Partial	√
RFC 3966	The tel URI for Telephone Numbers	√	√
RFC 4028	Session Timers in the Session Initiation Protocol	√	√
RFC 4040	RTP payload format for a 64 kbit/s transparent call - Clearmode	√	√ (forwarded transparently)
RFC 4117	Transcoding Services Invocation	√	×
RFC 4168	The Stream Control Transfer Protocol (SCTP) as a Transport for SIP	×	√
RFC 4235	Dialog Event Package	Partial	Partial
RFC 4240	Basic Network Media Services with SIP - NetAnn	√	√ (forwarded transparently)
RFC 4244	An Extension to SIP for Request History Information	√	√
RFC 4320	Actions Addressing Identified Issues with SIP Non-INVITE Transaction	√	√
RFC 4321	Problems Identified Associated with SIP Non-INVITE Transaction	√	√
RFC 4411	Extending SIP Reason Header for Preemption Events	√	√ (forwarded transparently)
RFC 4412	Communications Resource Priority for SIP	√	√ (forwarded transparently)
RFC 4458	SIP URIs for Applications such as Voicemail and Interactive Voice Response	√	√ (forwarded transparently)
RFC 4475	SIP Torture Test Messages	√	√
RFC 4497 or ISO/IEC 17343	Interworking between SIP and QSIG	√	√ (forwarded transparently)
RFC 4566	Session Description Protocol	√	√
RFC 4568	SDP Security Descriptions for Media Streams for SRTP	√	√
RFC 4582	The Binary Floor Control Protocol (BFCP)	×	√ (forwarded transparently)
RFC 4715	Interworking of ISDN Sub Address to sip isub parameter	√	√ (forwarded transparently)
RFC 4730	A SIP Event Package for Key Press Stimulus (KPML)	Partial	×



RFC	Description	Gateway	SBC
RFC 4733	RTP Payload for DTMF Digits	√	√
RFC 4904	Representing trunk groups in tel/sip URIs	√	√ (forwarded transparently)
RFC 4960	Stream Control Transmission Protocol	×	√
RFC 4961	Symmetric RTP and RTCP for NAT	√	√
RFC 4975	The Message Session Relay Protocol (MSRP)	×	√
RFC 5022	Media Server Control Markup Language (MSCML)	√	×
RFC 5079	Rejecting Anonymous Requests in SIP	√	√
RFC 5627	Obtaining and Using Globally Routable User Agent (UA) URIs (GRUU) in SIP	√	√ (forwarded transparently)
RFC 5628	Registration Event Package Extension for GRUU	√	×
RFC 5806	Diversion Header, same as draft-levy-sip-diversion-08	√	√
RFC 5853	Requirements from SIP / SBC Deployments	-	√
RFC 6035	SIP Package for Voice Quality Reporting Event, using sip PUBLISH	√	√
RFC 6135	An Alternative Connection Model for the Message Session Relay Protocol (MSRP)	×	√
RFC 6140	Registration for Multiple Phone Numbers in the Session Initiation Protocol (SIP)	√	√
RFC 6337	Session Initiation Protocol (SIP) Usage of the Offer/Answer Model	-	√
RFC 6341	Use Cases and Requirements for SIP-Based Media Recording (Session Recording Protocol - draft-ietf-siprec-protocol-02, and Architecture - draft-ietf-siprec-architecture-03)	√	√
RFC 6442	Location Conveyance for the Session Initiation Protocol	-	√
RFC 7245	An Architecture for Media Recording Using the Session Initiation Protocol	√	√
RFC 7261	Offer/Answer Considerations for G723 Annex A and G729 Annex B	√	√
RFC 7865	Session Initiation Protocol (SIP) Recording Metadata	√	√
RFC 7866	Session Recording Protocol	√	√
RFC 8068	Session Initiation Protocol (SIP) Recording Call Flows	√	√

## 5.2 SIP Message Compliancy

The SIP device complies with RFC 3261, as shown in the following subsections.

### 5.2.1 SIP Functions

The device supports the following SIP Functions:

**Table 51: Supported SIP Functions**

Function	Comments
User Agent Client (UAC)	-
User Agent Server (UAS)	-
Proxy Server	The device supports working with third-party Proxy Servers such as Nortel CS1K/CS2K, Avaya, Microsoft OCS, Alcatel, 3Com, BroadSoft, Snom, Cisco and many others
Redirect Server	The device supports working with third-party Redirection servers
Registrar Server	The device supports working with third-party Registration servers

### 5.2.2 SIP Methods

The device supports the following SIP Methods:

**Table 52: Supported SIP Methods**

Method	Comments
ACK	-
BYE	-
CANCEL	-
INFO	-
INVITE	-
MESSAGE	Supported only by the SBC application and send only
NOTIFY	-
OPTIONS	-
PRACK	-
PUBLISH	Send only
REFER	Inside and outside of a dialog
REGISTER	Send only for Gateway application; send and receive for SBC application
SUBSCRIBE	-
UPDATE	-

### 5.2.3 SIP Headers

The device supports the following SIP headers:

**Table 53: Supported SIP Headers**

SIP Header	SIP Header
Accept	Proxy- Authenticate
Accept-Encoding	Proxy- Authorization
Alert-Info	Proxy- Require
Allow	Prack
Also	Reason
Asserted-Identity	Record- Route
Authorization	Refer-To
Call-ID	Referred-By
Call-Info	Replaces
Contact	Require
Content-Disposition	Remote-Party-ID
Content-Encoding	Response- Key
Content-Length	Retry-After
Content-Type	Route
Cseq	Rseq
Date	Session-Expires
Diversion	Server
Expires	Service-Route
Fax	SIP-If-Match
From	Subject
History-Info	Supported
Join	Target-Dialog
Max-Forwards	Timestamp
Messages-Waiting	To
MIN-SE	Unsupported
P-Associated-URI	User- Agent
P-Asserted-Identity	Via
P-Charging-Vector	Voicemail
P-Preferred-Identity	Warning
Priority	WWW- Authenticate
Privacy	-



The following SIP headers are not supported:

- Encryption
- Organization

## 5.2.4 SDP Fields

The device supports the following SDP fields:

**Table 54: Supported SDP Fields**

SDP Field	Name
v=	Protocol version number
o=	Owner/creator and session identifier
a=	Attribute information
c=	Connection information
d=	Digit
m=	Media name and transport address
s=	Session information
t=	Time alive header
b=	Bandwidth header
u=	URI description header
e=	Email address header
i=	Session info header
p=	Phone number header
y=	Year

## 5.2.5 SIP Responses

The device supports the following SIP responses:

**Table 55: Supported SIP Responses**

Response Type		Comments
<b>1xx Response (Information Responses)</b>		
100	Trying	The device generates this response upon receiving a Proceeding message from ISDN or immediately after placing a call for CAS signaling.
180	Ringing	The device generates this response for an incoming INVITE message. Upon receiving this response, the device waits for a 200 OK response.
181	Call is Being Forwarded	The device doesn't generate these responses. However, the device does receive them. The device processes these responses the same way that it processes the 100 Trying response.
182	Queued	The device generates this response in Call Waiting service. When the SIP device receives a 182 response, it plays a special waiting Ringback tone to the telephone side.
183	Session Progress	The device generates this response if the Early Media feature is enabled and if the device plays a Ringback tone to IP
<b>2xx Response (Successful Responses)</b>		
200		OK
202		Accepted
204		No Notification
<b>3xx Response (Redirection Responses)</b>		
300	Multiple Choice	The device responds with an ACK, and then resends the request to the first new address in the contact list.
301	Moved Permanently	The device responds with an ACK, and then resends the request to the new address.
302	Moved Temporarily	The device generates this response when call forward is used to redirect the call to another destination. If such a response is received, the calling device initiates an INVITE message to the new destination.
305	Use Proxy	The device responds with an ACK, and then resends the request to a new address.
380	Alternate Service	The device responds with an ACK, and then resends the request to a new address.
<b>4xx Response (Client Failure Responses)</b>		
400	Bad Request	The device doesn't generate this response. Upon receipt of this message and before a 200 OK has been received, the device responds with an ACK and disconnects the call.
401	Unauthorized	Authentication support for Basic and Digest. Upon receipt of this message, the device issues a new request according to the scheme received on this response.
402	Payment Required	The device doesn't generate this response. Upon receipt of this message and before a 200 OK has been received, the device responds with an ACK and disconnects the call.

Response Type		Comments
403	Forbidden	The device doesn't generate this response. Upon receipt of this message and before a 200 OK has been received, the device responds with an ACK and disconnects the call.
404	Not Found	The device generates this response if it is unable to locate the callee. Upon receiving this response, the device notifies the User with a Reorder Tone.
405	Method Not Allowed	The device doesn't generate this response. Upon receipt of this message and before a 200 OK has been received, the device responds with an ACK and disconnects the call.
406	Not Acceptable	The device doesn't generate this response. Upon receipt of this message and before a 200 OK has been received, the device responds with an ACK and disconnects the call.
407	Proxy Authentication Required	Authentication support for Basic and Digest. Upon receipt of this message, the device issues a new request according to the scheme received on this response.
408	Request Timeout	The device generates this response if the no-answer timer expires. Upon receipt of this message and before a 200 OK has been received, the device responds with an ACK and disconnects the call.
409	Conflict	The device doesn't generate this response. Upon receipt of this message and before a 200 OK has been received, the device responds with an ACK and disconnects the call.
410	Gone	The device doesn't generate this response. Upon receipt of this message and before a 200 OK has been received, the device responds with an ACK and disconnects the call.
411	Length Required	The device doesn't generate this response. Upon receipt of this message and before a 200 OK has been received, the device responds with an ACK and disconnects the call.
413	Request Entity Too Large	The device doesn't generate this response. Upon receipt of this message and before a 200 OK has been received, the device responds with an ACK and disconnects the call.
415	Unsupported Media	If the device receives a 415 Unsupported Media response, it notifies the User with a Reorder Tone. The device generates this response in case of SDP mismatch.
420	Bad Extension	The device doesn't generate this response. Upon receipt of this message and before a 200 OK has been received, the device responds with an ACK and disconnects the call.
423	Interval Too Brief	The device does not generate this response. Upon receipt of this message the device uses the value received in the Min-Expires header as the registration time.
424	Bad Location Information	The device doesn't generate this response. Upon receipt of this message and before a 200 OK has been received, the device responds with an ACK and disconnects the call.
428	Use Identity Header	The device doesn't generate this response. Upon receipt of this message and before a 200 OK has been received, the device responds with an ACK and disconnects the call.

Response Type		Comments
429	Provide Referrer Identity	The device doesn't generate this response. Upon receipt of this message and before a 200 OK has been received, the device responds with an ACK and disconnects the call.
433	Anonymity Disallowed	If the device receives a 433 Anonymity Disallowed, it sends a DISCONNECT message to the PSTN with a cause value of 21 (Call Rejected). In addition, the device can be configured, using the Release Reason Mapping, to generate a 433 response when any cause is received from the PSTN side.
436	Bad Identity Info	The device doesn't generate this response. Upon receipt of this message and before a 200 OK has been received, the device responds with an ACK and disconnects the call.
437	Unsupported Credential	The device doesn't generate this response. Upon receipt of this message and before a 200 OK has been received, the device responds with an ACK and disconnects the call.
438	Invalid Identity Header	The device doesn't generate this response. Upon receipt of this message and before a 200 OK has been received, the device responds with an ACK and disconnects the call.
439	First Hop Lacks Outbound Support	The device doesn't generate this response. Upon receipt of this message and before a 200 OK has been received, the device responds with an ACK and disconnects the call.
440	Max-Breadth Exceeded	The device doesn't generate this response. Upon receipt of this message and before a 200 OK has been received, the device responds with an ACK and disconnects the call.
470	Consent Needed	The device doesn't generate this response. Upon receipt of this message and before a 200 OK has been received, the device responds with an ACK and disconnects the call.
480	Temporarily Unavailable	If the device receives this response, it notifies the User with a Reorder Tone. This response is issued if there is no response from remote.
481	Call Leg/Transaction Does Not Exist	The device doesn't generate this response. Upon receipt of this message and before a 200 OK has been received, the device responds with an ACK and disconnects the call.
482	Loop Detected	The device doesn't generate this response. Upon receipt of this message and before a 200 OK has been received, the device responds with an ACK and disconnects the call.
483	Too Many Hops	The device doesn't generate this response. Upon receipt of this message and before a 200 OK has been received, the device responds with an ACK and disconnects the call.
484	Address Incomplete	The device doesn't generate this response. Upon receipt of this message and before a 200 OK has been received, the device responds with an ACK and disconnects the call.
485	Ambiguous	The device doesn't generate this response. Upon receipt of this message and before a 200 OK has been received, the device responds with an ACK and disconnects the call.

Response Type		Comments
486	Busy Here	The SIP device generates this response if the called party is off-hook and the call cannot be presented as a call waiting call. Upon receipt of this response, the device notifies the User and generates a busy tone.
487	Request Canceled	This response indicates that the initial request is terminated with a BYE or CANCEL request.
488	Not Acceptable	The device doesn't generate this response. Upon receipt of this message and before a 200 OK has been received, the device responds with an ACK and disconnects the call.
491	Request Pending	When acting as a UAS: the device sent a re-INVITE on an established session and is still in progress. If it receives a re-INVITE on the same dialog, it returns this response to the received INVITE.  When acting as a UAC: If the device receives this response to a re-INVITE, it starts a timer. After the timer expires, the UAC tries to send the re-INVITE again.
<b>5xx Response (Server Failure Responses)</b>		
500	Internal Server Error	Upon receipt of any of these responses, the device releases the call, sending an appropriate release cause to the PSTN side. The device generates a 5xx response according to the PSTN release cause coming from the PSTN.
501	Not Implemented	
502	Bad gateway	
503	Service Unavailable	
504	Gateway Timeout	
505	Version Not Supported	
<b>6xx Response (Global Responses)</b>		
600	Busy Everywhere	Upon receipt of any of these responses, the device releases the call, sending an appropriate release cause to the PSTN side.
603	Decline	
604	Does Not Exist Anywhere	
606	Not Acceptable	



**International Headquarters**

Naimi Park  
6 Ofra Haza Street  
Or Yehuda, 6032303, Israel  
Tel: +972-3-976-4000  
Fax: +972-3-976-4040

**AudioCodes Inc.**

80 Kingsbridge Rd  
Piscataway, NJ 08854, USA  
Tel: +1-732-469-0880  
Fax: +1-732-469-2298

Contact us: <https://www.audiocodes.com/corporate/offices-worldwide>

Website: <https://www.audiocodes.com>

©2025 AudioCodes Ltd. All rights reserved. AudioCodes, AC, HD VoIP, HD VoIP Sounds Better, IPmedia, Mediant, MediaPack, What's Inside Matters, OSN, SmartTAP, User Management Pack, VMAS, VoIPerfect, VoIPerfectHD, Your Gateway To VoIP, 3GX, AudioCodes One Voice, AudioCodes Meeting Insights, and AudioCodes Room Experience are trademarks or registered trademarks of AudioCodes Limited. All other products or trademarks are property of their respective owners. Product specifications are subject to change without notice.

Document #: LTRT-27756

