Cisco TelePresence

Cisco on Cisco Technology Seminar

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Agenda

- Program Approach to TelePresence: Overview, Business Case and Technology Overview
- Design Solution for Cisco
  - Architecture
  - Network
- Deploy Solution
  - Readiness
  - Deployment
  - Experience (RRA, CTX)
- Support and Management
  - Support Engineering
  - Metrics
  - Entitlement

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TelePresence Technology Overview

Designing the Solution for Cisco

- Standards based TelePresence applications accommodate converged voice and video transmissions, such as:

  IP telephony: Works with IP-based phones and call-processing systems from the major networking and telecommunications vendors.

  Simplifies call launching using a Telephone instead of myriads of remote controls

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TelePresence Technology Overview

Designing the Solution for Cisco

Groupware: Integration with enterprise groupware solutions (such as Microsoft Outlook and Lotus Notes) accommodates easy scheduling of meetings and access to corporate information

Services: They should enable easy scheduling, management, reporting, billing, and metrics applications to ensure proper tracking and bill-back of activity on the system, as well as real-time support services

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TelePresence Technology Overview

Program Approach to Solution Architecture for Cisco

- Cisco is a first customer to TelePresence
- Target for an enterprise customer like Cisco
- Take a program approach with business case, deployment timeline and metrics and ROI targets
- Cisco-on-Cisco success story generation is key to adoption

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Cisco TelePresence Architecture Components

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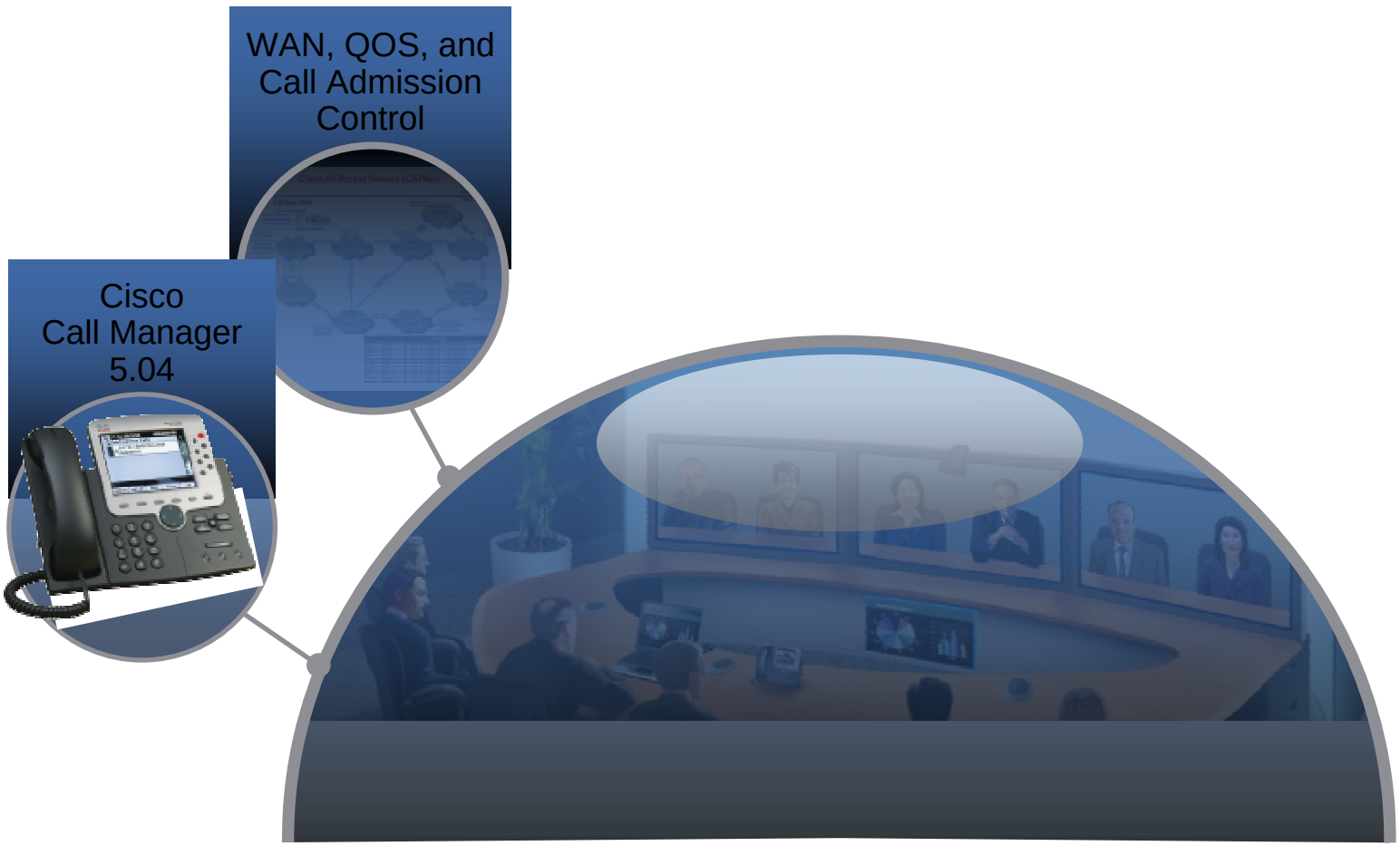
Cisco TelePresence Architecture Components



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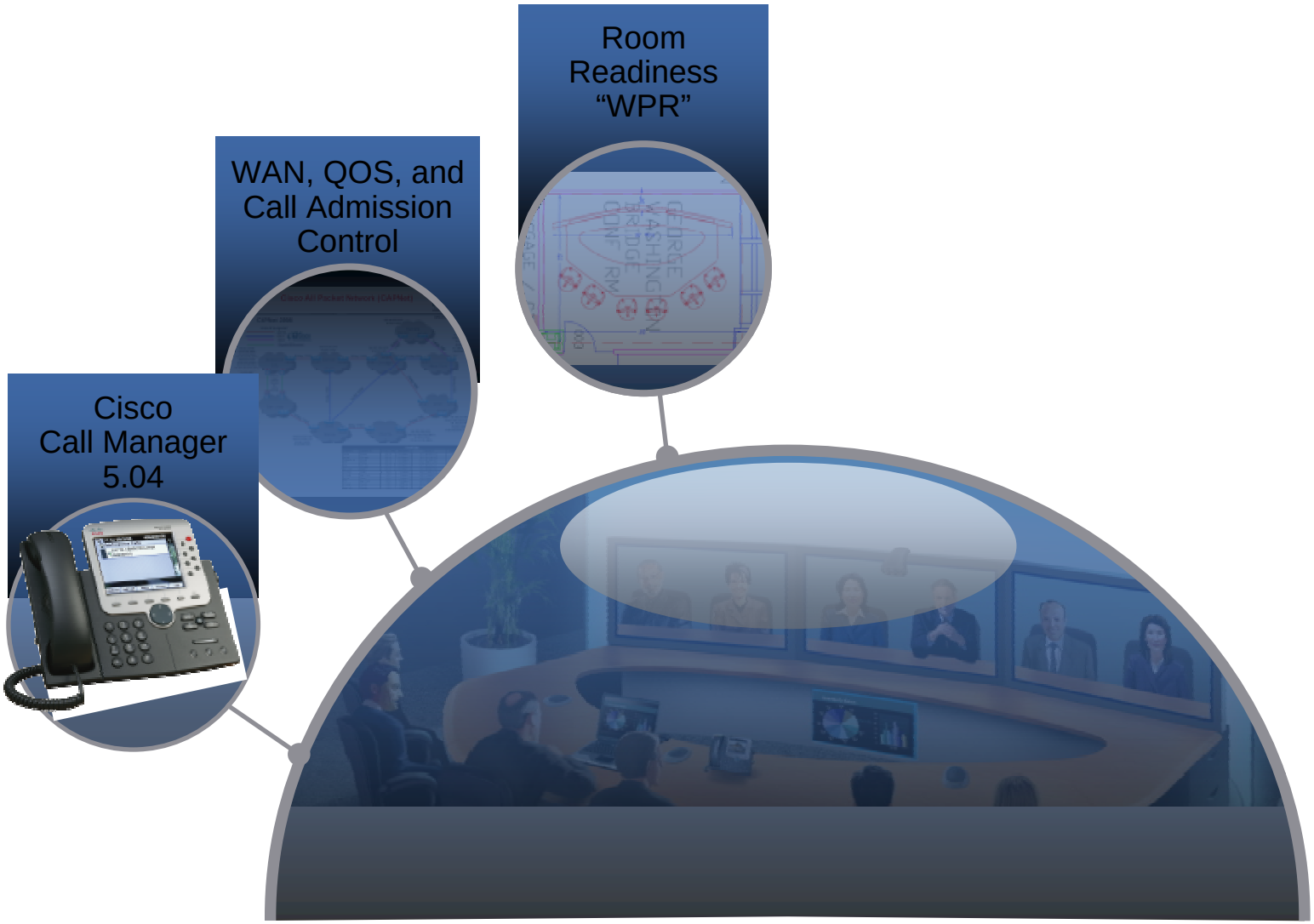
Cisco TelePresence Architecture Components



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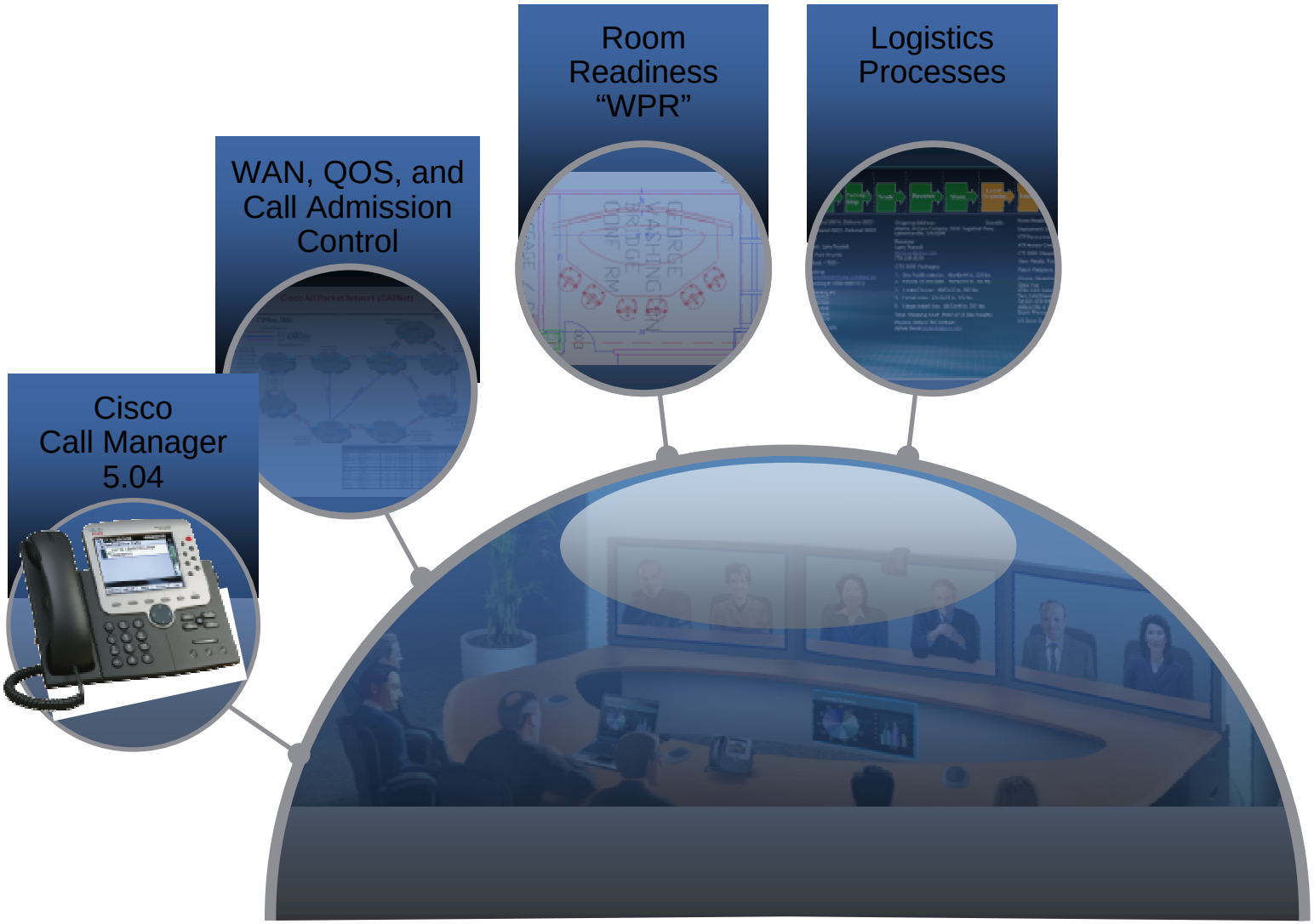
Cisco TelePresence Architecture Components



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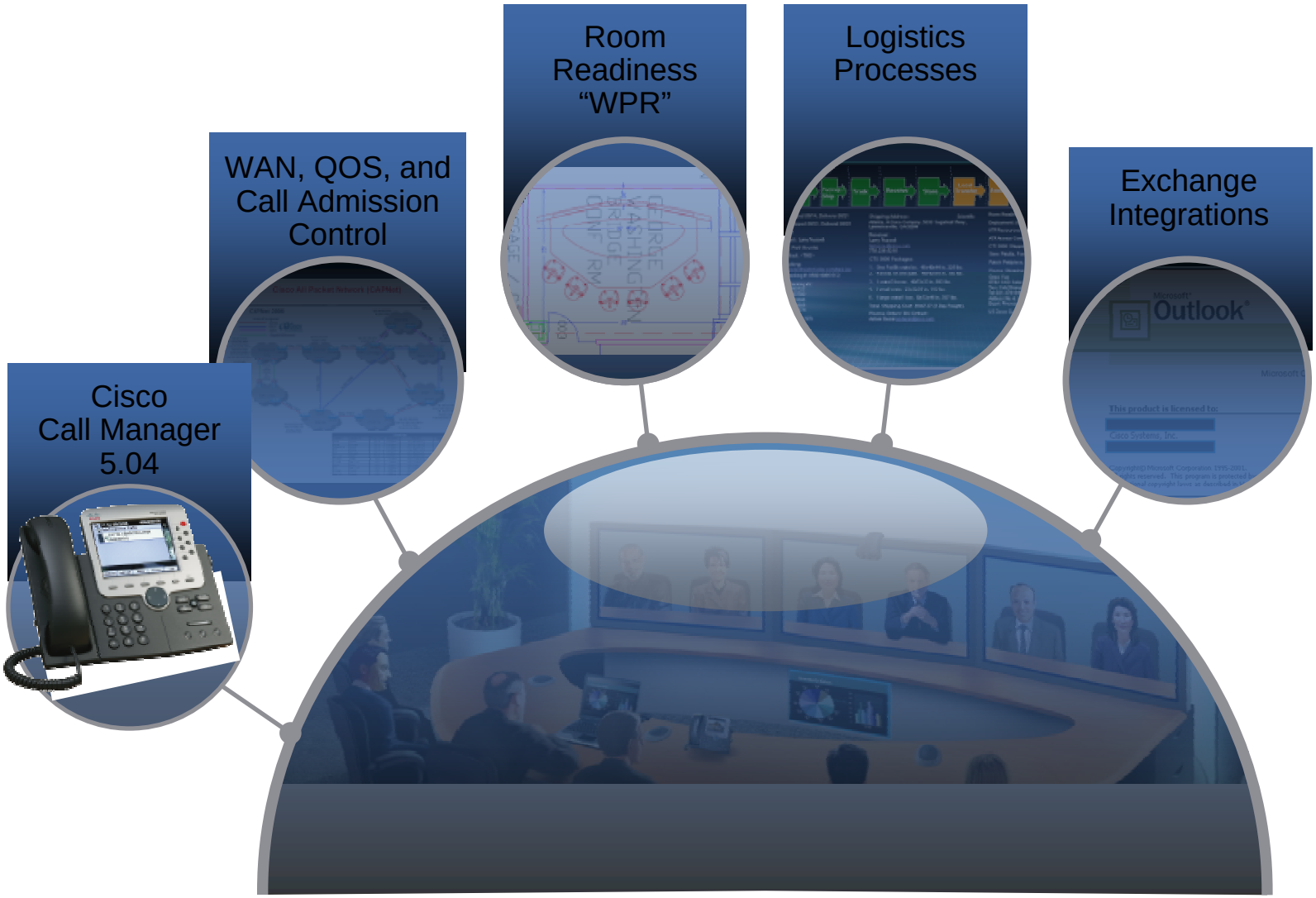

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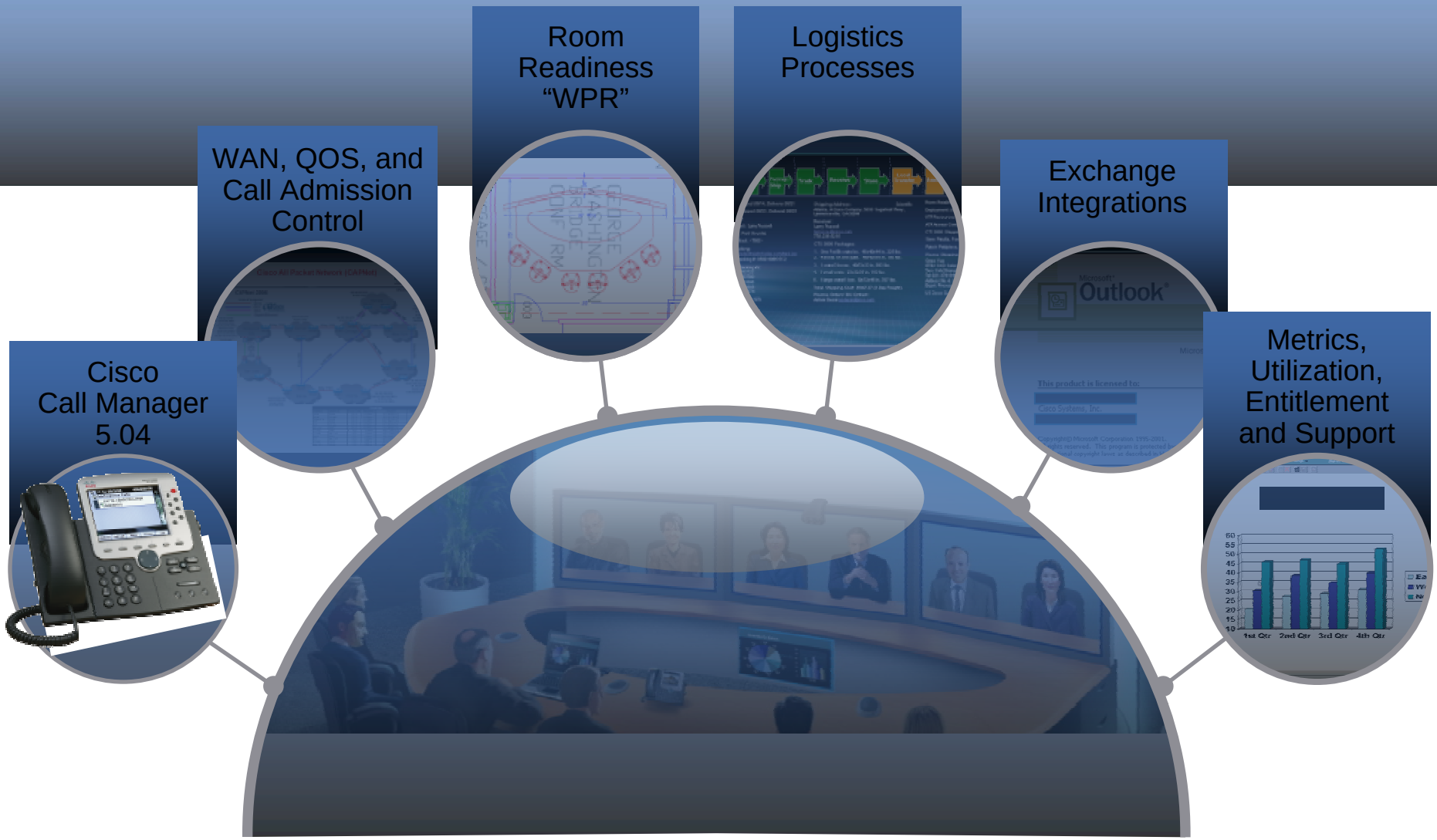
Cisco TelePresence Architecture Components

Cisco Product Solutions on Top of Existing Infrastructure



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One-Way Latency: Phase I and II

	Atlanta,SA	Amsterdam	Bangalore	Beijing	Bedfont Lakes	Boxborough	Chicago	Frankfurt	Hong Kong	Herndon	London City	New York	Paris	RTP	San Jose	Singapore	Sydney	Tokyo	Toronto
Atlanta, SA	-	50	172	121	55	15	24	63	104	10	56	12	55	6	29	119	111	95	29
Amsterdam	50	-	76	128	6	42	56	13	133	50	6	39	5	44	79	132	154	145	56
Bangalore	172	76	-	55	78	177	165	86	37	182	79	174	78	177	120	20	75	70	179
Beijing	121	128	55	-	132	126	113	141	18	131	134	123	133	126	92	35	88	51	128
Bedfont Lakes	55	6	78	132	-	38	44	14	136	55	2	36	6	50	84	137	159	149	52
Boxborough	15	42	177	126	38	-	12	52	107	15	40	3	44	10	34	126	116	100	20
Chicago	24	56	165	113	44	12	-	58	95	23	46	10	50	18	21	111	104	88	14
Frankfurt	63	13	86	141	14	52	58	-	145	63	16	49	9	58	90	145	167	158	65
Hong Kong	104	133	37	18	136	107	95	145	-	112	137	104	138	108	74	47	71	32	110
Herndon	10	50	182	131	55	15	23	63	112	-	56	12	55	5	39	129	121	105	28
London City	56	6	79	134	2	40	46	16	137	56	-	37	7	50	85	138	159	150	54
New York	12	39	174	123	36	3	10	49	104	12	37	-	41	7	31	121	113	97	17
Paris	55	5	78	133	6	44	50	9	138	55	7	41	-	50	84	137	159	150	57
RTP	6	44	177	126	50	10	18	58	108	5	50	7	50	-	31	124	116	100	24
San Jose	29	79	120	92	84	34	21	90	74	39	85	31	84	31	-	90	84	53	36
Singapore	119	132	20	35	137	126	111	145	47	129	138	121	137	124	90	-	55	50	126
Sydney	111	154	75	88	159	116	104	167	71	121	159	113	159	116	84	55	-	104	117
Tokyo	95	145	70	51	149	100	88	158	32	105	150	97	150	100	53	50	104	-	102
Toronto	29	56	179	128	52	20	14	65	110	28	54	17	57	24	36	126	117	102	-

Network Latency at or Near 200ms (One-Way)=Poor Quality

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One-Way Latency: Phase I and II

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Bangalore	172	76	-	55	78	177	165	86				174	78	177	120	20	75	70	179
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Hong Kong	104	133	37	18	136	107	95	145	-	112	137	104	138	108	74	47	71	32	110
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Network Latency at or Near 200ms (One-Way)=Poor Quality

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Types of Switches and Circuits

6500 E

3845

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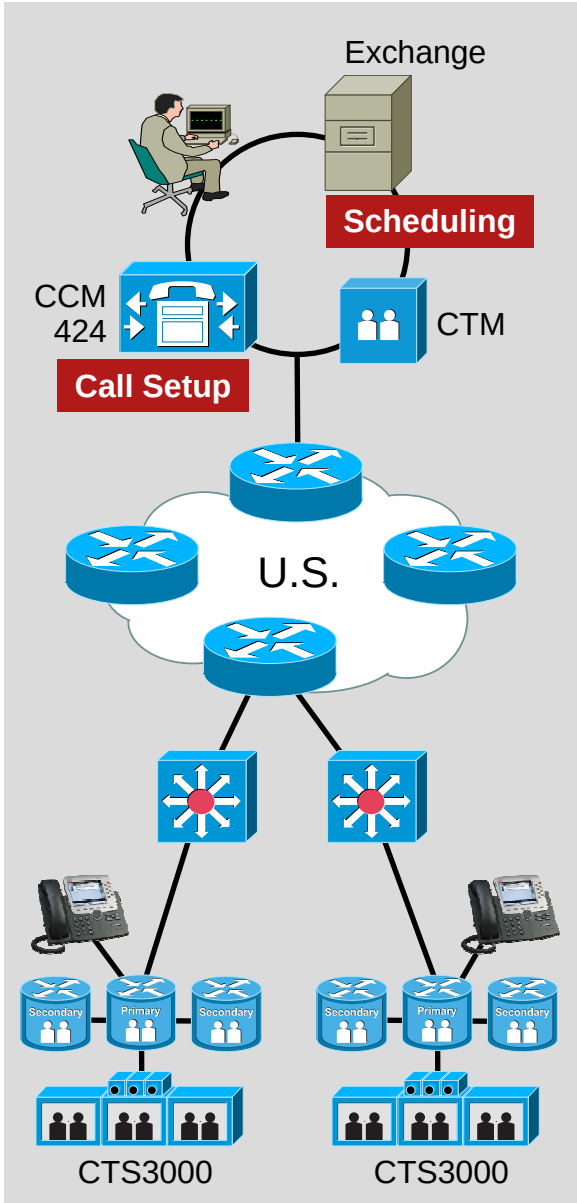
Cisco TelePresence High Level Architecture



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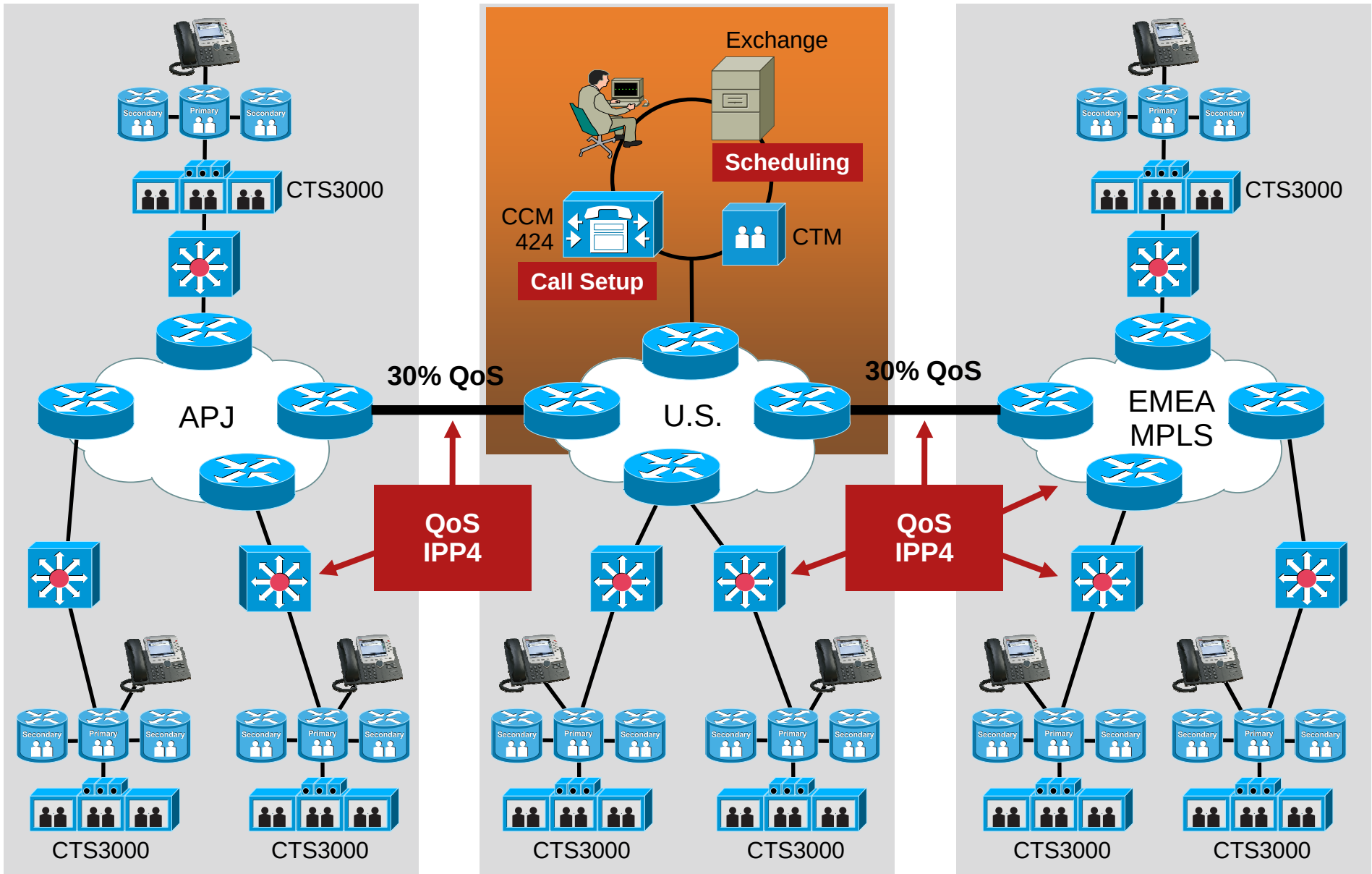
Cisco TelePresence High Level Architecture



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Cisco QoS Strategy Overview

CBWFQ Is Applied on WAN Edge with 7 Classes of Service by Percentage

Traffic Classification Occurs at the LAN Access Edge with Voice VLAN DSCP Been Trusted Like IP Phone (IPP5) and TelePresence (IPP4) and VACL Is Utilized to Classify the Traffics in Data VLAN Like VTA (IPP2), IP Communicator (IPP5), PC Back Up (IPP1), Etc.

Class of Service	
	Control (IPP 6/7): Routing Protocols, Telnet, SSH
	Voice Bearer (LLQ IPP 5): Voice RTP
	High Bandwidth Video (IPP 4): TelePresence RTP
	Signaling (IPP 3): Skinny, SIP, MGCP, H.323, Radius
	Low Bandwidth Video (IPP 2): IPVC, VTA
	Scavenger (IPP 1): PC Backups, CDN, Lab Traffic
	Default (IPP 0): All Other Traffics

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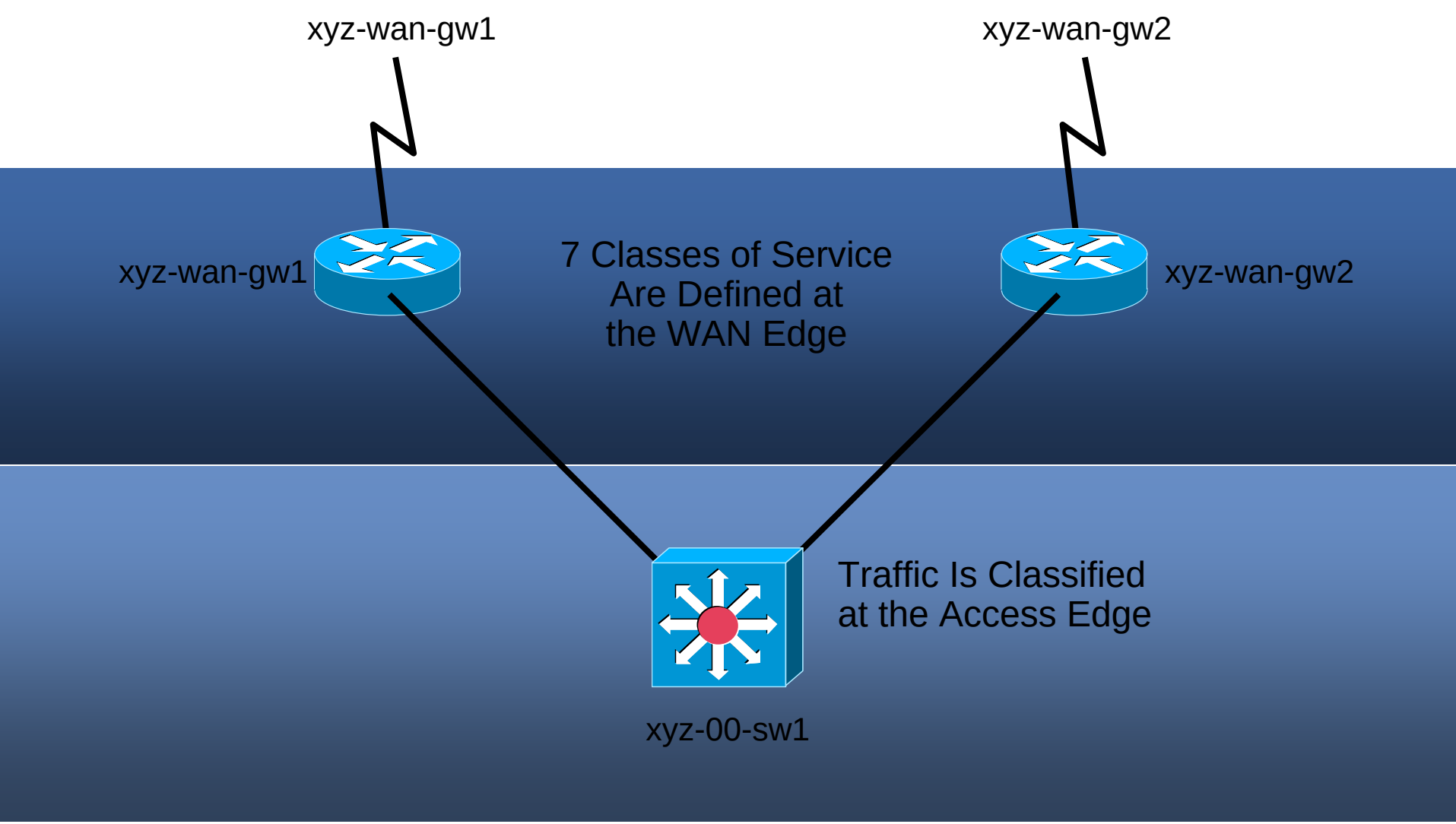
Generic Field Sales Office Topology



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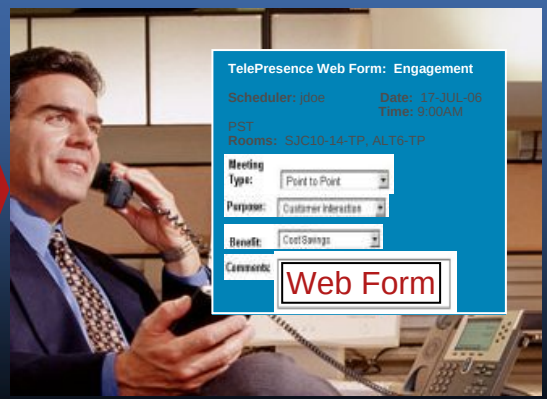
Cisco TelePresence Global Process Flow

Schedule TP Room w/Outlook

TP Justification



TP Coordinators Validate

Priority Due to Availability

1. Customers with Execs.
2. Customers demo
3. Partners/Customers demo
4. Executive Meetings
5. Internal Meetings

Schedule a Call

Use TelePresence (One-Button Click)

Feedback and Alignment to Value Case

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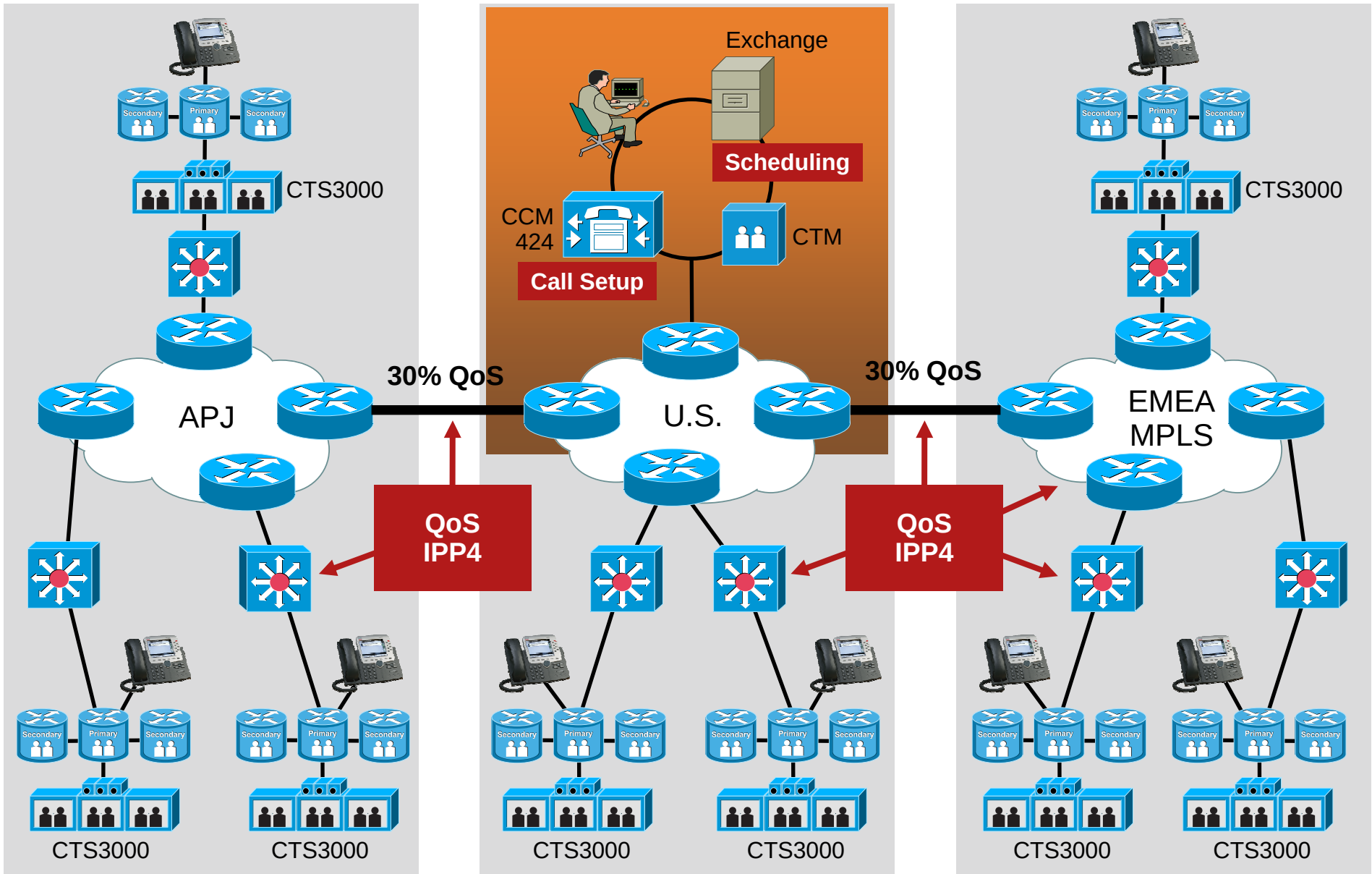
Cisco TelePresence: Flow of Schedule Data



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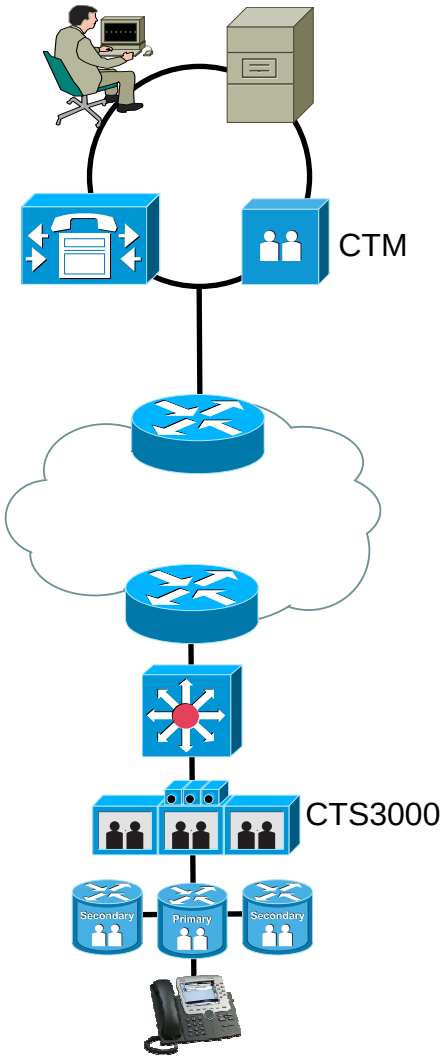

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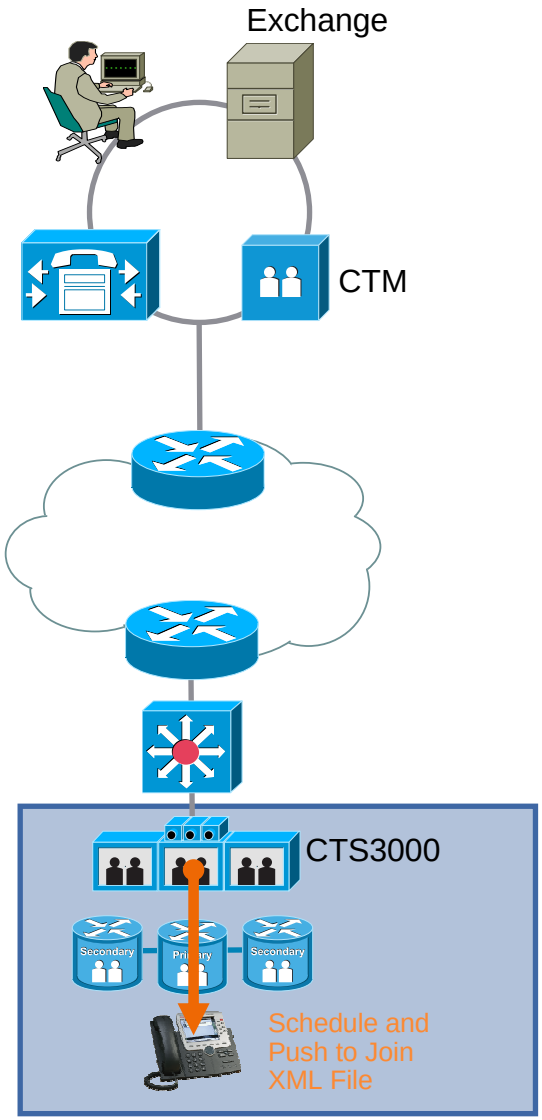

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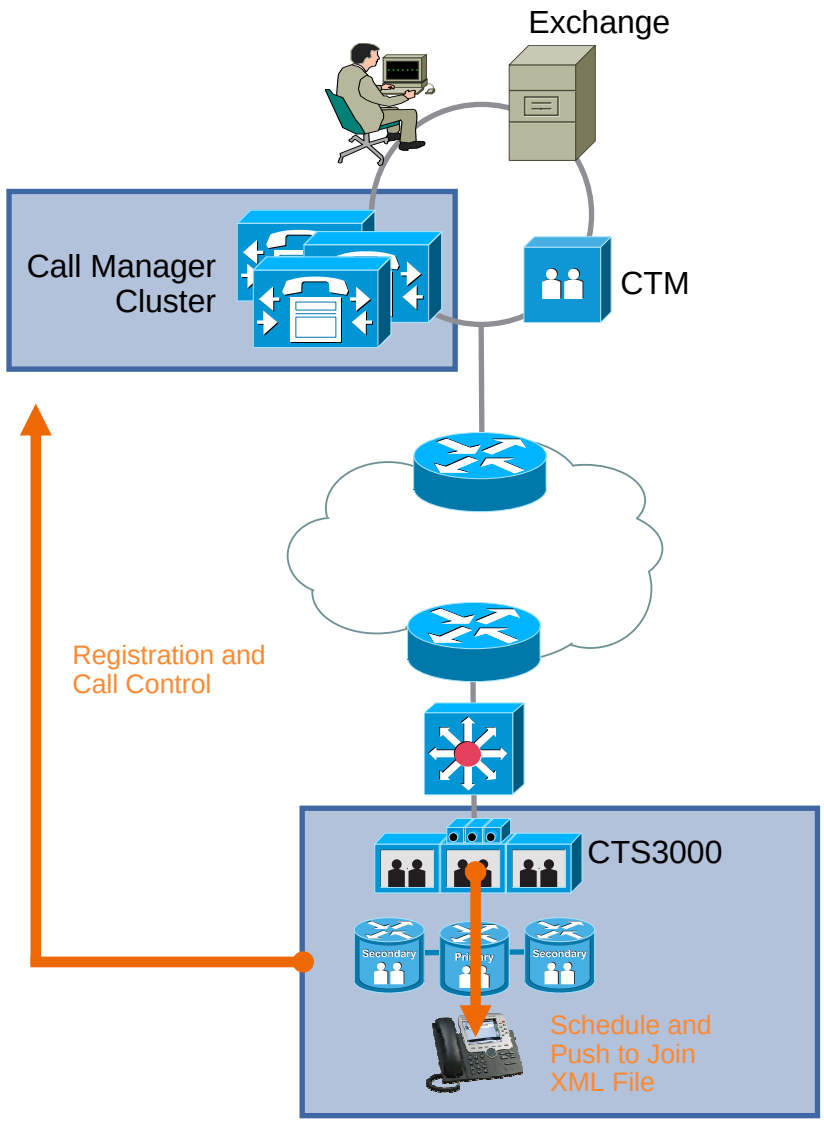

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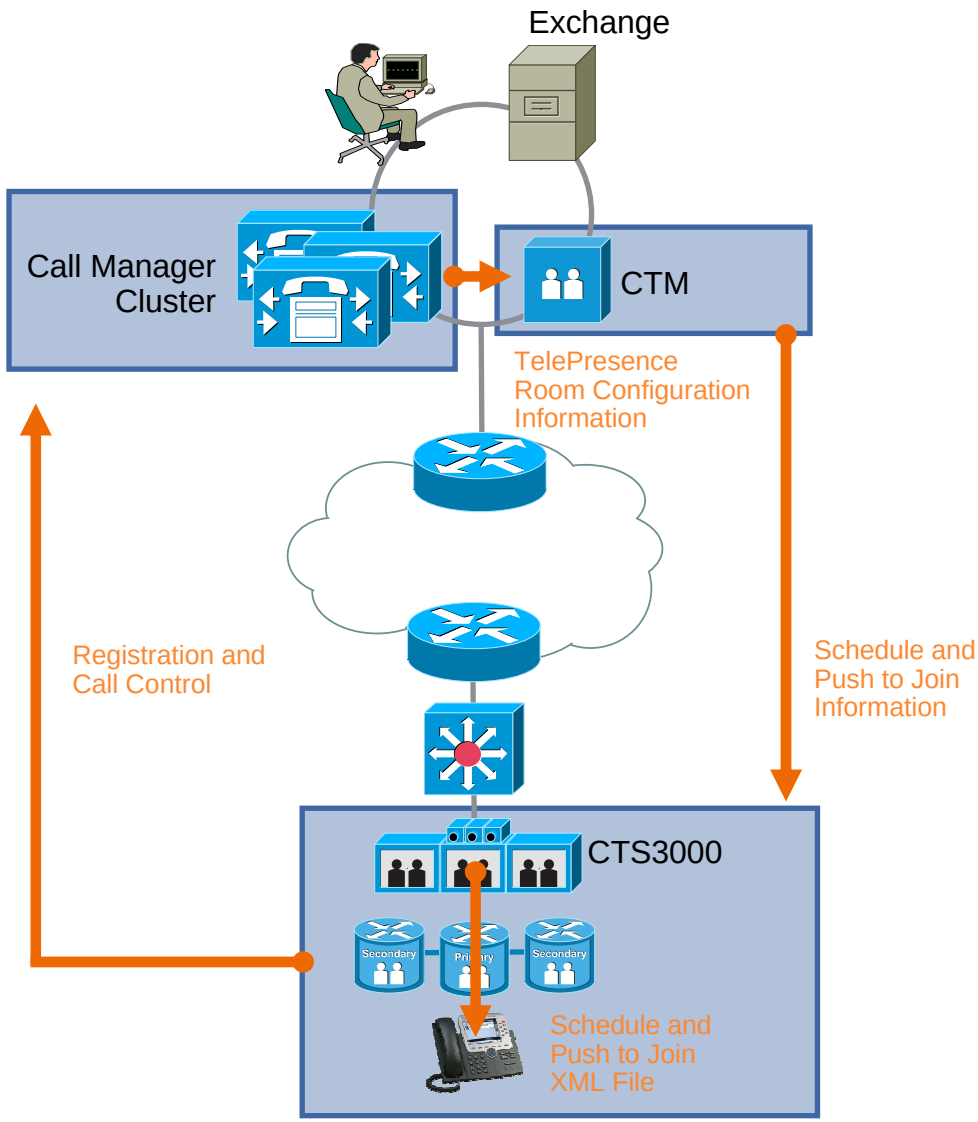

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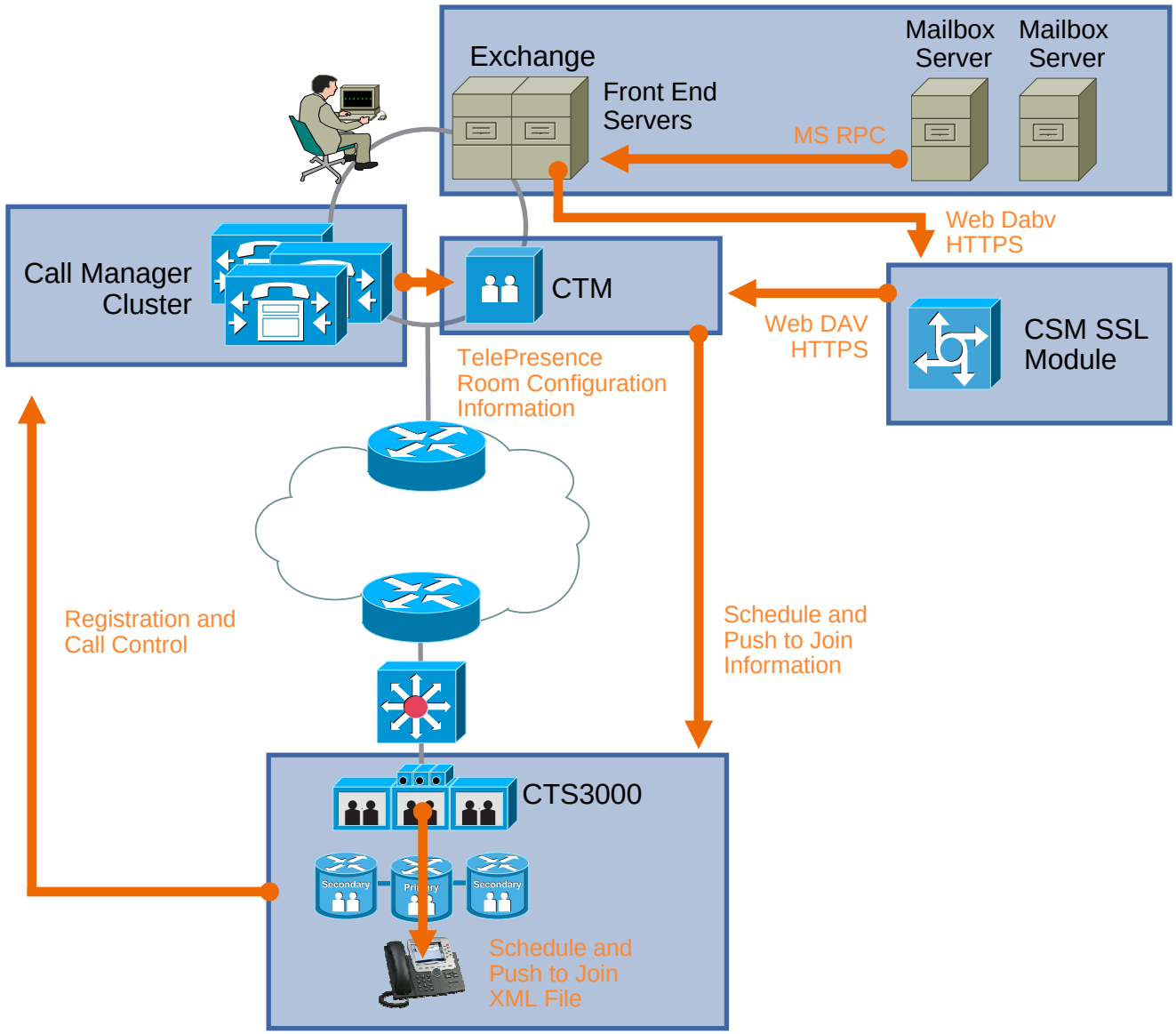

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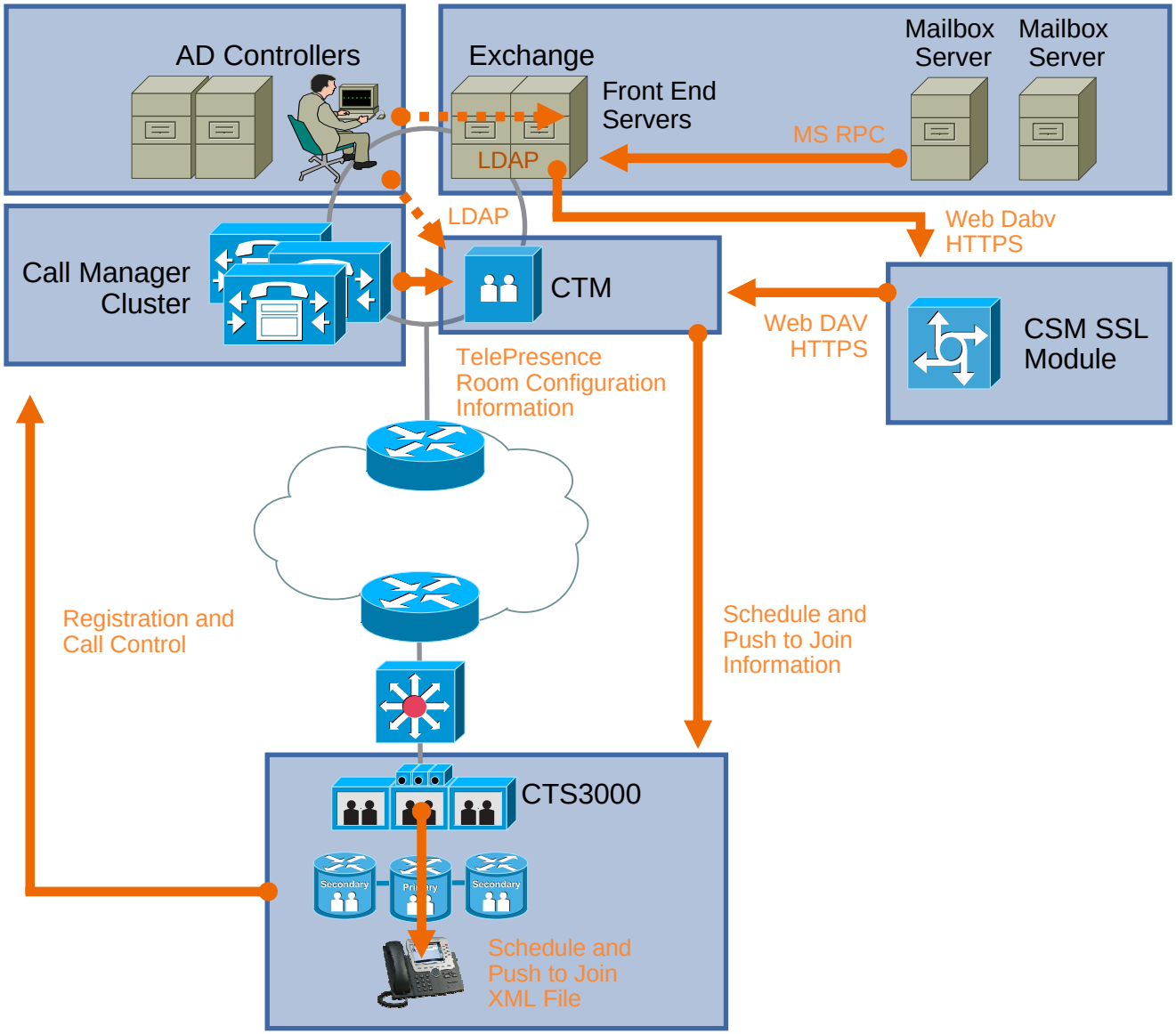

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