



Advanced Cisco Collaboration Training



On-Premise Collaboration

- Windows AD, DNS, CA
- vmware Infrastructure, ESXi
- CUCM, CUC, IMP
- ILS, SSO, DB Replication
- Advanced Call Routing
- CUBE HA
- SIP Deep Dive
- License Manager
- Security & Certificates
- Troubleshooting
- CCM Logs & PCAPs
- UC Upgrades
- Advanced configurations



Edge Collaboration

- Expressway C & E
- Licensing & Option Keys
- SSL Certificates
- Mobile Remote Access (MRA)
- B2B Call
- Video Endpoints
- Troubleshooting



Cloud Collaboration

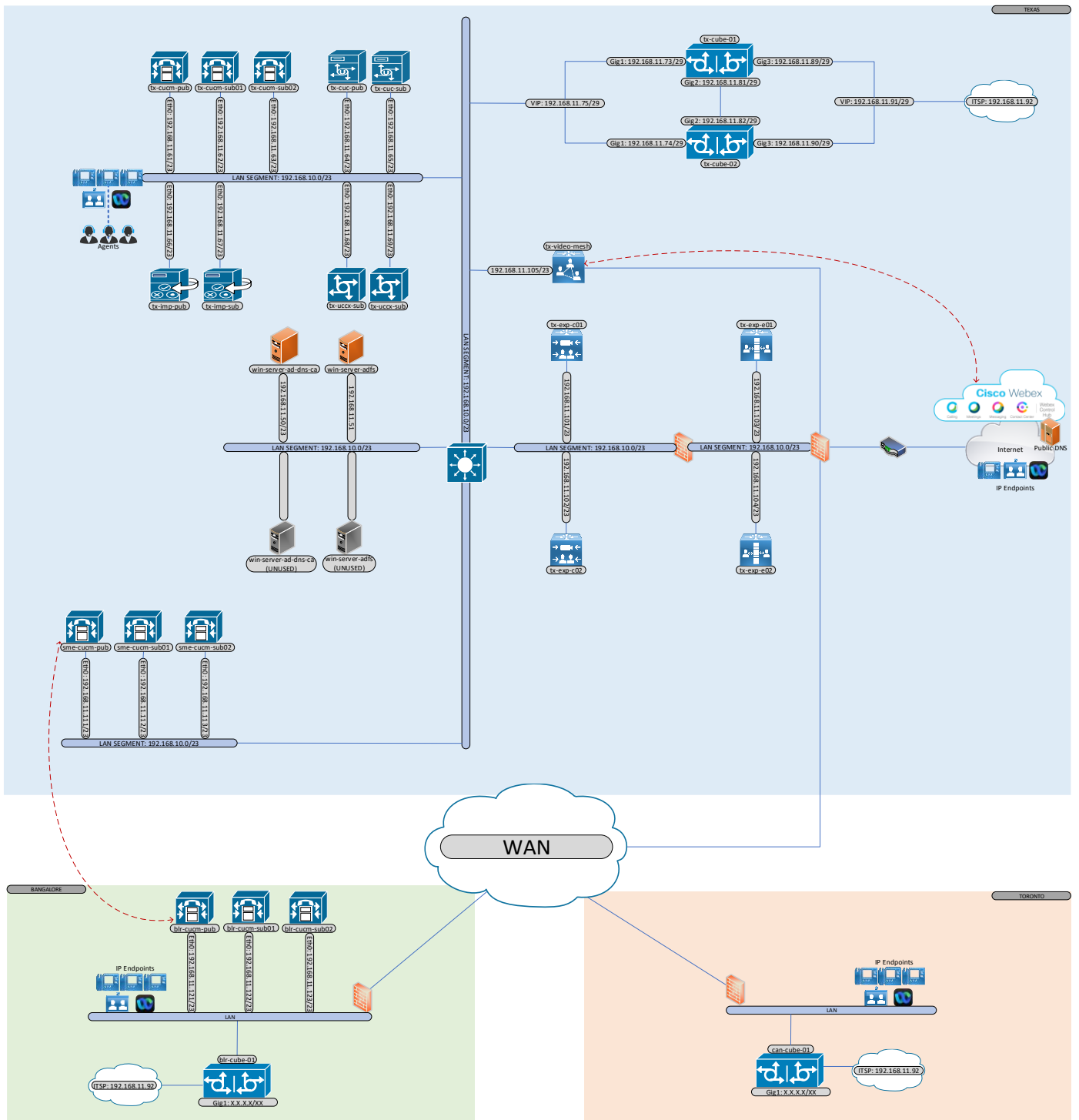
- Webex Teams Suit
- Webex Control Hub
- Life Cycle and Domain
- SSO
- Licensing
- Directory Connect
- Webex UCM Call
- Hybrid Call Services
- Cloud Registered TP

Call / WhatsApp:
+91-859-0101-859

Training Details

- Duration: 80 Hours of Video Training
- Fee: INR 20,000/- (Including GST)
- Support via WhatsApp / Call
- 100% Hands-on Training
- 80% Practical, 20% Theory
- Enterprise-level expert real-time trainer
- Post training community support
- Demo Class: <https://youtu.be/L6A-XFuMSgA>

Advanced Cisco Collaboration Lab



Chapter 1 Module 1 - Windows, vmware

1. Windows Active Directory (AD)
2. Domain Name System (DNS)
3. [Lab] Configure AD & DNS in Windows Server 2019
4. [Lab] Configure Reverse Lookup Zone in Windows DNS Server
5. [Lab] Add UC Servers DNS Entries
6. [Lab] Disable Windows Password Auto Expiry Group Policy
7. [Lab] Deploying CSR 1000v as NTP Server

Chapter 1 Module 2 - Cisco On-Premise Collaboration Solution (CUCM)

1. Cisco Unified Communications Manager (CUCM)
2. CUCM Installation
3. [Lab] Installing CUCM on vmware ESXi
4. [Lab] Some Useful CLI Commands
5. [Lab] CUCM Licensing
6. [Lab] Disaster Recovery System (DRS) Backup of CUCM Cluster
7. [Lab] Basic Health Check of UC Infrastructure & Understand the Cluster
8. Web GUI and Six Consoles in CUCM Cluster
9. Network Services in CUCM
10. Feature Services in CUCM
11. [Lab] Service Activation in CUCM Cluster
12. Understanding Cisco IP Phone 88XX
13. Understanding Cisco Telepresence Endpoint DX70
14. Protocols and Services Used by Cisco IP Phones / Telepresence Endpoints
15. Device Pool in CUCM
16. DHCP Configuration for Cisco IP Phones and Telepresence Endpoints
17. Default Phone Configuration File - xmldefault.cnf.xml
18. Auto Phone Firmware Upgrade Situations
19. [Lab] Auto Cisco Endpoint Registration in CUCM
20. [Lab] Create a Device Pool
21. [Lab] Manual Cisco Endpoint Registration in CUCM
22. User Management in CUCM
23. [Lab] Configure Local End User
24. [Lab] Configure CUCM Read Only Administrator
25. [Lab] Configure CUCM MACD Administrator
26. [Lab] LDAP (Light Weight Directory Access Protocol)
27. [Lab] Third Party SIP Phone Registration
28. IP Phone Packet Capture Procedure
29. RTMT To Collect Logs and PCAPs from CUCM Cluster

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30. IP Phone Bootup Process and Registration with PCAPs and CCM Logs
 31. CSS and Partition
 32. Dialed Number Analyzer - DNA
 33. Call Detailed Record - CDR
 34. IP Phone to IP Phone Call Flow with SIP Logs
 35. DX70 Web Management Console
 36. SSL Certificates
 37. SSL /TLS Handshake and PKI Infrastructure
 38. Understanding Public CA Signed Certificate
 39. Understanding Self Signed Certificate
 40. Internal or Enterprise CA Signed Certificate
 41. Understanding Components of Certificates
 42. CUCM SSL Certificates
 43. Tomcat and Tomcat Trust
 44. IPSec
 45. CallManager
 46. Trust Verification
 47. CAPF Certificate
 48. CSR - Certificate Signing Request
 49. CUCM SAN (Multi-Server Subject Alternate Name) Certificate
 50. [Lab] Setting up Internal / Enterprise CA in Windows Server
 51. [Lab] Create UC Certificate Templates in Windows Server Enterprise CA
 52. [Lab] Install Multi SAN Certificate for CUCM Cluster Tomcat Service
 53. Cisco IP Phone Services
 54. [Lab] Extension Mobility
 55. Troubleshooting Extension Mobility and Common Error Codes
 56. DNS Based Redundancy in Extension Mobility
 57. Single sign-on (SSO)
 58. [Lab] Configure Active Directory Federation Services (ADFS)
 59. [Lab] Configure SSO in CUCM
 60. CUCM DB Replication

Chapter 1 Module 3 - Cisco On-Premise Collaboration Solution (CUC)

1. Cisco Unity Connection (CUC)
2. [Lab] Installation PUB and SUB
3. [Lab] CUC Licensing
4. [Lab] Basic Health check in CUC
5. Web GUI and Five Consoles in CUC
6. [Lab] Cisco Unity Connection SIP Integration with CUCM
7. Understanding Call Routing Rules in Cisco Unity Connection
8. [Lab] Changing Authentication Rule
9. [Lab] Voicemail Template
10. [Lab] Creating Voicemailbox User
11. [Lab] Call Handler with Auto Attendant IVR

Chapter 1 Module 4 - Cisco On-Premise Collaboration Solution (IMP)

1. Cisco Unified IM and Presence (IMP)
2. [Lab] IMP Installation
3. [Lab] IMP Integration with CUCM
4. [Lab] DNS SRV Records for Jabber On-premise
5. Cisco Jabber Diagnostics, Problem Report and Troubleshooting

Chapter 1 Module 5 - Cisco On-Premise Collaboration Solution (Advanced Call Routing)

1. Session Initiation Protocol (SIP)
2. CUBE - Cisco Unified Border Element
3. [Lab] CUBE Configuration
4. CUBE Call Flow (with CUBE Debugs)
5. CUBE Call Flow (with CallManager Logs)
6. CUBE High Availability (HA)
7. CUCM Digit Manipulation
8. Translation Pattern
9. Calling and Called Party Transformations
10. CUBE Digit Manipulation
11. Voice Translation Profile
12. SIP Profile
13. Inbound Dial Peer Match
14. CUCM Deployment Models
15. Advanced Inter Cluster Call Routing via Session Management Edition (SME)
16. Inter Cluster Lookup Service (ILS)
17. SIP Normalization (Lua) Script
18. Media Resources
19. Hunt

Chapter 1 Module 6 - Cisco On-Premise Collaboration Solution (Upgrade)

1. CUCM Upgrade 11.5 to 12.5
2. Smart Licensing
3. Firmware Upgrade
4. Device Pack

Chapter 2 - Cisco Edge Collaboration Solution (Expressway)

1. Cisco Expressway Series
2. [Lab] DNS Entries for Expressway Series Servers
3. [Lab] Deploy Expressway
4. Different Types of License Expressway - C
5. Different Types of License Expressway - E
6. [Lab] Initializing and Licensing Expressway - C
7. [Lab] Installing Additional License on Expressway - C
8. [Lab] Initializing and Licensing Expressway - E
9. Expressway - E Single NIC vs Dual NIC
10. Clustering of Expressway
11. Clustering Prerequisites
12. [Lab] Expressway - C Clustering
13. [Lab] Expressway - E Clustering
14. [Lab] Expressway - C Certificate Requirement for MRA
15. [Lab] Expressway - C Cluster to TLS Enforce
16. [Lab] Expressway - E Certificate Requirement for MRA
17. [Lab] Expressway - E Cluster to TLS Enforce
18. [Lab] Configure MRA (Mobile Remote Access)

Chapter 3 - Cloud Collaboration

19. Overview of Webex Solutions
20. Webex Teams Overview
21. Webex Teams Infrastructure
22. WebEx Control Hub and Control Hub Deployment Life Cycle
23. Webex Teams Client
24. [Lab] User Management in Webex Control Hub
25. [Lab] Domain Verification, Claim the Domain
26. [Lab] Cisco Directory Connector
27. [Lab] Troubleshooting Directory Connector
28. Webex Teams SSO, Metadata File
29. [Lab] Webex Control Hub SSO Configuration
30. Classic Webex Meeting Site Administration
31. Webex Monitoring Hybrid Service
32. Policies and Features
33. [Lab] Workspaces
34. Register Cisco 8865 Phone in Cloud
35. Register Cisco DX70 in Cloud
36. Webex Video Mesh
37. Webex UCM Calling