

Avaya Aura™ Communication Manager System Capacities Table

Release 6.0
03-300511
Issue 7
June 2010

© 2010 Avaya Inc.

All Rights Reserved.

Notice

While reasonable efforts have been made to ensure that the information in this document is complete and accurate at the time of printing, Avaya assumes no liability for any errors. Avaya reserves the right to make changes and corrections to the information in this document without the obligation to notify any person or organization of such changes.

Documentation disclaimer

Avaya shall not be responsible for any modifications, additions, or deletions to the original published version of this documentation unless such modifications,additions, or deletions were performed by Avaya.

End User agrees to indemnify and hold harmless Avaya, Avaya's agents and employees against all claims, lawsuits, demands and judgments arising out of, or in connection with, subsequent modifications, additions or deletions to this documentation, to the extent made by End User.

Link disclaimer

Avaya is not responsible for the contents or reliability of any linked Websites referenced within this site or documentation(s) provided by Avaya. Avaya is not responsible for the accuracy of any information, statement or content provided on these sites and does not necessarily endorse the products, services, or information described or offered within them. Avaya does not guarantee that these links will work all the time and has no control over the availability of the linked pages.

Warranty

Avaya provides a limited warranty on this product. Refer to your sales agreement to establish the terms of the limited warranty. In addition, Avaya's standard warranty language, as well as information regarding support for this product, while under warranty, is available to Avaya customers and other parties through the Avaya Support Website: **http://www.avaya.com/support.**

Please note that if you acquired the product from an authorized Avaya reseller outside of the United States and Canada, the warranty is provided to you by the said Avaya reseller and not by Avaya.

Licenses

The software license terms available on the Avaya Website, **http://support.avaya.com/licenseinfo/** are applicable to anyone who downloads, uses and/or installs Avaya software, purchased from Avaya Inc., any Avaya affiliate, or an authorized Avaya reseller (as applicable) under a commercial agreement with Avaya or an authorized Avaya reseller. Unless otherwise agreed to by Avaya in writing, Avaya does not extend this license if the software was obtained from anyone other than Avaya, an Avaya affiliate or an Avaya authorized reseller, and Avaya reserves the right to take legal action against you and anyone else using or selling the software without a license. By installing, downloading or using the software, or authorizing others to do so,you, on behalf of yourself and the entity for whom you are installing, downloading or using the software (hereinafter referred to interchangeably as "you" and "end user"), agree to these terms and conditions and create a binding contract between you and Avaya Inc. or the applicable Avaya affiliate("Avaya").

Avaya grants End User a license within the scope of the license types described below. The applicable number of licenses and units of capacity for which the license is granted will be one (1), unless a different number of licenses or units of capacity is specified in the Documentation or other materials available to End User. "Designated Processor" means a single stand-alone computing device. "Server" means a Designated Processor that hosts a software application to be accessed by multiple users. "Software"means the computer programs in object code, originally licensed by Avaya and ultimately utilized by End User, whether as stand-alone products or pre-installed on Hardware. "Hardware" means the standard hardware originally sold by Avaya and ultimately utilized by End User.

License types

• Designated System(s) License (DS):

End User may install and use each copy of the Software on only one Designated Processor, unless a different number of Designated Processors is indicated in the Documentation or other materials available to End User. Avaya may require the Designated Processor(s) to be identified by type, serial number, feature key, location or other specific designation, or to be provided by End User to Avaya through electronic means established by Avaya specifically for this purpose.

• Concurrent User License (CU):

End User may install and use the Software on multiple Designated Processors or one or more Servers, so long as only the licensed number of Units are accessing and using the Software at any given time. A "Unit" means the unit on which Avaya, at its sole discretion, bases the pricing of its licenses and can be, without limitation, an agent, port or user, an e-mail or voice mail account in the name of a person or corporate function (e.g., webmaster or helpdesk), or a directory entry in the administrative database utilized by the Software that permits one user to interface with the Software. Units may be linked to a specific, identified Server.

• Named User License (NU):End User may: (i) install and use the Software on a single Designated Processor or Server per authorized Named User (defined below); or (ii) install and use the Software on a Server so long as only authorized Named Users access and use the Software. "Named User" means a user or device that has been expressly authorized by Avaya to access and use the Software. At Avaya's sole discretion, a "Named User" may be, without limitation, designated by name, corporate function (for example, webmaster or helpdesk), an e-mail or voice mail account in the name of a person or corporate function, or a directory entry in the administrative database utilized by the Software that permits one user to interface with the Software. • Shrinkwrap License (SR): Customer may install and use the Software in accordance with the terms and conditions of the applicable license agreements, such as "shrinkwrap" or "clickthrough" license accompanying or applicable to the Software "Shrinkwrap License" (SR).

See Third-party Components for more information.

Copyright

Except where expressly stated otherwise, no use should be made of materials on this site, the Documentation(s) and Product(s) provided by Avaya. All content on this site, the documentation(s) and the product(s) provided by Avaya including the selection, arrangement and design of the content is owned either by Avaya or its licensors and is protected by copyright and other intellectual property laws including the sui generis rights relating to the protection of databases. You may not modify, copy, reproduce, republish, upload, post, transmit or distribute in any way any content, in whole or in part, including any code and software. Unauthorized reproduction, transmission, dissemination, storage, and or use without the express written consent of Avaya can be a criminal, as well as a civil, offense under the applicable law. Third Party Components

Certain software programs or portions thereof included in the Product may contain software distributed under third party agreements ("Third Party Components"), which may contain terms that expand or limit rights to use certain portions of the Product ("Third Party Terms"). Information regarding distributed Linux OS source code (for those Products that have distributed the Linux OS source code), and identifying the copyright holders of the Third Party Components and the Third Party Terms that apply to them is available on the Avaya Support Website: http://support.avaya.com/Copyright.

Preventing toll fraud

"Toll fraud" is the unauthorized use of your telecommunications system by an unauthorized party (for example, a person who is not a corporate employee, agent, subcontractor, or is not working on your company's behalf). Be aware that there can be a risk of toll fraud associated with your system and that, if toll fraud occurs, it can result in substantial additional charges for your telecommunications services.

Avaya fraud intervention If you suspect that you are being victimized by toll fraud and you need technical assistance or support, call Technical Service Center Toll Fraud Intervention Hotline at +1-800-643-2353 for the United States and Canada.

For additional support telephone numbers, see the Avaya Support Website:

http://www.support.avaya.com/.

Suspected security vulnerabilities with Avaya products should be reported to Avaya by sending mail to:**securityalerts@avaya.com.**

Trademarks

Avaya® and Avaya Aura™ are trademarks of Avaya Inc.

The trademarks, logos and service marks ("Marks") displayed in this site, the documentation(s) and product(s) provided by Avaya are the registered or unregistered Marks of Avaya, its affiliates, or other third parties. Users are not permitted to use such Marks without prior written consent from Avaya or such third party which may own the Mark. Nothing contained in this site, the documentation(s) and product(s) should be construed as granting, by implication, estoppel, or otherwise, any license or right in and to the Marks without the express written permission of Avaya or the applicable third party. All non-Avaya trademarks are the property of their respective owners.

Downloading documents for the most current versions of documentation, see the Avaya Support Website: **http://www.avaya.com/support.**

Contact Avaya Support

Avaya provides a telephone number for you to use to report problems or **to** ask questions about your product. The support telephone number is 1-800-242-2121 in the United States. For additional support telephon**e numbers, see the Avaya Website: http://www.avaya.com/support.**Federal **Communications Commission Statement Avaya support.**

Avaya provides a telephone number for you to use to report problems or to ask questions about your product. The support telephone number is 1-800-242-2121 in the United States. For additional support telephone numbers, see the Avaya Support Web site:

http://www.avaya.com/support

Avaya Aura ™ Communication Manager System Capacities Table
for Release 6.0

Avaya Aura ™ Communication Manager and Avaya Call Management System	Avaya Aura™ Main / Avaya Aura™ for Survivable Core Duplex (CM_Duplex) [136]	Avaya Aura™ Main / Avaya Aura™ for Survivable Core Simplex (CM_Simplex) [136]	Avaya Aura™ for Survivable Remote Simplex (CM_SurvRemote) [136, 140]	Avaya Aura™ Main Embedded (CM_onlyEmbed) [137]	Avaya Aura™ for Survivable Remote Embedded (CM_SurvRemoteEmbed) [138, 140]
Documentation disclaimer: The capacities specified in this table pertain to general business configurations and may not be valid or recommended for Contact Center (CC) solutions. Simultaneously achieving the upper bounds for multiple capacities may not be possible for real-world CC systems. Call rates and other operational aspects of these CC systems may preclude realizing the maximum limits. Contact the Sales Factory Design Center for assistance with specifying Contact Center solutions and capacities.					
In general, software capacities of LSPs and ESSes are that of the Main Communication Manager they are associated with. They are not listed separately in this table. Exceptions to this general rule are noted in the table and in the endnotes. For example, compare row "System-wide Maximum H.248 media gateways" with row "H.248 media gateways per LSP".					
The call handling capacities are based on the platform limits. Some of the capacities are offer specific and are determined by the License File; other capacities are offer specific but are not limited by the License File. Some Call Center capacity increases require a Call Center Software upgrade to the release the increase is provided in. This table contains both the software-based capacities and offer-based limits. Offer and license limits are under the corresponding rows that provide the System Software limits.					
An asterisk (*) indicates that the software-defined capacity may not be reachable due to hardware and/or processor capacity limits for the platform.					

	Avaya Aura ™ Communication Manager and Avaya Call Management System	Avaya Aura™ Main / Avaya Aura™ for Survivable Core Duplex (CM_Duplex) [136]	Avaya Aura™ Main / Avaya Aura™ for Survivable Core Simplex (CM_Simplex) [136]	Avaya Aura™ for Survivable Remote Simplex (CM_SurvRemote) [136, 140]	Avaya Aura™ Main Embedded (CM_onlyEmbed) [137]	Avaya Aura™ for Survivable Remote Embedded (CM_SurvRemoteEmbed) [138, 140]
5	**ABBREVIATED DIALING and Autodial**					
10	AD Lists per System [68]	20,000	20,000	20,000	2,400	20,000
15	AD List Entry Size	24	24	24	24	24
20	AD Entries per System [69]	250,000	250,000	250,000	12000 *	250,000
25	**ABBREVIATED DIALING Lists (See endnote 132 for Autodial Buttons)**					
30	Autodial buttons per System	endnote 132	endnote 132	endnote 132	endnote 132	endnote 132
35	Enhanced List (a System List) [70]	2	2	2	2	2
40	Max entries across both enhanced lists	20,000	20,000	20,000	10,000	20,000
45	Group Lists	1,000	1,000	1,000	1,000	1,000
50	Max entries per list	100	100	100	100	100
55	Group lists / extension	3	3	3	3	3
60	System List	1	1	1	1	1
65	Max entries	100	100	100	100	100
70	Personal Lists	20,000	20,000	20,000	2,400	20,000
75	Max entries per list	100	100	100	100	100
80	Personal lists / extension	3	3	3	3	3

	Avaya Aura ™ Communication Manager and Avaya Call Management System	Avaya Aura™ Main / Avaya Aura™ for Survivable Core Duplex (CM_Duplex) [136]	Avaya Aura™ Main / Avaya Aura™ for Survivable Core Simplex (CM_Simplex) [136]	Avaya Aura™ for Survivable Remote Simplex (CM_SurvRemote) [136, 140]	Avaya Aura™ Main Embedded (CM_onlyEmbed) [137]	Avaya Aura™ for Survivable Remote Embedded (CM_SurvRemote Embed) [138, 140]
85	**ANNOUNCEMENTS: See RECORDED ANNOUNCEMENTS and the information under: ACD, Call Vectoring, and Hunt Groups.**					
90	**APPLICATIONS ADJUNCTS**					
95	Asynchronous Links (IP)	10	10	10	10	10
100	CDR Output Devices [4.6]	2	2	2	2	2
105	Journal Printers : System Printer [4.6]	2:1	2:1	2:1	2:1	2:1
110	Property Management Systems [4.6]	1	1	1	1	1
115	**SM (Session Manager): For SIP features and services, see the section on SIP**					
120	**Application Enablement Services**					
125	Communication Manager servers supported by one AES Server	16	16	16	16	16
130	AES Servers per Communication Manager	16	16	16	16	16
135	Connections to a Communication Manager with one AES Server	16	16	16	16	16
140	AES Server Interfaces (Processor Ethernet or CLAN Boards)	16	16	16	16 *	16 *
145	Inbound Messages/Second per AES Connection over PE	1,000	1,000	1,000	240	240

	Avaya Aura ™ Communication Manager and Avaya Call Management System	Avaya Aura™ Main / Avaya Aura™ for Survivable Core Duplex (CM_Duplex) [136]	Avaya Aura™ Main / Avaya Aura™ for Survivable Core Simplex (CM_Simplex) [136]	Avaya Aura™ for Survivable Remote Simplex (CM_SurvRemote) [136, 140]	Avaya Aura™ Main Embedded (CM_onlyEmbed) [137]	Avaya Aura™ for Survivable Remote Embedded (CM_SurvRemote Embed) [138, 140]
150	Inbound Messages/Second per AES Connection over CLAN	200	200	200	200	200
155	Outbound Messages/Second per AES Connection over PE	1,000	1,000	1,000	240	240
160	Outbound Messages/Second per AES Connection over CLAN	240	240	240	240	240
165	Messages/Sec/System (full duplex) [63]	1,000	1,000	1,000	240	240
170	**Adjunct Links**					
175	Maximum Links	254	254	254	254	254
180	PPP Links/switch using C-LAN board [4.1]	254	254	254	NA	NA
185	IP Routes (with C-LAN or PE) [4.1]	650	650	650	650	650
190	**VOICE PROCESSING ADJUNCTS**					
195	**Traditional AUDIX ®**	8	8	8	8	8
200	**COMMUNICATION MANAGER MESSAGING [134]**					
205	Subscriber Mailboxes [134]	N.A.	6,000	N.A.	1,000	N.A.
210	IP Trunk Call Answer Ports	N.A.	210	N.A.	24	N.A.
215	IP Trunk Total Ports	N.A.	250	N.A.	36	N.A.
220	IMAP4 Sessions	N.A.	6,000	N.A.	450	N.A.

Avaya Aura ™ Communication Manager and Avaya Call Management System		Avaya Aura™ Main / Avaya Aura™ for Survivable Core Duplex (CM_Duplex) [136]	Avaya Aura™ Main / Avaya Aura™ for Survivable Core Simplex (CM_Simplex) [136]	Avaya Aura™ for Survivable Remote Simplex (CM_SurvRemote) [136, 140]	Aura™ Main Embedded (CM_onlyEmbed) [137]	Avaya Aura™ for Survivable Remote Embedded (CM_SurvRemoteEmbed) [138, 140]
225	MCAPI Sessions	N.A.	128	N.A.	128	N.A.
230	TTS Sessions	N.A.	30	N.A.	12	N.A.
235	**INTUITY AUDIX ®**					
240	INTUITY AUDIX ® (Via Mode Code)	1	1	1	1	1
245	INTUITY AUDIX ® (Via TCP/IP)	8	8	8	8	8
250	Mode Code Voice Mail Systems	1	1	1	1	1
255	SIP MWI Hunt Groups for SIP-integrated Messaging Platforms [4.3]	10	10	10	10	10
265	**MODULAR MESSAGING**					
270	Modular Messaging (T1/E1 QSIG)	No Switch-based hard limits	No Switch-based hard limits	No Switch-based hard limits	No Switch-based hard limits	No Switch-based hard limits
275	Modular Messaging H.323 QSIG (IP Now)	No Switch-based hard limits	No Switch-based hard limits	No Switch-based hard limits	No Switch-based hard limits	No Switch-based hard limits
280	Modular Messaging Inband (Mode Code)	No Switch-based hard limits	No Switch-based hard limits	No Switch-based hard limits	No Switch-based hard limits	No Switch-based hard limits
285	Modular Messaging over C-LAN or PE	NA	NA	NA	NA	NA

	Avaya Aura ™ Communication Manager and Avaya Call Management System	Avaya Aura™ Main / Avaya Aura™ for Survivable Core Duplex (CM_Duplex) [136]	Avaya Aura™ Main / Avaya Aura™ for Survivable Core Simplex (CM_Simplex) [136]	Avaya Aura™ for Survivable Remote Simplex (CM_SurvRemote) [136, 140]	Avaya Aura™ Main Embedded (CM_onlyEmbed) [137]	Avaya Aura™ for Survivable Remote Embedded (CM_SurvRemote Embed) [138, 140]
290	**OTHER ADJUNCTS**					
295	CMS/IQ C-LAN/PE LAN Adjuncts [4.5]	4	4	4	4	4
300	TCP/IP Processor Channels (Includes Gateway Channels)	384	384	384	384	384
305	**ACD - AUTOMATIC CALL DISTRIBUTION. See end of table for CMS adjunct capacities. See EAS Section for capacities with EAS active.**					
310	Announcements per Split	2	2	2	2	2
315	Announcements per System	9,000	9,000	9,000	3,000	9,000
320	Splits	8,000	8,000	8,000	99	8,000
325	ACD Members per Split	1,500	1,500	1,500	200	1,500
330	Max Administered ACD members [4.4]	100,000	100,000	100,000	1,000	100,000
335	Logged-In Splits per Agent [5]	4	4	4	4	4
340	Before using the following capacities in a contact center, read the disclaimer at the beginning of the table or in endnote 1.					
345	**Max logged-in ACD agents (per system) when each logs into: [1, 6]**					
350	1 Split	10,000	10,000	5,000	500	500
355	2 Splits	10,000	10,000	5,000	500	500
360	3 Splits	10,000	10,000	5,000	333	333
365	4 Splits	10,000	10,000	5,000	250	250
370	Queue Slots per Group [7]	NA	NA	NA	NA	NA
375	Queue Slots per System [7]	NA	NA	NA	NA	NA

	Avaya Aura ™ Communication Manager and Avaya Call Management System	Avaya Aura™ Main / Avaya Aura™ for Survivable Core Duplex (CM_Duplex) [136]	Avaya Aura™ Main / Avaya Aura™ for Survivable Core Simplex (CM_Simplex) [136]	Avaya Aura™ for Survivable Remote Simplex (CM_SurvRemote) [136, 140]	Avaya Aura™ Main Embedded (CM_onlyEmbed) [137]	Avaya Aura™ for Survivable Remote Embedded (CM_SurvRemote Embed) [138, 140]
380	Offer Limit: Total Logged In ACD Agents [1, 66]	10,000	10,000	5,000	500	500
385	**ARS / AAR**					
390	AAR/ARS Patterns (Shared)	999	999	999	254	999
395	Number of entries in ARS/AAR Analysis Tables [111] (Max ARS/AAR Tables: 1 per location. [113])	12,000	12,000	12,000	5,000	12,000
400	Choices per RHNPA Table	24	24	24	24	24
405	Digit Conversion Entries [111]	6,000	6,000	6,000	2,500	6,000
410	**AAR/ARS Digit Conversion**					
415	Digits Deleted for ARS/AAR	28	28	28	28	28
420	Digits Inserted for ARS	18	18	18	18	18
425	**AAR/ARS Sub-Net Trunking**					
430	Digits Deleted for ARS/AAR [8]	28	28	28	28	28
435	Digits Inserted for ARS/AAR	36	36	36	36	36

	Avaya Aura ™ Communication Manager and Avaya Call Management System	Avaya Aura™ Main / Avaya Aura™ for Survivable Core Duplex (CM_Duplex) [136]	Avaya Aura™ Main / Avaya Aura™ for Survivable Core Simplex (CM_Simplex) [136]	Avaya Aura™ for Survivable Remote Simplex (CM_SurvRemote) [136, 140]	Avaya Aura™ Main Embedded (CM_onlyEmbed) [137]	Avaya Aura™ for Survivable Remote Embedded (CM_SurvRemote Embed) [138, 140]
440	Entries in each RHNPA Table	1,000	1,000	1,000	1,000	1,000
445	Facility Restriction Levels (FRLs)	8	8	8	8	8
450	Inserted Digit Strings [9]	3,000	3,000	3,000	1,200	3,000
455	**Patterns for Measurement**					
460	Shared Patterns for Measurement	25	25	25	25	25
465	RHNPA (Remote Home Numbering Plan Area) Tables	250	250	250	32	250
470	Routing Plans [4]	8	8	8	8	8
475	ARS Toll Tables	32	32	32	32	32
480	Entries per Toll Table	800	800	800	800	800
485	Trunk Groups in an ARS/AAR Pattern	16	16	16	16	16
490	UDP (Entries)	80,000	80,000	80,000	10,110	80,000

Avaya Aura ™ Communication Manager and Avaya Call Management System		Avaya Aura™ Main / Avaya Aura™ for Survivable Core Duplex (CM_Duplex) [136]	Avaya Aura™ Main / Avaya Aura™ for Survivable Core Simplex (CM_Simplex) [136]	Avaya Aura™ for Survivable Remote Simplex (CM_SurvRemote) [136, 140]	Avaya Aura™ Main Embedded (CM_onlyEmbed) [137]	Avaya Aura™ for Survivable Remote Embedded (CM_SurvRemote Embed) [138, 140]
505	**ASAI - Adjunct Switch Application Interface (System-wide limits shown unless otherwise noted. Each limit is achievable on a single link)**					
510	Adjunct Control Associations per Call (3rd party make call or take control)	1	1	1	1	1
515	Active Adjunct Control Associations (Simultaneous Active Call Controlled Calls and Max Adj. Transaction Records)	8,000	8,000	8,000	600	8,000
520	Active Adjunct Route Requests [112]	4,000	4,000	4,000	300	4,000
525	Active Notifications per Call	6	6	6	6	6
530	Active Notifications per Split Domain	6	6	6	6	6
535	Active Notifications per VDN Domain	6	6	6	6	6
540	Domain-Control Associations per Call	24	24	24	24	24
545	3rd-party Domain-Control Station Associations (Active Station Control Assoc.) - i.e., Domain Trans. Records	32,000	32,000	32,000	2,000	32,000

	Avaya Aura ™ Communication Manager and Avaya Call Management System	Avaya Aura™ Main / Avaya Aura™ for Survivable Core Duplex (CM_Duplex) [136]	Avaya Aura™ Main / Avaya Aura™ for Survivable Core Simplex (CM_Simplex) [136]	Avaya Aura™ for Survivable Remote Simplex (CM_SurvRemote) [136, 140]	Avaya Aura™ Main Embedded (CM_onlyEmbed) [137]	Avaya Aura™ for Survivable Remote Embedded (CM_SurvRemote Embed) [138, 140]
550	Domain-Control Split/Skill Associations	2,000	2,000	2,000	300	2,000
555	Domain-controllers per Station Domain	4	4	4	4	4
560	Domain-controllers per Split/skill Domain	8	8	8	8	8
565	Event Notification Associations	10,000	10,000	10,000	300	10,000
570	Max Calls With Send DTMF Active	32	32	32	32	32
575	Max Simultaneous Calls Being Classified	600	600	600	600	600
580	Simultaneous Billing (MultiQuest) Requests	1,000	1,000	1,000	100	1,000
585	Simultaneous Selective Listening Disconnected Paths	300	300	300	75	300
590	**ASAI Traffic**					
595	Messages/Sec per ASAI/ADJUNCT IP Link (full duplex)	1,000	1,000	1,000	240	240
600	Messages/Sec/System (full duplex)	1,000	1,000	1,000	240	240
605	**Maximum CTI Links**					
610	Maximum ASAI Links (Open and Proprietary) [92]	64	64	64	64	64

	Avaya Aura ™ Communication Manager and Avaya Call Management System	Avaya Aura™ Main / Avaya Aura™ for Survivable Core Duplex (CM_Duplex) [136]	Avaya Aura™ Main / Avaya Aura™ for Survivable Core Simplex (CM_Simplex) [136]	Avaya Aura™ for Survivable Remote Simplex (CM_SurvRemote) [136, 140]	Avaya Aura™ Main Embedded (CM_onlyEmbed) [137]	Avaya Aura™ for Survivable Remote Embedded (CM_SurvRemote Embed) [138, 140]
615	**ATTENDANT SERVICE. Note: IP Soft Console is not a newly introduced capacity.**					
620	Attendant Consoles(one is reserved for night) [10]	414	414	414	68	414
625	IP Soft Consoles(one is reserved for night) [10]	414	414	414	68	414
630	License Limit: IP Soft Consoles(day:night) [10]	414	414	414	68	414
635	Crisis Alert Stations (on Attendant consoles + Crisis Alert buttons on digital stations) [10.2]	414 + 10	414 + 10	414 + 10	68 + 10	414 + 10
640	Attendant Console 100s Groups/Attendant	20	20	20	20	20
645	Attendant Control Restriction Groups	996	996	996	996	996
650	**Centralized Attendant Service**					
655	Release Link Trunks at Branch	255	255	255	255	255
660	Release Link Trunk Group at Branch	1	1	1	1	1
665	Administered Release Link Trunks at Main [139]	24,000	24,000	24,000	4,000	4,000
670	Offer limit: Administered Release Link Trunks at Main [139]	24,000	24,000	24,000	4,000	4,000

	Avaya Aura ™ Communication Manager and Avaya Call Management System	Avaya Aura™ Main / Avaya Aura™ for Survivable Core Duplex (CM_Duplex) [136]	Avaya Aura™ Main / Avaya Aura™ for Survivable Core Simplex (CM_Simplex) [136]	Avaya Aura™ for Survivable Remote Simplex (CM_SurvRemote) [136, 140]	Avaya Aura™ Main Embedded (CM_onlyEmbed) [137]	Avaya Aura™ for Survivable Remote Embedded (CM_SurvRemote Embed) [138, 140]
675	Release Link Trunk Groups at Main [11, 23]	2,000	2,000	2,000	99	2,000
680	**Other Access Queues**					
685	Max Number of attendant Priority Queue Values [12]	13	13	13	13	13
690	Size range of attendant Reserved Queue	2 - 1108	2 - 1108	2 - 1108	2 - 182	2 - 1108
695	Reserved attendant Queue Default Size	5	5	5	5	5
700	Attendant Queue Length	4,435	4,435	4,435	728	4,435
705	Switched Loops/Console	6	6	6	6	6
710	**AUTHORIZATION**					
715	Authorization Codes	90,000	90,000	90,000	5,000	90,000
720	Station Security Code Length	3 to 8	3 to 8	3 to 8	3 to 8	3 to 8
725	Administrable Classes of Restrictions (COR)	996	996	996	996	996
730	Classes of Service (COS)	16	16	16	16	16
735	Length of Authorization Code	4 - 13	4 - 13	4 - 13	4 - 13	4 - 13
740	Length of Barrier Code	4 to 7	4 to 7	4 to 7	4 to 7	4 to 7
745	Length of Account Codes [93]	1 - 15	1 - 15	1 - 15	1 - 15	1 - 15
750	Restricted Call List [113]	1	1	1	1	1

	Avaya Aura ™ Communication Manager and Avaya Call Management System	Avaya Aura™ Main / Avaya Aura™ for Survivable Core Duplex (CM_Duplex) [136]	Avaya Aura™ Main / Avaya Aura™ for Survivable Core Simplex (CM_Simplex) [136]	Avaya Aura™ for Survivable Remote Simplex (CM_SurvRemote) [136, 140]	Avaya Aura™ Main Embedded (CM_onlyEmbed) [137]	Avaya Aura™ for Survivable Remote Embedded (CM_SurvRemote Embed) [138, 140]
755	Remote Access Barrier Codes	10	10	10	10	10
760	Lists of CDR FEAC destinations [113]	1	1	1	1	1
765	Toll Call List [113]	1	1	1	1	1
770	Unrestricted/Allowed Call Lists [113]	10	10	10	10	10
775	Total Call List Entries	1,000	1,000	1,000	1,000	1,000
780	**AUTOMATIC CALL BACK (ACB) CALLS**					
785	Max ACB Calls	1,500	1,500	1,500	1,500	1,500
790	**AUTOMATIC WAKEUP**					
795	Simultaneous Display Requests	30	30	30	30	30
800	Wakeup Requests per System	15,000	15,000	15,000	2,400	15,000
805	Wakeup Request per Extension	2	2	2	2	2
810	Wakeup Requests per 15 min Interval [20]	950	950	950	450	950
815	**BASIC CALL MANAGEMENT SYSTEM (BCMS)**					
820	Measured Agents or Login Ids	3,000	3,000	3,000	400	3,000
825	Measured Agents per Split/Skill	1,500 / 3,000	1,500 / 3,000	1,500 / 3,000	200	200

	Avaya Aura ™ Communication Manager and Avaya Call Management System	Avaya Aura™ Main / Avaya Aura™ for Survivable Core Duplex (CM_Duplex) [136]	Avaya Aura™ Main / Avaya Aura™ for Survivable Core Simplex (CM_Simplex) [136]	Avaya Aura™ for Survivable Remote Simplex (CM_SurvRemote) [136, 140]	Avaya Aura™ Main Embedded (CM_onlyEmbed) [137]	Avaya Aura™ for Survivable Remote Embedded (CM_SurvRemote Embed) [138, 140]
830	Measured Splits/Skills	600	600	600	99	600
835	Measured Agent-split/skill pairs	40,000	40,000	40,000	1,000	40,000
840	Measured Trunk Groups	32	32	32	32	32
845	Measured VDNs	512	512	512	99	512
850	Maximum Agents Displayed by Monitor BCMS Split Command [12.1]	100	100	100	100	100
855	Max BCMS Terminals	4	4	4	3	3
860	Max Active Maintenance Commands for System	5	5	5	5	5
865	Max Simultaneous BCMS Terminals in Monitor Mode [12.2]	13	13	13	1	1
870	**Reporting Periods**					
875	Intervals	25	25	25	25	25
880	Days	7	7	7	7	7
885	**BRIDGING (See entry below for CALL APPEARANCES and BRIDGED CALL APPEARANCES)**					
890	**CABINETS**					
895	**Port Network Connectivity. This feature is for Federal Government use only.**					
900	Port Networks (see endnotes for migration)	64	64	64	NA	NA
905	Port Networks per MCC Cabinet [67]	5	5	5	NA	NA

	Avaya Aura ™ Communication Manager and Avaya Call Management System	Avaya Aura™ Main / Avaya Aura™ for Survivable Core Duplex (CM_Duplex) [136]	Avaya Aura™ Main / Avaya Aura™ for Survivable Core Simplex (CM_Simplex) [136]	Avaya Aura™ for Survivable Remote Simplex (CM_SurvRemote) [136, 140]	Avaya Aura™ Main Embedded (CM_onlyEmbed) [137]	Avaya Aura™ for Survivable Remote Embedded (CM_SurvRemoteEmbed) [138, 140]
910	Switch Nodes (Simplex) [3]	3	3	3	NA	NA
915	Switch Nodes (Duplex) [3]	6	6	6	NA	NA
920	DS1 Converter Complex (Simplex) [3]	41	41	41	NA	NA
925	DS1 Converter Complex (Duplex) [3]	82	82	82	NA	NA
930	**EPN [13]**					
935	MCC [67]	64	64	64	NA	NA
940	SCC	64 (4/stk)	64 (4/stk)	64 (4/stk)	NA	NA
945	G650 (19 inch Rack Mount)	64 (5/stk)	64 (5/stk)	64 (5/stk)	NA	NA
950	**PPN**	NA	NA	NA	NA	NA
955	**CALL APPEARANCES and BRIDGED CALL APPEARANCES**					
960	Call and Bridged Appearances per Station [16]	97	97	97	97	97
965	Max Call Appearances per Ext.	10	10	10	10	10
970	Min Call Appearances per Ext.	0	0	0	0	0
975	**Primary Extension Bridging**					
980	System-wide Maximum Bridged Appearances	80,000	80,000	80,000	2,400	80,000

Avaya Aura ™ Communication Manager and Avaya Call Management System		Avaya Aura™ Main / Avaya Aura™ for Survivable Core Duplex (CM_Duplex) [136]	Avaya Aura™ Main / Avaya Aura™ for Survivable Core Simplex (CM_Simplex) [136]	Avaya Aura™ for Survivable Remote Simplex (CM_SurvRemote) [136, 140]	Avaya Aura™ Main Embedded (CM_onlyEmbed) [137]	Avaya Aura™ for Survivable Remote Embedded (CM_SurvRemote Embed) [138, 140]
985	Max Simultaneously Active (Off-hook) Bridge Users on a Call (excluding principal and the calling/called party on the call) [17]	5	5	5	5	5
990	Max Number of Bridges to a Principal's Call Appearance [15] (See below for extended numbers)	25	25	25	25	25
995	Administered Users with Bridged Appearances (Station User maximum) [71.0, 72]	41,000	41,000	41,000	2,400	41,000
1000	Max Number Bridges to a Principal's Call Appearance with Extension that allows additional bridges [15]	63	63	63	63	63
1005	Number of Principals that can have the Extended number of Bridges	1,250	1,250	1,250	1,250	1,250
1010	**CALL COVERAGE**					
1015	Coverage Answer Groups (CAG)	1,000	1,000	1,000	200	1,000
1020	Coverage Paths	9,999	9,999	9,999	2,000	9,999
1025	Coverage Paths Incl. in Call Coverage Report	200	200	200	200	200

Avaya Aura ™ Communication Manager and Avaya Call Management System		Avaya Aura™ Main / Avaya Aura™ for Survivable Core Duplex (CM_Duplex) [136]	Avaya Aura™ Main / Avaya Aura™ for Survivable Core Simplex (CM_Simplex) [136]	Avaya Aura™ for Survivable Remote Simplex (CM_SurvRemote) [136, 140]	Avaya Aura™ Main Embedded (CM_onlyEmbed) [137]	Avaya Aura™ for Survivable Remote Embedded (CM_SurvRemoteEmbed) [138, 140]
1030	Coverage Path per Station	2	2	2	2	2
1035	Coverage Points in a Path	6	6	6	6	6
1040	Remote Coverage Points [97]	10,000	10,000	10,000	10,000	10,000
1045	Members per CAG	8	8	8	8	8
1050	Time of Day Coverage Tables	1,000	1,000	1,000	1,000	1,000
1055	Time of Day Changes per Table	5	5	5	5	5
1060	Remote Admin Coverage Paths	2	2	2	2	2
1065	**CALL DETAIL RECORDING**					
1070	Intra-switch Call Trackable Extensions [119]	5,000	5,000	5,000	1,000	5,000
1075	Max Number of CDR Records That Can Be Buffered in the Switch [54.1]	17,326	17,326	17,326	6,902	6,902
1080	Number of Records Buffered for the Primary Output Device that will cause Secondary Device to be Busied Out for 2 Minutes [54.1]	1,900	1,900	1,900	1,900	1,900
1085	Survivable CDR: Number of Output Files [54, 55]	20	20	20	20	20

	Avaya Aura ™ Communication Manager and Avaya Call Management System	Avaya Aura™ Main / Avaya Aura™ for Survivable Core Duplex (CM_Duplex) [136]	Avaya Aura™ Main / Avaya Aura™ for Survivable Core Simplex (CM_Simplex) [136]	Avaya Aura™ for Survivable Remote Simplex (CM_SurvRemote) [136, 140]	Avaya Aura™ Main Embedded (CM_onlyEmbed) [137]	Avaya Aura™ for Survivable Remote Embedded (CM_SurvRemoteEmbed) [138, 140]
1090	**CALL FORWARDING**					
1095	Call Forwarded Digits (standard off-net)	18	18	18	18	18
1100	Call Forwarded Digits (enhanced off-net)	24	24	24	24	24
1105	Total number of Call Forwarded stations [71.0]	41,000	41,000	41,000	2,400	41,000
1110	**CALL PARK**					
1115	Attendant Group Common Shared Ext. Numbers per System [19]	1,182	1,182	1,182	1,182	1,182
1120	Number of Parked Calls	10,604	10,604	10,604	723	723
1125	**CALL PICKUP GROUPS: (based on station user max)**					
1130	Call Pickup Members/Group	50	50	50	50	50
1135	Call Pickup Members/System [71.0]	41,000	41,000	41,000	2,400	2,400
1140	Number of Groups	5,000	5,000	5,000	800	800
1145	**CALL VECTORING**					
1150	Skills a Call Can Simultaneously Queue to	3	3	3	3	3
1155	Priority Levels	4	4	4	4	4
1160	Recorded Announcements/Audio Sources for Vector Delay	9,000	9,000	9,000	3,000	9,000

Avaya Aura ™ Communication Manager and Avaya Call Management System		Avaya Aura™ Main / Avaya Aura™ for Survivable Core Duplex (CM_Duplex) [136]	Avaya Aura™ Main / Avaya Aura™ for Survivable Core Simplex (CM_Simplex) [136]	Avaya Aura™ for Survivable Remote Simplex (CM_SurvRemote) [136, 140]	Avaya Aura™ Main Embedded (CM_onlyEmbed) [137]	Avaya Aura™ for Survivable Remote Embedded (CM_SurvRemote Embed) [138, 140]
1165	Vector Steps per Vector (32 prior to 4.0)	99	99	99	99	99
1170	Vector Directory Numbers (VDNs) [20.1]	30,000	30,000	30,000	512	30,000
1175	Vectors per System	8,000	8,000	8,000	256	8,000
1180	Number of Collected Digits for Call Prompting or CINFO	16	16	16	16	16
1185	Number of Dial-Ahead Digits for Call Prompting	24	24	24	24	24
1190	Vector Routing Tables (100 entries per table)	999	999	999	999	999
1195	BSR Application Routing Tables (forms)	511	511	511	255	511
1200	BSR Application-Location Pairs [20.5]	2,560	2,560	2,560	2,560	2,560
1205	Holiday Tables (15 entries per table)	999	999	999	999	999
1210	Service Hours Tables	999	999	999	999	999
1215	Total non-blank Comment Steps	40,000	40,000	40,000	1,280	40,000
1220	Vector Variables (26 with prior releases)	702	702	702	702	702
1225	Active Collect Local Variables	12,000	12,000	12,000	450	450
1230	VDN Variables	9	9	9	5	9
1235	Policy Routing Tables	8,000	8,000	8,000	256	8,000

	Avaya Aura ™ Communication Manager and Avaya Call Management System	Avaya Aura™ Main / Avaya Aura™ for Survivable Core Duplex (CM_Duplex) [136]	Avaya Aura™ Main / Avaya Aura™ for Survivable Core Simplex (CM_Simplex) [136]	Avaya Aura™ for Survivable Remote Simplex (CM_SurvRemote) [136, 140]	Avaya Aura™ Main Embedded (CM_onlyEmbed) [137]	Avaya Aura™ for Survivable Remote Embedded (CM_SurvRemote Embed) [138, 140]
1240	Policy Routing Points (PRTs x VDN entries)	24,000	24,000	24,000	768	24,000
1245	**CONFERENCE**					
1250	Maximum Number of Parties in a Conf	6	6	6	6	6
1255	Simultaneous 3-way Conf. Calls [21]	10,304	10,304	10,304	see endnote	see endnote
1260	Simultaneous 6-way Conf. Calls [22]	5,152	5,152	5,152	see endnote	see endnote
1265	**Meet-Me Conferencing**					
1270	Max Number of Conference Parties	3-6	3-6	3-6	3-6	3-6
1275	Max Required Security Code Length	0 or 6	0 or 6	0 or 6	0 or 6	0 or 6
1280	Meet-Me Conference VDNs	1,800	1,800	1,800	175	1,800
1285	**Expanded Meet-Me Conferencing (EMMC) NOTE: The Meet-me Conf VDN Maximums apply to EMMC as well.**					
1290	Maximum EMMC Ports	300	300	300	300	300
1295	Conferees in EMMC	3-300	3-300	3-300	3-300	3-300
1300	**DATA PARAMETERS**					
1305	Administered Connections	128	128	128	128	128
1310	PRI Endpoints (PE)	50	50	50	50	50
1315	Administered Access Endpoints	24,000	24,000	5,000	1,000	1,000

	Avaya Aura ™ Communication Manager and Avaya Call Management System	Avaya Aura™ Main / Avaya Aura™ for Survivable Core Duplex (CM_Duplex) [136]	Avaya Aura™ Main / Avaya Aura™ for Survivable Core Simplex (CM_Simplex) [136]	Avaya Aura™ for Survivable Remote Simplex (CM_SurvRemote) [136, 140]	Avaya Aura™ Main Embedded (CM_onlyEmbed) [137]	Avaya Aura™ for Survivable Remote Embedded (CM_SurvRemote Embed) [138, 140]
1320	Offer limit: Administered Access Endpoints [139]	24,000	24,000	5,000	1,000	1,000
1325	**ALPHANUMERIC DIALING**					
1330	Max entries	1,250	1,250	1,250	NA	NA
1335	Alphanumeric Characters per Entry	24	24	24	NA	NA
1340	**MULTIMEDIA PARAMETERS [3]**					
1345	TN787K multimedia interface (MMI) Boards	14	14	14	NA	NA
1350	TN788C multimedia voice conditioner (VC) Boards	52	52	52	NA	NA
1355	MMI and VC Boards in Multiple PN	Yes	Yes	Yes	NA	NA
1360	Multimedia One Number Conferences per System	5,000	5,000	5,000	NA	NA
1365	Multimedia Dynamic Conference Records	208	208	208	NA	NA
1370	**Maximum Number of BRI Connections [101]**	7,000	7,000	7,000	1,000 *	7000 *
1375	**DIGITAL DATA ENDPOINTS**	7,500	7,500	7,500	800	7,500
1380	**DIAL PLAN**					
1385	DID LDNs (without Tenant Partitioning)	20	20	20	20	20

Avaya Aura ™ Communication Manager and Avaya Call Management System		Avaya Aura™ Main / Avaya Aura™ for Survivable Core Duplex (CM_Duplex) [136]	Avaya Aura™ Main / Avaya Aura™ for Survivable Core Simplex (CM_Simplex) [136]	Avaya Aura™ for Survivable Remote Simplex (CM_SurvRemote) [136, 140]	Avaya Aura™ Main Embedded (CM_onlyEmbed) [137]	Avaya Aura™ for Survivable Remote Embedded (CM_SurvRemoteEmbed) [138, 140]
1390	Maximum Extensions (of all types) [24]	64,000	64,000	64,000	3,500	64,000
1395	Station Extensions (included in Maximum Extensions) [24.1]	41,000	41,000	41,000	2,400	41,000
1400	Miscellaneous Extensions (included in Maximum Extensions) [25]	32,508	32,508	32,508	900	32,508
1405	VDN Extensions (included in Miscellaneous Extensions)	30,000	30,000	30,000	512	30,000
1410	Station Extensions plus VDN Extensions combined limit (share a message server table)	N.A.	N.A.	N.A.	N.A.	N.A.
1415	Extension Number Portability (UDP Entries)	80,000	80,000	80,000	10,110	80,000
1420	Maximum Dial Plan Analysis Table entries	540	540	540	540	540
1425	**Feature Dial Access Codes**					
1430	Number of Codes [100]	166	166	166	166	166
1435	Number of Digits in a Feature Access Code	1 - 4	1 - 4	1 - 4	1 - 4	1 - 4
1440	**Integrated Directory Entries [27]**	41,415	41,415	41,415	2,469	41,415

	Avaya Aura ™ Communication Manager and Avaya Call Management System	Avaya Aura™ Main / Avaya Aura™ for Survivable Core Duplex (CM_Duplex) [136]	Avaya Aura™ Main / Avaya Aura™ for Survivable Core Simplex (CM_Simplex) [136]	Avaya Aura™ for Survivable Remote Simplex (CM_SurvRemote) [136, 140]	Avaya Aura™ Main Embedded (CM_onlyEmbed) [137]	Avaya Aura™ for Survivable Remote Embedded (CM_SurvRemote Embed) [138, 140]
1445	**Maximum Extension Size** [123]	13	13	13	13	13
1450	**Minimum Extension Size**	1	1	1	1	1
1455	**NAMES**					
1460	Number of names [28]	83,423	83,423	83,423	4,268	83,423
1465	Number of characters in a station name	27	27	27	27	27
1470	Number of characters in a group name	25	25	25	25	25
1475	Number of name characters in a missed call message	20	20	20	20	20
1480	**Non-DID LDNs**	2,000	2,000	2,000	99	2,000
1485	**EXTENSIONS (total)** [24]					
1490	Prefix Extensions	Yes	Yes	Yes	Yes	Yes
1495	Prefix Extensions Lengths [99]	2-6	2-6	2-6	2-6	2-6
1500	**Trunk Dial Access Codes**					
1505	Number of Dial Access Codes	2,218	2,218	2,218	317	2,218
1510	Number of digits in DAC	1 - 4	1 - 4	1 - 4	1 - 4	1 - 4
1515	**Max Locations** [106]	250	250	250	50	250

	Avaya Aura ™ Communication Manager and Avaya Call Management System	Avaya Aura™ Main / Avaya Aura™ for Survivable Core Duplex (CM_Duplex) [136]	Avaya Aura™ Main / Avaya Aura™ for Survivable Core Simplex (CM_Simplex) [136]	Avaya Aura™ for Survivable Remote Simplex (CM_SurvRemote) [136, 140]	Avaya Aura™ Main Embedded (CM_onlyEmbed) [137]	Avaya Aura™ for Survivable Remote Embedded (CM_SurvRemote Embed) [138, 140]
1520	**DO NOT DISTURB (DND)**					
1525	DND Requests per System	41,000	41,000	41,000	2,400	41,000
1530	Simultaneous Display Requests	30	30	30	30	30
1535	**EXPERT AGENT SELECTION (EAS) (note 83)**					
1540	Skill Groups	8,000	8,000	8,000	99	8,000
1545	VDN Skill Preferences	3	3	3	3	3
1550	Max Skills a Call Can Simultaneously Queue to	3	3	3	3	3
1555	Max Administered ACD Members (login ID / Agent-Skill pairs) [28.1]	999,999	999,999	999,999	6,000	999,999
1560	Max Staffed (logged-in) ACD Members [28.3] i.e., agent-skill pairs	100,000	100,000	100,000	1,000	100,000
1565	Max Administered Agent Login IDs [28.4]	30,000	30,000	30,000	1,500	30,000
1570	**Max Skills per Agent**					
1575	Max Skills per Agent in CM	120	120	120	20	120
1580	Skill Levels (preferences) per Agent Skill	16	16	16	16	16

	Avaya Aura ™ Communication Manager and Avaya Call Management System	Avaya Aura™ Main / Avaya Aura™ for Survivable Core Duplex (CM_Duplex) [136]	Avaya Aura™ Main / Avaya Aura™ for Survivable Core Simplex (CM_Simplex) [136]	Avaya Aura™ for Survivable Remote Simplex (CM_SurvRemote) [136, 140]	Avaya Aura™ Main Embedded (CM_onlyEmbed) [137]	Avaya Aura™ for Survivable Remote Embedded (CM_SurvRemote Embed) [138, 140]
1585	Before using the following capacities in a contact center, read the disclaimer at the beginning of the table or in endnote 1.					
1590	Max Staffed (logged-in) EAS Agents per Skill (members per group) [1, 28.6]	10,000	10,000	10,000	500	500
1595	**Max Logged in EAS Agents (per system) when each has: [1, 6]**					
1600	1 Skill	10,000	10,000	10,000	500	500
1605	2 Skills	10,000	10,000	10,000	500	500
1610	4 Skills	10,000	10,000	10,000	250	250
1615	10 Skills	10,000	10,000	10,000	100	100
1620	20 Skills	5,000	5,000	5,000	50	50
1625	60 Skills (R12 or later CMS Required)	1,666	1,666	1,666	NA	NA
1630	120 Skills (R16.1 or later CMS Required)	833	833	833	NA	NA
1635	**EXTERNAL DEVICE ALARMING**	90	90	90	90	90
1640	**FACILITY BUSY INDICATORS**					
1645	Buttons per Tracked Resource [65]	100	100	100	100	100
1650	Number of Station Busy Indicators (SBI) [95]	10,000	10,000	10,000	3,600	10,000

	Avaya Aura ™ Communication Manager and Avaya Call Management System	Avaya Aura™ Main / Avaya Aura™ for Survivable Core Duplex (CM_Duplex) [136]	Avaya Aura™ Main / Avaya Aura™ for Survivable Core Simplex (CM_Simplex) [136]	Avaya Aura™ for Survivable Remote Simplex (CM_SurvRemote) [136, 140]	Avaya Aura™ Main Embedded (CM_onlyEmbed) [137]	Avaya Aura™ for Survivable Remote Embedded (CM_SurvRemote Embed) [138, 140]
1655	Facility Busy Indicators per system (SBIs + Queue Status buttons + ((24 DTGS buttons and 2 SBIs on each Attendant) x Attd Max) [95.1]	32,726	32,726	32,726	5,868	32,726
1660	**HUNT GROUPS (NON ACD) [28.5]**					
1665	Announcements per Group	1	1	1	1	1
1670	Announcements per System [18]	9,000	9,000	9,000	3,000	9,000
1675	Total Hunt Groups	8,000	8,000	8,000	99	8,000
1680	Members per Group	1,500	1,500	1,500	200	1,500
1685	Before using the following capacities in a contact center, read the disclaimer at the beginning of the table or in endnote 1.					
1690	Group Members per System [1, 28.5]	10,000	10,000	10,000	500	10,000
1695	Queue Slots per Group [7]	NA	NA	NA	NA	NA
1700	**INTERCOM TRANSLATION TABLE (ICOM): Automatic, Manual and Dial**					
1705	ICOM groups per system [131]	256	256	256	32	256
1710	Auto/Manual ICOM Groups	256	256	256	32	256
1715	Dial ICOM Groups	256	256	256	32	256
1720	**Members per ICOM group**					
1725	Auto/Manual ICOM Groups	32	32	32	32	32
1730	Dial ICOM Groups	32	32	32	32	32

	Avaya Aura ™ Communication Manager and Avaya Call Management System	Avaya Aura™ Main / Avaya Aura™ for Survivable Core Duplex (CM_Duplex) [136]	Avaya Aura™ Main / Avaya Aura™ for Survivable Core Simplex (CM_Simplex) [136]	Avaya Aura™ for Survivable Remote Simplex (CM_SurvRemote) [136, 140]	Avaya Aura™ Main Embedded (CM_onlyEmbed) [137]	Avaya Aura™ for Survivable Remote Embedded (CM_SurvRemoteEmbed) [138, 140]
1735	Members per System [131]	8,192	8,192	8,192	1,024	8,192
1740	**IP Solutions and SIP Specific Capacities (also see sections on OPTIM and Trunks)**					
1745	**IP Attendant Consoles and Soft Console capacities: See Attendant category**					
1750	Before using the following capacities in a contact center, read the disclaimer at the beginning of the table or in endnote 1.					
1755	**Simultaneous in-use IP ports (including stations and trunks) [1, 71.0, 71.4, 71.5, 71.6, 72] (See entries under the PORTS category for total ports, including ALL port types)**					
1760	With a mix of H.323 and SIP [1, 78]	24,576	24,576	24,576	5,000	6,000
1765	When all IP ports are H.323 [1, 78]	24,576	24,576	24,576	5,000	5,000
1770	When all IP ports are SIP [1]	24,000	24,000	12,000	4,000	4,000
1775	Offer limit: When all IP ports are SIP [1]	24,000	24,000	12,000	4,000	4,000
1780	TN799 Circuit Packs (C-LAN)	106	106	106	NA	NA
1785	Number of Sockets on PE Interface [75]	24,576	24,576	24,576	6,000	6,000
1790	Max Duplicated TN2602 virtual MAC Tables	8	8	8	NA	NA
1795	Maximum of all IP Media Resources (TN2302AP (64-port) + TN2602AP (80 or 320 port) [71.0, 71.1, 71.5, 71.6]	200	200	200	see endnotes	see endnotes

Avaya Aura ™ Communication Manager and Avaya Call Management System		Avaya Aura™ Main / Avaya Aura™ for Survivable Core Duplex (CM_Duplex) [136]	Avaya Aura™ Main / Avaya Aura™ for Survivable Core Simplex (CM_Simplex) [136]	Avaya Aura™ for Survivable Remote Simplex (CM_SurvRemote) [136, 140]	Avaya Aura™ Main Embedded (CM_onlyEmbed) [137]	Avaya Aura™ for Survivable Remote Embedded (CM_SurvRemoteEmbed) [138, 140]
1800	TN2602AP (IP Media Resource 80) - Part of the Overall Maximum above	128	128	128	NA	NA
1805	TN2602AP (IP Media Resource 320) - Part of the Overall Maximum above	128	128	128	NA	NA
1810	Maximum Port Networks (including G650s) - Also see row 945 G650 for the number of Cabinets in a G650 PN.	64	64	64	NA	NA
1815	System-wide Maximum H.248 media gateways (G250, G350, G700, IG550, G430, G450) [71.0, 71.5, 71.6]	250	250	250	50	250
1820	Maximum H.323 media gateways (MultiTech) - NOT part of the above limit of 250 H.248 media gateways or 64 PNs	250	250	250	250	250
1825	Total Number of LSPs (includes all Servers)	250	250	250	50	250
1830	H.248 media gateways per LSP [71.0, 71.5, 71.6]	50	50	50	50	50
1835	Maximum administered H.323 trunks [62, 71.0, 139]	12,000	12,000	12,000	4,000	4000

	Avaya Aura ™ Communication Manager and Avaya Call Management System	Avaya Aura™ Main / Avaya Aura™ for Survivable Core Duplex (CM_Duplex) [136]	Avaya Aura™ Main / Avaya Aura™ for Survivable Core Simplex (CM_Simplex) [136]	Avaya Aura™ for Survivable Remote Simplex (CM_SurvRemote) [136, 140]	Avaya Aura™ Main Embedded (CM_onlyEmbed) [137]	Avaya Aura™ for Survivable Remote Embedded (CM_SurvRemote Embed) [138, 140]
1840	Offer Limit: Maximum administered H.323 trunks [62, 71.0, 139]	12,000	12,000	12,000	4,000	4,000
1845	Maximum Concurrently Registered H.323 Stations [45.1, 47, 71.0, 72, 139]	18,000	18,000	5,000	1,000	1,000
1850	Offer Limit: Maximum Concurrently Registered H.323 Stations [45.1, 47, 71.0, 72, 139]	18,000	18,000	5,000	1,000	1,000
1855	Before using the following capacities in a contact center, read the disclaimer at the beginning of the table or in endnote 1.					
1860	Offer Limit: Maximum H.323 IP ACD Agents [1, 66]	10,000	10,000	5,000	500	500
1865	Offer Limit: Maximum H.235.5 (Annex H) Stations [57]	5,000	5,000	5,000	1,000	1,000
1870	Before using the following capacities in a contact center, read the disclaimer at the beginning of the table or in endnote 1.					
1875	Administered ISDN+IP Trunks (pool of ISDN, IP, and SIP trunk Ports). See also row "Administered SIP Trunks." [1, 62, 71.0, 72]	24,000	24,000	24,000	4,000	4,000
1880	Offer Limit: Administered ISDN+IP Trunks (pool of ISDN, IP, and SIP trunk Ports). See also row "Administered SIP Trunks." [1, 62, 71.0, 72, 133, 135]	24,000	24,000	24,000	4,000	4,000
1885	Signaling Groups [60]	999	999	999	999	999

	Avaya Aura ™ Communication Manager and Avaya Call Management System	Avaya Aura™ Main / Avaya Aura™ for Survivable Core Duplex (CM_Duplex) [136]	Avaya Aura™ Main / Avaya Aura™ for Survivable Core Simplex (CM_Simplex) [136]	Avaya Aura™ for Survivable Remote Simplex (CM_SurvRemote) [136, 140]	Avaya Aura™ Main Embedded (CM_onlyEmbed) [137]	Avaya Aura™ for Survivable Remote Embedded (CM_SurvRemote Embed) [138, 140]
1890	Number of IP (H.323 or SIP) Trunk members in a Signaling Group	255	255	255	255	255
1895	Video-Capable H.323 trunks (same as H.323 trunks limit) [62, 116]	12,000	12,000	12,000	4,000	12,000
1900	Offer Limit: Video-Capable H.323 trunks (same as H.323 trunks limit) [62, 116]	12,000	12,000	12,000	4,000	4,000
1905	Video-Capable H.323 Stations or Softphones (same as H.323 Stations limit - see Voice Terminals Section) [116]	18,000	18,000	18,000	2,400	5,000
1910	Offer Limit: Video capable H.323 stations or softphones	18,000	18,000	5,000	1,000	1,000
1915	Number of Simultaneous H.323 video Calls [116]	10,666	10,666	10,666	833	833
1920	Number of Simultaneous SIP station-to-station video Calls [77]	2,000	2,000	2,000	333	333
1925	Max Number of Video Bridges	40	40	40	40	40
1930	***Remote Office Feature Group (also see endnote 114)***					
1935	Remote Office Gateways (H.323 RO Gateway)	250	250	250	250	250
1940	License Limit: Maximum Administered Remote Office Stations	18,000	18,000	18,000	2,400	5,000

	Avaya Aura ™ Communication Manager and Avaya Call Management System	Avaya Aura™ Main / Avaya Aura™ for Survivable Core Duplex (CM_Duplex) [136]	Avaya Aura™ Main / Avaya Aura™ for Survivable Core Simplex (CM_Simplex) [136]	Avaya Aura™ for Survivable Remote Simplex (CM_SurvRemote) [136, 140]	Avaya Aura™ Main Embedded (CM_onlyEmbed) [137]	Avaya Aura™ for Survivable Remote Embedded (CM_SurvRemote Embed) [138, 140]
1945	Offer Limit: Maximum Administered Remote Office Stations	18,000	18,000	5,000	1,000	1,000
1950	License Limit: Maximum Administered Remote Office Trunks	12,000	12,000	12,000	4,000	4,000
1955	Offer Limit: Maximum Administered Remote Office Trunks	12,000	12,000	12,000	4,000	4,000
1960	**Service Observing/Call Recording Capacities**					
1965	Additional timeslots per observing association within a port network gateway - with No Talk FAC or ASAI Single Step Conference	0	0	0	0	0
1970	Additional timeslots per observing association within a H.248 gateway - with SO buttons or FACs (Talk or no Talk)	1	1	1	1	1
1975	Total Observers of extensions for the system [127]	not limited	not limited	not limited	not limited	not limited
1980	Total Observers of VDNs for System	50	50	50	50	50
1985	Total observers of the same EAS agent LoginID or station extension (option set to y - when set to n, only one observer is allowed in a call) [125]	2	2	2	2	2

Avaya Aura ™ Communication Manager and Avaya Call Management System		Avaya Aura™ Main / Avaya Aura™ for Survivable Core Duplex (CM_Duplex) [136]	Avaya Aura™ Main / Avaya Aura™ for Survivable Core Simplex (CM_Simplex) [136]	Avaya Aura™ for Survivable Remote Simplex (CM_SurvRemote) [136, 140]	Avaya Aura™ Main Embedded (CM_onlyEmbed) [137]	Avaya Aura™ for Survivable Remote Embedded (CM_SurvRemote Embed) [138, 140]
1990	Maximum parties in a connection being observed. The observer(s) are each counted as a party. [126]	6	6	6	6	6
1995	Before using the following capacities in a contact center, read the disclaimer at the beginning of the table or in endnote 1.					
2000	**SIP (See endnotes 1, 120)**					
2005	Administered SIP Trunks [1, 14, 62, 71.0, 133. 135.] Part of ISDN/IP/SIP trunk pool.	14,000	14,000	14,000	4,000	4,000
2010	Offer Limit: Administered SIP Trunks [1, 62, 133, 135]	14,000	14,000	14,000	4,000	4,000
2015	Offer Limit: Simultaneous in use SIP Trunks [133, 135]	7,000	7,000	7,000	4,000	4,000
2020	SES: See endnote 120	NA	NA	NA	NA	NA
2025	Administered SIP stations [1, 139]	18,000	18,000	5,000	1,000	1,000
2030	Offer Limit: Administered SIP stations [1, 139]	18,000	18,000	5,000	1,000	1,000
2035	SIP Softclient Buddies	50	50	50	50	50
2040	**Maximum Bridged Call Appearances and Extended Bridged Groups: See Entry above under Call APPEARANCES and BRIDGED CALL APPEARANCES**					
2045	**SBS (Separation of Bearer and Signaling)**					
2050	SBS Trunks	1,000	1,000	1,000	1,000	1,000
2055	SBS Stations	500	500	500	500	500

Avaya Aura ™ Communication Manager and Avaya Call Management System		Avaya Aura™ Main / Avaya Aura™ for Survivable Core Duplex (CM_Duplex) [136]	Avaya Aura™ Main / Avaya Aura™ for Survivable Core Simplex (CM_Simplex) [136]	Avaya Aura™ for Survivable Remote Simplex (CM_SurvRemote) [136, 140]	Avaya Aura™ Main Embedded (CM_onlyEmbed) [137]	Avaya Aura™ for Survivable Remote Embedded (CM_SurvRemote Embed) [138, 140]
2060	**LAST NUMBER DIALED**					
2065	Entries/System [29]	48,914	48,914	48,914	3,268	48,914
2070	Number of Digits	24	24	24	24	24
2075	**LEAVE WORD CALLING (SWITCH BASED) and MESSAGE WAITING**					
2080	System-wide Messages Stored	12,000	12,000	12,000	2,000	12,000
2085	Max Remote Leave Word Calling Messages	2,000	2,000	2,000	1,000	2,000
2090	Messages per User	125	125	125	125	125
2095	**REMOTE MESSAGE WAITING INDICATORS**					
2100	Remote MWI per Extension	80	80	80	80	80
2105	Remote MWI per System [117] (Station user max / 20)	2,050	2,050	2,050	120	2,050
2110	Simultaneous Message Retrievers	400	400	400	400	400
2115	System-wide Super Message Retrievers (can retrieve anyone's messages)	30	30	30	30	30
2120	**MALICIOUS CALL TRACE**					
2125	Max Simultaneous Traces	16	16	16	16	16

	Avaya Aura ™ Communication Manager and Avaya Call Management System	Avaya Aura™ Main / Avaya Aura™ for Survivable Core Duplex (CM_Duplex) [136]	Avaya Aura™ Main / Avaya Aura™ for Survivable Core Simplex (CM_Simplex) [136]	Avaya Aura™ for Survivable Remote Simplex (CM_SurvRemote) [136, 140]	Avaya Aura™ Main Embedded (CM_onlyEmbed) [137]	Avaya Aura™ for Survivable Remote Embedded (CM_SurvRemote Embed) [138, 140]
2130	**MULTIPLE LISTED DIRECTORY NUMBERS (MLDN)**					
2135	Via DID without Tenant Partition	20	20	20	20	20
2140	Via DID with Tenant Partition [128]	100	100	100	100	100
2145	Via CO	2,000	2,000	2,000	99	2,000
2150	**MODEM POOL GROUPS - Mode 2/Analog [3]**					
2155	Group members per system	2,016	2,016	2,016	160	2,016
2160	Number of groups	63	63	63	5	63
2165	Members per group	32	32	32	32	32
2170	**NETWORKING (also see Trunks)**					
2175	CAS RLT Nodes [23]	2,000	2,000	2,000	99	2,000
2180	**DCS Nodes [31]**					
2185	TCP/IP	63	63	63	63	63
2190	ISDN PRI (Public and/or Private)	63	63	63	63	63
2195	Hybrid (combination of PRI and TCP/IP)	63	63	63	63	63
2200	ENP Nodes [32]	999	999	999	999	999
2205	**QSIG Nodes: No Fixed Node Capacity. See endnote 73.**					
2210	**QSIG/DCS Interworked Nodes** [76]	63	63	63	63 *	63 *

	Avaya Aura™ Communication Manager and Avaya Call Management System	Avaya Aura™ Main / Avaya Aura™ for Survivable Core Duplex (CM_Duplex) [136]	Avaya Aura™ Main / Avaya Aura™ for Survivable Core Simplex (CM_Simplex) [136]	Avaya Aura™ for Survivable Remote Simplex (CM_SurvRemote) [136, 140]	Avaya Aura™ Main Embedded (CM_onlyEmbed) [137]	Avaya Aura™ for Survivable Remote Embedded (CM_SurvRemote Embed) [138, 140]
2215	**OPTIM Applications such as EC500, OPS, PBFMC, PVFMC [105]**					
2220	Number of OPTIM applications per Station (EC500, OPS, PBFMC, PVFMC)	4	4	4	4	4
2225	Software-defined OPTIM Station Capacity [71.0, 72, 104]	41,000	41,000	5,000	1,000	1,000
2230	Offer Limit: OPTIM Station Capacity	41,000	41,000	5,000	1,000	1,000
2235	License Limit: administered OPTIM EC500 telephones	41,000	41,000	41,000	2,400	41,000
2240	Administered OPTIM-OPS stations (SIP Endpoints) [139]	18,000	18,000	5,000	1,000	1,000
2245	Offer Limit: Administered OPTIM-OPS stations (SIP Endpoints) [139]	18,000	18,000	5,000	1,000	1,000
2250	Call Center 16CC SIP Phones[74]	NA	NA	NA	NA	NA
2255	OPTIM Mapping Table Capacity	123,000	123,000	123,000	9,600	123,000
2260	**PAGING**					
2265	Code Calling IDs	125	125	125	125	125
2270	Loudspeaker Zones	9	9	9	9	9
2275	**Group Paging using Speaker Phone [50]**					
2280	Number of Groups [33]	32	32	32	32	32
2285	Members per Group [35]	32	32	32	32	32

	Avaya Aura ™ Communication Manager and Avaya Call Management System	Avaya Aura™ Main / Avaya Aura™ for Survivable Core Duplex (CM_Duplex) [136]	Avaya Aura™ Main / Avaya Aura™ for Survivable Core Simplex (CM_Simplex) [136]	Avaya Aura™ for Survivable Remote Simplex (CM_SurvRemote) [136, 140]	Avaya Aura™ Main Embedded (CM_onlyEmbed) [137]	Avaya Aura™ for Survivable Remote Embedded (CM_SurvRemote Embed) [138, 140]
2290	**PARTITIONS**					
2295	Attendant Groups (System wide)	414	414	414	68	414
2300	Tenant Partitions [130]	100	100	100	100	100
2305	Multiple Music on Hold Sources [26]	100	100	100	100	100
2310	**PERSONAL CO LINES (PCOL)**					
2315	PCOL Appearances per group	16	16	16	16	16
2320	PCOL Lines (Trunk Groups)	200	200	200	200	200
2325	PCOL Trunks per PCOL Group	1	1	1	1	1
2330	**PORTS (Max Ports including stations and trunks)**					
2335	Software-defined Max Ports on System (Row "Administered Stations (Overall Maximum Number)") plus row "Administered Trunks (Overall Maximum Number)".) [71.0, 71.4, 71.5, 71.6, 72]	65,000	65,000	65,000	6,400	65,000
2340	License Limit: Maximum number of ports	65,000	65,000	65,000	6,400	65,000
2345	**Maximum PORT CIRCUIT PACK SLOTS** [34]					
2350	**Per PN**					
2355	MCC Standard Reliability	99	99	99	NA	NA
2360	SCC Standard Reliability	71	71	71	NA	NA

	Avaya Aura ™ Communication Manager and Avaya Call Management System	Avaya Aura™ Main / Avaya Aura™ for Survivable Core Duplex (CM_Duplex) [136]	Avaya Aura™ Main / Avaya Aura™ for Survivable Core Simplex (CM_Simplex) [136]	Avaya Aura™ for Survivable Remote Simplex (CM_SurvRemote) [136, 140]	Avaya Aura™ Main Embedded (CM_onlyEmbed) [137]	Avaya Aura™ for Survivable Remote Embedded (CM_SurvRemote Embed) [138, 140]
2365	**RECORDED ANNOUNCEMENTS / AUDIO SOURCES**					
2370	Announcement/Audio Source Extensions per System [18]	9,000	9,000	9,000	3,000	9,000
2375	**Analog & Aux Trunk Announcements**					
2380	Queue Slots per Announcement	1,000	1,000	1,000	150	1,000
2385	Queue Slots per System	1,000	1,000	1,000	150	1,000
2390	Calls Connected to Same Announcement	1,000	1,000	1,000	1,000	1,000
2395	**Integrated Announcements**					
2400	Queue Slots per System	4,000	4,000	4,000	4,000	4,000
2405	Calls Connected to Same Announcement	1,000	1,000	1,000	1,000	1,000
2410	Total Announcement Sources: Integrated Boards on PNs plus embedded **vVAL** Sources on G250, G350, G700, etc. media gateways	378	378	378	178	378
2415	**TN2501AP (VAL) Boards in Port Network Gateways (G650, MCC1, SCC1)**					
2420	VAL Boards (TN2501) per system	128	128	128	NA	NA
2425	Channels per Board (Playback Ports)	31	31	31	NA	NA
2430	Maximum Announcements per TN2501 Board (Firmware 17 or later otherwise limited to 256)	1,024	1,024	1,024	NA	NA

Avaya Aura ™ Communication Manager and Avaya Call Management System		Avaya Aura™ Main / Avaya Aura™ for Survivable Core Duplex (CM_Duplex) [136]	Avaya Aura™ Main / Avaya Aura™ for Survivable Core Simplex (CM_Simplex) [136]	Avaya Aura™ for Survivable Remote Simplex (CM_SurvRemote) [136, 140]	Avaya Aura™ Main Embedded (CM_onlyEmbed) [137]	Avaya Aura™ for Survivable Remote Embedded (CM_SurvRemote Embed) [138, 140]
2435	Board Content Saved [91]	All active boards	All active boards	All active boards	NA	NA
2440	Recording Time per Board (in Minutes) [90, 124]	60	60	60	NA	NA
2445	**Embedded Media Gateway Integrated Virtual VAL (Voice Annc. Over LAN) vVAL Announcement Sources**					
2450	Channels per Source (playback ports) - depends on the Media Gateway [124]	see endnote	see endnote	see endnote	see endnote	see endnote
2455	Maximum Announcements per Source	1,024	1,024	1,024	1,024	1,024
2460	Source Contents Saved (VAL FTP download) [91]	All active boards	All active boards	All active boards	All active boards	All active boards
2465	Recording Time per Source in Minutes - depends on the Media Gateway (15 min for G250/G350/G430, 20 min. for G700 and 45 or 240 min. for G450) [90, 124]	15, 20 or 45/240	15,20 or 45/240	15,20 or 45/240	15, 20 or 45/240	15, 20 or 45/240
2470	**Locally Sourced Music and Announcements (LSMA) - Provides groups of announcement sources and allows announcements and audio groups to be used as Music on Hold sources.**					
2475	Audio Groups (for announcements/music) [121]	50	50	50	50	50
2480	Sources per Audio Group (VAL and/or vVAL)	378	378	378	378	378
2485	Administered Announcement Files [122]	12,000	12,000	12,000	3,000	12,000

Avaya Aura ™ Communication Manager and Avaya Call Management System		Avaya Aura™ Main / Avaya Aura™ for Survivable Core Duplex (CM_Duplex) [136]	Avaya Aura™ Main / Avaya Aura™ for Survivable Core Simplex (CM_Simplex) [136]	Avaya Aura™ for Survivable Remote Simplex (CM_SurvRemote) [136, 140]	Avaya Aura™ Main Embedded (CM_onlyEmbed) [137]	Avaya Aura™ for Survivable Remote Embedded (CM_SurvRemote Embed) [138, 140]
2490	MOH Groups (for assignment as the system music source or Tenant Partition Multiple Music Source)	10	10	10	10	10
2495	Analog/Aux Trunk Sources (Ports) per MOH Group [56]	100	100	100	100	100
2500	Unique Analog/Aux Trunk MOH Ports per System (each referenced only once) [56]	100	100	100	100	100
2505	**SIP Enablement Services (See IP Solutions and SIP Specific Capacities)**					
2510	**STATIONS (See Voice Terminals; also see Ports for maximum ports including Stations and trunks)**					
2515	**SYSTEM ADMINISTRATION TERMINAL (SAT)**					
2520	Admin History Log File Entries	1,800	1,800	1,800	500	1,800
2525	Simultaneous Admin Commands [2]	10	10	10	10	10
2530	Simultaneous Maintenance Commands [2]	5	5	5	5	5
2535	Simultaneous System Management Sessions [2]	17	17	17	5	5
2540	Number of Scheduled Reports	50	50	50	50	50
2545	**SPEECH SYNTHESIS CIRCUIT PACKS**					
2550	Number of Speech Synthesis Circuit Packs	40	40	40	NA	NA
2555	Channels per Speech Circuit Pack	4	4	4	NA	NA

	Avaya Aura ™ Communication Manager and Avaya Call Management System	Avaya Aura™ Main / Avaya Aura™ for Survivable Core Duplex (CM_Duplex) [136]	Avaya Aura™ Main / Avaya Aura™ for Survivable Core Simplex (CM_Simplex) [136]	Avaya Aura™ for Survivable Remote Simplex (CM_SurvRemote) [136, 140]	Avaya Aura™ Main Embedded (CM_onlyEmbed) [137]	Avaya Aura™ for Survivable Remote Embedded (CM_SurvRemoteEmbed) [138, 140]
2560	**TERMINATING EXTENSION GROUPS (TEG)**					
2565	TEGs	32	32	32	32	32
2570	Users That May Share a TEG	4	4	4	4	4
2575	**TIME SLOTS [36]**					
2580	Simultaneous Calls in CM [36]	15,424	15,424	15,424	5,000	5,000
2585	Simultaneous calls between 2 SIP stations [52]	6,000	6,000	6,000	1,000	1,000
2590	Total Time Slots in CM [61]	32,768	32,768	32,768	endnote 61	endnote 61
2595	Total Time Slots for Voice & Data [38, 61, 71.1]	30,848	30,848	30,848	endnote 61	endnote 61
2600	Time Slots per Port Network	512	512	512	NA	NA
2605	Time Slots per H.248 Gateway [124]	see endnote	see endnote	see endnote	see endnote	see endnote
2610	***TONE CLASSIFIERS***					
2615	Tone Receivers (General) [39, 124]	8,000	8,000	8,000	1,200	8,000
2620	TTR Queue Size	4	4	4	4	4
2625	Prompting TTR Queue Size	80	80	80	80	80
2630	**TRUNKS (For Max IP trunks, SIP trunks, Signaling Groups etc., also see IP Solutions)**					
2635	DS1 Circuit Packs including MM710s (PRI/Station only, Total (PRI+Line-side DS1) [94, 94.1]	522	522	522	80 *	522 *

	Avaya Aura ™ Communication Manager and Avaya Call Management System	Avaya Aura™ Main / Avaya Aura™ for Survivable Core Duplex (CM_Duplex) [136]	Avaya Aura™ Main / Avaya Aura™ for Survivable Core Simplex (CM_Simplex) [136]	Avaya Aura™ for Survivable Remote Simplex (CM_SurvRemote) [136, 140]	Avaya Aura™ Main Embedded (CM_onlyEmbed) [137]	Avaya Aura™ for Survivable Remote Embedded (CM_SurvRemote Embed) [138, 140]
2635	DS1 Circuit Packs including MM710s (PRI/Station only, Total (PRI+Line-side DS1) [94, 94.1]	522	522	522	80 *	522 *
2640	DS1 with Echo Cancellers [94, 94.1]	522	522	522	80 *	522 *
2645	Queue Slots for Trunks	4,000	4,000	4,000	198	4,000
2650	Before using the following capacities in a contact center, read the disclaimer at the beginning of the table or in endnote 1.					
2655	Administered Trunks (Overall Maximum Number of Trunks of all types) [71.0, 72, 102, 14]	24,000	24,000	24,000	4,000	24,000
2660	Offer limit: Administered Trunks (Overall Maximum Number of Trunks of all types) [71.0, 72, 102, 14]	24,000	24,000	24,000	4,000	4,000
2665	***Total PRI Interfaces*** [40 94]	522	522	522	80	522
2670	***BRI TRUNKS*** [42]					
2675	BRI Trunk Circuit Packs [42.2]	250	250	250	50 *	250 *
2680	Administered BRI Trunks in CM (Max B-Channels x Max Boards and/or MMs) [42.3]	6,000	6,000	6,000	1200 *	6000 *
2685	Offer limit: Administered BRI Trunks in CM	6,000	6,000	6,000	1200*	4,000
2690	***SBS Trunks: see section "IP Solutions and SIP Specific Capacities"***					
2695	***ISDN Temporary Signaling Connections***					
2700	TSCs in System [41]	24,999	24,999	24,999	4,256	24,999

Avaya Aura ™ Communication Manager and Avaya Call Management System		Avaya Aura™ Main / Avaya Aura™ for Survivable Core Duplex (CM_Duplex) [136]	Avaya Aura™ Main / Avaya Aura™ for Survivable Core Simplex (CM_Simplex) [136]	Avaya Aura™ for Survivable Remote Simplex (CM_SurvRemote) [136, 140]	Avaya Aura™ Main Embedded (CM_onlyEmbed) [137]	Avaya Aura™ for Survivable Remote Embedded (CM_SurvRemote Embed) [138, 140]
2705	Call Associated TSCs [41]	24,000	24,000	24,000	4,000	24,000
2710	Non Call Associated TSCs	999	999	999	256	999
2715	Administered / Fixed TSCs	250	250	250	128	250
2720	**Ringback Queue Slots**	4,000	4,000	4,000	198	4,000
2725	**Trunk Groups**					
2730	Trunk Group Hourly Measurements	75	75	75	75	75
2735	Trunk Groups in the System	2,000	2,000	2,000	99	2,000
2740	PRI Call-By-Call Trunk Groups in the System (part of the total trunk groups in the system)	200	200	200	10	200
2745	Trunk Members in a Trunk Group	255	255	255	255	255
2750	***ISDN / IP / SIP Trunks (also see section on IP Solutions and SIP specific capacities)***					
2755	Incoming Call Handling Treatment (ICHT) per Trunk Group	540	540	540	288	540
2760	Incoming Call Handling Treatment (per System)	9,999	9,999	9,999	288	9,999
2765	User Defined Services	60	60	60	60	60
2770	Usage Allocation Entries (per Plan)	15	15	15	15	15
2775	Number of entries in the Public Unknown Numbering form (for outgoing Caller ID/ANI) [37]	9,999	9,999	9,999	240	9,999

	Avaya Aura ™ Communication Manager and Avaya Call Management System	Avaya Aura™ Main / Avaya Aura™ for Survivable Core Duplex (CM_Duplex) [136]	Avaya Aura™ Main / Avaya Aura™ for Survivable Core Simplex (CM_Simplex) [136]	Avaya Aura™ for Survivable Remote Simplex (CM_SurvRemote) [136, 140]	Avaya Aura™ Main Embedded (CM_onlyEmbed) [137]	Avaya Aura™ for Survivable Remote Embedded (CM_SurvRemote Embed) [138, 140]
2780	**VOICE TERMINALS [43]**					
2785	Administered Stations (Overall Maximum Number of Stations of all types) [46, 51, 71.0, 72, 101]	41,000	41,000	41,000	2,400	41,000
2790	License Limit: Maximum administered Stations	41,000	41,000	41,000	2,400	41,000
2795	Offer Limit: Maximum administered Stations	41,000	41,000	5,000	1,000	1,000
2795	**Administered BRI (Point-to-Point and Multipoint) Stations (part of the Overall Max)[44]**					
2800	Point-to-Point	7,000	7,000	7,000	1,000 *	7000 *
2805	Multipoint (Passive Bus)	7,000	7,000	7,000	1,000 *	7000 *
2810	Offer Limit: Administered BRI stations	7,000	7,000	5,000	1000 *	1000 *
2815	**Digital Stations (part of the Overall Max) [45, 71.0, 72]**	41,000	41,000	41,000	2,400	41,000
2820	**Display Stations (part of the Overall Max) [45, 71.0, 72, 101]**	41,000	41,000	41,000	2,400	41,000
2825	Offer Limit: Administered Digital & Display stations	41,000	41,000	5,000	1,000	1,000
2830	**H.323 Stations (part of Overall Station Max) [45 71.0]**	18,000	18,000	18,000	2,400	5,000
2835	Offer Limit: Maximum Concurrently Registered H.323 Stations [47]	18,000	18,000	5,000	1,000	1,000
2840	Offer Limit: Maximum Concurrently Registered UNAUTHENTICATED H.323 Stations [47]	18,000	18,000	5,000	1,000	1,000

	Avaya Aura ™ Communication Manager and Avaya Call Management System	Avaya Aura™ Main / Avaya Aura™ for Survivable Core Duplex (CM_Duplex) [136]	Avaya Aura™ Main / Avaya Aura™ for Survivable Core Simplex (CM_Simplex) [136]	Avaya Aura™ for Survivable Remote Simplex (CM_SurvRemote) [136, 140]	Avaya Aura™ Main Embedded (CM_onlyEmbed) [137]	Avaya Aura™ for Survivable Remote Embedded (CM_SurvRemoteEmbed) [138, 140]
2845	IP stations (administered SIP + registered H.323)	41,000	41,000	5,000	1,000	1,000
2850	Offer Limit: IP stations (administered SIP + registered H.323)	41,000	41,000	5,000	1,000	1,000
2855	Station Button Capacity (K Units)	23,286	23,286	23,286	885	23,286
2860	Number Of Administrable Physical Buttons	1,440,000	1,440,000	1,440,000	54,400	1,440,000
2865	Maximum Buttons with Customizable Labels per System	100,000	100,000	100,000	54,400	100,000
2870	Station Button Feature Capacity [95.1]	32,726	32,726	32,726	5,868	32,726
2875	**VUSTATS**					
2880	Measured Agents or Login Ids	3,000	3,000	3,000	400	3,000
2885	Measured Splits/Skills	600	600	600	99	600
2890	Measured Trunk Groups	32	32	32	32	32
2895	Measured VDNs	512	512	512	99	512
2900	Max VuStat Buttons [118]	1,000	1,000	1,000	1,000	1,000
2905	Display Formats for VuStats	50	50	50	50	50
2915	**Reporting Periods**					
2920	Intervals	25	25	25	25	25
2925	Days	1	1	1	1	1
2930	**Reporting Adjunct Switch Links**					

Avaya Aura ™ Communication Manager and Avaya Call Management System		Avaya Aura™ Main / Avaya Aura™ for Survivable Core Duplex (CM_Duplex) [136]	Avaya Aura™ Main / Avaya Aura™ for Survivable Core Simplex (CM_Simplex) [136]	Avaya Aura™ for Survivable Remote Simplex (CM_SurvRemote) [136, 140]	Avaya Aura™ Main Embedded (CM_onlyEmbed) [137]	Avaya Aura™ for Survivable Remote Embedded (CM_SurvRemoteEmbed) [138, 140]
2935	R3V9/R3V11/R12/R13/R13.1 CMS	1 or 2	1 or 2	1 or 2	1 or 2	1 or 2
2940	R14 CMS and 4.0 Avaya IQ or later[87]	2 or 4	2 or 4	2 or 4	2 or 4	2 or 4

CMS Capacities

The limits in the following table are defined by capacities on CMS R16.1 and not by CM structures.

Row	CMS Capacity Item	R16.1 CMS Total Capacity
CMS - 1	ACD Admin Log Records	30,000
CMS - 2	ACDs (multi-ACD configuration)	8
CMS - 3	Agent login/logout data records	1,500,000
CMS - 4	Agent Login/Logout Records	1,500,000
CMS - 5	Agent Trace Records	500,000
CMS - 6	Agent Traces Active	600
CMS - 7	ICH Call Records	100,000
CMS - 8	CWC [85]	1,999
CMS - 9	Exception Records	2,000
CMS - 10	External Call History Busy Hour Calls (per 20 min interval)	120,000
CMS - 11	External Call History Busy Hour Calls (per hour)	400,000
CMS - 12	ICH Data Base Rows (write rate 4K in 20 min)	100,000
CMS - 13	Locations / Location IDs	250
CMS - 14	Logged-in Agent-Split/Skill Pairs over 8 ACDs	150,000
CMS - 15	Logged-in Agent-Split/Skill Pairs per ACD	100,000
CMS - 16	Max CWCs collected in the call record	6
CMS - 17	Measured Trunk Groups per ACD	8,000
CMS - 18	Measured Trunks over 8 ACDs (R14 and later) 84	40,000
CMS - 19	Measured Trunks per ACD (R14 and Later) 84	12,000
CMS - 20	Measured VDNs for a single ACD	30,000

Row	CMS Capacity Item	R16.1 CMS Total Capacity
CMS - 21	Measured VDNs over 8 ACDs	30,000
CMS - 22	Reason Codes (Aux Work) - 15 minute intervals	100
CMS - 23	Skills/Splits over 8 ACDs	32,000
CMS - 24	Splits/Skills per ACD	8,000
CMS - 25	Supervisor Logins (Simultaneous active client sessions) [86]	800
CMS - 26	Unmeasured Trunks over 8 ACDs	20,000
CMS - 27	Unmeasured Trunks per ACD	6,000
CMS - 28	Vectors over 8 ACDs	32,000
CMS - 29	Vectors per ACD	8,000

Endnotes

The Capacities Table for Communication Manager Release 6.0 contains Communication Manager offer limits. These endnotes explain some of the contents in the Capacities Table and some of the major offer limits. These endnotes explain some of the contents in the Capacities Table and some of the major offer limits. Special Applications-based capacity differences are highlighted in green.

For information regarding End-of-Sale of platforms such as G3R and G3si, see the introduction and the notes in the beginning of the Capacities Table.

Endnote	Detailed Description
*	The software-defined capacity may not be reachable due to hardware and/or processor capacity limits for the platform.
1	Documentation disclaimer: The capacities specified in this table pertain to general business configurations and may not be valid or recommended for Contact Center (CC) solutions. Simultaneously achieving the upper bounds for multiple capacities may not be possible for real-world CC systems. Call rates and other operational aspects of these CC systems may preclude realizing the maximum limits. Contact the Sales Factory Design Center for assistance with specifying Contact Center solutions and capacities.
2	System Management sessions are used for system administration and maintenance purposes, and some of the platforms allow multiple simultaneous sessions. "Simultaneous System Management Sessions" states the number of simultaneous sessions each template supports. However, besides human administrators, the following types of sessions may also be using some of this capacity. • EPN maintenance ports: 1 • Dial in or dial out requests: 1 for each direction • Management Information Systems: 1 • CLAN ports: 1 The system also limits the number of simultaneous administration commands such as **add** and **change**, as long as they are not accessing the same data. "Simultaneous Admin Commands" gives the number of these allowed. For example, two administrators cannot change the same station simultaneously. Commands such as **test**, **busyout**, **release**, and **status** are

Endnote	Detailed Description
	maintenance commands. "Simultaneous Maintenance Commands" gives the number of simultaneous maintenance commands that can be issued in addition to the administration commands, as long as they are not accessing the same data and the command is not designated as a single user command.
3	In previous releases this feature was supported only on Fiber-Connected Port Networks (ATM or Direct-Connect or the center stage switch (CSS)), but CM 6.0 support for fiber connections is only using CSS, and then only for federal government use.
3.1	Endnote removed.
4	SA9050 provides 32 routing plans and time of day charts on the CM_Duplex, CM_Simplex, CM_SurvRemote[140], and CM_SurvRemoteEmbed[140] templates. SA9050 provides 8 routing plans and time of day charts on the CM_onlyEmbed template.
4.1	The TN799 (C-LAN) circuit pack has one Ethernet connection and 16 PPP connections. The sum of links via PPP and Ethernet ports has to be less than the maximum number of communication-interface links per switch. IP Routes refers to the size of the IP routing table accessed by the **change ip-route** command. CLAN boards need to be in a port network. Port networks can not be used with S8300D. PPP links are not supported via the processor Ethernet interface.
4.2	Endnote removed.
4.3	The system supports 10 QSIG hunt groups, but the number of messaging adjuncts depends on the PRI signaling groups in the system.
4.4	This shows the number of agent-split combinations supported. Agent-split pairs is the total combination used by ACD agents, Auto-Available Splits (AAS) ports (for example, VRUs), non-ACD hunt groups (groups with or without queues, Message Center Service, INTUITY AUDIX®, Remote AUDIX®, etc.). Each non-ACD hunt group member, AAS split member, and split assigned to an ACD agent is counted when administered.

Endnote	Detailed Description
4.5	The number of CMS adjuncts using TN799 circuit packs (C-LAN) for connectivity to the switch counts toward the maximum capacity of C-LANs. The servers also provide LAN connectivity through their native NICs and do not need to use C-LAN boards.
4.6	Administer the links over the TN799 circuit pack (C-LAN) or over the Processor Ethernet (procr).
5	An agent can be assigned more splits during administration but only this number can be simultaneously logged into.
6	The maximum **Members per Group limits** limit the number of agents that can log into the same split/skill. Maximum agent limits are reduced by the number of non-ACD members and AAS ports administered, and with non-EAS, the additional splits assigned to agents that are not logged into.
7	Queue slots are shared across non-ACD, ACD (splits/skills) and AAS hunt groups. NOTE: The capacity limits for System and Per Group Queue Slots are not applicable with platforms that run Communication Manager Release 2.1 due to the Dynamic Hunt Group Queue Slot Allocation feature. Hunt group queue slots are allocated on an as-needed basis allowing all calls that are possible to be in queue as the default. The previous hunt group **Queue Length** field became a **Queue Limit** field with specified limits carried forward in an upgrade. The common pool of queue slots is 5,000 for the CM_onlyEmbed and CM_SurvRemoteEmbed[140] templates and 15,000 for the CM_Duplex, CM_Simplex, and CM_SurvRemote[140] templates.
8	Plus up to 7 Inter-eXchange Carrier (IXC) digits.
9	This is the number of available inserted-digit-strings administered on the route-patterns selected by AAR/ARS analysis.
10	The number of attendant consoles listed is per software limitations.
10.1	Endnote removed.
10.2	Crisis Alert Stations: Crisis Alert buttons can be administered on attendant consoles and 10 additional digital stations. A special application, SA8608, increases this capacity to 250 Crisis Alert digital stations.

Endnote	Detailed Description
11	The number of release link trunk groups counts towards the total number of trunk groups in the system.
12	This does not include MLPP. With MLPP the limit is 17 for all platforms.
12.1	The BCMS **monitor split** command shows the status for the first 100 agents logged into the split, regardless of how many additional agents log into the split.
12.2	BCMS monitoring is a maintenance process and is limited by the active maintenance commands limit, as shown in row "Simultaneous Maintenance Commands". This should be reduced by 3 to reserve command slots for INADS and SAT logins.
13	EPNs: The entries reflect the PNs, and in brackets, the number of stacked cabinets per PN. In a Mixed PNC environment, scalability increases for Center Stage Switch (CSS) by expanding the number of total port networks to 64. The CSS is limited to a maximum of 44 PNs, but another 20 (or more depending on how many PNs are part of the CSS) can be IP Bearer connected, for a maximum of 64. CM 6.0 support for fiber connections is only using the center stage switch, and then only for government use.
14	The total number of trunks in trunk groups that are assigned as measured externally or “both” for CMS and/or IQ tracking and reporting is limited to 12,000 trunks. Also trunk groups with a signaling group defined as “IMS” (IP Multimedia Subsystem) for SIP links with ASM can not be assigned as measured by BCMS or external reporting adjuncts. The expanded virtual trunk port number range to T24000 will be supported by the reporting adjuncts.
15	There can be up to 16 Bridged Call Appearances for a primary phone’s extension (not call appearance button) if ASAI is used. Otherwise, 1250 principal stations can each have up to 63 other stations with bridged appearances of the principal station. After that, the 1251st principal station through the principal station that hits the system-wide maximum number of bridged appearances are limited to having only 25 other stations with bridged appearances of the principal station.

Endnote	Detailed Description
	Special Application SA9018 increases the number of Bridged Call Appearances for a primary's call appearance to 127.
16	The number of call appearances is the sum of primary and bridged appearances. "Max Call Appearances per Ext" gives the maximum that can be primary. A maximum of 54 administrable buttons is supported on the 7434 terminal without display. A maximum 52 call appearances is supported on the 8434 terminal with display and expansion module. A maximum 96 administrable buttons is supported on the 9630, 9640, and 9650 IP telephones with 3 button modules.
17	This maximum varies depending on the number of parties already on the call, on the calling and called parties' sides. The 7-parties maximum number of parties on a call is the guiding principle.
18	To administer announcements greater than 256, specifically refer to an announcement number greater than 256. For example, use **change announcement 300**. The administrator then has access to another 16 pages and so on. For hunt group announcements greater than 256, the Call Center Release must be Release 8.1 or later.
19	Shared extensions must be shared among all attendant groups in the system including Tenant Partitions.
20	Special Application SA8661 provides 2050 automatic wakeup requests in a 15-min. interval.
20.1	VDNs are counted as part of the miscellaneous extensions capacity which includes VDNs, hunt groups, announcements, LDNs, TEGs, PCOL groups, access endpoints, administered TSCs, and Code Calling IDs extensions and common shared extensions. The total of stations (station extensions including ACD agent physical set extensions, Logical Agent IDs and AWOH) assigned cannot exceed the platform Station Extensions limit. The total of all extensions assigned for any purpose cannot exceed the platform Maximum Extensions limit (See the Dial Plan section for details).

Endnote	Detailed Description
20.5	BSR (Best Service Routing) application numbers are limited to 511, and location numbers are limited to 255.
21	Simultaneous 3-way Conference Calls. For non-IP endpoints on systems using port networks, the limit equals the number of time slots for voice per port network (484) divided by 3, then rounded down, then multiplied by the number of Port Networks. See "Maximum Port Networks." For non-IP endpoints on systems using H.248 media gateways, the limit equals the number of time slots for voice per media gateway divided by 3, then rounded down, then multiplied by the number of media gateways. See endnote 61 and "System-wide Maximum H.248 media gateways." If IP endpoints are involved, a VoIP resource is used up. The available number of VOIP resources limits the number of such calls with IP endpoints. For the CM_onlyEmbed and CM_SurvRemoteEmbed[140] templates, the number of simultaneous 3-way conference calls depends on the gateway the S8300D is embedded in. The following numbers do not include subtending media gateways. • S8300D embedded in a G430 or G350 or G250: 157 • S8300D embedded in a G450 or G700: 137
22	Simultaneous 6-way Conference Calls. For non-IP endpoints on systems using port networks, the limit equals the number of time slots for voice per port network (484) divided by 6, then rounded down, then multiplied by the number of Port Networks. See "Maximum Port Networks." For non-IP endpoints on systems using H.248 media gateways, the limit equals the number of time slots for voice per media gateway divided by 6, then rounded down, then multiplied by the number of media gateways. See endnote 61 and "System-wide Maximum H.248 media gateways." If IP endpoints are involved, a VoIP resource is used up. The available number of VOIP resources limits the number of such calls with IP endpoints.

Endnote	Detailed Description
	For the CM_onlyEmbed and CM_SurvRemoteEmbed[140] templates, the number of simultaneous 6-way conference calls depends on the gateway the S8300D is embedded in. The following numbers do not include subtending media gateways. • S8300D embedded in a G430 or G350 or G250: 78 • S8300D embedded in a G450 or G700: 68
23	In practice, customers with RLT trunks also have DCS trunks, which limits them to 63 RLT nodes and 63 RLT trunk groups at the main server.
24	The Maximum Extensions limit is the total number of defined extensions for any use. Included in this count are station extensions, miscellaneous extensions, data extensions, PRI endpoint extensions and terminating extension groups.
24.1	Station extensions consist of attendant extensions, station set assignments (including ACD agent physical sets), AWOH (administration without hardware) and administered Logical Agent IDs extensions.
25	Miscellaneous extensions consist of VDNs, hunt groups, announcements, LDNs, PCOL groups, common shared extensions, access endpoints, administered TSCs, Code Calling IDs, TEGs, Paging zones, and Phantom ACAs. Access Endpoints are tied to the number of trunks, not the number of trunk groups.
26	Special Application SA8993 increases Music on Hold Sources to 250 for all templates.
27	Integrated Directory Entries = stations + attendant consoles.
28	Number of Names = number of stations + attendant consoles + trunk groups + digital data endpoints + miscellaneous extensions.
28.1	Total of the administered Login ID skill-pair members (for agents and AAS ports).
28.2	Endnote removed.
28.3	Number of agent-skill combinations supported. Agent-skill pairs is the total combination used by ACD agents, Auto-Available Skills (AAS) ports (for example, VRUs), non-ACD hunt groups (groups with or without queues, Message Center Service, INTUITY AUDIX®, Remote AUDIX®,

Endnote **Detailed Description**

etc.). Each non-ACD hunt group member and AAS skill member is counted when administered. Each skill assigned to an EAS agent is counted as an ACD member when the EAS agent logs in, not when administered.

28.4 This limit may not be reachable depending on how many skills are assigned per Login ID due to the ACD Members Administered (Login ID-skill pair) limits. Login ID limits for different numbers of skills per Login ID are:

Maximum Login IDs with	**CM_Duplex, CM_Simplex, and CM_SurvRemote[140] templates**	**CM_onlyEmbed and CM_SurvRemoteEmbed[140] templates**
1 Skill Each	30,000	1,500
20 Skills Each	30,000	300
60 Skills Each	16,666	N.A.
120 Skills Each	8,333	N.A.

Max Administered ACD Members (login ID / Agent-Skill pairs) shows the Login ID-Skill pair limit for each server.

28.5 Hunt group members include non-ACD (hunting, Message Center Service, INTUITY AUDIX®, Remote AUDIX®, etc.) and ACD uses (splits or skills including Auto-Available Splits/Skills). Each ACD agent-split/skill assignment counts as a hunt group member.

28.6 This capacity is supported only **with ucd-mia** and **ead-mia** hunt group types and optionally with **ucd-loa** and **ead-loa** using the bucket occupancy algorithm. Otherwise the capacity is 1,500 agents in a skill. The bucket algorithm changes the occupancy selection to a more granular/coarse approach. When the option is active and more than 3K agents have assigned to the same skill, the algorithm for agent selection based on LOA switches over to a bucket algorithm (with 5% increment buckets). Note that **PAD** and **SLM** types are still limited to 1,500.

29 Last Number Dialed Entries = stations + digital data endpoints + attendant consoles.

31 INTUITY® supports 20 DCS nodes.

32 These numbers are node number addresses.

Endnote	Detailed Description
33	Special Application SA8927 increases the number of speakerphone paging groups to 999 on the CM_Duplex, CM_Simplex, CM_SurvRemote[140], and CM_SurvRemoteEmbed[140] templates, and to 256 on the CM_onlyEmbed template.
34	Only port slots are included in this count. For example, there are 100 slots per MCC EPN cabinet with 99 port slots and one slot dedicated for the Tone Clock circuit pack. There may be other service circuits required that would further reduce the number of port slots available.
35	Special Application SA9096 increases the members per speakerphone paging group to 127 for all templates.
36	"Simultaneous calls in CM" is equal to the number of call record data structures allocated for the server platform. This was traditionally determined using 242 Simultaneous Circuit Switched Calls per port network. Multimedia calls tend to be multi-party calls. Calls involving circuit switched endpoints will also be limited by "Total Time Slots in CM". For example, the maximum number of calls between two circuit switched endpoints on a CM_onlyEmbed or CM_SurvRemoteEmbed[140] template running embedded in a G450 would be 512/2 = 256. Calls involving only IP endpoints would not have this limitation if CM is configured to use IP-IP direct media. See *Communication Manager Hardware and Traffic Guidelines* for further details.
37	Special Application SA8911 increases Public/Unknown Numbering entries to 20000 on the CM_Duplex, CM_Simplex, CM_SurvRemote[140], and CM_SurvRemoteEmbed[140] templates, but leaves it at 240 on the CM_onlyEmbed template.
38	484 time slots for voice and data per port network.
39	The system uses the port network TN744 Call Classifier/Detector for basic TTR use as well as call prompting/call classification/MFC. With H.248 IP gateways (for example, G450) the embedded processor circuit pack provides local tone detectors. The number of TN744 circuit packs is limited by the number of available slots. There is a single limit on the total number of tone receiver (classifier) ports for the system. • TN744 has 8 ports for call prompting/call classification/MFC/TTR/GPTD use.

Endnote	Detailed Description
	• The IPSIs (TN2312BP IP server interface) have 8 TTR resources embedded within them. • The G250 TTR limits are in endnote 124 Current Gateway Capacities • The G350 TTR limits are in endnote 124 Current Gateway Capacities • The G700 TTR limits are in endnote 124 Current Gateway Capacities • The G430 TTR limits are in endnote 124 Current Gateway Capacities • The G450 TTR limits are in endnote 124 Current Gateway Capacities The TTR capacity of the G700 affects the Busy Hour Call Capacity, especially the Call Center call mix. In an IP-Connected configuration, TTRs can only be used to serve calls local to the gateway. They can not be shared across media gateways /PNGs.
40	Counts towards the total number of DS1 circuit packs.
41	Call Associated Temporary Signaling Connections (CA-TSCs) are associated with DCS and older AUDIX® integration methods. They are not used by QSIG or SIP. QSIG uses Non Call Associated TSCs.
42	The TN2185 BRI Trunk circuit pack and the MM720 provide 8 ports. The TN556B and TN2198 provide 12 ports. Each port (2B + D) provides 2 BRI trunks.
42.1	Endnote removed
42.2	More information regarding BRI trunks (including TN2185, TN556 (suffix C and later), MM722 and MM720 that are administered with the **add bri trunk** command). CM supports the number of BRI trunk circuit packs shown in "BRI Trunk Circuit Packs." This includes TN2185, TN556 (suffix C and later), MM722, and MM720 that are administered with the **add bri trunk** command. The TN720 can be either NT or TE mode, but as long as it is administered as a trunk circuit pack it counts towards that maximum. CM limits media gateways to the numbers shown in "System-wide Maximum H.248 media gateways." This can be any combination of G700, G450, G430, G350, and G250. BRI board limits are also based on the types of media gateway and how many Media Modules (MM) they can support.

Endnote **Detailed Description**

- G450 supports a maximum of 8 MMs per gateway.
- G430 supports a maximum of 3 MMs per gateway.
- G700 supports a maximum of 4 MMs per gateway.
- G350 supports a maximum of 6 MMs per gateway
- G250-BRI supports no MMs, but has 2 native BRI interfaces (4B + 2D) per gateway.
- CM will likely run into the BRI trunk circuit pack limits before running into the maximum BRI trunks limits. With a MM720, if you use all 16 ports on each MM you get up to 250 x 16 = 4000 trunks on the CM_Duplex, CM_Simplex, CM_SurvRemote[140], and CM_SurvRemoteEmbed[140] templates, and 50 x 16 = 800 trunks on the CM_onlyEmbed template. These are less than the limits on "Administered BRI Trunks in CM."

42.3 The 6,000 maximum is based on the following. Each TN556 BRI circuit pack supports 12 ports; each port supports 2 B-Channels per port. 250 x 24 = 6,000.

If BRI trunks are used to connect to the PSTN, TN2185 or MM720 is more commonly used, which support 8 ports (16 B-Channel), giving a total of 4000 (250 x 16) trunks.

If MM722 (2-port BRI circuit pack) is used, the capacity is further reduced.

43 The following items use extensions, and so can reduce the total number of available extensions on a switch:

- Analog Music-On-Hold
- Attendants
- Modem Pool Conversion Resources
- TAAS Port
- Stations (Digital, display, BRI, etc.)
- Analog Announcements
- Analog External Alarm Port
- EAS Agent Login Ids
- ACD Agents

44 All BRI stations can be display stations.

MM720 supports 8 ports, and multipoint configuration with 2 B-channels per port. Thus the

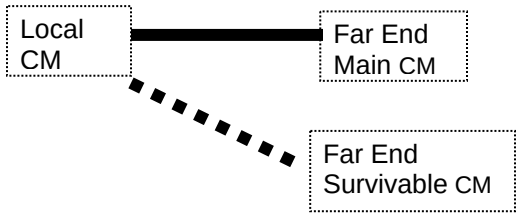
Endnote	Detailed Description
	MM720 can support 16 BRI stations. The multipoint configuration requires an external data module.
45	Capacities depend upon the version of IP phones.
45.1	The **Logged-In IP Softphone Agents** field on the System-Parameters Customer-Options form, which counts the ACD agents (either non-EAS or EAS) logging in with IP softphones for display purposes, is set to the lesser of the two by the RFA/License File on the **Logged-in ACD Agents** field or the **Maximum Concurrently Registered IP Stations** field.
46	Including extensions administered without associated hardware. See the Dial Plan section of the *Capacities Table* for more details.
47	An H.323 Softphone operating in shared control with a H.323 telephone with the same extension will consume two IP station registrations.
48	Endnote removed. It was replaced by endnote 95.1.
49	Endnote removed.
50	Due to a downlink buffer overflow problem, Group Page with Speakerphone does not work with TN754A or TN754B. Minimum vintage of TN754C is required. Earlier vintage circuit packs may cause lost messages, pages not terminating, phantom ringing, invalid displays, etc.
51	There are 2 Polycom SpectraLink® in-building wireless offers: the 900 MHz system and the 24GHz system called the IP Wireless Telephone System. The 900 MHz phone (3410) is administered on CM as 8410; the 2.4GHZ phone (3606) is administered as 4606. The Polycom SpectraLink® wireless user maximum is based on the station user maximum.
52	A SIP station-to-station call counts as one call towards "Simultaneous Calls in CM'. However, the SIP half-call model means that each SIP station on the call is using two SIP trunks. This limits simultaneous SIP call capacity. The limits shown already have taken this into account. A SIP to H.323 call would use only half as much SIP resources.
53	Endnote removed.

Endnote	Detailed Description
54	There are two ways to collect CDR records: Legacy CDR and Survivable CDR. In the Legacy method, the CM switch outputs the CDR data records in a near real time stream via an IP link to an external CDR collection devices such as a third party CDR adjunct device or a terminal server. When outputting to the third party adjunct, the data can be transmitted using standard TCP/IP or via the Avaya propriety Reliable Session Protocol (RSP). In the Survivable CDR method, the CDR data records are stored in data files on the CM server's hard drive and then collected by a third party CDR adjunct using Secure File Transfer Protocol (SFTP). The Survivable CDR method provides encrypted transfers of the CDR data records from the server to the adjunct.
54.1	CM servers can buffer the number of records shown on "Max Number of CDR Records That Can Be Buffered in the Switch". The second number, 1,900 is a watermark number. Assume both primary and secondary CDR devices are up, then if the buffered records (there is one buffer only) reaches 1900 or higher, the secondary CDR is dropped down for 2 minutes. The primary CDR continues to be up and sending records. This indicates that secondary CDR device should not be used for sending records, but for debug, etc. In most cases, only the primary CDR device is used.
55	The Survivable CDR feature allows CDR records to be stored on the hard disk of the server (main, LSP or ESS) rather than being transmitted to the CDR adjunct through an IP link. Once the CDR data is stored on the local hard drive the CDR adjunct must login to the server and retrieve the CDR data files that are saved there. Each server is capable of saving up to 20 CDR data files, each with up to 20 megabytes per file. When the twenty-first file is created, the oldest CDR data file is automatically deleted thereby maintaining the twenty file maximum. Individual CDR record length may vary from 59 characters per record in the LSU formats up to 155 characters per record in the maximum size customized format. Customers select the format that best meets their needs. The most popular CDR format is the unformatted format which contains 107 characters. A single CDR data file can hold anywhere from a little over 76.5K records per file up to 355.4 records per file depending on the selected format.

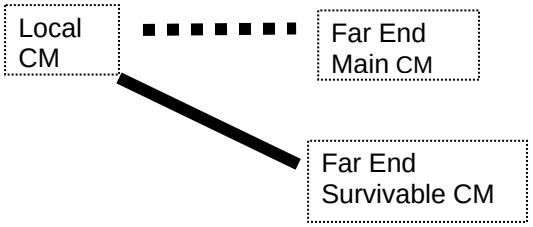
Endnote	Detailed Description
56	Special Application SA8993 increases the number of music sources to 250 for all platforms.
56.1	Endnote removed.
57	H.235.5 (Annex H) Stations are limited by offer. They are not limited by CM software nor by CM license software, other than "Maximum Concurrently Registered H.323 Stations" and "Offer Limit: Maximum Concurrently Registered H.323 Stations." If you administer more H.235.5 (Annex H) stations than the H.235.5 (Annex H) offer limit, recovery re-registration delays after an outage can be significant.
58	Endnote removed.
59	Endnote removed.
60	The signaling connections are shared by ISDN, H.323, and SIP signaling groups.
61	For the CM_onlyEmbed and CM_SurvRemoteEmbed[140] templates, the number of time slots depends on the gateway the S8300D is embedded in. The following numbers do not include subtending media gateways. Total Time Slots: • S8300D embedded in a G430 or G250: 256 • S8300D embedded in a G450, G700, or G350: 512 Total Time Slots for Voice & Data • S8300D embedded in a G430 or G250: 234 • S8300D embedded in a G450: 412 • S8300D embedded in a G700 or G350: 472
62	For IP (H.323 or SIP) trunks to continue to work when the far end of the IP trunk switches to a survivable server, the near end CM server needs to have twice as many IP trunks configured as will be in service at any one time. Half of those IP trunks go to the far end main server, and the other half of those IP trunks go to the far end survivable server. This effectively reduces the maximum number of administered IP trunks on the near end CM server by a factor of two. Here is an example.

Endnote **Detailed Description**

4000 total trunks, normal operation
2000 trunks to far end main in use
2000 idle trunks to far end survivable



4000 total trunks, far end in survivable mode
2000 idle trunks to far end main
2000 trunks to far end survivable in use



63 The overall system limit is not restricted by the type of underlying transport that is used. For example, either a single Processor Ethernet connection or 5 CLANs will be able to reach 1000 messages per second on the CM_Duplex, CM_Simplex, and CM_SurvRemote[140] templates.

64 Endnote removed.

65 This is for tracking features like send all calls, call forwarding, and station busy status. The limit is 64 if the buttons doing the tracking are on J24 (SUSHI) DCP sets, and as shown in "Buttons per Tracked Resource" if the buttons doing the tracking are on other set types. CM can administer more than these, but call processing won't use more than these.

66 Logged-in Agent capacity is limited by the offer through the Logged-In Agent customer option. See the respective Product Definitions for details.

67 Endnote removed.

68 Includes personal lists + group lists + system list + enhanced lists.

69 This amount allows users to have 20,000 Enhanced AD entries (implemented as 2 lists), 10,000 personal lists with 20 entries each rather than 100, a System list of 100, and 100 Group lists with 100 entries each. This creates a maximum of 230,100 entries instead of 250,000.

Endnote **Detailed Description**

70 Enhanced Abbreviated Dialing consists of 2 lists of 10,000 entries each, rather than one Enhanced AD list of 20,000 entries. This allows 4-digit dialing via FAC to remain as before. A 20,000 entry list would have required users to enter 5 digits when dialing via FAC.

71.0 Communication Manager software-based limits may not apply to features because their maximums are scaled by their associated capacities, set by the License File, or based on the hardware/platform limitations (boot-time configurations). Some capacities as main server may be different from capacities as an LSP.

Call Capacities (such as simultaneous 2-way, 3-way or 6-way calls) in the table are for non-IP endpoints. If IP endpoints are involved, a VoIP resource is used. The available number of VOIP resources limits the number of such calls with IP endpoints. See endnotes 21 and 22.

The CM_onlyEmbed and CM_SurvRemoteEmbed[140] templates don't use the TN-pack based IP Media Resources TN2302AP and TN2602AP. This is because TN packs need port networks, but S8300D does not support port networks. The CM_onlyEmbed and CM_SurvRemoteEmbed[140] templates' IP Media Resources depend on the gateways that the S8300D is embedded in. The sub-sections below contain gateway-specific information.

71.0 continued Media Gateways supported by Avaya Media Servers

Connect → Gateways ↓	**IP-Connect**	**Fiber (CSS) Connect [1]**	**Comments**
G250	Yes	No	Counts towards H.248 MGs
G350	Yes	No	Counts towards H.248 MGs
G430	Yes	No	Counts towards H.248 MGs
G450	Yes	No	Counts towards H.248 MGs
G650	Yes	Yes	Counts towards max PNs; see "Maximum Port Networks"
G700	Yes	No	Counts towards H.248 MGs
IG550	Yes	No	Counts towards H.248 MGs
SCC/MCC	Yes	Yes	Counts towards max PNs; see "Maximum Port Networks"

Endnote **Detailed Description**

1. Fiber connect is only for federal government use.

71.0
continued VOIP resources
Each IP Phone requires one channel. TN circuit packs can go on G650, MCC and SCC Media Gateways.

- TN2602AP (IP Media Resource 320, a.k.a. standard IP Media Resource)
  - 320 channels for G.711 and G.726A
  - 280 channels for G.729A/AB
  - It does not support G.723

  These capacities are the same with either AEA or AES encryption.
- TN2602AP (a.k.a. Low Density IP Media Resource) supports
  - 80 channels for G.711 and G.726A.
  - 80 channels for G.729A/AB.
  - It does not support G.723.

  These capacities are the same with either AEA or AES encryption
- TN2302AP (IP media processor): Capacities impacted if AES encryption algorithm is used.
  - 64 G.711 audio channels with AEA (48 with AES).
  - 32 G.729A/B and G.723 audio channels with AEA (24 with AES).
- G430 channel capacity is described by endnote 124 Current Gateway Capacities
- G450 channel capacity is described by endnote 124 Current Gateway Capacities.
- G350 channel capacity is described by endnote 124 Current Gateway Capacities.
- G250 channel capacity is described by endnote 124 Current Gateway Capacities.

71.1 **G700**
The VOIP engine on the G700 support 64 channels for G.711, and 32 channels for G.729 or G.723. The MM760 media module also supports 64 channels for G.711 and 32 channels for G.729 or G.723.

Endnote Detailed Description

VOIP Capacity of a Single G700 Media Gateway (MG) with and without Internal Call Controller						
Description	**VOIP Engine and Call Capacities** The column with ( ) applies to Without ICC Configuration only, which supports 5 MGs					**Constraining Factor**
Number of VOIP Engines Installed in a Single MG → Type of call ↓	1	2	3	4	(5)	
IP Phone to Legacy Station, Analog Trunk or E1/T1 Facility	32	64	96	128	(160)	Simultaneous G.711 equivalent non-encrypted 2-Way Conversations limited by the VoIP Engine (Note B) Includes call progress tones
IP Phone to IP Phone 2-Way Conversations						Dependent on (1) Ability of the IP phones to Shuffle (2) Performance of the LAN
IP Phone to IP Phone 2-Way Conversations that require Hair Pin capability	64	128	192	256	(320)	(1) Limited by the VoIP Engine (2) Performance of the LAN
IP Phone to IP Phone 3-Way Conference	10	21	32	42	(53)	Simultaneous 3-Way Conversations Limited by VoIP Engine (Note A)
Transcoding IP to IP phone (from G711, G729 and G723)	32	64	96	128	(160)	Simultaneous 2-Way Conversations Limited by the VoIP Engine (Note A)

Endnote **Detailed Description**

Note A: Calls between IP Phones depend on the ability of IP Phones to shuffle and the performance of the LAN.

Note B: The maximum cannot be reached simultaneously with all types of calls that require a VOIP Port.

On each G700 media gateway, 512 Time-Slots are available, out of which 40 time-slots are used for Call Progress Tones. Each G700 media gateway can support a maximum of 236 simultaneous non-IP connections (472 total time-slots divided by 2 time-slots per call). Each G700 media gateway supplies 15 Call Classifiers.

G700 supports stacked media gateways, 10 media gateways/stack.

71.2 Endnote removed.

71.3 Endnote removed.

71.4 **G350** is targeted at small branch offices of large distributed systems. In a standalone configuration, an S8300 server on a G350 Media Gateway provides WAN, LAN and PSTN connectivity. Call Center applications are supported. Embedded AUDIX® (IA770) is supported. G350 has 6 physical slots for Media Modules.

The following are configuration guidelines, not software-defined capacity limits. See Communication Manager Hardware and Traffic Guidelines for more details.

- Recommend using 4 slots for voice, 2 for WAN connectivity: 1 slot for High-Density Media Module (HDMM), 1 slot for Call Controller (S8300), and 4 slots for other media modules. No more than 2 MM710. No more than 3 MM716.
- G350 can support up to 5 other subtending G350/G250 gateways. The G700 gateway subtending to a G350 is not recommended.
  - Stations per G350 gateway
    - Up to 72 users in any combination of IP, analog, and DCP stations.
  - Trunks per G350 gateway
    - Up to 60 trunks total
    - 40 analog trunks

Endnote **Detailed Description**

- 2 T1/EI for digital trunks
- 32 IP trunks at G711
- Up to a total of 132 TDM stations and trunks

71.5 **G860**

G860 R1 supports a maximum of 40,000 calls BHCC of medium call center traffic terminating on IP endpoints, using a CM server with the latest GA version of TN2602AP (IP Media Resource 320, a.k.a. High Density). G860 R1 supports a minimum 2,688 VoIP channels with a single T3 PSTN interface. The G860 R1 supports a maximum 4 active TP-6310 modules which serve as many as 4xDS-3 interfaces. This carrier-grade platform supports redundancy to avoid any single point of failure.

G860 R2 increases capacity to 6000 channels and 40,000 BHCC of medium call center traffic terminating on IP endpoints per CM server with the latest GA version of TN2602AP. When many G860s are added, the level of availability and scalability is increased, the capacity increases with multiple Communication Manager servers to provide a solution with G860 to offer more than the 40K BHC. New solution configurations include a many-to-many mapping of Communication Manager servers to G860. This multiple mapping is implemented by assigning each T3 circuit pack (TP6310) to a different Communication Manager server. As many as three active TP6310s may be used in a single G860 in a 9+3 configuration along with one standby redundant TP6310 (N+1 configuration). Achieve load balancing by distributing incoming calls based on ANI/DNIS information.

A 9 + 3 configuration refers to nine active T3 interfaces supported by three hot standby TP6310 circuit packs in which each TP6310 circuit pack supports three x T3 interfaces. The G860 has total of 10 slots. Four slots are used by primary and redundant shelf controller circuit packs, and Ethernet circuit packs. Slot 10 is reserved for a redundant standby TP circuit pack, leaving 5 slots for active TP circuit packs.

G860 R2 supports high bandwidth optical interfaces including OC3 (Optical Carrier at 155.52 Mbps) and STM (Synchronous Transfer Mode) in a 3+1 configuration. This configuration is three T3/OC-3/STM-1 PSTN interfaces supported by one active TP6310. TP-6310 supports either a single OC-3 interface or 3xDS-3 interfaces. A 3+3 configuration requires one active and one redundant TP-6310 modules. A standby TP6310 may be used in slot 10. This configuration allows G860 R2 to support data connections in addition to TDM voice calls.

Endnote **Detailed Description**

71.6 **Avaya IG550 Integrated Gateway**:
The IG550 Integrated Gateway is based on the Juniper routers that host an Avaya TGM550 card functioning as a H.248 gateway, and some TIM cards that provide interfaces for legacy TDM interfaces. This solution is focused on branches of 2-100 users.

The TGM550 can support 10, 20, or 80 concurrent VoIP calls, depending on which DSP option is installed. It provides 32 ports of touch tone detection and call classification, 16 announcement ports, 20 minutes of announcements or music, and 256 announcement files. Each gateway provides 120 timeslots.

	J2320	J2350	J4350 / J6350
Slots in the platform	3	5	6
Max number of interface TIM (excluding TGM)	2	4	4
Max # of Avaya TIM516 (Analog)	1	2	3
Max # of Avaya TIM514 (Analog)	2	4	4
Max # of Avaya TIM508 (Analog)	1	3	3
Max # of Avaya TIM518 (Analog)	1	3	3
Max # of Avaya TIM521 (BRI)	2	4	4
Max # of Avaya TIM510 (E1/T1)	2	4	4
Max # of Juniper BRI cards	1	1	2
Max # of Juniper T1/E1 cards	1	1	2
Max # of analog ports (trunks and lines)	16	16	J4350 - 35 J6350 - 40

71.7 Endnote removed

72 The following are configuration guidelines, not software-defined capacity limits, for the S8300D server in various H.248 media gateways. These guidelines are per gateway. Using multiple subtending gateways allows CM embedded on S8300D to reach the system-wide capacities. See Communication Manager Hardware and Traffic Guidelines for more details.

Endnote **Detailed Description**

Media Gateway	Station Limit	Trunk Limit
G700	450	450
G450	450	450
G430	150	150
G350	72	60
G250	14	4
G250 - BRI	14	5
G250 - DCP	14	4
G250 – DS1	14	16

73 QSIG integrated nodes are not limited by a fixed node capacity. However, the size of a QSIG network is limited by physical connectivity and the inter-switch dial plan limitations based upon the customer configuration. With AAR dialing, it is possible to address another user within a QSIG network with up to a 20-digit number, so it is possible to have large QSIG networks.

74 The 16CC is not supported with Communication Manager 6.0.

75 The TN799 C-LAN circuit pack supports 400 sockets. The maximum number of H.323 stations that can simultaneously register to a single TN799 or PE interface can be reduced from the TN799 and Processor Ethernet (PE) socket limits with traffic-engineering or licensing.

76 Applies to hybrid QSIG/DCS networks. The QSIG portion of the network is unrestricted with respect to the number of nodes (see note 73). The DCS portion is restricted to the DCS node limitations that already exist. A switch that acts as a gateway (both DCS and QSIG links) deducts from the overall DCS node limit.

77 The SIP half-call model means that each SIP station on the video call is using two SIP trunks. This limits simultaneous SIP video call capacity. The limits shown already have taken this into account. A SIP to H.323 video call would use only half as much SIP resources, but it would also count towards the H.323 video limit.

Endnote	Detailed Description
78	System maximum for all simultaneous in-use IP ports, including stations and trunks. These can be H.323, SIP, or any combination of H.323 and SIP that does not exceed these limits nor the separate limits for H.323 and SIP, and the separate limits for stations and trunks. A system configured to support the maximum numbers of IP ports requires that the signaling groups for the H.323 trunks be administered to use shared signaling. SIP trunks always use shared signaling. See Communication Manager Hardware and Traffic Guidelines for further details.
79	Endnote removed.
80	If the capacity of CMS exceeds the capacity of the DEFINITY® server or Communication Manager server for a single ACD configuration, the server capacity takes precedence. Additional capacity is provided to support the optional Multi-ACD CMS configuration. The capacities shown for CMS represent the total capacity across all ACDs (total of 8) supported in a Multi-ACD configuration. ACD Member/Agent Login capacities reflect the maximum number of CMS measured agent-split/skill pairs, including AAS ports that can be logged-in across 8 ACDs. Capacities for R3V11 or later CMS assume a limit of 100K agent-skill pairs. Increased agent-skill pair capacity on CMS increase CMS platform requirements.
81	Endnote removed.
81.1	Endnote removed. It was replaced by endnote 78.
82	The CM 6.0 servers and H.248 media gateways do not support the TN750C announcement circuit pack. Customers must upgrade to the VAL (Voice Announcement on LAN) circuit pack, and/or use the Embedded VAL announcement sources on the media gateways.
83	AAS ports are included in the ACD Members, Logged-In Agents and Logged-In IDs Staffed counts on the Communication Manager Server system. Only measured logged-in ACD agent-split/skill pairs (including AAS ports) are counted towards the CMS limits.
84	CMS requires allocation of trunk data structures called unmeasured trunks for tracking of agent-to-agent, bridging, conference, and transfer call sequences that use capacity from the total. The

Endnote	Detailed Description
	maximum values for measured trunks and unmeasured trunk facilities are specified for each ACD in the CMS Data Storage Allocation window on CMS. Prior to CMS Release 14, the unmeasured trunks were counted along with the measured trunks toward the system and ACD allocated trunk limit of a total of 40,000 across all ACDs. The recommended assignment per ACD for unmeasured trunks was 25% of the measured trunks. With CMS Release 14 and later the measured trunks and unmeasured trunks are treated separately. Unmeasured trunks are not subtracted from the maximum measured trunks. Data Storage Allocation recommends that unmeasured trunks be set at 50% of the measured trunks allocated. The unmeasured system limit is 20,000 (50% of the measured trunk system limit over all ACDs which is 40,000) and the unmeasured limit for an ACD is 6,000 (50% of the measured trunk CM limit for a single ACD). All trunks supported on the Communication Manager platform can be assigned as externally measured by CMS.
85	A maximum call work code is the number that can be stored in the call work code tables on CMS. This is not the maximum number that can be collected in call records.
86	Each Supervisor client session may include CMS ASCII terminals, Supervisor, Visual Vectors and Network Reporting clients.
87	With Communication Manager Release 4.0 and later, a second pair of MIS TCP/IP links is provided for connecting Avaya IQ, a reporting adjunct. The first pair of links connects CMS, and the second pair connects Avaya IQ. You can connect a Communication Manager system to both CMS and Avaya IQ, with both running the same SPI language. High Availability (HA) is supported on both pairs of MIS links. HA operation on the first pair runs on 2 CMS systems and HA operation on the second pair runs on 2 Avaya IQ systems. HA between CMS and Avaya IQ is not supported. All reporting adjunct systems connected to the same Communication Manager system must be running the same SPI language. CC 6.0 provides SA9090 that will allow assigning up to 4 of the MIS links for use as CMS links instead of IQ links.
88	Endnote removed.

Endnote	Detailed Description
89	Endnote removed.
90	The TN2501AP VAL circuit packs and vVAL media gateway sources do not use compression to store announcements. All announcement files are recorded as wave files (64 Kbps PCM wave files *.wav, CCITT u-law/a-law, 8 KHz sampling, 8-bit mono). Announcement file storage requires 8 Kbytes per second of recording time plus approximately 30 bytes for the header.
91	To save the announcement files to a PC, use LAN connectivity and FTP to backup and restore all active TN2501 VAL circuit packs and Media Gateway embedded vVAL sources. Transfer the announcements per file to and from the source and a client PC.
92	BRI Link capacity limited to 8.
93	The system requires a fixed length account code between 1 and 15 unless SA7991 Variable Length Account Codes is enabled.
94	On the CM_Duplex, CM_Simplex, CM_SurvRemote[140], and CM_SurvRemoteEmbed[140] templates with SA7491 enabled, an additional 166 DS1 interfaces are supported. Use the additional DS1 interfaces for Line Side DS1 connections and not as trunks.
94.1	Limits on other vital system resources such as VoIP resources and tone detectors can block some media gateway configurations. Traffic engineering should take this into account. The following are configuration guidelines, not software-defined capacity limits. See Communication Manager Hardware and Traffic Guidelines for more details. Total recommended DS1 Circuit Packs, including DS1s on all subtending gateways, for a S8300D embedded in a gateway. o G450, G700, G430: 80 o G350: 10 o G250-DS1: 1
95	Station Busy Indicators (SBI) maximum when SA7994 is enabled: 25,000 SBIs are available for the CM_Duplex, CM_Simplex, CM_SurvRemote[140], and CM_SurvRemoteEmbed[140] templates.
95.1	The following button features share a common resource in memory:

Endnote **Detailed Description**

- Call Forwarding All
- Call Forward Busy Don't Answer
- Send Extension Calls (SAC with extension)
- Station Busy Indicators
- Trunk Group Status
- Hunt Group Status
- Loudspeaker Paging Zone Status
- PCOL Group Status
- Data Module
- Terminating Extension Group Status
- Announcement Status
- Attendant Group Status/DXS
- Remote Trunk Group Select

This resource is called Facility Status tracking buttons (Facility Busy Indicators or FBIs). It includes the following. Maximum SBIs on stations + Maximum Queue status buttons + total DTGS buttons on Attendants + SBIs on attendants (2 SBIs per attendant).

For the CM_Duplex, CM_Simplex, CM_SurvRemote[140], and CM_SurvRemoteEmbed[140] templates, the FBI maximums are:

- Standard offer: 32,726 =(10,000 + 12000 + (24 DTGS x 414 attds) + (2 x 414 attds)
- With SA7994: 47,726 = (25,000 + 12000 + (24 DTGS x 414 attds) + (2 x 414 attds)

For the CM_onlyEmbed template, the FBI maximums are:

- Standard offer: 5,868 = 3600 + 500 + (24 DTGS x 68 attds) + (2 x 68 attds).
- No Special Application for the smaller systems.

Each of these individual maximums can not be exceeded when arriving at total FBIs on the system. For example, maximum queue status buttons can not exceed the system maximum, although the SBI maximum may not be reached in a system.

96 Endnote removed.

97 Endnote removed.

98 Endnote removed.

Endnote	Detailed Description
99	Prefixed extensions can take any length between 2 and 6 digits. Only regular extensions can be the length specified in "Maximum Extension Size." The prefixed extension length refers to the number of dialed digits, not the true extension length. For prefixed extensions of length 2-6, the corresponding administered true extension lengths range from 1-5.
100	In the code base, this number is known as MAXDAC, the maximum number of dial access codes that are commonly referred to as Feature Access Codes.
101	This is also limited by license, but that limit is also 41,000.
102	This is the total number of trunks permitted in the system. IP trunks are part of this overall maximum. However, the maximum number of circuit switched trunks, H.323 trunks, and SIP trunks differ. See “Administered ISDN+IP Trunks (pool of ISDN, IP, and SIP trunk Ports)", “Maximum administered H.323 trunks" and “Administered SIP Trunks" for details.
103	Endnote removed.
104	Extension to Cellular maximums are based on the limits for the station maximums for the specific templates The number of station records can run out before the limit is reached if EC500 users are configured in a bridging arrangement that requires 3 station records per EC500 user (1 Principal desk set, and 2 XMOBILE stations as bridges of the 2 Call Appearances of the Principal).
105	EC500 / EC500 OPTIM Station users administered with EC500 count towards the station user maximums set by the template-specific limits. This limit does not include XMOBILE mappings. XMOBILE mappings are limited by the software-defined station user capacity. On CM 6.0, the EC500 OPTIM user capacity is the same as the station user maximum for each of the platforms.
106	Location administration allows: • Remote Port Networks and Remote Offices and Gateways to have different administration than the main server • Different settings for Time of Day Offset, Area Code, and Daylight Savings Rules for different locations

Endnote	Detailed Description
	• Specific route selection in AAR/ARS administration
107	Endnote removed.
108	Endnote removed.
109	Endnote removed.
110	Endnote removed.
111	Here are ARS enhancements for the CM_Duplex and CM_Simplex templates, compared to CM 5.2.1 S8800 capacities. • Locations remain at 250. • Digit Analysis entries increased from 8000 to 12000. • Digit Conversion entries increased from 4000 to 6000. • Toll entries remain at 2000. The following items indirectly allow the capability to have more entries on all the forms (analysis, conversion, toll) with longer digit strings. • Long Internal Digit Nodes increased from 4500 to 8000. • Short Internal Digit Nodes increased from 9000 to 16000. Here are ARS enhancements for the CM_onlyEmbed template, compared to CM 5.2.1 S8300 capacities. • Locations remain at 50. • Digit Analysis entries increased from 4000 to 5000. • Digit Conversion entries increased from 2000 to 2500. • Toll entries remain at 1000. The following items indirectly allow the capability to have more entries on all the forms (analysis, conversion, toll) with longer digit strings. • Long Internal Digit Nodes increased from 1500 to 2500. • Short Internal Digit Nodes increased from 6000 to 9000.
112	In CM 6.0, the Increased Adjunct Route Capacity RTU is automatically enabled in licensing for every switch that has ASAI enabled. While this RTU is OFF in the fixed feature masks for ESS/LSPs, if the feature is ON for the main server, it will be turned ON for any ESS/LSP

Endnote	Detailed Description
	subtending the main server.
113	This total is per location. Multiply these numbers by row "Max Locations" for the system-wide totals.
114	The Remote Office Feature group, introduced in Communication Manager Release 9.2, provides connectivity over the WAN. The maximum Remote Office Gateways is separate and independent from the H.248 Media Gateway maximum. A system can be configured with all of the following. • PNs as stated on "Maximum Port Networks" • H.248 media gateways (mix of G430, G450, etc.) as stated on "System-wide Maximum H.248 media gateways". • Remote Offices (MultiTech gateways) as stated on "Remote Office Gateways." The MultiTech gateway is an H.323 managed gateway. From an engineering calculation point-of-view, one can start with the capacity limits regarding the number of gateways per platform. There is some interplay to consider. Check Communication Manager server resources for the allowed limits of H.323 endpoints and H.323 trunks. • The MultiTech gateway's stations are managed as H.323 stations that count as IP stations. • The MultiTech gateway's trunks are managed as H.323 trunks. Communication Manager does not perceive the MultiTech gateway to be a gateway for building tables and associating stations and trunks together for maintenance, administration, and call processing. Signaling Groups are supported on the Communication Manager platform. The signaling group limitation is often encountered as the first hard limit. Customers who add gateways to systems that are heavily loaded with existing stations and trunks sometimes run into limitations on IP station or trunks. Each customer is different and Avaya account teams must work with customer engineers on system configuration.
115	Endnote removed.
116	H.323 Video Capacity • For video capable stations and endpoints, the limit is the same as the H.323 stations limit. The VSX Video station usually registers to 3 separate extensions as if it were 3 separate stations. The capacity for VSX endpoints is one-third the Communication Manager server’s IP Stations limit.

Endnote	Detailed Description
	• The limit on simultaneous H.323 video calls equals (total H.323 stations / 3) because each H.323 video call uses roughly 3 times as much memory as a non-Video IP call.
117	Auto/Remote Message Waiting. A Special Application, SA8558, allows a capacity increased to 11,000.
118	VUSTATS: A Special Application, SA8558, allows a maximum of up to 5,000 VUSTATS buttons on the large servers and increases the number of simultaneously updating displays limit from 500 to 2,000.
119	Intra-Switch CDR: individually administer the endpoints for intra-switch CDR on the intra-switch CDR form. SA8202 (Intra-switch CDR by COS) extends the limit to include all the stations supported on a platform. All phones with the same COS are included in intra-switch CDR reporting.
120	SIP Enablement Services is no longer supported in CM 6.0. Instead, CM 6.0 works with Session Manager. The Session Manager capacities document, to be written, contains Session Manager capacities. A Communication Manager server can be connected to multiple Session Manager servers, for the larger Communication Manager platforms that support large Branch Office scenarios. • TLS Links on Communication Manager: Communication Manager supports a maximum of 49 TLS sessions of any kind o 17 max may be allocated to AES o 32 max may be used by SIP/Session Manager and other servers such as Meeting Exchange ®. Theoretically there can be a maximum of 32 Session Manager Servers per Communication Manager server. The actual number is smaller if the Session Manager servers are duplicated servers. A signaling connection between a Communication Manager and a Session Manager pair requires 2 such TLS sessions (one each for Session Manager-originated and CM-originated traffic) These 2 TLS sessions together, forming the signaling connection between Communication Manager and Session Manager is called a TLS link, hence a 16 TLS link maximum because of the max 32 sessions. A network can have at most 6 core Session Manager servers; the remainder would be local Branch Session Manager servers. o TLS links for SIP are independent of AES TLS sessions

Endnote	Detailed Description
121	An Audio Group defines a list of VAL/vVAL sources (circuit pack locations) from which announcement files are played. An audio group can be assigned to an announcement extension as the source location instead of a specific single source circuit pack location. When the announcement is to be played, the closest working source in the list of sources assigned to the audio group is selected to play the named file assigned to the announcement extension. The same audio group can be assigned as the location for many announcement extensions, limited by the number of announcement files that can be stored on any given source. Each file for the announcement extensions must be duplicated in each of the sources listed for the audio group.
122	The administered announcement files limit is a count of all the sources assigned to defined announcement extensions that contain an announcement file. With all single-sourced announcements, the total equals the total extensions defined. (This is the same as without Locally Sourced Music and Announcements (LSMA)). With group sourced announcements, each source included in the group defined for the extension is counted towards the limit (i.e., each source a file is in is counted). In a system with a combination of single sourced and group sourced extensions, each of the single sourced extensions and the individual sources in the assigned groups are counted towards the limit. For example, a configuration with 5 single sourced announcement extensions and 2 audio group sourced extensions with each group listing 10 sources uses 7 announcement extensions and 25 administered announcement files. The display capacity screen shows both the announcement extensions and administered files system limits along with the current Used and Available quantities.
123	For Call Center applications, an increase of extension length beyond 8 digits requires an R16 or later CMS and CM 5.2.1 or later, or use of Avaya IQ.

Endnote **Detailed Description**

124

Current Gateway Capacities:

Gateway	TDM Timeslots[1] (pairs)	TTR	Announcement			VoIP Channels
			Ports[11]	Time	Files	
G250 (analog, BRI)	113/117	8	7	15 min.	256	10 [10]
G250 (DCP, DS1)	113/117	16	7	15 min.	256	16 [10]
G350	234/238	16	7	15 min.	256	32 [2]
G430	229/237	32	16	45/240 min[8].	256	25[9]
G450	206/238	64	64	45/240 min[8]	1024	80 to 320 [7]
G700	230/238	15	16	20 min.	256	64[3,5]
IG550	128[6]	32	16	20 min.	?	10/20/80 [2,4]

124 continued

NOTES:

1. Available timeslot *pairs* for voice calls (number of simultaneous 2-party calls); first number is with announcements enabled on the gateway, requiring reserved TDM timeslots (hence G450 with more announcement ports, ends up with fewer available timeslots for voice calls); second number is available timeslots with no announcement
2. Same number of channels for all Codec and encryption options
3. Number of G.711 unencrypted; for other Codecs and encryption options, refer to CID 123531
4. Capacity depends on VoIP DSP configuration options

Endnote **Detailed Description**

5. VoIP channels expandable via MM760, each with 64 additional G.711 channels
6. 128 timeslot pairs to backplane and separate 128 pairs to media processors.
7. Each MP20 provides 25 channels for G.711 or G.726 but only 20 channels for G.729. Each MP80 provides 80 channels independent of codec. There are four slots for MP boards. The maximum of 320 active channels requires 4 MP80s.
8. The announcement capacity of the G430 and G450 is 240 minutes (4 hours) when the system is equipped with compact flash. The announcement capacity is 45 minutes for systems that have internal flash.
9. The G430 is equipped with 25 channels on the motherboard. There is an option to add a MP10 to increase the channel allotment by 10, or a MP20 to increase the channel allotment by 25 channels for G.711 or G.726 but only 20 channels for G.729, or a MP80 to increase the channel allotment by 80. The maximum G430 channel allotment with the 25 channels on the motherboard and 80 channels on the optional MP80 is 105.
10. G250 supports VoIP channels for G729/G723 and G.711 with or without Encryption.
    - G250-and G250-BRI support
        - 10 VoIP channels for G729/G723 and G.711
        - 10 VoIP channels with AES encryption
        - 8 VoIP channels with SRTP encryption
    - G250-DS1 and G250-DCP support
        - 16 VoIP channels for G729/G723 and G.711
        - 12 VoIP channels with AES encryption
        - 10 VoIP channels with SRTP encryption
11. One port is reserved for recording.

125 When the **Allow Two Observers in Same Call** field on the **Feature-Related System-Parameter** form is set to **y**, two service observers can be in a merged conference call, where the service observers may be monitoring an EAS LoginID, station extension, or VDN (1 observing the VDN and 1 another type). Multiple service observers will be counted as conferees in a conference call, but they will not be included in the actual number of conferenced parties that is shown for the **Conference <*n*>** station display.

This capability allows automated Agent Quality Recording via switch-adjunct products (for example, Witness or NICE) that use the Service Observing feature to continue recording EAS

Endnote **Detailed Description**

agents or stations after two service-observed agents are merged by a call conference (previously the one doing the recording was stopped) or to be able to have an observer monitor EAS agents or stations for quality while being observed for recording.

If more than 2 service observers are about to be merged for a call-conference operation and a call-conference occurs with more than two service observers in both call legs, this feature allows the conference to take place, but only 2 observers will be left in the merged call with an observer in each call leg.
In this instance, the highest preference is given to keeping the service observer with a Class of Restriction (COR) with the **Service Observing by Recording Device** field set to **y**.

This feature applies to activation using any of the SO FACs (Listen-Only, Listen/Talk and No-Talk) or SO buttons towards stations/agents. It can not be applied towards VDNs for VDN service observing so no more than one VDN observer can be on the same call in vector processing. When the call is connected to an agent, both the VDN observer and the agent observer (or conferenced agent observer) can be connected.

126 If the number of parties will exceed 6, an observer or additional observer will not be added and/or the agents are denied adding another conference party.

Capacities with DMCC/CMAPI call recording:

1. **Using Service Observe or Single Step Conference** – Each observer (recording or manual observer) counts towards the 6 party limit per call. Example: Only 2 additional conferenced parties can be added along with the caller and agent with multiple observers (2 recording ports, or one recording port plus the manual observer).
2. **Using Dual Registration** – Only one party is considered towards the 6 party limit per call. Example: up to two recording ports register on the agent's station as additional endpoints. Communication Manager will not consider these as additional parties on a call, so up to 4 additional parties can be added to a call. Note: as of January, 2008, none of the recording vendors have demonstrated the ability to use this method which requires Communication Manager Release 5.0 and AES Release 4.1 or later.

127 There is no process limit to the number of Service Observing associations that can be active in the system. What will limit service observing is the number of bridged connections involved with an observed call, the number of observers of the same call (limited to one observer except when

Endnote	Detailed Description
	the **Allow Two Observers In The Same Call** system option is active) and system resources that include timeslots, inter-gateway connections/links and VoIP resources.
128	Special Application SA8993 allows a maximum of 250 Multiple Listed Directory Numbers.
129	Endnote removed
130	Special Application SA8993 allows a maximum of 250 Tenant Partitions.
131	Special Application SA9035 allows a maximum of 1024 Intercom Groups on the CM_Duplex, CM_Simplex, CM_SurvRemote[140], and CM_SurvRemoteEmbed[140] templates. Special Application SA9035 allows a maximum of 128 Intercom Groups on the CM_onlyEmbed template.
132	There is no limit on the maximum number of auto dial buttons, other than the system limit on button capacity. See row 'Station Button Capacity' for system button limitations.
133	At the time this document was published, the software limit of 24,000 administered SIP trunks on the CM_Duplex and CM_Simplex templates was not in the CM 6.0 marketing offer. We anticipated that it would be added to the CM 6.0 offer later in 2010. At the time this document was published, we expected that the CM 6.0 marketing offer limit on SIP trunks simultaneously in use on the CM_Duplex and CM_Simplex templates would to increase later in 2010 to 12,000 for CM Evolution server configurations and to 24,000 for CM Feature Server configurations.
134	With one exception, Communication Manager Messaging for Federal Markets (CMM-FM) has the same capacities as CMM on the Avaya Aura™ Main / Avaya Aura™ for Survivable Core (Simplex configuration) template. That exception is Subscriber Mailboxes. CMM-FM supports 15,000 mailboxes.
135	Survivable remote platforms in CM 6.0 are expected to only support SIP trunking to the SM core. Service provider PSTN SIP trunks are not yet planned to be supported on survivable remote platforms in CM 6.0. They are planned to be supported in a future release.
136	The capacities shown in these columns assume a large core survivable server backing up a large main server. In other words, they assume the following settings on the Server Role page's

Endnote	Detailed Description
	"Configure Memory" fields. • The "This Server's Memory Setting" field is set to Large. • If the server role field is set to one of the survivable roles (ESS, or LSP) then the server also has the "Main Server's Memory Setting" field set to Large.
137	The capacities shown in this column assume a small main server. In other words, they assume the following settings on the Server Role page. • The server's role is set to Main. • The "This Server's Memory Setting" field under "Configure Memory" is set to Small.
138	The capacities shown in this column assume a small survivable server backing up a remote part of a large core server. In other words, they assume the following settings on the Server Role page. • The "This Server's Memory Setting" field under "Configure Memory" is set to Small. • The server role field is set to one of the survivable roles (ESS, or LSP) • The "Main Server's Memory Setting" field under "Configure Memory" is set to Large. If you want to know what the capacities would be for a small survivable backing up a small main, read the (CM_onlyEmbed) column immediately to the left. In other words, if "This Server's Memory Setting" is Small, and "Main Server's Memory Setting" is also Small, the resulting survivable server's capacities are the same as those of a small main server.
139	For survivable remote server software capacities, this document uses the term 'administered' as seen from two different points of view. 1. The way people and marketing offers commonly use the term. 2. The way CM software uses the term. For example, suppose a CM system has a large main server at headquarters and two small survivable servers, one at each of two distant remote branches. Person A moves from one phone to another phone, both within branch A. 1. From a marketing offer point of view, person A's station is only used in branch A. From a marketing offer point of view, the only survivable server that needs to have this station counted towards the station limits is the survivable server in branch A. 2. However, from CM software's point of view, CM station translations, including A's phone move, are updated through the headquarters main server. That main server downloads the complete set of revised station translations to all survivable remote branches. The

Endnote	Detailed Description
	survivable server in branch B receives that complete set of translations. From CM server B's point of view, those translations include person A's extension information. Server B counts that extension towards server B's administered station capacity limit. That is why this document's software capacity limits for some items in the survivable remote server columns are higher than similar limits in the adjacent marketing Offer Limit rows.
140	At the time this document was published, the following templates were not in the CM 6.0 marketing offer. We expected that they would be added to the CM 6.0 offer later in 2010. • Avaya Aura™ for Survivable Remote Embedded (CM_SurvRemoteEmbed) • Avaya Aura™ for Survivable Remote Simplex (CM_SurvRemote).