Avaya Communication Manager

System Capacities Table
Release 4.0

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Introduction

This document contains Avaya Communication Manager Release 4.0 offer-defined capacities for various server platforms (S8700 series, S8500, S8300 etc.). Capacities of LSPs and ESSes are that of the main Communication Manager that they are associated with.

Avaya Communication Manager and Avaya Call Management System	**Release 4 Linux Server Platforms**						
	S8700, S8710, S8720 See Note-2	**S8720XL** See Note-2	**S8500, S8500B, S8500C(*)** See Note-3 and Footnote 71.3	**S8400 New platform in R3.1**	**S8300/G700** See Note-4	**S8300 /G350** See Note-4	**S8300 /G250** See Note-5
Supported Media Gateways and Port Networks ->	**with H.248 media servers, H.323 Remote Office gateways (incl. G150), MCC1, SCC1, CMC1**	**with H.248 media gateways, H.323 Remote Office gateways (incl. G150), MCC1, SCC1, CMC1**	**with H.248 media gateways, H.323 Remote Office gateways (incl. G150), MCC1, SCC1, CMC1**	**with CMC1, G150, G250, G350, G600, G650, G700** See Note-6	**with H.248 media gateways and H.323 Remote Office gateways**	**No sub-tending H.248 media gateways**	**No sub-tending H.248 media gateways**
ITEM							

NOTES Regarding the Release 4 System Capacities Table

Capacities for the various server platforms (S8700 series, S8500, S8400, S8300, etc.) are provided here. Software capacities of LSPs and ESSes are that of the Main Communication Manager they are associated with, so they are not listed separately in this table. The call handling capacities are based on the platform limits. The capacities are offer-specific and are determined by the License File.

An asterisk (*) indicates that the software-defined capacity cannot be reached due to hardware and/or processor capacity limits for the platform.

NOTE-1 Platforms removed from the Release 4 Capacities Table: (1) G3CSI End-of-Sale: The last date we will sell new G3CSI systems is February 5, 2007. (2) Upgrades: the end date for upgrades is TBD. (3) Software Release: the last software release supported is Communication Manager R3.1. (4) S8100 (a.k.a. Windows/D1/IP600/gaznt) is not available with Communication Manager R2.1 and beyond. S8100 is supported with Communication Manager R2.0. See the Release 2 System Capacities Table for more information.

NOTE-2: S8700-series platforms: Mixed Port Network Connectivity (PNC) allows for IP-connected PNs to co-exist with ATM or Center Stage connected PNs. Media server capacities and configurations are the same for all S8700-series platforms S8720 is a RoHS Compliant platform introduced in Release 3.1. The S8720XL is a feature on S8720 Media Servers with a set of increased capacities. These capacities where applicable are indicated in the S8720XL column.

NOTE-3: S8500 Platforms: When configured as ESS for S8700 series media servers, both the S8500 and S8500B support the same capacities as the main server. S8500C is a RoHS Compliant platform. It has the same capacities as other S8500 platforms.

NOTE-4: S8300 Platforms (with G350 and G700): Due to memory needs, Release 2.1 and beyond requires the S8300B board whether it is configured as ICC or LSP. The S8300/G350 column reflects G350 as an ICC, not as LSP. G350 ICC: (1) With 4.1 will support 50 subtending Media Gateways, (2) does NOT support Octaplane and (3) G350 supports Call Center applications. See the policy statement in the cover memo and in footnote 71.4 for details. An ICC processor used as an LSP has the same support capacities as the primary server. RoHS Compliance: S8300B will be RoHS Compliant by 4FQ06. S8300C is a New RoHS Compliant platform available by 4FQ06.

NOTE-5: S8300/G250: Call Center support certification with the G250 is limited to basic ACD when in ICC configurations (with the S8300). Full Call Center support for both basic and Elite offers has been certified only with the G250 when used in ECC configurations as a subtending gateway served by S8700-series or S8500B.

NOTE-6: S8400 (RoHS Compliant NEW PLATFORM in Communication Manager R3.1): Capacities are mostly based on the G3csi platform (see the S8400 column in this table for details). It can be housed in G650, G600, and the CMC cabinet. G600 and CMC are supported only with migrations to S8400, and S8400 on G650 is supported for new installs. The rest of the gateways are remote gateways only, for example H.323 and H.248 gateways. S8400 also supports a Processor Ethernet (PE). C-LANs and PE can coexist on an S8400. For the SIP solution, SES can connect over a C-LAN or a PE.

NOTE-7: G3csi does not support EPNs. ProLogix is usually configured as a csi. G3csi will be RoHS Compliant by 4FQ06.

NOTE-8: G150 Remote Office Gateway is an H.323-based Media Gateway. The system maximum for Remote Office gateways is also 250, but it is separate from the system maximum limit of 250 for H.248 media gateways such as the G250, G350, and G700.

10	***ABBREVIATED DIALING***							
15	AD Lists per System[68]	21,003	21,003	21,003	2,502	2,502	2,502	2,502
20	AD List Entry Size	24	24	24	24	24	24	24
25	AD Entries per System	250,000[69]	250,000[69]	250,000[69]	12,000	12,000	12,000*	12,000*
30	***ABBREVIATED DIALING BUTTONS[1]***							
35	Entries per System (same as maximum button capacities on the platform) [1]	See footnote 1	See footnote 1	See footnote 1	See footnote 1	See footnote 1	See footnote 1	See footnote 1

	Avaya Communication Manager and Avaya Call Management System	**Release 4 Linux Server Platforms**						
		S8700, S8710, S8720 See Note-2	**S8720XL** See Note-2	**S8500, S8500B, S8500C(*)** See Note-3 and Footnote [71.3]	**S8400 New platform in R3.1**	**S8300/G700** See Note-4	**S8300 /G350** See Note-4	**S8300 /G250** See Note-5
40	Enhanced List (System List)	2[70]	2[70]	2[70]	1	1	1	1
45	Max entries	10,000	10,000	10,000	10,000	10,000[71.1]	10,000[71.1]	10,000[71.1]
50	Group Lists	1,000	1,000	1,000	100	100	100	100
55	Max entries	100	100	100	100	100	100	100
60	Group lists / extension	3	3	3	3	3	3	3
65	System List	1	1	1	1	1	1	1
70	Max entries	100	100	100	100	100	100	100
75	Personal Lists	20,000	20,000	20,000	2,400	2,400	2,400	2,400
80	Max entries	100	100	100	100	100	100	100
85	Personal lists / extension	3	3	3	3	3	3	3
90	***ANNOUNCEMENTS: See information under: ACD, Call Vectoring, Hunt Groups, Recorded Announcements and S8300 Specific Capacities***							
95	***APPLICATIONS ADJUNCTS***							
100	Asynchronous Links (RS232)	10	10	10	5	9	9	9
105	Asynchronous Links (C-LAN)	10	10	10	10			
110	CDR Output Devices[4.6]	2	2	2	2	2	2	2
115	Journal Printers : System Printer[4.6]	2:1	2:1	2:1	2:1	2:1	2:1	2:1
120	Property Management Systems[4.6]	1	1	1	1	NA	NA	NA
125	***SES (SIP Enablement Services, fka CCS) for SIP features and services: See Section on SIP***							
130	***Application Enablement Services***							
135	AES Servers per Communication Manager	16	16	16	16	16	16	16
140	AES Server Connections per Communication Manager	16	16	16	16	16	16	16
145	AES Server Interfaces (Processor C-LAN/C-LAN Boards)	16	16	16	16	16*	16*	16*
150	Inbound Messages/Second per AES Connection	200	200	200	200	200	200	200
155	Outbound Messages/Second per AES Connection	240	240	240	240	240	240	240
160	Messages/Sec/System (full duplex)	720	720	720	240	240	240	240
165	***Adjunct Links***							
170	Maximum Links[4.1]	33	33	33	25	25	25	25
175	PPP Links/switch using C-LAN board4.1	33	33	33	25	NA	NA	NA
180	IP Routes (with C-LAN)[4.1]	650	650	650	400	NA	NA	NA
185	***VOICE PROCESSING ADJUNCTS***							
190	***Traditional AUDIX***	8	8	8[113]	8	1	1	1
195	***EMBEDDED AUDIX[3]***	1	1	1	1	1	1[71.4]	1[71.4]
200	EMBEDDED AUDIX DCP Emulation[3]	1	1	1	1	NA	NA	NA
205	***INTUITY AUDIX***							
210	INTUITY AUDIX (Via Mode Code)	1[4.2]	1[4.2]	1[4.2]	1[4.2]	1[4.2]	1[4.2]	1[4.2]
215	INTUITY AUDIX (Via TCP/IP)	8	8	8	1	1	1	1
220	INTUITY AUDIX (MAPD)	1	1	1	1	NA	NA	NA
225	Mode Code Voice Mail Systems	1[4.2]	1[4.2]	1[4.2]	1[4.2]	1[4.2]	1[4.2]	1[4.2]
230	QSIG MWI Hunt Groups for QSIG-integrated Messaging Platforms [4.3]	10	10	10	NA	10	10	10
235	***MODULAR MESSAGING***							
240	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	No Switch-based hard limits	No Switch-based hard limits
245	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	No Switch-based hard limits	No Switch-based hard limits
250	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	No Switch-based hard limits	No Switch-based hard limits
255	Modular Messaging over C-LAN	8 per Switch	8 per Switch	8 per Switch	8 per Switch	NA	NA	NA
260	***OTHER ADJUNCTS***							
265	CMS/CCR C-LAN/LAN Adjuncts[4.5]	4	4	4	4	4	4	4
270	TCP/IP Processor Channels (Includes Gateway Channels)	384	384	384	128	128	128	128
275	***AUTOMATIC CALL DISTRIBUTION (ACD) NOTE-1: See end of table for CMS adjunct capacities. NOTE-2: See EAS Section for capacities with EAS***							
280	Announcements per Split	2	2	2	2	2	2	2
285	Announcements per System	3,000	9,000	3,000	3,000	3,000	3,000	3,000
290	Splits	2,000	2,000	2,000	99	99	99	99
295	ACD Members per Split	1,500	1,500	1,500	200	200	200	200
300	Max Administered ACD members[4.4]	60,000	100,000	60,000	1,000	1,000	1,000	1,000
305	Logged-In Splits per Agent[5]	4	4	4	4	4	4	4
310	***Max logged-in ACD agents (per system) when each logs into:[6]***							

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315	1 Split	5,200	7,000	1,000	500	450[71.1]	450[71.1]	40[71.1]
320	R14 CMS (See Note 80)	41,600	41,600	41,600	41,600	41,600	41,600	41,600
325	2 Splits	5,200	7,000	1,000	500	450[71.1]	450[71.1]	40[71.1]
330	R14 CMS (See Note 80)	41,600	41,600	41,600	41,600	41,600	41,600	41,600
335	3 Splits	5,200	7,000	1,000	333	333[71.1]	333[71.1]	40[71.1]
340	R14 CMS (See Note 80)	33,333	33,333	33,333	33,333	33,333	33,333	33,333
345	4 Splits	5,200	7,000	1,000	250	250	250	40
350	R14 CMS (See Note 80)	25,000	25,000	25,000	25,000	25,000	25,000	25,000
355	Queue Slots per Group[7]	NA	NA	NA	NA	NA	NA	NA
360	Queue Slots per System[7]	NA	NA	NA	NA	NA	NA	NA
365	OFFER Limits: Total Logged In ACD Agents	5,200	7,000	1,000	500	450	450	40
370	***ARS / AAR***							
375	AAR/ARS Patterns (Shared)	999	999	999	254	254	254	254
380	Number of entries in ARS/AAR Analysis Tables (Max ARS/AAR Tables: 1 per location: 250 max locations on S8700/8500; 50 on S8300. Also see entry on "Locations" below)	8,000 [111]	8,000 [111]	8,000 [111]	4,000	4,000	4,000	4,000
385	Choices per RHNPA Table	24	24	24	12	12	12	12
390	Digit Conversion Entries	4,000 [111]	4,000 [111]	4,000 [111]	2000	2,000	2,000	2,000
395	***AAR/ARS Digit Conversion***							
400	Digits Deleted for ARS/AAR	28	28	28	28	28	28	28
405	Digits Inserted for ARS/AAR	18	18	18	18	18	18	18
410	***AAR/ARS Sub-Net Trunking***							
415	Digits Deleted for ARS/AAR[8]	28	28	28	28	28	28	28
420	Digits Inserted for ARS/AAR	36	36	36	36	36	36	36
425	Entries in each RHNPA Table	1,000	1,000	1,000	1,000	1,000	1,000	1,000
430	Facility Restriction Levels (FRLs)	8	8	8	8	8	8	8
435	Inserted Digit Strings[9]	3,000	3,000	3,000	1,200	1,200	1,200	1,200
440	***Patterns for Measurement***							
445	Shared Patterns for Measurement	25	25	25	20	20	20	20
450	RHNPA (Remote Home Numbering Plan Area) Tables	250	250	250	32	32	32	32
455	Routing Plans	8	8	8	8	8	8	8
460	ARS Toll Tables	32	32	32	32	32	32	32
465	Entries per Toll Table	800	800	800	800	800	800	800
470	Trunk Groups in an ARS/AAR Pattern	16	16	16	6	6	6	6
475	UDP (Entries)	80,000	80,000	80,000	10,000	10,000	10,000	10,000
480	TOD Charts	8	8	8	8	8	8	8
485	Toll Analysis Table Entries	2,000 [111]	2,000 [111]	2,000 [111]	1,000	1,000	1,000	1,000
490	***ASAI - See CALLVISOR ASAI***							
495	***ATTENDANT SERVICE (NOTE: IP Soft Console Capacities is a NEW ENTRY, but NOT a NEWLY INTRODUCED CAPACITY)***							
500	Attendant Consoles(day:night)[10]	128 (127:1)	414 (413:1)	128 (127:1)	16 (15:1)	68 (67:1)	68 (67:1)	68 (67:1)
510	OFFER: IP Soft Consoles(day:night)[10]	128	414	68	16	68	68	68
515	Crisis Alert Stations (on Attendant consoles + Crisis Alert buttons on digital stations)	128 + 10 [10.2]	414 + 10[10.2]	128 + 10	16 + 10	68 + 10	68 + 10	68 + 10
520	Attendant Console 100s Groups/Attendant	20	20	20	20	20	20	20
525	Attendant Control Restriction Groups	96	96	96	96	96	96	96
530	***Centralized Attendant Service***							
535	Release Link Trunks at Branch	255	255	255	99	99	99	99
540	Release Link Trunk Group at Branch	1	1	1	1	1	1	1
545	Release Link Trunks at Main	4,000	4,000	4,000	400	400	400	400
550	Release Link Trunk Group at Main[11]	2,000	2,000	2,000	99	99	99	99
555	***Other Access Queues***							
560	Max Number of Priority Queue Values[12]	13	13	13	13	13	13	13
565	Size range of Reserved Queue	2 - 342	2 - 1108	2 - 342	2 - 75	2 - 182	2 - 182	2 - 182
570	Reserved Queue Default Size	5	5	5	5	5	5	5
575	Attendant Queue Length	1,371	4,435	1,371	80	728	728	728
580	Switched Loops/Console	6	6	6	6	6	6	6
585	***AUTHORIZATION***							
590	Authorization Codes	90,000	90,000	90,000	5,000	5,000	5,000	5,000
595	Station Security Code Length	7	7	7	7	7	7	7
600	Administrable Classes of Restrictions (COR): Total COR.	996: 1000	996: 1000	996: 1000	996: 1000	996: 1000	996: 1000	996: 1000
605	Classes of Service (COS)	16	16	16	16	16	16	16
610	Length of Authorization Code	4 - 13	4 - 13	4 - 13	4 - 13	4 - 13	4 - 13	4 - 13

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615	Length of Barrier Code	4-7	4-7	4-7	4-7	4-7	4-7	4-7
620	Length of Account Codes [93]	1 - 15	1 - 15	1 - 15	1 - 15	1 - 15	1 - 15	1 - 15
625	Restricted Call List	1	1	1	1	1	1	1
630	Remote Access Barrier Codes	10	10	10	10	10	10	10
635	CDR Account Code List	1	1	1	1	1	1	1
640	Toll Call List	1	1	1	1	1	1	1
645	Unrestricted/Allowed Call Lists	10	10	10	10	10	10	10
650	Total Call List Entries	1,000	1,000	1,000	1,000	1,000	1,000	1,000
655	***AUTOMATIC CALL BACK (ACB) CALLS***							
660	Max ACB Calls	1,500	1,500	1,500	1500	1500	1500	1500
665	***AUTOMATIC WAKEUP***							
670	Simultaneous Display Requests	30	30	30	10	10	10	10
675	Wakeup Requests per System	15,000	15,000	15,000	2,400	2,400	2,400	2,400
680	Wakeup Request per Extension	2	2	2	2	2	2	2
685	Wakeup Requests per 15 min Interval [20]	950	950	950	450	450	450	450
690	***BASIC CALL MANAGEMENT SYSTEM (BCMS)***							
695	Measured Agents or Login Ids	3,000	3,000	3,000	400	400[71.1]	400[71.1]	400[71.1]
700	Measured Agents per Split/Skill	1,500 / 3,000[115]	1,500 / 3,000[115]	1,500 / 3,000[115]	200	200	200	200
705	Measured Splits/Skills	600	600	600	99	99	99	99
710	Measured Agent-split/skill pairs	40,000	40,000	40,000	1,000	1,000	1,000	1,000
715	Measured Trunk Groups	32	32	32	32	32	32	32
720	Measured VDNs	512	512	512	99	99	99	99
725	Maximum Agents Displayed by Monitor BCMS Split Command[12.1]	100	100	100	100	100	100	100
730	Max BCMS Terminals	4	4	4	3	3	3	3
735	Max Active Maintenance Commands for System	15	15	15	1	1	1	1
740	Max Simultaneous BCMS Terminals in Monitor Mode[12.2]	13	13	13	1	1	1	1
745	***Reporting Periods***							
750	Intervals	25	25	25	25	25	25	25
755	Days	7	7	7	7	7	7	7
760	***BRIDGING (See entry below for CALL APPEARANCES and BRIDGED CALL APPEARANCES)***							
765	***CABINETS***							
770	***Inter-Port Network Connectivity***							
775	Port Networks (see footnote for migration)	64	64	64	1	NA	NA	NA
780	Max Number of Port Networks per MCC Cabinet	5	5	NA [67]	NA	NA	NA	NA
785	Switch Nodes (Simplex)[3]	3	3	NA	NA	NA	NA	NA
790	Switch Nodes (Duplex)[3]	6	6	NA	NA	NA	NA	NA
795	DS1 Converter Complex (Simplex)[3]	41	41	41	NA	NA	NA	NA
800	DS1 Converter Complex (Duplex)[3]	82	82	NA	NA	NA	NA	NA
805	***EPN*** [13]							
810	MCC	64	64	NA [67]	NA	NA	NA	NA
815	SCC	64 (4/stk)	64 (4/stk)	3 (4/stk)	NA	NA	NA	NA
820	CMC	64 (3/stk)[3.1]	64 (3/stk)[3.1]	64 (3/stk)	NA	NA	NA	NA
825	G600 (19" Rack Mount)	64(4/stk)[3.1]	64 (4/stk)[3.1]	64(4/stk)	NA	NA	NA	NA
830	G650 (19" Rack Mount)	64 (5/stk)	64 (5/stk)	64 (5/stk)	NA	NA	NA	NA
835	***PPN***							
840	CMC	NA	NA	NA	3	NA	NA	NA
845	G600 19" Rack Mount Cabinet	NA	NA	NA	3	NA	NA	NA
850	G650 (19" Rack Mount) Cabinet	NA	NA	NA	5	NA	NA	NA
855	***CALL APPEARANCES and BRIDGED CALL APPEARANCES***							
860	Call Appearances per Station[16]	96	96	96	96	96	96	96
865	Max Call Appearances per Ext.	10	10	10	10	10	10	10
870	Min Call Appearances per Ext.	0	0	0	0	0	0	0
875	***Primary Extension Bridging***							
880	System-wide Maximum Bridged Appearances	80,000	80,000	80,000	900	2,400	2,400	2,400
885	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	5	5
890	Max Number of Bridges to a Principal's Call Appearance[15] (See below for extended numbers)	25	25	25	25	25	25	25
895	Total Users with Bridged Appearances (Station User maximum)	36,000 [71.2]	36,000 [71.2]	36,000 [71.3]	900	2,400 [71.1]	2,400 [71.4]	2400 [71.4]

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900	Max Number Bridges to a Principal's Call Appearance with Extension that allows additional bridges[15]	63	63	63	63	63	63	63
905	Number of Principals that can have the Extended number of Bridges	1,250	1,250	1,250	1,250	1,250	1,250	1,250
910	***CALL COVERAGE***							
915	Coverage Answer Groups (CAG)	1,000 [33]	1,000 [33]	1,000 [33]	200	200	200	200
920	Coverage Paths	9,999	9,999	9,999	2,000	2,000	2,000	2,000
925	Coverage Paths Incl. in Call Coverage Report	200	200	200	100	100	100	100
930	Coverage Path per Station	2	2	2	2	2	2	2
935	Coverage Points in a Path	6	6	6	6	6	6	6
940	Remote Coverage Points	10,000	10,000	10,000	999 2,000[97]	999 2,000[97]	999 2,000[97]	999 2,000[97]
945	Max Users/Coverage Path	47,088	47,088	47,088	3,500*	3,500*	3,500*	3,500*
950	Members per CAG	8	8	8	8	8	8	8
955	Time of Day Coverage Tables	999	999	999	999	999	999	999
960	Time of Day Changes per Table	5	5	5	5	5	5	5
965	Remote Admin Coverage Paths	2	2	2	2	2	2	2
970	***CALL DETAIL RECORDING***							
975	Intra-switch Call Trackable Extensions[119]	5,000	5,000	5,000	1,000	1,000	1,000	1,000
980	Max Number of CDR Records That Can Be Buffered in the Switch 54.1	17,326	17,326	17,326	500	500	500	500
985	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	200	200	200	200
990	Survivable CDR: Number of Output Files [55]	N/A	N/A	20	N/A	20	20	20
995	***CALL FORWARDING***							
1000	Call Forwarded Digits (off-net)	16	16	16	16	16	16	16
1005	Total number of Call Forwarded stations	36,000 [71.2]	36,000 [71.2]	36,000 [71.3]	2,400	2,400 [71.1]	2,400 [71.1]	2,400 [71.1]
1010	***CALL PARK***							
1015	Attendant Group Common Shared Ext. Numbers per System[19]	1182	1182	1182	1182	1182	1182	1182
1020	Number of Parked Calls	10,604	10,604	10,604	723	723	723	723
1025	***CALL PICKUP GROUPS: (based on station user max)***							
1030	Call Pickup Members/Group	50	50	50	50	50	50	50
1035	Call Pickup Members/System	36,000	36,000	36,000	2,400	2,400[71.1]	2,400[71.1]	2,400[71.1]
1040	Number of Groups	5,000	5,000	5,000	800	800	800	800
1045	***CALL VECTORING***							
1050	Skills a Call Can Simultaneously Queue to	3	3	3	3	3	3	3
1055	Priority Levels	4	4	4	4	4	4	4
1060	Recorded Announcements/Audio Sources for Vector Delay	3,000	9,000	3,000	3,000	3,000	3,000	3,000
1065	Vector Steps per Vector (32 with prior releases)	99	99	99	99	99	99	99
1070	Vector Directory Numbers	20,000	20,000	20,000	512	512	512	512
1075	CMS Measured VDNs	20,000	20,000	20,000	512	512	512	512
1080	R14 CMS	20,000	20,000	20,000	20,000	20,000	20,000	20,000
1085	Vectors per System (**2,000 capacity requires CMS R13.1 or later**)	2,000	2,000	2,000	256	256	256	256
1090	R14 CMS[80]	7,992	7,992	7,992	7,992	7,992	7,992	7,992
1095	Number of Collected Digits for Call Prompting or CINFO	16	16	16	16	16	16	16
1100	Number of Dial-Ahead Digits for Call Prompting	24	24	24	24	24	24	24
1105	Vector Routing Tables (100 entries per table)	100	100	100	10	10	10	10
1110	BSR Application Routing Tables (forms)	511	511	511	255	255	255	255
1115	BSR Application-Location Pairs[20.5]	2,560	2,560	2,560	2,560	1,000	1,000	1,000
1120	Holiday Tables (15 entries per table)	99	99	99	99	99	99	99
1125	Total non-blank Comment Steps	10,000	10,000	10,000	1,280	1,280	1,280	1,280
1130	Vector Variables (26 with prior releases)	702	702	702	702	702	702	702
1135	Active Collect Local Variables	8,000	12,000	8,000	400	450	450	450
1140	VDN Variables	5	9	5	5	5	5	5
1145	***CALLVISOR ASAI*** (System-wide limits shown unless otherwise noted. Each limit is achievable on a single link.)							
1150	Adjunct Control Associations per Call (3rd party make call or take control)	1	1	1	1	1	1	1
1155	Active Adjunct Control Associations (Simultaneous Active Call Controlled Calls and Max Adj. Transaction Records)	8,000	8,000	8,000	600	600	600	600
1160	Active Adjunct Route Requests	2,000 or 4,000[112]	2,000 or 4,000[112]	2,000 or 4,000[112]	300	300	300	300

	Avaya Communication Manager and Avaya Call Management System	**Release 4 Linux Server Platforms**						
		S8700, S8710, S8720 See Note-2	**S8720XL** See Note-2	**S8500, S8500B, S8500C(*)** See Note-3 and Footnote 71.3	**S8400 New platform in R3.1**	**S8300/G700** See Note-4	**S8300 /G350** See Note-4	**S8300 /G250** See Note-5
1165	Active Notifications per Call	6	6	6	6	6	6	6
1170	Active Notifications per Split Domain	6	6	6	6	6	6	6
1175	Active Notifications per VDN Domain	6	6	6	6	6	6	6
1180	Domain-Control Associations per Call	24	24	24	24	24	24	24
1185	3rd-party Domain-Control Station Associations (Active Station Control Assoc.) - i.e., Domain Trans. Records	32,000	32,000	32,000	2,000	2,000	2,000	2,000
1190	Domain-Control Split/Skill Associations	2,000	2,000	2,000	300	300	300	300
1195	Domain-controllers per Station Domain	4	4	4	4	4	4	4
1200	Domain-controllers per Split/skill Domain	8	8	8	8	8	8	8
1205	Event Notification Associations	10,000	10,000	10,000	300	300	300	300
1210	Max Calls With Send DTMF Active	32	32	32	16	32	32	32
1215	Max Simultaneous Calls Being Classified	600	600	600	600	600	600	600
1220	Simultaneous Billing (MultiQuest) Requests	1,000	1,000	1,000	100	100	100	100
1225	Simultaneous Selective Listening Disconnected Paths	300	300	300	75	75	75	75
1230	***ASAI Traffic***							
1235	Messages/Second per ASAI/BRI Link	30	30	30	30	30?	30?	30?
1240	Inbound Messages/Sec per MAPD CTI Link	200	200	200	120/200[109]	NA	NA	NA
1245	Outbound Messages/Sec per MAPD CTI Link	240	240	240	120/240[109]	NA	NA	NA
1250	Messages/Sec per MAPD (full duplex)	240	240	240	120/240[109]	NA	NA	NA
1255	Messages/Sec. per ASAI/ADJUNCT IP Link (full duplex)	720	720	720	240	240	240	240
1260	Messages/Sec/System (full duplex)	720	720	720	120/240[109]	240	240	240
1265	***Maximum CTI Links***							
1270	Maximum ASAI Links (Open and Proprietary)	64	64	64	64	64	64	64
1275	CTI Links per MFB	4	4	4	NA	NA	NA	NA
1280	CTI Links per MAPD	8	8	8	8	NA	NA	NA
1285	***CONFERENCE***							
1290	Maximum Number of Parties in a Conf	6	6	6	6	6	6	6
1295	Simultaneous 3-way Conf. Calls[21]	10,304	10,304	10,304	161	157/MG	157	157
1300	Simultaneous 6-way Conf. Calls[22]	5,152	5,152	5,152	80	78/MG	78	78
1305	***Meet-Me Conferencing***							
1310	Max Number of Conference Parties	3-6	3-6	3-6	3-6	3-6	3-6	3-6
1315	Max Required Security Code Length	0 or 6	0 or 6	0 or 6	0 or 6	0 or 6	0 or 6	0 or 6
1320	Meet-Me Conference VDNs	1,800	1,800	1,800	175	175	175	175
1325	***Expanded Meet-Me Conferencing (EMMC) NOTE: The Meet-me Conf VDN Maximums apply to EMMC as well.***							
1330	Maximum EMMC Ports	300	300	300	0	300	300	300
1335	Conferees in EMMC	3-300	3-300	3-300	NA	3-300	3-300	3-300
1340	***DATA PARAMETERS***							
1345	Administered Connections	128	128	128	128	NA	NA	NA
1350	***ALPHANUMERIC DIALING***							
1355	Max entries	1,250	1,250	1,250	200	NA	NA	NA
1360	Characters/Entry	22	22	22	22	NA	NA	NA
1365	PRI Endpoints (PE)	50	50	50	25	NA	NA	NA
1370	Access Endpoints (Number of Trunks)	8000	8000	8000	400	NA	NA	NA
1375	***MULTIMEDIA PARAMETERS[3]***							
1380	TN787D MMI Boards	12	12	12	4	NA	NA	NA
1385	TN788B VC Boards	69	69	69	25	NA	NA	NA
1390	MMI and VC Boards in Multiple PN	Yes	Yes	Yes	NA	NA	NA	NA
1395	Multimedia One Number Conferences per System	2000	2,000	2,000	800	NA	NA	NA
1400	Multimedia Dynamic Conference Records	192	192	192	64	NA	NA	NA
1405	***Maximum Number of BRI Connections [101]***	7,000	7,000	7,000	1,000	1,000	1,000 *	1,000 *
1410	***DIGITAL DATA ENDPOINTS***	7,500	7,500	7,500	800	NA	NA	NA
1415	***DIAL PLAN***							
1420	DID LDNs	20	20	20	8	8	8	8
1425	Maximum Extensions (of all types)[24]	49,733	55,733	49,733	3,500*	3,500	3,500	3,500
1430	Station Extensions (included in Maximum Extensions)[24.1]	36,051	36,051	36,051	2,416*	2,416	2,416	2,416
1435	Miscellaneous Extensions (included in Maximum Extensions)[25]	26,258	32,508	26,258	900	900	900	900
1440	Extension Number Portability (UDP Entries)	80,000	80,000	80,000	10,000	10,000	10,000	10,000
1445	***Feature Dial Access Codes***							
1450	Number of Codes[100]	122	122	122	121	122	122	122
1455	Number of Digits in a Feature Access Code	1 - 4	1 - 4	1 - 4	1 - 4	1 - 4	1 - 4	1 - 4
1460	Integrated Directory Entries[27]	36,028	36,028	36,028	2,416	2,416	2,416	2,416
1465	Maximum Extension Size[123]	13	13	13	13	13	13	13

	Avaya Communication Manager and Avaya Call Management System	**Release 4 Linux Server Platforms**						
		S8700, S8710, S8720 See Note-2	**S8720XL** See Note-2	**S8500, S8500B, S8500C(*)** See Note-3 and Footnote 71.3	**S8400 New platform in R3.1**	**S8300/G700** See Note-4	**S8300 /G350** See Note-4	**S8300 /G250** See Note-5
1470	Minimum Extension Size	1	1	1	1	1	1	1
1475	***NAMES***							
1480	Number of names28	48,845	48,845	48,845	4,215	4,215	4,215	4,215
1485	Number of characters in a name	27	27	27	27	27	27	27
1490	***Non-DID LDNs***	666	666	666	50	50	50	50
1495	***EXTENSIONS (total)*** [24]							
1500	Prefix Extensions	Yes	Yes	Yes	Yes	Yes	Yes	Yes
1505	Prefix Extensions Lengths[99]	2-6	2-6	2-6	2-6	2-6	2-6	2-6
1510	***Trunk Dial Access Codes***							
1515	Number of Dial Access Codes	2,218	2,218	2,218	317	317	317	317
1520	Number of digits in DAC	1 - 4	1 - 4	1 - 4	1 - 4	1 - 4	1 - 4	1 - 4
1525	Locations[106]	250[106]	250[106]	250[106]	6	50	50	50
1530	***DO NOT DISTURB (DND)***							
1535	DND Requests per System	36,000	36,000	36,000	2,400	2,400 [71.1]	2,400 [71.1]	2,400 [71.1]
1540	Simultaneous Display Requests	30	30	30	10	10	10	10
1545	***DISPLAY***							
1550	Display Formats	50	50	50	50	50	50	50
1555	Simultaneous Updating Displays	500	500	500	100	100	100	100
1560	***EXPERT AGENT SELECTION (EAS) (note 83)***							
1565	Skill Groups	2,000	2,000	2,000	99	99	99	99
1570	VDN Skill Preferences	3	3	3	3	3	3	3
1575	Max Skills a Call Can Simultaneously Queue to	3	3	3	3	3	3	3
1580	Max Administered ACD Members (login ID / Agent-Skill pairs)[28.1]	180,000	180,000	180,000	6,000	6,000	6,000	6,000
1585	Max Staffed (logged-in) ACD Members[28.3] i.e., agent-skill pairs	60,000	100,000	60,000	1,000	1,000	1,000	1,000
1590	R14 CMS (See Note 80)	100,000	100,000	100,000	100,000	100,000	100,000	100,000
1595	Max Administered Agent Login IDs[28.4]	20,000	20,000	20,000	1,500	1,500	1,500	1,500
1600	***Max Skills per Agent***							
1605	R14 CMS	60	60	60	20	20	20	20
1610	Skill Levels (preferences) per Agent Skill	16	16	16	16	16	16	16
1615	Max Staffed (logged-in) EAS Agents per Skill (members per group)	3,000[28.6]	7,000[28.7]	3,000[28.6]	200	200	200	200
1620	***Max Logged in EAS Agents (per system) when each has:*** [6]							
1625	1 Skill	5,200	7,000	1,000	500	450[71.1]	450[71.1]	40[71.1]
1630	R14 CMS (See Note 80)	41,600	41,600	41,600	41,600	41,600	41,600	41,600
1635	2 Skills	5,200	7,000	1,000	500	450[71.1]	450[71.1]	40[71.1]
1640	R14 CMS (See Note 80)	41,600	41,600	41,600	41,600	41,600	41,600	41,600
1645	4 Skills	5,200	7,000	1,000	250	250[71.1]	250[71.1]	40[71.1]
1650	R14 CMS (See Note 80)	25,000	25,000	25,000	25,000	25,000	25,000	25,000
1655	10 Skills	5,200	7,000	1,000	100	100	100	40
1660	R14 CMS (See Note 80)	10,000	10,000	10,000	10,000	10,000	10,000	10,000
1665	20 Skills	3,000	5,000	1,000	50	50	50	40
1670	R14 CMS	5,000	5,000	5,000	5,000	5,000	5,000	5,000
1675	60 Skills (R12 or later CMS Required)	1,000	1,666	1,000	NA	NA	NA	NA
1680	R14 CMS	1,666	1,666	1,666	NA	NA	NA	NA
1685	OFFER Limits: Total Logged In ACD Agents	5,200	7,000	1,000	500	450	450	40
1690	OFFER: Business Advocate Agents (subset of ACD agents)	5,200	7,000	1,000	500	450	450	NA
1695	***EXTERNAL DEVICE ALARMING***	90	90	90	32	32	32	32
1700	***FACILITY BUSY INDICATORS***							
1705	Buttons per Tracked Resource	500	500	500	100	100	100	100
1710	Number of Station Busy Indicators (SBI)	10,000 25,000[95]	10,000 25,000[95]	10,000	3,600	3,600	3,600	3,600
1715	Facility Busy Indicators per system (SBIs + Queue Status buttons + ((24 DTGS buttons and 2 SBIs on each Attendant) * Attd Max)	18,528 33,528[95.1]	27,764 42,764[95.1]	18,528	10,916	5,868	5,868	5,868
1720	***HUNT GROUPS (NON ACD)*** [28.5]							
1725	Announcements per Group	1	1	1	1	1	1	1
1730	Announcements per System (See Footnote 18)	3,000	9,000	3,000	3000	3,000	3,000	3,000
1735	Total Hunt Groups	2,000	2,000	2,000	99	99	99	99
1740	Members per Group	1,500	1,500	1,500	200	200	200	200
1745	Group Members per System[28.5]	5,200	7,000	5,200	1,000	1,000	1,000	1,000
1750	Queue Slots per Group[7]	NA	NA	NA	NA	NA	NA	NA

	Avaya Communication Manager and Avaya Call Management System	**Release 4 Linux Server Platforms**						
		S8700, S8710, S8720 See Note-2	**S8720XL** See Note-2	**S8500, S8500B, S8500C(*)** See Note-3 and Footnote [71.3]	**S8400 New platform in R3.1**	**S8300/G700** See Note-4	**S8300 /G350** See Note-4	**S8300 /G250** See Note-5
1755	***INTERCOM TRANSLATION TABLE (ICOM): Automatic, Manual and Dial***							
1760	ICOM groups per system	256	256	256	32	32	32	32
1765	Auto/Manual ICOM Groups	256	256	256	32	32	32	32
1770	Dial ICOM Groups	256	256	256	32	32	32	32
1775	***Members per ICOM group***							
1780	Auto/Manual ICOM Groups	32	32	32	32	32	32	32
1785	Dial ICOM Groups	32	32	32	32	32	32	32
1790	Members per System	8,192	8,192	8,192	1,024	1,024	1,024	1,024
1795	***IP Solutions and SIP Specific Capacities (also see sections on OPTIM and Trunks)***							
1800	IP Attendant Consoles and Soft Console capacities: See Attendant category							
1805	Total IP ports (including stations and trunks)[81.1] (See entries under the PORTS category for total ports, including ALL port types)	12,000[71.2]	16000 [71.2]	3,200[71.3] (2400+800)	1,500	900[71.1, 113] (450+450)	900[71.4] (450+450)	900[71.4] (450+450)
1810	TN799 Circuit Packs (C-LAN)	64	106	64	8??	NA	NA	NA
1815	Number of Sockets on PE Interface[75]	NA	NA	2500	1700	1700	1700	1700
1820	Maximum of all IP Media Resources (TN802B + TN2302AP (64-port) + TN2602AP (80 or 320 port) [71.0]	200	200	200	8	built-in VOIP engine	built-in VOIP engine	built-in VOIP engine
1825	OFFER: TN2602AP (IP Media Resource 80) - Part of the Overall Maximum above	128	128	128	2	NA	NA	NA
1830	OFFER: TN2602AP (IP Media Resource 320) - Part of the Overall Maximum above	128	128	128	2	NA	NA	NA
1835	Maximum Port Networks (including G600s and G650s) - Also see 600 and 650 under Cabinets for the number of Cabinets in a PN.	64	64	64	1	NA	NA	NA
1840	System-wide Maximum H.248 media gateways (G250, G350, G700)	250[71.2]	250 [71.2]	250 [71.3]	5	50[71.1, 113]	NA	NA
1845	Maximum H.323 media gateways (G150, R300, MultiTech) - NOT part of the above limit of 250 H.248 media gateways or 64 PNs	250	250	250	80	50	50	50
1850	Total Number of LSPs (include S8300, S8500 Servers)	250	250	250	5	50	50	50
1855	H.248 media gateways per LSP	50[71.2]	50 [71.2]	50 [71.3]	5	50	NA	NA
1865	Offer-defined maximum administered H.323 trunks	8,000	12,000	800	400	450	450	10
1870	Max H.323 IP Stations (part of Overall Station Max)[45]	12,000	12,000	12,000	900	450[71.1,113]	450[71.4]	450[71.4]
1875	Offer-defined maximum concurrently registered IP Stations	12,000	12,000	2,400	900	450	450	10
1880	Offer-defined maximum IP Agents	5,200	5,200	1,000	500	450	450	40
1885	ISDN/IP Trunks (pool of ISDN, IP, and SIP trunk Ports). For SIP Trunk Max: See SIP Server.	8,000[71.2]	12000 [71.2]	8,000 [71.3]	450	450[71.1, 113]	450[71.4]	450[71.4]
1890	Signaling Groups[60]	772	772	772	772	772	772 *	772 *
1895	Number of IP (H.323) Trunk members in a Signaling Group	255	255	255	255	255	255	255
1900	Video-Capable IP trunks (same as IP trunks limit)	8,000[116]	12,000[116]	8,000[116]	450	450[116]	450[116]	450[116]
1905	Video-Capable Stations (same as IP Stations limit - see Voice Terminals Section)	12,000[116]	12,000[116]	2,400[116]	900	450[71.1,113, 116]	450[71.4, 116]	450[71.4, 116]
1910	OFFER: maximum video capable H.323 stations	12,000	12,000	2,400	900	450	450	10
1915	OFFER: maximum video capable IP Softphones	12,000	12,000	2,400	900	450	450	10
1920	Number of Simultaneous Video Calls	1,000	1,000	1,000	250	75 [116]	75 [116]	75 [116]
1925	***Remote Office Feature Group (also see Footnote 114)***							
1930	Remote Office Gateways (R300, and H.323 RO Gateway G150)	See entry for H.323 media gateways.	See entry for H.323 media gateways	See entry for H.323 media gateways	See entry for H.323 media gateways	See entry for H.323 media gateways	See entry for H.323 media gateways	See entry for H.323 media gateways.
1935	OFFER: Maximum Administered Remote Office Stations	12,000	12,000	2,400	900	450	450	450
1940	OFFER: Maximum Administered Remote Office Trunks	8,000	12,000	800	400	450	450	0
1945	***SIP Enablement Services (SES, a.k.a. CCS)***							
1950	SIP Maximum Trunks supported (Linux platforms only). Part of ISDN/IP/SIP trunk pool	5,000[71.2]	5,000[71.2]	800[71.2]	450	450[71.1, 113]	450	450
1955	OFFER: maximum administered SIP trunks	5000	5000	800	400	450	450	10
1960	SIP-SES: Number of Edge Nodes in a SIP domain	1	1	1	1	1	1	1
1965	SIP-SES: Number of Home Nodes per domain	20	20	20	20	20	20	20
1970	SIP-SES: Number of Home SESes per Communication Manager server (based on Communication Manager support of max 32 TLS links, and 2 links per Home)	16	16	16	16	16	16	16
1975	SIP-SES: Number of SIP Users per Home Node (Performance Pack: See Footnote 120)	3,500[120]	3,500[120]	3,500[120]	3,500[120]	3,500[120]	3,500[120]	3,500[120]

	Avaya Communication Manager and Avaya Call Management System	Release 4 Linux Server Platforms						
		S8700, S8710, S8720 See Note-2	**S8720XL** See Note-2	**S8500, S8500B, S8500C(*)** See Note-3 and Footnote 71.3	**S8400 New platform in R3.1**	**S8300/G700** See Note-4	**S8300 /G350** See Note-4	**S8300 /G250** See Note-5
1980	SIP-SES: Number of IM (Instant Message) Clients per node	500	500	500	500	500	500	500
1985	OFFER: SIP stations	12,000	12,000	2,400	450	450	450	450
1995	***Maximum Bridged Call Appearances and Extended Bridged Groups: See Entry above under Call APPEARANCES and BRIDGED CALL APPEARANCES***							
2000	***SBS (Separation of Bearer and Signaling) - NOTE: For S8300, the platform maximums for stations and trunks must be taken as the limiting factor.***							
2005	SBS Trunks	1,000	1,000	1,000	1,000	1,000 *	1000 *	1000 *
2010	SBS Stations	500	500	500	500	500 *	500 *	500 *
2015	***S8300 specific capacities (NOTE: Some are applicable to S8300/G700 but not applicable to S8300/G350. For example, G700 supports stacked media gateways, but G350 does not). Embedded Voice Mail applies to the S8400***							
2020	Max Media Modules per Stacked Gateway (4MMs per media gateway)	NA	NA	NA	NA	40 (10MGs*4)	NA 71.4	NA 71.4
2025	Total TTRs per Stacked Gateway (10 media gateways/stack)	NA	NA	NA	NA	64	15	16
2030	Tone Detection Devices per Gateway (General) 39	NA	NA	NA	NA	15	15	15
2035	ASAI CTI Links	NA	NA	NA	NA	64 (with ICC)	64 (with ICC)	64 (with ICC)
2040	***Embedded Voice Mail***							
2045	Number of Mail Boxes	NA	NA	NA	450	450	450 71.4	450 71.4
2050	Number of Ports	NA	NA	NA	8	8	8	8
2055	Number of Hours of Storage	NA	NA	NA	1400	1,400	1,400	1,400
2060	***Embedded Announcements***							
2065	Announcement Files	NA	NA	NA	NA	256	256	256
2070	Minutes of Recording	NA	NA	NA	NA	20	10	10
2075	Number of Simultaneous Playback Channels	NA	NA	NA	NA	15	6	6
2080	Number of Record Channels	NA	NA	NA	NA	1	1	1
2085	***LAST NUMBER DIALED***							
2090	Entries/System 29	43,528	43,528	43,528	3,216	3,216	3,216	3,216
2095	Number of Digits	24	24	24	24	24	24	24
2100	***LEAVE WORD CALLING (SWITCH BASED) and MESSAGE WAITING***							
2105	System-wide Messages Stored	12,000	12,000	12,000	2,000	2,000	2,000	2,000
2110	Max Remote Leave Word Calling Messages	2,000	2,000	2,000	1,000	1,000	1,000	1,000
2115	Messages per User	125	125	125	125	125	125	125
2120	***REMOTE MESSAGE WAITING INDICATORS***							
2125	Remote MWI per Extension	80	80	80	80	80	80	80
2130	Remote MWI per System (Linux Servers: Station user max / 20; G3CSI: Station user max / 10)	1,800 117	1,800 117	1,800	120	240	240	240
2135	Simultaneous Message Retrievers	400	400	400	60	60	60	60
2140	System-wide Super Message Retrievers (can retrieve anyone's messages)	10	10	10	10	10	10	10
2145	***MALICIOUS CALL TRACE***							
2150	Max Simultaneous Traces	16	16	16	16	16	16	16
2155	***MULTIPLE LISTED DIRECTORY NUMBERS (MLDN)***							
2160	Via DID	20	20	20	8	8	8	8
2165	Via DID w/Tenant Partition	100	100	100	20	20	20	20
2170	Via CO	2,000	2,000	2,000	99	99	99	99
2175	***MODEM POOL GROUPS - Mode 2/Analog 3***							
2180	Group members per system	2,016	2,016	2,016	160	160	160	160
2185	Number of groups	63	63	63	5	5	5	5
2190	Members per group	32	32	32	32	32	32	32
2195	***NETWORKING (also see Trunks)***							
2200	CAS RLT Nodes	99	99	99	99	99	99	99
2205	***DCS Nodes 31***							
2210	TCP/IP	63	63	63	63*	63*	63*	63*
2215	ISDN PRI (Public and/or Private)	63	63	63	63*	63*	63*	63*
2220	Hybrid (combination of PRI, BX.25, & TCP/IP)	63	63	63	63*	63*	63*	63*
2225	ENP Nodes 32	999	999	999	999	999	999	999
2230	***QSIG Nodes: No Fixed Node Capacity See Footnote 73.***							
2235	***QSIG/DCS Interworked Nodes 76***	63	63	63	63*	63*	63*	63*
2240	***OPTIM Applications such as EC500, OPS, SCCAN, CSI 105***							
2245	Number of OPTIM applications per Station (EC500, OPS, SCCAN, CSP)	4	4	4	4	4	4	4
2250	Software-defined Station Capacity 104	36,000 71.2, 120	36,000 71.2,120	36,000 71.2,120	2400	2,400	2,400 71.4	2,400 71.4
2255	OFFER: maximum EC500 telephones	36,000	36,000	2,400	450	450	450	450

	Avaya Communication Manager and Avaya Call Management System	**Release 4 Linux Server Platforms**						
		S8700, S8710, S8720 See Note-2	**S8720XL** See Note-2	**S8500, S8500B, S8500C(*)** See Note-3 and Footnote 71.3	**S8400 New platform in R3.1**	**S8300/G700** See Note-4	**S8300 /G350** See Note-4	**S8300 /G250** See Note-5
2260	OFFER: OPTIM-OPS stations (for SIP and Motorola endpoints)	12,000	12,000	2,400	450	450	450	450
2265	OPTIM Mapping Table Capacity	54,000	108,000	54,000	9,600	9,600	9,600	9,600
2270	***PAGING***							
2275	Code Calling IDs	125	125	125	125	125	125	125
2280	Loudspeaker Zones	9	9	9	9	9	9	9
2285	***Group Paging using Speaker Phone*** [50]							
2290	Number of Groups	32	32	32	32	32	32	32
2295	Members per Group	32	32	32	32	32	32	32
2300	***PARTITIONS***							
2305	Attendant Groups (System wide)	128	414	128	16	68	68	68
2310	Tenant Partitions	100	100	100	100	100	100	100
2315	Multiple Music on Hold Sources	100	100	100	100	100	100	100
2320	***PERSONAL CO LINES (PCOL)***							
2325	PCOL Appearances	16	16	16	16	16	16	16
2330	PCOL Lines (Trunk Groups)	200	200	200	200	200	200	200
2335	PCOL Trunks per Trunk Group	1	1	1	1	1	1	1
2340	***PORTS (Max Ports including stations and trunks)***							
2350	OFFER-defined maximum number of ports	44,000	48,000	3,200	1,300	900	900	900
2355	***Maximum PORT CIRCUIT PACK SLOTS*** [34]							
2360	***Per PN***							
2365	MCC Standard Reliability	99	99	99	NA	NA	NA	NA
2370	SCC Standard Reliability	71	71	71	NA	NA	NA	NA
2375	***RECORDED ANNOUNCEMENTS / AUDIO SOURCES***							
2380	Announcement/Audio Source Extensions per System [18]	3,000	9,000	3,000	3,000	3,000	3,000	3,000
2385	***Analog & Aux Trunk Announcements***							
2390	Queue Slots per Announcement	1,000	1,000	1,000	150	1,000	1,000	1,000
2395	Queue Slots per System	1,000	1,000	1,000	150	1,000	1,000	1,000
2400	Calls Connected to Same Announcement	1,000	1,000	1,000	150	1,000	1,000	1,000
2405	***Integrated Announcements***							
2410	Queue Slots for System	4,000	4,000	4,000	200	4,000	4,000	4,000
2415	Calls Connected to Same Announcement	1,000	1,000	1,000	50	1,000	1,000	1,000
2420	VAL Boards (TN2501)	10	128	10	5	NA	NA	NA
2425	OFFER LIMIT: VAL Boards (TN2501)	10	128	10	5	NA	NA	NA
2430	Total Announcement Sources: Integrated Boards on PNs plus embedded **vVAL** Sources on G250/G350/700 media gateways	10 TN2501 + 250 vVAL	128 TN2501 + 250 vVAL	10 TN2501 + 250 vVAL	5 TN2501 + 5 vVAL	50 vVAL Announcement Sources	5 vVAL Announcement Sources	1 (No subtending media gateways)
2435	***TN2501AP (VAL) Boards in Port Network Gateways (G650, G600, CMC1, MCC1, SCC1)***							
2440	Channels per Board (Playback Ports)	31	31	31	31	NA	NA	NA
2445	Maximum Announcements per TN2501 Board (Firmware 17 or later otherwise limited to 256)	1,024	1,024	1,024	1,024	NA	NA	NA
2450	Board Content Saved[91]	All active boards	All active boards	All active boards	All active boards	NA	NA	NA
2455	***Recording Time per Board (in Minutes)*** [90]							
2460	Low-end Option (Max. 1 Board)	10	10	10	10	NA	NA	NA
2465	High-end Option (with up to 5 Boards for CSI; 10 for S8700/S8710)	60	60	60	60	NA	NA	NA
2470	***G600 Embedded Integrated SSP (Scalable Speech Processor) Announcements*** [3.1]							
2475	SSP Boards	1 per G600	1 per G600	NA	NA	NA	NA	NA
2480	Channels per SSP Integ. Announcement Circuit Pack	8	8	NA	NA	NA	NA	NA
2485	Maximum Announcements per Board	128	128	NA	NA	NA	NA	NA
2490	Board Contents Saved	All	All	NA	NA	NA	NA	NA
2495	***Recording Time (Min)*** [3.1]							
2500	16 KB recording	240	240	NA	NA	NA	NA	NA
2505	32KB recording	120	120	NA	NA	NA	NA	NA
2510	64KB recording	60	60	NA	NA	NA	NA	NA
2515	***Embedded Media Gateway Integrated Virtual VAL (Voice Annc. Over LAN) vVAL Announcement Sources***							
2520	Channels per Source (playback ports) - depends on the Media Gateway (lower number for G250/G350, higher number for G700)	6 or 15	6 or 15	6 or 15	6 or 15	15	6	6
2525	Maximum Announcements per Source	256	256	256	256	256	256	256
2530	Source Contents Saved (VAL FTP download)	All active boards	All active boards	All active boards	All active boards	All active boards	All active boards	All active boards

	Avaya Communication Manager and Avaya Call Management System	**Release 4 Linux Server Platforms**						
		S8700, S8710, S8720 See Note-2	**S8720XL** See Note-2	**S8500, S8500B, S8500C(*)** See Note-3 and Footnote [71.3]	**S8400 New platform in R3.1**	**S8300/G700** See Note-4	**S8300 /G350** See Note-4	**S8300 /G250** See Note-5
2535	Recording Time per Source in Minutes - depends on the Media Gateway (lower number for G250/G350, higher number for G700)	10 or 20	10 or 20	10 or 20	10 or 20	20	10	10
2540	***Locally Sourced Music and Announcements (LSMA) - Allows "announcements" & "audio groups" to also be used as Music on Hold sources.***							
2545	Audio Groups (for announcements/music) [121]	50	50	50	NA	50	5	1
2550	Sources per Audio Group (VAL and/or vVAL)	250	378	250	NA	50	5	1
2555	Administered Announcement Files [122]	3,000	12,000	3,000	NA	3,000	256	256
2560	MOH Groups (for assignment as the system music source or Tenant Partition Multiple Music Source)	10	10	10	NA	10	1	1
2565	Analog/Aux Trunk Sources (Ports) per MOH Group	250	250	250	NA	250	NA	NA
2570	Unique Analog/Aux Trunk MOH Ports per System (each referenced only once)	250	250	250	NA	250	NA	NA
2575	***SIP Enablement Services (See IP Solutions and SIP Specific Capacities)***							
2580	***STATIONS (See Voice Terminals; also see Ports for maximum ports including Stations and trunks)***							
2585	***SYSTEM ADMINISTRATION***							
2590	Number of Login IDs: Customer + Service	50 + 5	50 + 5	50 + 5	11 + 5	11 + 5	11 + 5	11 + 5
2595	Admin History Log File Entries	1,800	1,800	1,800	500	500	500	500
2600	Simultaneous Admin Commands [2]	10	10	10	1	1	1	1
2605	Simultaneous Maintenance Commands [2]	5	5	5	1	1	1	1
2610	Simultaneous System Management Sessions [2]	15	15	15	5	5	5	5
2615	Number of Scheduled Reports	50	50	50	50	50	50	50
2620	Access Security Gateway Session History Log Entries	250	250	250	100	100	100	100
2625	***SPEECH SYNTHESIS CIRCUIT PACKS***							
2630	Number of Speech Synthesis Circuit Packs	40	40	40	6	NA	NA	NA
2635	Channels per Speech Circuit Pack	4	4	4	4	NA	NA	NA
2640	***TERMINATING EXTENSION GROUPS (TEG)***							
2645	TEGs	32	32	32	32	32	32	32
2650	Users That May Share a TEG	4	4	4	4	4	4	4
2655	***TIME SLOTS [36]***							
2660	Simultaneous Circuit Switched Calls [36]	15,424	15,424	15,424	242	236	236	117
2665	Total Time Slots	32,768	32,768	32,768	512	512[71.1]	512[71.4]	256[71.4]
2670	Time Slots for Voice & Data [38]	30,976	30,976	30,976	484	472[71.1]	472[71.4]	234[71.4]
2675	Time Slots per Port Network	512	512	512	512	512/MG	512/MG	256/MG
2680	***TONE CLASSIFIERS***							
2685	Tone Receivers (General) [39]	1,200	8,000	1,200	200	15 / G700	15 / G350	15 / G350
2690	TTR Queue Size	4	4	4	4	NA	NA	NA
2695	Prompting TTR Queue Size	80	80	80	80	NA	NA	NA
2700	***TRUNKS (For Max IP trunks, SIP trunks, Signaling Groups etc., also see IP Solutions)***							
2705	DS1 Circuit Packs including MM710s on S8300s (PRI/Station only, Total (PRI+Line-side DS1)	522 688[94]	522 688[94]	522[94]	30	Max 15 MM710s as E1s or 20 MM710 as T1s [94.1]	5 MM710s [94.1]	N/A G250 does not support BRI MM
2710	OFFER: DS1 with Echo Cancellers	522 688[94]	522 688[94]	80	30	80	NA	NA
2715	Queue Slots for Trunks	4,000	4,000	4,000	198	198	198	198
2720	Max Number of Trunks of all types in System	8,000[71.2,102]	12,000[71.2,102]	8,000[71.2,102]	400	450[71.1,102]	450[71.4,102]	450[71.4,102]
2725	***Total PRI Interfaces [40]***	522	522	522 [94]	30	NA	NA	NA
2730	Qty Emulated Circuits per ATM CES Interface	8	8	8	8	NA	NA	NA
2735	Qty of PRI D-channels per ATM CES Interface	8	8	8	8	NA	NA	NA
2740	Max Quantity ATM Interfaces used for CES per PN	2	2	2	2	NA	NA	NA
2745	Max Quantity ATM Interfaces used for CES per System	88	88	88	2	NA	NA	NA
2750	Max Quantity ATM Interfaces (CES+PNC) per system	88[103]	176	88[103]	2	NA	NA	NA
2755	***BRI TRUNKS [42]***							
2760	BRI Trunk Circuit Packs	250	250	250	250 *	250 [42.2]	250 [42.2]	250 [42.2]
2765	BRI Trunks (Max B-Channels * Max Boards and/or MMs) [42.1]	6,000 [42.3]	6,000 [42.3]	6,000 [42.3]	4,000	4,000[71.1]	4,000[71.4]	4,000[71.4, 42.3]
2770	***SBS Trunks (See IP Solutions)***							
2775	***ISDN Temporary Signaling Connections***							
2780	TSCs in System	8,256	8,256	8,256	656	656	656	656
2785	Call Associated TSCs	8,000	8,000	8,000	400	400[71.1]	400[71.4]	400[71.4]
2790	Non Call Associated TSCs	999	999	999	256	256	256	256
2795	Administered / Fixed TSCs	250	250	250	128	128	128	128
2800	***Ringback Queue Slots***	1,332	1332	1,332	198	198	198	198

	Avaya Communication Manager and Avaya Call Management System	**Release 4 Linux Server Platforms**						
		S8700, S8710, S8720 See Note-2	**S8720XL** See Note-2	**S8500, S8500B, S8500C(*)** See Note-3 and Footnote [71.3]	**S8400 New platform in R3.1**	**S8300/G700** See Note-4	**S8300 /G350** See Note-4	**S8300 /G250** See Note-5
2805	***Trunk Groups***							
2810	Trunk Group Hourly Measurements	75	75	75	25	25	25	25
2815	Trunk Groups in the System	2,000	2,000	2,000	99	99	99	99
2820	PRI Call-By-Call Trunk Groups in the System (part of the total trunk groups in the system)	200	200	200	10	10	10	10
2825	Trunk Members in a Trunk Group	255	255	255	99	99	99	99
2830	***ISDN / IP / SIP Trunks (also see section on IP Solutions and SIP specific capacities)***							
2835	Incoming Call Handling Treatment (ICHT) per Trunk Group	540	540	540	54	54	54	54
2840	Incoming Call Handling Treatment (per System)	9,999	9,999	9,999	288	288	288	288
2845	User Defined Services	60	60	60	24	24	24	24
2850	Usage Allocation Entries (per Plan)	15	15	15	15	15	15	15
2855	Number of entries in the Public Unknown Numbering form (for outgoing Caller ID/ANI)	9,999	9,999	9,999	240	240	240	240
2860	***VOICE TERMINALS[43] (For Blade Server, Station Max is 500)***							
2865	Associated Data Modules (e.g. DTDMs)	NA	NA	NA	NA	NA	NA	NA
2875	OFFER: maximum stations	36,000	36,000	2400	900	450	450	15
2880	***BRI (Point-to-Point and Multipoint) Stations (part of the Overall Max)[44]***							
2885	Point-to-Point	7,000	7,000	7,000	1,000	1,000*	1,000*	1,000*
2890	Multipoint (Passive Bus)	7,000	7,000	7,000	1,000	1,000*	1,000*	1,000*
2895	Digital Stations (part of the Overall Max)[45]	36,000[71.2, 101]	36,000[71.2, 101]	36,000[71.3, 101]	2,400	2,400[71.1,113]	2,400[71.4]	2,400[71.4]
2900	Display Stations (part of the Overall Max)	36,000[71.2, 101]	36,000[71.2, 101]	36,000[71.3, 101]	2,400	2,400[71.1,113]	2,400[71.4]	2,400[71.4]
2905	IP Stations (part of Overall Station Max)[45]	12,000	12,000	2,400	900	450[71.1,113]	450[71.4]	450[71.4]
2910	OFFER: Maximum concurrently registered IP Stations	12,000	12,000	2,400	900	450	450	10
2915	OFFER: Maximum concurrently registered UNAUTHENTICATED IP Stations	12,000	12,000	2,400	900	450	450	10
2920	Station Button Capacity (K Units)[47]	17,496	17,496	17,496	662.4	662.4	662.4	662.4
2925	Number Of Administrable Physical Buttons	1,440,000	1,440,000	1,440,000	54,250	54,400	54,400	54,400
2930	Maximum Buttons with Customizable Labels per System	1,440,000	1,440,000	1,440,000	54,250	54,400	54,400	54,400
2935	Station Button Feature Capacity[48]	15,900	15,900	15,900	15,900	15,900	15,900	15,900
2940	***VUSTATS***							
2945	Measured Agents or Login Ids	3,000	3,000	3,000	400	400[71.1]	400[71.4]	400[71.4]
2950	Measured Splits/Skills	600	600	600	99	99	99[71.4]	99[71.4]
2955	Measured Trunk Groups	32	32	32	32	32	32[71.4]	32[71.4]
2960	Measured VDNs	512	512	512	99	99	99[71.4]	99[71.4]
2965	Max VuStat Buttons[118]	1000	1000	1000	100	100	100	100
2970	System Max Simultaneous Updating Displays	500	500	500	100	100	100	100
2975	***Reporting Periods***							
2980	Intervals	25	25	25	25	25	25	25
2985	Days	1	1	1	1	1	1	1
2990	***Reporting Adjunct Switch Links***							
2995	R3V9/R3V11/R12/R13/R13.1 CMS	1 or 2	1 or 2	1 or 2	1 or 2	1 or 2	1 or 2	1 or 2
3000	R14 CMS and 4.0 CCR[87]	2 or 4	2 or 4	2 or 4	2 or 4	2 or 4	2 or 4	2 or 4
3005	***CMS Capacities (see note 84.2 for R14 orderable models)***							
3010	**CMS Capacity Item**	**R14 CMS Total Capacity**						
3015	ACDs (multi-ACD configuration)	8						
3020	ACD Admin Log Records	30,000						
3025	Agent Traces Active	400						
3030	Agent Trace Records	500,000						
3035	Call Records (internal)	5,000						
3040	CWC[85]	1,999						
3045	Max CWCs collected in the call record	6						
3050	Exception Records	2,000						
3055	External Call History Busy Hour Calls (limit for an hour)	99,000						
3060	Logged-in Agent-Split/Skill Pairs[94]	100,000						
3065	Splits/Skills per ACD	2,000						
3070	Skills over 8 ACDs	16,000						
3075	Login/Logout Records	999,999						

Avaya Communication Manager and Avaya Call Management System		**Release 4 Linux Server Platforms**						
		S8700, S8710, S8720 See Note-2	**S8720XL** See Note-2	**S8500, S8500B, S8500C(*)** See Note-3 and Footnote [71.3]	**S8400 New platform in R3.1**	**S8300/G700** See Note-4	**S8300 /G350** See Note-4	**S8300 /G250** See Note-5
3080	With R14 this is the Measured Trunk limit across all ACDs. It was Measured + Unmeasured Trunks prior to R14[84.1]	40,000						
3085	Unmeasured Trunks across all ACDs	20,000						
3090	Unmeasured Trunks for a single ACD	6,000						
3095	Measured Trunk Groups	8,000						
3100	Locations / Location IDs	250						
3105	Simultaneous active client sessions[86]	400						

Avaya Communication Manager/CMS Release 4.0
System Capacities Table – Footnotes

NOTE:

1. **The Release 4.0 Capacities Table contains Communication Manager Offer limits. This footnote explains some of the contents in the Capacities Table and some of the major offer limits.**
2. **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.**
3. **Special Applications-based capacity differences are highlighted in green.**
4. **Release 4.0 capacity changes are identified as such in these footnotes.**

Footnote Number:	***Detailed Description***
*	***The software-defined capacity cannot be reached due to hardware and/or processor capacity limits for the platform.***
Note:	***Mixed Port Network Connectivity (PNC) allows for IP-Connected PNs to co-exist with either ATM or Center Stage Fiber-onnected PNs. This applies to Media Server systems S8700, S8710, and S8720. S8500 systems support Direct-Connect Fiber (3 or less PNs) and IP-Connected PNs.*** ***CMC1, G600 are strictly IP-Connected PNs.*** ***G700/G350/G250 are H.323 media gateways.*** ***G650, GMCC1 and SCC1 can be IP-Connected or ATM/ Center Stage Fiber-connected PNs.***
Note:	***On Server Platforms:*** ***1. S8400 is a NEW platform introduced in R3.1 (capacities similar to the G3csi with some differences).*** ***2. S8720 is a NEW platform introduced in R3.1 (same capacities as S8700 and S8710).*** ***The S8720XL introduced in 4.0 supports larger capacities for certain features.*** ***3. Discontinued Platforms:*** • ***The S8100 is NOT sported with Communication Manger R 2.1 and beyond.*** • ***The DEFINITY Server R is discontinued since December 8, 2003****. The DEFINITY Server R cannot be upgraded to Communication Manager 2.0 and beyond,* ***but upgrades to Communication Manager R1.3.x will be sold until November 2004****. Please consult Upgrades and Additions for Avaya DEFINITY Server R, 555-233-115, for information about upgrading to Communication Manager 1.3.* • ***The G3si platform is NOT supported starting with R3.0.*** • ***Category B Offer is NOT supported starting with R3.0.*** • ***The CSI Platform is NOT supported starting with R4.0***
1	There is no limit on the maximum number of auto dial buttons (other than the system limit on button capacity). See Station Button Capacity for system button limitations.
2	System Management sessions are used for system administration and maintenance purposes, and some of the platforms allow multiple simultaneous sessions. The S8700 and S8710 offers, for example, can support 15 simultaneous sessions. But the system allows maximum 10 simultaneous admin sessions for add/change, etc., as long as they are not accessing the same data; for example 2 admin users cannot change the same station object simultaneously. Commands such as test, busyout, release, status are maintenance commands, and up to 5 such simultaneous commands can be issued in addition to the admin commands, as long as they are not accessing the same data, and the command is not designated as a 'single user' command.
3	Feature only supported on Fiber Connected Port Networks (ATM or Direct-Connect or CCS). PNs may include MCC1, SCC1, and G650.
3.1	Feature only supported on IP-Connected Port Networks. PNs may include CMC1, G600, SCC1, and MCC1.
4	(Footnote removed)

Avaya Communication Manager/CMS Release 4.0
System Capacities Table – Footnotes

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 (with C-LAN) refers to the size of the IP routing table accessed by the "change ip-route" command.

4.2 (Footnote removed)

4.3 Although the system supports 10 QSIG hunt groups, the number of messaging adjuncts depends on the PRI signaling groups on 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 (e.g., 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.

4.5 The number of CMS adjuncts using C-LAN for connectivity to the switch counts toward the maximum capacity of TN799 circuit packs (C-LAN). The S8300 provides LAN connectivity via its native NIC and does **not** use C-LAN.

4.6 These links can be administered over the C-LAN TN799 circuit pack.

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 any platforms that run Communication Manager R2.1 or due to the R2.1 Dynamic Hunt Group Queue Slot Allocation feature. Hunt group queue slots are now 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 1,000 for the CSI/S8300 server platforms and 15,000 for the S8500/S8700/ S8710/S8720 platforms (increased from 12K in Communication Manager R4.0).

8 Plus up to 7 Inter-eXchange Carrier (IXC) digits.

9 This is the number of available 12-character inserted-digit-strings available for AAR/ARS preferences.

10 The number of attendant consoles listed is per software limitations. One console is supported per CMC without supplemental power.

10.1 (Footnote removed)

10.2 Crisis Alert Stations: Crisis Alert buttons can be administered on attendant consoles, and 10 additional digital stations.
In Communication Manager R3.0, on the 8700/8710 platforms ONLY, a SPECAL GREEN FEATURE increases this capacity to 250 Crisis Alert Stations.

11 The number of release link trunk groups counts towards the total number of trunk groups in the system.

12 "Maximum number of queue slots" is referred to as "emergency access queue length" in G3 SI.

12.1 The Monitor Split command shows the status for only 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 command and is limited by the active maintenance commands limit, reduced by 2 in G3r and by 3 in the S8700, S8710 platform (2 active command slots are reserved for the INADS and SAT logins respectively).

13 **EPNs:** Only EPNs in the G3si/S8500 (direct connect migration), G3R and S8700, S8710 Multi-Connect systems can be DS1-remoted EPNs.
The numbers reflect the number of cabinets, not the number of EPNs.
The entries in the S8500 and S8700, S8710 (MC and IPC) columns reflect the PNs (and in brackets, the number of stacked cabinets per PN).
In a Mixed PNC environment, scalability increases for Center Stage Switch/Direct Connect 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.
- The Direct Connect is limited to 3 PNs, but it can now have 61-63 IP-Connected PNs associated with it.

R3.1, S8400: In its initial release the TN8400 supports only the port network in which it resides**. It does not support any EPNs** and therefore the CMC, G600 and G650 quantities listed for the S8400 under EPNs are listed as NA.

14 (Footnote removed)

15 Extended 64 bridged appearances (principal + 63) are supported on all platforms when ASAI is not used. The capacity is 16 with ASAI (Category A only).

16 The number of call appearances is the sum of primary and bridged appearances; at most 10 can be primary. A maximum of 54 administrable buttons can be supported for the 7434 terminal without display.

The 8434 terminal with display and expansion module can support up to 52 call appearances.

A maximum of 96 administrable buttons can be supported on the 9630, 9640, and 9650 IP telephones when equipped 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 absolute maximum number of parties on a call (7 parties) is the guiding principle.

18 For administering announcements beyond 256: The Call Center Release must be set to R8.1 or later. To access greater than 256, specifically refer to an announcement number greater than 256, for example, "change announcement 300". The administrator then has access to another 16 pages and so on.

19 Shared extensions must be shared among all attendant groups in the system including Tenant Partition scenarios.

20 With SA8661: 2050 AWU requests in 15-min. interval.

20.1 VDNs are counted as part of the miscellaneous extensions capacity which counts VDNs, hunt groups, announcements, LDNs, TEGs, PCOL groups, access endpoints, administered TSCs, and Code Calling IDs extensions and common shared extensions. VDNs also share message server table space. In addition, 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. Also, the total of all extensions assigned for any purpose cannot exceed the platform Maximum Extensions limit (See the Dial Plan section for details).

20.5 BSR (Best Service Routing) application numbers is limited to 511 and location numbers is limited to 255.

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21 Simultaneous 3-way Conference Call = ROUND_DOWN (484 / 3) times number Port Networks.
NOTE: These are for non-IP endpoints. 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.

22 Simultaneous 6-way Conference Call = ROUND_DOWN (484 / 6) times number Port Networks.
NOTE: These are for non-IP endpoints. 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.

23 (Footnote removed)

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 extension groups, PRI endpoint groups and trunk group extensions.

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.

Note that Access Endpoints are actually tied to the number of trunks, not the number of trunk groups.

26 (Footnote removed)

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 (Footnote 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 (e.g., VRUs), non-ACD hunt groups (groups with or without queues, Message Center Service, INTUITY/AUDIX, Remote AUDIX, 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. Here are Login ID limits for different numbers of skills per Login ID:

Maximum Login IDs With	**CSI/SI (R9/R10/1.x/2.0) or S8100/S8300 (1.x or later)**	**R (R9/R10/1.x/2.0) or S8700/S8710 (1.1 or later)**	**S8500, S8700, S8710 (1.3 or later)***
1 to 4 Skills Each	1,500	10,000	20,000
9 Skills Each	666	7,222	20,000
10 Skills Each	600	6,500	18,000
20 Skills Each	300	3,250	9,000
60 Skills Each	NA	NA	3,000

*The Login ID-Skill pair limit for S8500/S8700/S8710 increased to 180,000 with R1.3.

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 or ead-mia hunt group types. Otherwise the capacity is 1,500 agents in a skill.

28.7 This capacity is supported only with ucd-mia and, ead-mia hunt group types and optionally with ucd-loa and ead-loa hunt group types otherwise the capacity is 1,500 agents in a skill (PAD and SLM types are limited to 1,500). The option to support 7,000 agents in a loa type skill changes the architecture for occupancy selection to a more granular/coarse approach.

29 Last Number Dialed Entries = Stations + Digital Data Endpoints + Attendant Consoles

31 Intuity supports 20 DCS nodes.

32 These numbers are node number addresses.

33 On Larger systems, Coverage Answer Groups are 1/4th of Station User Maximum; 9,000 (36000/4) on S87xx.

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 board. There may be other service circuits required which would further reduce the number of port slots available. In G3R and G3si MCC port carriers, the service slots may be equipped with service boards that do not require tip and ring connections.

35 (Footnote removed)

36 242 Simultaneous Circuit Switched Calls per port network. Multimedia calls tend to be multi-party calls. See Communication Manager Hardware and Traffic Guidelines for further details.

37 (Footnote removed)

38 484 time slots for voice and data per port network.

39 The switch uses the port network TN744 Call Classifier/Detector for basic TTR use as well as call prompting/call classification/MFC. In addition, the TN2182 Tone/Clock/Detector is used for multiple tone detection functions. With H.248 IP gateways (e.g., G700) the embedded processor board provides local tone detectors for these functions. The number of TN748, TN420, or TN744 boards is limited only by the number of available slots. The number of TN2182 boards is limited only as described in Communication Manager Hardware and Traffic Configuration Guidelines. There is a single limit on the total number of tone receiver (classifier) ports for the system.

- TN748/TN420 have 4 ports for TTR use.
- TN748/TN420 have 2 ports for GPTD use.
- TN744 has 8 ports for call prompting/call classification/MFC/TTR/GPTD use.
- TN2182 has 8 ports for call prompting/call classification/MFC/TTR/GPTD use.
- On the G700s: the maximum Tone Receivers per G700 was increased from 12 to 15 in Communication Manager R1.3. It should be noted that in spite of this enhancement, 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.
- The IPSIs have 8 TTR resources embedded within them.

40 Counts towards the total number of DS1 circuit packs.

41 Total number of Measured Trunks supported by the DEFINITY CSI Server system is 400. However, the limit as per the DEFINITY CSI Offer Document is 390.

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 BRI trunks supported by a DEFINITY CSI Server system: A CSI is limited to 512 Data Link Connection Identifiers (DLCI), of which only 320 may be used for BRI trunks. Each BRI port takes 4 DLCIs, so that allows for 80 ports. Because each "port" is really 2B+D, there are two BRI trunks per port. Therefore, 80 ports equates to 160 BRI trunks. However, since the system-wide trunk maximum is 100, the maximum BRI trunks supported for CSI is also 100. For the S8300, it is 400 since the system maximums for S8300 follow the SI maximums.

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).
In Communication Manager R2.2 and beyond all Linux platforms of Communication Manager software (S8700/S8710, S8500/S8500B, S8300) support **maximum 250 BRI trunk boards.** This includes TN2185, TN556 (suffix C and later), MM722 and MM720 that are administered using the "add bri trunk" command. Note that the 720 can be either NT or TE mode, but as long as it is administered as a trunk board it counts towards that maximum.

For S8300/G700:

1. Although software allows maximum 250 BRI trunk boards, the physical limit is different, since it supports **maximum 50 Media Gateways** (could be a combination of G700, G350 and G250s as media gateways), and the maximum BRI boards is based on the type of media gateway and how many Media Modules (MM) they can support.
   - G700 Media Gateways support maximum 4 MMs each. IF only G700 Media Gateways are used: S8300/G700 can have maximum 199 BRI trunk boards - i.e., (50 media gateways * 4 per media gateway) -1 (since the G700 with the processor module in it can have maximum 3 other media modules). The maximum of 199 is based on the assumption that there are no LSPs. If there are G700s as LSPs they also house maximum 3 other MMs. The system can be customized in many ways.
   - G350 Media Gateways support maximum 5 MMs each.
   - G250 BRI has a built-in 2-port BRI, (like the MM722).
   -
2. **The S8300 supports maximum 450 trunks**. The most likely way to get the full 250 BRI trunk boards with maximum 250 media gateways is if many of them are MM722s with only a few trunks per board. With a MM720, if we assume you use all 16 ports on each MM, you'd only get up to 28 or 29 MMs before you'd hit the system-wide 450 trunk limit.

For other S8300 platforms (G350, G250):
They do not support subtending media gateways and the hardware limit is less than the software limits.

42.3 The 6,000 maximum is based on:
the TN556 BRI Board supports 12 ports, and each port supports 2 B-Channels per port (250 * 24).
However 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 * 16).
If MM722 (2-port BRI board) is used, the capacity is further reduced.

43 The following items reduce the total number of available "Stations" 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

These items constitute all the valid objects within software that limit the number of available stations on a switch. Attendant Consoles and Stations are not the only objects that reduce the total number of available stations on a switch. See the Dial Plan section of the Capacities Table for more details.

44 All BRI stations can be display stations.
Line side BRI MM support on MM720 is a new feature of Communication Manager R3.0. It allows BRI stations to be administered on the S8300 systems which support only Media Modules and not the TN cards.

MM720 supports 8 ports, and multipoint configuration with 2 B-channels per port. Thus the MM720 can support 16 BRI stations. NOTE that the multipoint configuration requires an external data module.
The maximum number of BRI stations supported on S8300 systems depends on the media gateways, and the number of MM720s that they can support.

45 Capacities depend upon the release/version of IP phones.

45.1 The "Logged-In IP Softphone Agents" field on the 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: "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 "Station Button Capacity (units)" replaces "Maximum Button Modules" (from pre-R1V5.1).

48 The following button features share a common resource in memory:

- 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

49 **As of October 2002, the DWBS system has been discontinued.** For G3R, TN789 Radio Controller Circuit Packs cannot be used in DS-1 remote EPNs.

50 Due to downlink buffer overflow problem, the Group Page with Speakerphone feature does not work with TN754A or TN754B. Minimum vintage of TN754C is required. Earlier vintage boards may cause lost messages, pages not terminating, phantom ringing, invalid displays etc.

51 **As of October 2002, the DWBS system has been discontinued**. The in-building system that replaces the DWBS is provided in collaboration with SpectraLink®. There are 2 offers: the 900 MHz system and the 24GHz system called the IP Wireless Telephone System. The 900 MHz phone (3410) is administered on the MV as 8410; the 2.4GHZ phone (3606) is administered as 4606. As a result the SpectraLink® wireless user maximum is based on the station user maximum for each of the platforms.

52 (Footnote removed)

53 Stores CDR records on the local hard disk.

54 **On S8100 or D1 platforms only**: The system uses two files to store and control CDR records. One file is named cdr.out and the other cas.in. Both files are in the directory d:\AvayaData\CDR. Every 10 minutes, the system checks for the presence of the file cas.in. If the file cas.in is NOT present, the system renames the cdr.out file to be cas.in and creates a new cdr.out file. If the cdr.out file reaches a size of 100,000 bytes or contains 1000 records, the system stops writing records and begin buffering records internally. Once 500 records have been buffered internally, new records are discarded. Data is lost.
The call accounting system should delete the file cas.in when it is ready to accept a new set of cdr records. Within 10 minutes, the system renames the cdr.out file to cas.in as explained above (assuming the cdr.out file is not empty). As soon as the cas.in file appears, the call accounting system may process the records and then delete the cas.in file again.
The call accounting system MUST process the records at a rate to match the expected switch call rate in order to not lose data.
On other platforms: CDR must be collected in real time using external CDR collection devices such as the terminal server, or an application that supports RSP (Reliable Session Protocol).

54.1 S8700 series media servers can buffer 17,326 records. 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 and etc. In most case, only the primary CDR device is used.

55 Applies only to LSPs (S8300 and S8500 media servers). Survivable CDR 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 via an IP link as has historically been done. 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 twenty CDR data files, each with up to twenty 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 274 characters per record in the maximum size “customized” format. Each customer selects the format that best meets their needs, however the most popular CDR format is the “unformatted” format with contains 107 characters in Communication Manager R4.0. Therefore, 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.

56 (Footnote removed)

56.1 (Footnote removed)

57 (Footnote removed)

58 Reports are not produced via the system, but through ASA. There is no limit to this activity in ASA.

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System Capacities Table – Footnotes

59 The total number of stations (including ACD agent physical sets, Logical Agent IDs and AWOH) assigned and the VDNs assigned cannot exceed 36,000 for S87xx and S8500 (VDNs share message server space). Dial plan limits also apply.

60 The signaling connections are shared by ISDN, ATM trunk signaling, and IP signaling groups. This number is the maximum number of DS1s and the number of support Remote Offices.

61 (Footnote removed)

62 (Footnote removed)

63 (Footnote removed)

64 Maximum stations for S8100 Media Server with CMC1 Media Gateway, or G650 Media Gateway:
→ 240 stations with embedded messaging enabled; (when the 168 H.323 trunks are included, the total for H.323 endpoints is 408)
→ 450 stations with embedded messaging disabled. (When the 168 H.323 trunks are included, the total for H.323 endpoints is 618).

65 (Unused)

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

67 For S8500:
- For Migrations from SI/R Simplex direct connect, it is a maximum of 3.
- For new shipments: not available because new shipments are all IP-Connect media gateways.

68 Is increased to support a total of (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.

70 The 10,000 additional Enhanced AD Entries on a second list (rather than expanding the 1 Enhanced AD list) allows 4-digit dialing via FAC to remain as before. To expand the 1 list would have required users to enter 5 digits when dialing via FAC.

NOTES re. Foot Notes 71, 71.1, 71.2, 71.3 and 71.4

Footnotes 71 and 71.1 are related to the S8300with G700 offer; 71.2 is related to the S8700, S8710 platform; 71.3 is related to the S8500 platform; 71.4 contains information regarding the S8300/G350 offer.

- Some of the maximums (such as maximum stations, trunks, EC500 users, IP stations, IP trunks, LSPs etc.) set by the Communication Manager software are different from the offer-based limits in the various releases. Few of these offer-based limits are mentioned here.
- **Features** such as Call Forwarding are turned ON/OFF by the License File but not the actual capacity limits. However on some of the platforms the Communication Manager software-based limits may not apply to the features because their maximums are scaled by the associated capacities that they are coupled with, set by the License File, or based on the hardware/platform limitations (boot-time configurations).
- Similar derived capacity limitations apply to features such as call pickup, bridging, etc., which may not be controlled by the license file (turning the feature on or off), or for feature-specific capacities.
- **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 Footnotes 21 and 22).

71 The sub-sections below contain server-specific information. The System maximums (such as maximum stations, trunks, IP stations, maximum ports, LSPs etc.) set by Communication Manager software are different from the offer-based limits in the various releases. Some of the differences are noted below.

Media Gateways supported by Avaya Media Servers					
Servers → Gateways↓	**S8700, S8710, S8720 IP-Connect**	**S8700, S8710, S8720 Fiber (ATM or CSS) Connect**	**S8500 (3-PNs as DirectConn + 64 MGs as IP-Connect**	**S8300 G700 G350**	**Comments**
G150	Yes	Yes	Yes	Yes	Counts towards H.323 MGs
G250	Yes	Yes	Yes	Yes	Counts towards H.248 MGs
G350	Yes	Yes	Yes	Yes	Counts towards H.248 MGs
G600	Yes		Yes		
G650	Yes	Yes	Yes	Yes	Counts towards max 64 PNs
G700	Yes	Yes	Yes	Yes	Counts towards H.248 MGs
SCC/MCC	Yes	Yes	Yes		Counts towards the PNs. **S8500** supports max 3 direct-connect (i.e. Fiber Connected) PNs although one can add IP-Connected PNs. **S8700, S8710, S8720** support a max of 64 PNs.
CMC	Yes		Yes		S8500 supports max 64 CMC / S8100

R2.1: NOTE regarding Blade Server, see Footnote 113.

71.0 **Note regarding: VOIP Resources in general**:
Each IP Phone requires one channel. TN cards can go on G650, MCC and SCC.

1. TN2602AP (IP Media Resource 320, a.k.a. Crossfire High Density):
   a. 320 channels for G.711 and G.726A;
   b. 280 channels for G.729A/AB.
   c. It does not support G.723.

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

   These capacities are the same with either AEA or AES encryption
3. TN2302AP (MedPro aka Prowler): Capacities impacted if AES encryption algorithm is used.
   a. 64 G.711 audio channels with AEA (48 with AES).
   b. 32 G.729A/B and G.723 audio channels with AEA (24 with AES).
4. VOIP engine on the G700 support 64 channels for G.711, and 32 channels for G.729 or G.723.
5. MM760 media module also supports 64 channels for G.711, and 32 channels for G.729 or G.723.
6. G350 VOIP engines support half the capacity of the VOIP engines on the G700.
7. G250 supports 10 VoIP channels for G729/G723 and G.711 with or without Encryption.

71.1 **S8300/G700 (ICC):** The S8300 with the G700 Media Gateway has a capacity similar to that of a G3si when the Internal Call Controller is in use. When the G700 Media Gateway is controlled by another platform, the administration of the G700 Gateway counts against the media gateway capacities already defined for that platform.

The following table provides some of the S8300/G700 offer details (the number of media gateways, Stations and trunks). The number of supported media gateways limits the entry in the "Total Number of Integrated Boards And/Or Embedded Virtual Announcements Boards" field for the S8300 ICC platform (1 per media gateway).

S8300/G700	Release 1.3	Release 2.0	Release 2.1 and Beyond
Media Gateways	50 G700 MGs	50 G350 / G700 MGs	50 G350/G700 MGs
Number of trunks	450	450	450
Number of stations	450	450	450
Number of LSPs	10	10	50

S8300/G700 Voice Over Internet Protocol (VOIP) Engine Capacities:

Each VOIP Engine supports 64 G.711 equivalent calls.

In a Configuration with ICC: One VOIP engine is included on the main ICC. 3 more VOIP Engines can be added for increasing the call capacity, for a maximum of 4 VOIP Engines.

In a Configuration without ICC: Each Media Gateway can support up to 5 VOIP Engines.

This is limited by the number of available Media Module slots that are populated with VOIP Engines. The following table provides VOIP Engine Capacities.

NOTE: This table applies to all releases of S8300 with G700 Media Gateway.

VOIP Capacity of a Single 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)

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 Media Gateway, 512 Time-Slots are available, out of which 40 time-slots are used for Call Progress Tones. Each Media Gateway can support a maximum of 236 simultaneous Non-IP connections (472 total time-slots divided by 2 time-slots per call).

71.2 **S8700, S8710 and S8720 Platforms (PNs can either be IP-Connected or Fiber connected).**
(NOTE: S8720 is a new platform introduced in Communication Manager R3.1)
Highlights of Capacities are provided below.

- Media Gateways: In Communication Manager R2 (**both 2.0 and 2.1**), as in R1.3, the S8700, S8710 MultiConnect and IP-Connect platforms support 250 media gateways.
- LSPs:
  - **R2.0:** These platforms also support **50** LSPs. Each LSP can support up to 50 G700 Media Gateways.
  - **R2.1:** These platforms also support **250** LSPs. Each LSP can support up to 50 G700 Media Gateways
- Port Networks (**R2.0 and 2.1**): In addition to these media gateways, they support PNs also:
  - The S8700, S8710 Multi-connect also supports 64 PNs (MCC, SCC, G650).
  - S8700, S8710 IP-Connect supports 64 PNs (G600, G650, CMC1).
- Station Maximum:
  For the S8700, S8710 IP-Connect:
  - **R1.3** allowed 12k IP+ 4k non-IP stations;
  - **In R2.0,** 16k stations can be any mix of station types (the maximum IP stations remains 12k).
  - **In R2.1:** Station Maximum is the same as for MultiConnect (36,000).

  On the MultiConnect:
  The station maximum is 36k; however 12k is the maximum for IP stations.
  NOTE: This applies to S8700 IP-Connect also in R2.1 and beyond; and for S8700: R2.2 and beyond.
- Trunks:
  Both IP-Connect and MultiConnect support software-defined limit of 8,000 trunks. But the **offer-based limits** are as follows:
  - **Release 2.0:**
    - On S8700, S8710 IP-Connect the Offer-based limit for overall trunk maximum as well as IP trunk maximum is **4000 (which is part of the maximum 12K IP endpoints)**.
    - On MultiConnect Offer limit for IP trunks is **8000** (same as the system maximum).
  - **Release 2.1:** On both IP-Connect and MultiConnect systems the Offer limit is **8000** trunks.
  - **Release 4.0:** S8720XL systems, the Offer limit is **12000** trunks.
- SIP Trunks:
  - **In Release 2:** Although the trunk maximum is 8000, they allow maximum 1000 SIP trunks (a license file based limit).
  - **In Release 3.0**: Maximum number of SIP trunks is 2000.
  - **In Release 3.1: Maximum number of SIP trunks is 5000.**
- Maximum Ports: The Offer maximum for Maximum ports is as specified below (the Software-defined maximum ports is 44,000 - i.e., 36k endpoints + 8k trunks):
  - **Release 2.0**:
    - Maximum ports for IP-Connect is 16,000 ports (this includes both IP and traditional stations and trunks; maximum IP ports remains 12k).
    - Maximum ports for MultiConnect 44,000 ports (including both IP and traditional stations and trunks).
  - **Release 2.1**: Maximum ports on IP-Connect is the same as on MultiConnect systems: 44,000 ports (including both stations and trunks).
  - **Release 4.0**: Maximum ports on S8720XL systems: 48,000 ports (including both stations and trunks).

Other system maximums set by Communication Manager software may be different from the offer-based limits in the various releases.

71.3 **S8500** is a new server introduced in Communication Manager R2.0. It is a single server Linux offer, and its capacities are the same as for the S8700, S8710, except where it is truncated by the License File. S8500 specific information:

- S8500 supports 250 G650/G700/G350 Media Gateways. However the G650 Media Gateway is the default offer; this configuration is most suitable for new shipments of the system.
- In addition, it supports traditional PNs as follows (these are suitable for upgrading G3si to S8500):
  - S8500 can support up to 64 CMC (S8100) cabinets as PNs
  - S8500 supports 3 PNs if the PNs are MCC or SCC cabinets
- Although the software supports 8000 trunks, the license file limit is 800 trunks, thus allowing for maximum 3200 ports (2400 stations and 800 trunks) that could consist of both traditional non-IP and IP endpoints/trunks).
- S8500 is a standalone offer in Release 2; S8500 as ESS is supported in a later release.
- Communication Manager R2.0: 50 LSPs. Release 2.1: 250 LSPs.

71.4 **S8300/G350:**

S8300/G350 was first offered in Communication Manager R2.0, the target market being small branch office of a large distributed system. In a standalone configuration, it is an S8300 Server on a G350 Media Gateway, and provides WAN, LAN and PSTN connectivity. Its capacities are much less than S8300/G700.

In Release 2.0: G350 ICC (1) did NOT support subtending Media Gateways, (2) did NOT support the Octaplane, and (3) Capacities for G350 as ICC was different from G350 as an LSP.

Release 2.1 and beyond: G350 (Both ICC and ECC) supports Call Center applications.

- **Hardware:**
- Media Modules: It supports 6 physical slots (not all are for voice; only 4 out of 6 are recommended for voice; other 2 are for WAN connectivity). It consists of: 1 High-Density Media Module (HDMM) slot, 1 slot for Call Controller (S8300), and 4 slots for other media modules. NOTE: Release 2.1 can support up to 3 Analog Media Modules (MM711).
- Embedded AUDIX (IA770) is supported. But note that this takes up a Media Module slot, and this reduces the number of MM slots available for other purposes. The number of mailboxes on the IA770 is the same as for the G700 platform (450 mailboxes) although the number of users on the G350 platform is only 40 in Release 2.0.
- Tone detectors: G350, just like the G700, supports 15 Tone Detectors.
- **Call Center features and services are now supported for both ICC (S8300/G350) and ECC (S8700, S8710, S8500, etc.) configurations starting with Communication Manager 2.1. Communication Manager 2.0 was certified with ECC only.**
- **Stations:** It supports **maximum 40 users** that could be a combination of IP, analog and DCP stations. Maximum for each of these types are: 40 IP endpoints, 24 DCP stations, 18 analog stations. The Software does not prevent administering more than these limits, but in doing so the configuration may not be practical (all station, no trunks; or all stations, no WAN connectivity).
- **Trunks:** It can support up to 18 (16 + 2 fixed ports) analog trunks, 1 T1/E1 for digital trunks, and 2 8-port BRI trunk media modules.
- **IP endpoints** (station and trunk): 40.

71.5 **High Density Trunk Gateway (HDTG)**: Our current solution for the high-end market segment that is targeted by the HDTG is based on the G650 chassis. The G650 is based on IP enabled port network architecture but is limited in its TDM backplane capacity to 256 channels. Due to this limitation, G650 is not capable of supporting a DS-3 interface and requires an external Multiplexer and multiple G650 systems (between 10 systems to 20 systems depending on the solution reliability configuration) to terminate such an interface.

HDTG key properties are:

- Compact and cost effective media gateway platform targeted towards the large enterprises and mid-density carrier environments.
- Support (at minimum) 2,016 VoIP channels with T3/OC-3/STM-1 PSTN interfaces.
- Small footprint especially attractive for enterprises and central office locations where space is at a

premium.

- Carrier grade platform with full support of redundancy to avoid any single point of failure and meet 5 9's availability requirement.

71.6 **Avaya IG550 Integrated Gateway**: The IG550 Integrated Gateway includes two main offers: a one-box solution and a two-box solution.

IG550 Integrated Gateway one-box solution: This solution is based on the Juniper (JNPR) boxes that host an Avaya TGM550 card functioning as a H.248 gateway and a TIM that provides interfaces for legacy TDM interfaces. This solution is focused on the smaller branches of 2-100 users with a "sweet spot" of 5-40 users. This range is covered by different JNPR boxes

• 10-30 uses will be covered by J4350 until midway is offered in the market

• 25 and above uses will be covered by J6350

IG550 Integrated Gateway two-box solution: This solution is based on the same JNPR platforms (J4300, Saipan) side by side with Avaya Branch Gateways G250, G350, and G700. In this scenario the customer gets the full set of features offered by the Avaya branch solution. Not all branches could be served by the one-box solution. Branches with requirements that exceed the capacities or functionality offered by the TGM550 solution will be offered a two-box solution. Management interfaces between Avaya and JNPR systems should be similar as possible in the two-box solution and one-box solution.

IG550 Integrated Gateway Voice Capacities		
	J4350 based	J6350 based
Slots in the platform	6	6
Maximum number of interface TIM (excluding TGM)	4	4
Maximum number of HD TIM	2	3
Maximum number of BRI cards	2	2
Maximum number of T1 cards	2	2
Maximum number of analog ports (trunks and lines)	Depends on max analog ports	
cRTP: support (sessions)	Depends on DSP card	
Number of simultaneous voice calls (sessions)	Depends on DSP card	
Maximum number of sites supported by single Communication Manager server	250	
List of Communication Manager servers need to support IG550 Integrated Gateway	8500, 87XX, 8300B/C within G700/450 (S84XX is nice to have)	

72 NOT APPLICABLE. This is Prologix and MAP-D Specific. For use of Co-Resident DLG, you must install a C-LAN interface for the G3csi in order to take advantage of the C-LAN bus bridging. The bus bridging provides 1 TDM timeslot, which is 64 kbits, thus producing 4 ASAI links (ASAI links are 16 kbits each).

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 the use of 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.

Avaya Communication Manager/CMS Release 4.0
System Capacities Table – Footnotes

74 When this threshold has been reached, the link is temporarily busied out. There is no user intervention required to re-establish the link.

75 The TN799 (C-LAN Board) Circuit Pack supports 400 sockets for IP registration purposes.

75.1 For Category B only (not offered in Release 2.0 and beyond): BCMS allows a maximum of 25 agents to be measured, although the system maximum for the number of Logged-In Agents may be more.

76 The line item 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, however, is restricted to the DCS node limitations that already exist. Note that a switch that acts as a gateway (both DCS and QSIG links) deducts from the overall DCS node limit.

77 R6.3.2 CSI and later without the C-LAN board supports 120 messages/second. R7 CSI and later, with C-LAN, supports 240 messages/second. The system limit is 240 messages/second.

78 (Footnote removed)

79 The values delineated here are on a per G700 gateway basis. Each G700 has its own embedded voice announcement capability up to a system maximum level of 10. This maximum is not currently achievable since you can only stack 8 G700 chassis together via the Cajun Octaplane cabling.

80 If the capacity of CMS exceeds the capacity of the DEFINITY 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 represents 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 (see Note 84).

81 64 is the maximum for number of C-LAN boards on the S8700, S8710, S8720 and S8500 platforms. The S8720XL supports 106.

81.1 Overall System Maximum for all IP ports, including stations and trunks. For example, an S8720XL system cannot be configured with maximum IP stations (12,000) and maximum IP trunks (12,000) since the total (24,000) exceeds the IP Port maximum of 16,000.

82 The S8700, S8710 and S8720 platforms (and H.248 MGs) do not support the TN750C announcement board. Customers must upgrade to the VAL (Voice Announcement on LAN) board, and/or use the Embedded vVAL 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 This is the CMS capacity across 8 ACDs. Communication Manager supports up to 60,000 (100,000 with the S8720XL) agent-skill pairs. Based on performance studies, the recommended agent-skill pair capacities for CMS vary depending on the hardware platform. These capacities are recommendations only and are not enforced in the CMS software. The hardware platform specifics are as follows:

CMS Hardware Platform	CMS per ACD Agent-Skill Pair Limit	CMS Total Agent-Skill Pair Limit	
		15 Minute Archive	30 Minute Archive
Sun Blade 100/500	50,000	25,000	50,000
Sun Blade 150/650	50,000	25,000	50,000
Fire 880/9002	60,000	75,000	100,000
Fire 880/9004	60,000	100,000	100,000
Fire 880/9006	60,000	100,000	100,000
Fire 880/9008	60,000	100,000	100,000
Fire 890/9002	60,000	75,000	100,000
Fire 890/9004	60,000	100,000	100,000
Fire 890/9006	60,000	100,000	100,000
Fire 890/9008	60,000	100,000	100,000

Limits imposed by R13/R13.1/R14 Expanded Aux Load Line (supports up to 100 Aux Reason Codes)

- Only supported on the Sun Blade 150, Sun Fire V880 and V890 platforms. Not supported with Sun Blade 100.
- A minimum of 30 minute intervals are supported.
- Reduced Agent Interval Data Storage (assumes total agent skill pairs are logged in 24x7 simultaneously):

Agent-Skill Pairs (for an ACD)	Maximum Days of Interval Data
60,000 (see Note)	17.5
50,000	21
40,000	26
34,000	31
30,000	35
23,500	45
20,000	52
10,000	62

Note: 62 days of interval data can be stored with the CMS R13 standard load line (default is 31 days).

84.1 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 indicated. The 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 R14 CMS, 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. Also the recommended assignment per ACD for “unmeasured trunks” was 25% of the measured trunks.

With R14 CMS the measured trunks and unmeasured trunks are treated separately and unmeasured trunks are not subtracted from the maximum measured trunks. Data Storage Allocation suggests (in HELP) that unmeasured trunks be set at 50% of the measured trunks allocated. The unmeasured system limit is now 20,000 (50% of the measured trunk system limit over all ACDs which is still 40,000) and the unmeasured limit for an ACD is 6,000 (50% of the measured trunk S8720XL limit for a single ACD).

All trunks supported on the Communication Manager platform can be assigned as externally measured by CMS.

84.2

R14 CMS Orderable Models				
SB150 1GB	**V890 2CPUs**	**V890 4CPUs**	**v890 6CPUs**	**V890 8CPUs**
45,000 or 35,000 BHCC	200,000 BHCC	250,000 BHCC	250,000 BHCC	300,000 BHCC
60 or 80 Concurrent Supervisors	200 Concurrent Supervisors	250 Concurrent Supervisors	300 Concurrent Supervisors	400 Concurrent Supervisors
2 - 3rd party software elements	5 - 3rd party software elements	5 - 3rd party software elements	7 - 3rd party software elements	7 - 3rd party elements AND real time streaming
50,000 Agent Skill pairs	100,000 Agent Skill pairs	100,000 Agent Skill pairs	100,000 Agent Skill pairs	100,000 Agent Skill pairs
5 reports per Supv session	7 reports per Supv session	8 reports per Supv session	8 reports per Supv session	10 reports per Supv. Session
4 report elements	5 report elements	7 report elements	8 report elements	12 report elements
100 active agent traces	300 active agent traces	400 active agent traces	400 active agent traces	400 active agent traces
30 sec. aver. Refresh rate 10% at 3 sec.	30 sec. aver. Refresh rate 20% at 3 sec.	30 sec. aver. Refresh rate 30% at 3 sec.	30 sec. aver. Refresh rate 50% at 3 sec.	100% at 3 sec. aver. Refresh rate

85 Maximum number of call work codes is that which 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 client session may include CMS ASCII terminals (maximum of 250), Supervisor, Visual Vectors and Network Reporting clients.

87 With Communication Manager R4.0, a second pair of MIS TCP/IP links is provided for CCR connection. The first pair is dedicated for connection with CMS and the second pair is dedicated for CCR. The same Communication Manager system can be connected to both a CMS and a CCR (both running the same SPI language). High Availability (HA) is supported on both pairs of MIS links. HA operation on the first pair can only be with 2 CMS systems and HA operation on the second pair can only be with 2 CCR systems (HA between CMS and CCR is not supported). All reporting adjunct systems connected to the same Communication Manager system must be running the same SPI language.

88 Support for Mode 2 backup and restore is not provided in the S8700, S8710 Multi-Connect and S8700, S8710 IP-Connect platforms.

89 With VAL (TN2501AP) boards and vVAL media gateway sources, announcements are recorded as Microsoft Windows wave files (*.wav - CCITT u-law/a-law, 8 KHz sampling, 8-bit mono) and can be transferred via FTP to and from the source on a per file basis to a client PC using LAN connectivity. Backup and restore is accomplished via FTP of all the files on each board to-from the client PC.

90 The TN2501AP VAL boards and vVAL sources do not use compression to store announcements. All announcement files are 64 Kbps PCM wave files (CCITT u-law/a-law, 8 KHz sampling, 8-bit mono). Announcement file storage requires 8 Kbytes per second of recording time plus about 30 bytes for the header.

91 The ability to backup all active boards is based on the use of FTP to save the announcement files to a PC with the TN2501 VAL boards and Media Gateway embedded vVAL sources.

92 BRI Link limited to 8.

93 The system requires a fixed length account code between 1 and 15 unless SA 7991 "Variable Length Account Codes" has been activated.

94 An additional 166 DS1 interfaces are permitted in the system if SA7491 is enabled; however, these additional DS1 interfaces can only be used for Line Side DS1 connections, not as trunks. This is supported only on the S87xx platforms.
The S8500 offer port limit of 3200 effectively limits the number of supported DS1s to a smaller number than the software support limit of 522.
For the S8400 trunk limit of 400 affectively limits the number of PRI interfaces that can be used.

94.1 On the S8300, DS1 interfaces are provided using the MM710 Media modules. It should be noted that:

- On the S8300/G700: Although each Media Gateway can support maximum 4 - 5 MM710s, and the platform can support up to 50 subtending media gateways, the absolute maximum can not be calculated as 249 (4 on the G700 + 245 (5 each on the 49 G350s)). This is because other vital system resources such as VOIP resources and tone detectors will be exhausted, making this a blocking media gateway configuration. Additionally the S8300 only supports maximum 450 trunks.
- On the S8300/G350, although it can support maximum 5 MM710s, it is not a realistic configuration because it does not allow for any other MM types.
- The S8300/G250 does NOT support BRI.

95 Station Busy Indicators (SBI) maximum when SA7994 is enabled: 25,000 SBIs are available for S8700, S8710 Multi-Connect and S8700, S8710 IP-Connect platforms.

95.1 Facility Status tracking buttons (Facility Busy Indicators or FBIs) includes:
Maximum SBIs on stations + Maximum Queue status buttons + total DTGS buttons on Attendants + SBIs on attendants (2 SBIs per attendant).

For S8720XL systems, the FBI maximums are:

- Standard offer: 27,764 =(10,000 + 7000 + (24 DTGS * 414 attds) + (2 * 414 attds)
- With SA7994: 42,764 = (25,000 + 7000 + (24 DTGS * 414 attds) + (2 * 414 attds)

For S8720/S8710/S8700 systems, the FBI maximums are:

- Standard offer: 18,528 =(10,000 + 5200 + (24 DTGS * 128 attds) + (2 * 128 attds)
- With SA7994: 33,528 = (25,000 + 5200 + (24 DTGS * 128 attds) + (2 * 128 attds)

For S8500 systems, the FBI maximums are:

- Standard offer: 18,528 =(10,000 + 5200 + (24 DTGS * 128 attds) + (2 * 128 attds)

For S8400s and S8300s etc.:

- S8400 System: 3600 + 500 + (24 DTGS * 16 attds) + (2 * 16 attds).
- S8300 System: 3600 + 500 + (24 DTGS * 68 attds) + (2 * 68 attds).
- No SA for the smaller systems.

NOTE: 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 A total of 80,000 UDP entries are available when SA7948 is enabled.

97 A total of 2,000 remote coverage points are available on the DEFINITY CSI platform when SA8467 is enabled. The S87xx platforms support 10,000 remote coverage points as standard.

98 No need for this SA - general increase in 3.0
A total of 2,000 coverage paths are available on the DEFINITY CSI and DEFINITY SI platforms when SA8467 is enabled, and 9,999 coverage paths on the DEFINITY R, S87xx when SA8467 is enabled. Although the S8300 ICC platform maximums are based on the DEFINITY SI limits, the maximums for the S8300 platform is determined by the Offer limits, which may be lower than the system-defined maximum. Please see Note 71.1 for details.

99 Prefixed extensions can take any length between 2 and 6 digits. Only regular extensions can be of 7 digits in

length. The prefixed extension length refers to the number of dialed digits, not the true extension length. For prefixed extensions of length 2-6, their 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 The S8700, S8710, S8720 IP-Connect currently shares the same maximum as do the S8700, S8710 Multi-connect, but the offer limit is based on License File truncation.

102 This value is the total number of traditional trunks permitted in the system. IP trunks are part of this overall maximum. For both IP-Connect and MultiConnect, the maximum trunk capacity is the same as the software maximum of 8000 trunk ports. However, the maximum number of SIP Trunks supported on these is different. See Footnote 71.2 for details.

103 S8700, S8710 and S8720 IP-Connect do not support ATM PNC connectivity.

104 The administrative limit for EC500 mappings is half the Station User Maximum, for each of the target systems. However, it is possible to run out of station records before this limit is reached if configuring the EC500 users in a typical 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).
Also see Footnote 71.1. Extension to Cellular maximums are also set based on the offer limits for the station maximums for the specific platforms.

105 **EC500 / EC500 OPTIM**: Station users administered with the EC500 capability count towards the station user maximums set by the platform-specific offer limits. But this offer limit does not include the XMOBILE mappings. The XMOBILE mappings are gated by the software-defined station user capacity.

- On traditional platforms, EC500 capacities are the same as the earlier releases (Principal + 2 XMOBILE stations in a typical configuration). The offer-limit based maximum EC500 users for S8300 for the various releases are maximum 125 EC500 users in R1.2 and maximum 225 EC500 users in R1.3.
- On Linux platforms, the EC500 OPTIM user capacity is the same as the station user maximum for each of the platforms.

106 Location administration allows for remote Port Networks as well as Remote Offices and Gateways to have slightly variant administration than the PPN or Controller. Location administration allows for Time of Day Offset, Area Code, and Daylight Savings Rules to be applied differently at the various locations. These location values can also be used in AAR/ARS administration to make location specific route selection. Locations include EPNs as well as gateways, but there are some limitations.

Though the S8700, S8710 platform can support 64 EPNs plus 250 Media Gateways, the number of ARS Locations is limited to 250.
Location ID support by the Call Center CMS adjunct:

- CMS Release 12 (which coincides with Communication Manager R2.0) supports up to 250 Location IDs.
- Earlier releases of CMS support only up to 44 Location IDs. The switch (ACD software) maps any location ID above 44 to location ID 0 in agent and trunk event messages to CMS.

107 Only with ADJLK (CVCT).

108 8 links are possible; a C-LAN board is necessary to get the full bandwidth.

109 120 applies to configuration with MAPD only (using TDM bus bridge). 240 applies to configuration with MAPD where C-LAN serves as the bus bridge.

110 **Announcement Capacity**: The VAL Board (TN2501) has a capacity to record up to 1 hour of announcements. The G700 embedded vVAL announcement source can store up to 20 minutes of recording. The G250/G350 vVAL source can store up to 10 minutes.

111 ARS enhancements for the S8700, S8710 platform are as follows (note that some of the G3R capacities were lower):

- Locations: increased from 64 to 250
- Digit Analysis entries increased from 4000 to 8000
- Digit Conversion entries increased from 3000 to 4000
- Toll entries increased from 1000 to 2000

In addition, 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 3500 to 4500
- Short Internal Digit Nodes, increased from 6000 to 9000

ARS enhancements for the S8300 platform (compared to G3si capacities) are as follows:

- Locations: increased from 10 to 50
- Digit Analysis entries increased from 2000 to 4000
- Digit Conversion entries increased from 400 to 2000
- Toll entries: 1000 (no change).

In addition, the following two 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 500 to 1500
- Short Internal Digit Nodes, increased from 3000 to 6000

112 Requires Increased Adjunct Route Capacity RTU enabled via License File.

113 (Footnote removed)

114 The **Remote Office Feature group** was created in Communication Manager R9.2. They provide connectivity over the WAN. The Remote Office Gateways can be served by S8700, S8710, S8500, S8300, G3si and G3csi as the main Communication Manager server.
NOTE: The 250 maximum RO Gateways is separate and independent from the H.248 media gateway capacity limit, also 250. A system can be configured with:

- 64 PNs
- 250 H.248 media gateways (mix of G700, G350, G250 etc.)
- 250 Remote Offices (could be a mix of R300s, MultiTechs and G150s)

- The **R300** was the first product instantiation to utilize this feature.
- The **G150** IP Office Gateway is a H.323 based gateway, and operates under the jurisdiction of this feature group both from a perspective of call processing and administration. Three models of the G150 are being supported: G150 2T + 4A (3 VOIP); G150 4T + 4A + 8DS (3VOIP); and G150 4T + 4A + 8DS (16VOIP).
- The **MultiTech gateway** is an H.323 managed gateway. However it is not defined as a Remote Office gateway. Its use of the protocols is a bit different. Its stations are managed as H.323 type of stations (which count as IP stations). Its trunks are managed as IP trunks. Communication Manager does not perceive the MultiTech gateway to be a "gateway" from the perspective of building tables and associating stations/trunks together from a maintenance/administrative/call processing point-of-view.

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 that a system designer must look at:

- Communication Manager Server resources to check for the allowed limits of IP endpoints and IP Trunks. Each G150 analog/DCP station counts as IP one endpoint on the Communication Manager server. Each analog trunk or digital trunk's DS0 counts as an IP trunk.
- Signaling Groups supported on the Communication Manager platform.

From past experiences with gateway users, the signaling group limitation tends to be encountered as the first "hard limit". However, the customers who are adding gateways to systems which are heavily loaded with existing stations and trunks can sometimes run into limitations on IP station or trunks. Each customer is different and the account teams must do system configuration work with their engineers.

115 The increase to agents in the same group applies only to Expert Agent Selection skill groups assigned as ucd-mia or ead-mia group type or optionally with the loa types with S8720XL.

116 **Video Capacity**:

- **G3csi** does NOT support H.323 Video.
- **Video Call handling Capacity**: S87xx platforms support 6,000 Busy Hour Video Call Attempts.
- **Video Capable stations / endpoints**: Although this is the same as the IP stations limit, the VSX Video station type usually registers to 3 separate extensions, as if it were 3 separate stations. Thus the overall capacity to support these types of endpoints reduces the system capacity to one-third the Communication Manager server's IP Stations limit.
- The general guideline for calculating simultaneous video calls is: Total Multimedia endpoints (total stations / 3) / 2 (assuming each video call involves 2 endpoints).
- For example, on S8300 it is 75 (450 / 3/ / 2).

117 Auto / Remote Message Waiting: On the S87xx, a Special Application allows this capacity to be increased to 5,000.

118 VuStats: A Special Application SA8558 allows administration of up to 5000 VuStats buttons on the S8700 / S8710 and increases the number of simultaneously updating displays limit (which is 500) to 2,000.

119 Intra-Switch CDR: The 5000 endpoints for intra-switch CDR should all be individually administered on the intra-switch CDR form.
With SA8202 (Intra-switch CDR by COS), this limit can be extended to include all the stations supported on a platform. All phones having the same COS are included in the intra-switch CDR reporting.

120 ***SIP Enablement Services***: Avaya SIP Enablement Services Release 3.0 (SES) incorporates the SIP functionality previously introduced as Converged Communications Server Release 2.1, combined with new feature and scalability enhancements. The application combines the standard functions of a SIP proxy/registrar server with SIP trunking support and duplicated server features to create a highly scalable and reliable SIP communications network supporting telephony, instant messaging, conferencing, and collaboration solutions. The SES supports:

- 1 Edge SES per administrative domain; and
- Up to 20 Home SESs per administrative domain served by the Edge SES.

These can be duplicated servers for providing a high availability solution.
There are two offer models:

- The standard offer with 1GB RAM, which supports a maximum 3,500 SIP endpoints
- With Performance Pack (Additional 2 GB of RAM for a total of 3 GB) supports a maximum 6,000 SIP endpoints.

They can be either Home node only, Edge node only, or a Combined Home/Edge offer.
NOTE:

- **SES Homes connect to the Communication Manager server**. Capacity information in the Capacities Table associated with this footnote is for SES servers (not the Communication Manager server). The capacity of SES Home may exceed the maximums on the Communication Manager for some of the platforms. Such a configuration requires multiple Communication Manager servers per SES. Also, a Communication Manager server can be connected to multiple SES Homes, for the larger Communication Manager platforms that support large Branch Office scenarios.
- **TLS Links on Communication Manager and SES Homes**: In Release 3.0 and 3.1, because the Communication Manager server can support maximum 16 TLS links for SIP, theoretically there can be maximum 16 SES Homes per Communication Manager server. The actual number is smaller if the Homes are duplicated servers. The 3.1 maximum is 7 duplicated Homes per Communication Manager Server.

121 An **Audio Group** defines a list of VAL/vVAL sources ("board" locations) from which announcement files can be played. An audio group can be assigned to an announcement extension as the source "location" instead of a specific "single" source "board 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 as limited by the number of announcement files that can be stored on any given source. It is required that each of the files for those announcement extensions are 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 is equal to the total extensions defined (same as w/o 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 the Reporting Adjunct to be blank (no external adjunct) or use of CCR. CMS does not support greater than 8 digit extensions in the dial plan.