

Cloud Collaboration Training



Datacenter & Cloud

- vmware Infrastructure
- Windows AD, DNS
- Azure Cloud
- Azure Compute
- Storage
- Networking
- Azure AD
- Web Hosting, Public DNS
- Identity & Access Management
- PowerShell foundation



Microsoft Teams and 365

- Microsoft 365 Admin Center
- Licensing & Subscriptions
- MS Teams Administration
- MS Teams Access Policies
- Teams Phone System
- Direct Routing
- SBCs (AudioCodes)
- Audio Conferencing
- Teams Dial Plan
- CUCM & Teams Integration
- Cloud Registered Teams IP Phone



Cisco Webex

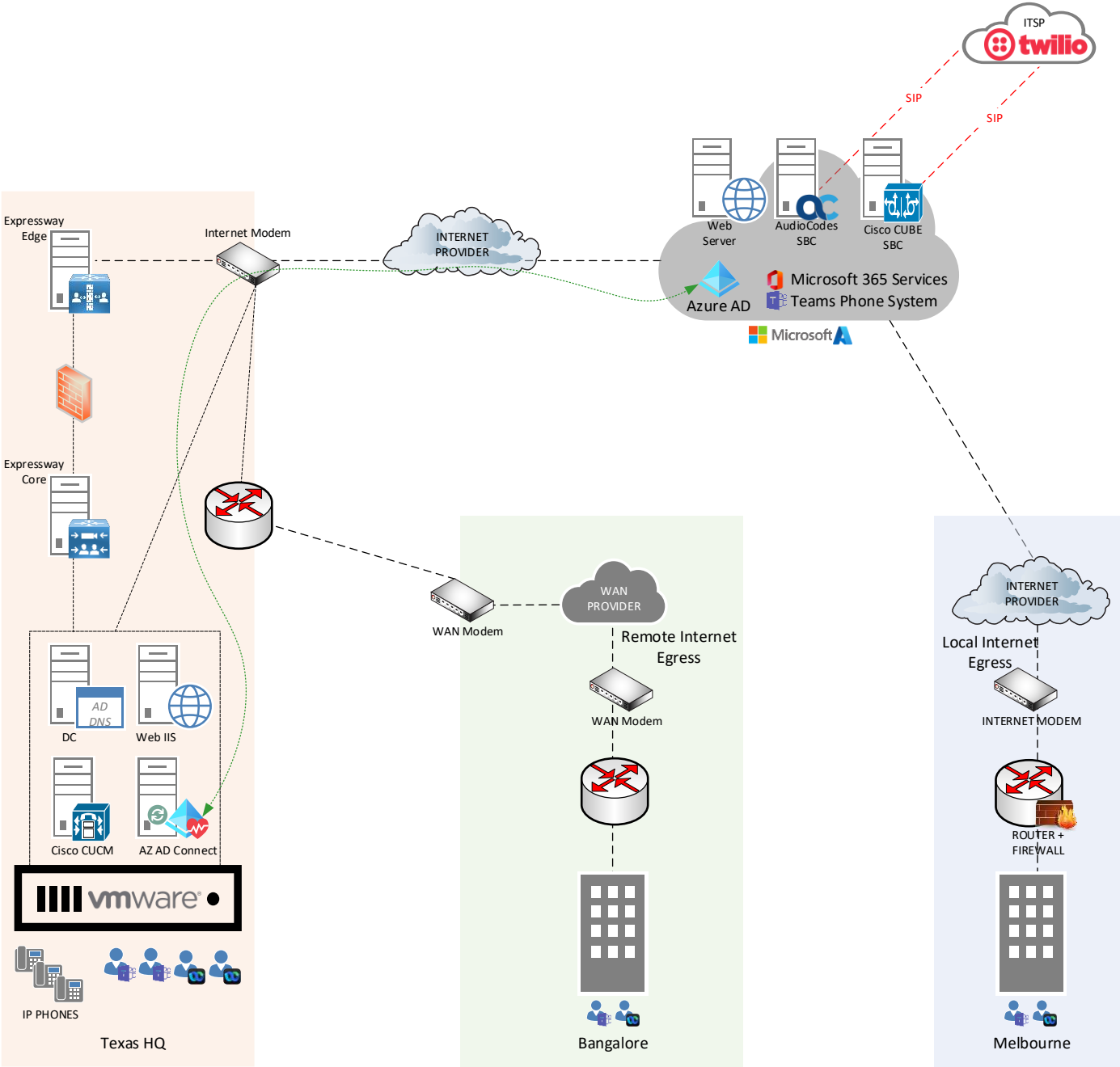
- Webex Control Hub
- Licensing & Policies
- Webex Administration
- SSO with Azure AD
- Webex Calling
- Webex Dial plan
- Local Gateway
- SBCs (CUBE)
- UCM Calling
- Cloud Registered Webex IP Phone

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

Training Details

- Duration: 90 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>

Cloud Collaboration Lab



Module 1 - vmware Datacenter, Windows, and Azure Public Cloud

1. Introduction to Networking, Virtualization and Cloud Computing
2. Structure on an Enterprise Server Infrastructure
3. Structure of Virtualized Enterprise Server Infrastructure
4. What is vmware ESXi?
5. [Lab] Getting Started with vmware ESXi
6. [Lab] Installing Windows Server 2019 in vmware ESXi
7. [Lab] Windows Server Post-installation Setup on vmware ESXi Platform
8. [Lab] Installing vmware Tools
9. Microsoft Traditional Active Directory (AD)
10. Windows Active Directory (AD)
11. Domain Name System (DNS)
12. [Lab] Configure Active Directory & DNS in Windows Server 2019
13. [Lab] Configure Reverse Lookup Zone
14. [Lab] Adding Primary Domain AJCOLLAB.COM in Active Directory as UPN Suffix
15. [Lab] Disable Windows Password Auto Expiry & Complexity Group Policy (For lab usage only)
16. [Lab] Create a User in AD
17. Real World Examples of Server Infrastructure
18. Deploying Web Server in Windows using IIS
19. Port forwarding and External Access to IIS Website
20. As a Service Offerings
21. Platform as a Service Demo
22. Infrastructure as a Service Demo
23. History of Microsoft
24. What is Microsoft Azure
25. History of Microsoft Azure
26. Azure Global Infrastructure
27. Azure Datacenter
28. Regions
29. Geography
30. Availability Zones (AZ)
31. Express Route
32. Azure global network
33. Understanding Cloud Collaboration Certifications
34. AJ Recommendation for Certifications
35. [Lab] Creating Free Trial Azure and 365 Account with 365 E5 Trial
36. [Lab] Getting Started with Administration via Azure Portal (portal.azure.com)
37. [Lab] User Administration with Azure Portal
38. [Lab] License Management from Azure Portal

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39. [Lab] Getting Started with Administration via Microsoft 365 Portal (admin.microsoft.com)
 40. [Lab] User Administration with Microsoft 365 Portal
 41. [Lab] Create new User from Microsoft 365 Admin Portal
 42. [Lab] License Management from Microsoft 365 Portal
 43. [Lab] Managing Custom Domain from Microsoft 365 Admin Portal
 44. Azure Subscription
 45. [Lab] Create Azure Subscription
 46. Azure Resource
 47. Resource Group
 48. [Lab] Create Resource Group
 49. Azure Virtual Machine Services
 50. Azure Virtual Machine Types and Sizes
 51. [Lab] Deploying Windows VM in Azure
 52. [Lab] Deleting Azure VM
 53. Azure Virtual Network Service
 54. Virtual Network Interface
 55. [Lab] Creating Azure Virtual Network Service
 56. Review the Virtual Network Service
 57. [Lab] Deploy New Windows VM in Azure Virtual Network
 58. Review the Azure Virtual Machine
 59. [Lab] Accessing and Connecting to Azure VM
 60. [Lab] Deleting Azure Virtual Machine
 61. Network Security Group
 62. [Lab] Creating Network Security Group at Subnet Level
 63. [Lab] Add Inbound Rules in Network Security Group
 64. Realtime Examples with Azure Virtual Machines
 65. [Lab] Host Your Own HTML Website with Windows VM in Azure using Windows IIS
 66. [Lab] Accessing IIS Sample Website with Private IP or localhost
 67. [Lab] Change the default IIS Website to your own Custom Site
 68. [Lab] Hosting AJ Labs Sample HTML Webpage on Azure Windows VM
 69. [Lab] GoDaddy Domain Mapping to Azure VM Public IP (A Record)
 70. [Lab] GoDaddy Domain Mapping to Azure VM Public DNS Name (CNAME)
 71. [Lab] Host Your Own PHP Website in Azure Windows VM with Windows IIS & PHP
 72. [Lab] Hosting AJ Labs Sample PHP Webpage on Azure Windows VM
 73. [Lab] Enable IIS & Loading Custom PHP to Azure Windows VM Using PowerShell
 74. Custom data or User Data and Custom Script Extension
 75. User Data for Azure Virtual Machine
 76. Custom Script Extension
 77. [Lab] Enable IIS and Loading Custom PHP to Azure Windows VM Using Custom Script Extension
 78. [Lab] Deploying CentOS Linux VM in Azure
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79. [Lab] Host Your Sample PHP Website with CentOS Linux VM in Azure using HTTPD
 80. [Lab] Host Your Own PHP Website with CentOS Linux VM in Azure using HTTPD
 81. [Lab] WinSCP to Edit Linux Files via SFTP
 82. [Lab] Loading Custom PHP Website to Azure CentOS Linux VM using Bash Script
 83. [Lab] Loading Custom PHP Website to CentOS Linux using Custom Script Extension
 84. [Lab] Loading Custom PHP Website to CentOS Linux VM using Custom Data Scripts
 85. Azure Load Balancer
 86. [Lab] Deploying Azure Load balancer and distributing website traffic
 87. Azure NAT Gateway
 88. [Lab] Deploying Azure Load balancer and distributing website traffic
 89. Default Network Communications in Azure vNet
 90. OS Disk, Temporary Disk and Data Disk
 91. Azure Managed Disks
 92. State of Azure Virtual Machine
 93. Azure Resource Cost Analysis, Budget and Pricing
 94. Virtual Machine Serial Console
 95. Azure Storage Accounts
 96. [Lab] Creating a Storage Account
 97. [Lab] Uploading a File to Blob Storage
 98. [Lab] Azure Storage Explorer Access to Individual Container
 99. [Lab] Azure Storage Explorer Access to All Container inside a Subscription
 100. Azure Identities and Governance
 101. Azure Active Directory
 102. [Lab] Reviewing Default Azure AD Directory Options
 103. [Lab] Map Custom Domain in Azure AD
 104. [Lab] Create Users in Azure AD and Login as New User
 105. [Lab] Create a Global Administrator Account with AJCOLLAB Domain Name
 106. [Lab] Getting a new Free Trial Azure Subscription on the new Account
 107. [Lab] Access the Microsoft 365 Admin Portal
 108. [Lab] Disable Multi-Factor Authentication Security by Default Options
 109. [Lab] Disable Multi-Factor Authentication Per User Basis
 110. Difference between Azure AD and On-Premise Windows AD
 111. Role Based Access Control (RBAC)
 112. [Lab] Creating User Groups and Adding Users to the Group
 113. [Lab] Providing Reader Access to Resource Group for the new User Group
 114. [Lab] Providing Owner Access to the New Subscription for the Default User
 115. [Lab] Creating Custom Role
 116. Azure AD Role
 117. Azure AD Connect
 118. Azure AD Connect Prerequisites
 119. [Lab] Setting up Windows Server for Azure AD Connect – Joining Domain
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120. [Lab] Create Sync User Group in On-Premise AD
 121. [Lab] Create an OU for Group Writeback
 122. [Lab] Installing Azure AD Connect
 123. Accounts Created as part of AD Connect
 124. AD Connect Sync Scheduler Status
 125. [Lab] Azure AD Connect Filtering Based on Domain
 126. [Lab] Metaverse Search
 127. [Lab] Azure AD Connect Manual Sync Cycle
 128. Delta Sync
 129. Full Sync (Initial Sync)
 130. [Lab] Synchronize on-prem AD Group to Azure AD
 131. [Lab] Completely Disable Azure AD Sync
 132. Important AD Connect PowerShell Commands
 133. PowerShell Foundation
 134. [Lab] Renaming folder Name with PowerShell
 135. [Lab] Start / Stop Windows Service with PowerShell
 136. [Lab] Installing MSOL Command sets in PowerShell
 137. [Lab] Connecting PowerShell to Azure
 138. [Lab] Installing & Connecting Exchange Online Command sets in PowerShell
 139. [Lab] Installing & Connecting Teams Command sets in PowerShell
 140. [Lab] Creating a User with PowerShell
 141. Important PowerShell Commands

Module 2 – Microsoft 365, Teams Administration, Direct Routing, SBCs

1. Assign Microsoft 365 Licenses to End Users (Enable Teams Feature)
2. [Lab] Assign Microsoft 365 Licenses to End Users from Admin Portal
3. [Lab] Assign Microsoft 365 Licenses to End Users from Admin Portal Active User Page
4. [Lab] Assign Microsoft 365 Licenses to End Users from Azure Active Directory Portal
5. [Lab] Group Based License Assignment
6. [Lab] Access office Applications and Teams as End User
7. Getting Started with Teams Administration
8. Understanding Groups for Teams Administration
9. [Lab] Creating Microsoft 365 Group with Teams from Microsoft Admin Center
10. [Lab] Creating Microsoft 365 Group from Azure Active Directory
11. [Lab] Enable Teams to an Existing Microsoft 365 Group
12. [Lab] Creating Teams from Teams Admin Center
13. [Lab] End User Creating Teams from Teams Application
14. [Lab] Creating Teams and Adding Users Using PowerShell
15. [Lab] Group or Teams Assignment from User Page
16. Managing Users in a Team
17. [Lab] Team Member Requesting to Add another Member to the Owner
18. [Lab] Team Owner Adds Another Member
19. [Lab] Add Additional Owner to the Team
20. [Lab] Managing Teams Settings from Teams Admin Portal
21. [Lab] Managing Users in Teams Admin Center
22. [Lab] Dynamic User Group Membership
23. Governance and Life Cycle Management
24. [Lab] Naming policy for Microsoft 365 Groups
25. [Lab] Managing Group Expiration Policy
26. [Lab] Archiving and Restoring a Team
27. [Lab] Deleting and Un-Deleting
28. Managing Guest Access
29. [Lab] Configuring Guest Access
30. [Lab] Configure Guest User
31. [Lab] Remote Guest User
32. Managing Chat and Collaboration Experience
33. Global (Org-wide default) Messaging Policy
34. Custom Messaging Policy
35. View and Change Policy for individual User
36. Test Custom Messaging Policy
37. External Access
38. Standard Channel
39. Public Channel in Teams

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40. Private Channel in Teams
 41. Manage Channels from Team Admin Center
 42. Global (Org-wide default) Teams Policy
 43. Custom Teams Policy
 44. Test Custom Teams Policy
 45. Channel Email Integration
 46. External Sharing from Teams
 47. File Upload in Teams
 48. File Management in Teams
 49. File Sharing Link from Teams
 50. External Cloud File Storage Options in File Tab
 51. Enable or Disable External Clouds File Storage Options
 52. Adding Google Drive to Cloud File Storage
 53. Managing Meeting Experience
 54. Configuring Meeting Settings
 55. Meeting Policies
 56. General
 57. Audio & Video:
 58. Recording & Transcription:
 59. Content Sharing:
 60. Participants & Guests:
 61. Custom Meeting Policies
 62. Teams Federation and External Access
 63. Managing Security and Compliance
 64. Microsoft Teams Admin Roles from Microsoft 365 Admin Portal
 65. Microsoft Teams Admin Roles from Azure Active Directory Portal
 66. Teams Phone System for PSTN
 67. Microsoft Teams PSTN Connectivity Options
 68. Phone System Licensing
 69. Calling Plan - Managing Microsoft Teams Phone Numbers
 70. [Lab] Buy a Calling Plan from Microsoft 365 Admin Center
 71. [Lab] Assigning and Verifying Phone System License along with Calling Plan
 72. Calling Plan Teams Phone Number Types
 73. [Lab] Acquiring Phone Numbers from Microsoft (Calling Plan)
 74. [Lab] Assigning Phone Numbers to User (Calling Plan)
 75. Network Topology
 76. [Lab] Configuring Network Topology
 77. Configuring Emergency Calling
 78. [Lab] Manage Emergency Address
 79. [Lab] Manage Location Information Service (LIS) database
 80. [Lab] Create Emergency Calling Policy (Calling Plan, Operator Connect)
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81. Phone System Policies
 82. Calling Policy
 83. Call Hold Policy (Music on Hold)
 84. Call Park Policy
 85. Caller ID Policy
 86. Policy Packages
 87. Inbound Call Blocking at Tenant Level
 88. Inbound Call Blocking Individual User Level
 89. Outbound Call Blocking
 90. IVR Solutions with Call Queue
 91. Call Queues
 92. Call Que Routing Methods
 93. Resource Accounts
 94. Auto Attendants
 95. [Lab] Design a Complete Voice IVR Contact Center Application in Microsoft Teams
 96. [Lab] Acquire the Service Phone Number
 97. [Lab] Creating Resource Accounts
 98. [Lab] Assign 'Microsoft Teams Phone Resource Account licenses
 99. [Lab] Assign Number to Auto Attendant Resource Account
 100. [Lab] Creating Call Queues
 101. [Lab] Creating Auto Attendant
 102. Audio Conferencing in Meeting
 103. [Lab] Configure Licenses for the Audio Conferencing
 104. [Lab] Configure Audio Conferencing
 105. [Lab] User Settings for Audio Conferencing
 106. [Lab] Audio Conferencing Option in a Sample Meeting
 107. Optimize Network Performance for Teams
 108. Network Readiness
 109. Network Performance
 110. Network Validation Tools
 111. Network Planner
 112. Network Connectivity Test Tool
 113. Network Assessment Tool
 114. VPN Considerations for Teams
 115. Dial Plan
 116. Service Country Scoped Dial Plan:
 117. Tenant Scoped Dial Plan
 118. [Lab] Creating Custom Tenant Dial Plan
 119. Inbound Call Handling Per User Features
 120. Call Delegation
 121. Simultaneous Ringing (Sim Ring)
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122.	Call Forwarding
123.	Group Call Pickup
124.	Inbound Call Handling Configurations from Teams Admin Center
125.	[Lab] Teams Cloud Voicemail Configurations
126.	Teams Client Devices
127.	Microsoft Teams Room (MTR) Components
128.	Microsoft Teams Rooms License
129.	Microsoft Teams Room (MTR) Provisioning
130.	Microsoft Teams Phones
131.	Microsoft Teams Phones Provisioning
132.	Configuration Profile
133.	Basic Monitoring and Troubleshooting Teams
134.	Azure AD Login Issues
135.	PowerShell User Account Validation
136.	Support Logs from Teams Desktop Client
137.	Teams Media Logs
138.	Teams Desktop Logs
139.	Browser Logs
140.	Microsoft Call Quality Dashboard (CQD)
141.	Call Quality Report for individual users
142.	Teams Usage Reports
143.	Transport Relay
144.	Direct Routing
145.	Plan Design Direct Routing Call Flows
146.	Microsoft Certified SBCs
147.	License Required for Direct Routing
148.	Steps required to deploy direct routing
149.	Configuring Direct Routing SBC
150.	[Lab] Add SBC in Microsoft Teams
151.	[Lab] Voice Routes and PSTN Usage Record
152.	[Lab] Voice Routing Policy
153.	[Lab] Enable User for Direct Routing
154.	[Lab] Add Public SRV Records and CNAMEs for Teams Phone System
155.	[Lab] Implement AudioCodes SBC with Microsoft Teams
156.	[Lab] Configure Network Security Group of SBC
157.	Access the Web Interface of AudioCodes SBC
158.	[Lab] Map Public DNS name to Public IP Address of SBC
159.	[Lab] Configure the Public SSL Certificate for SBC
160.	[Lab] Configure AudioCodes SBC for Direct Routing
161.	[Lab] SIP PSTN Side Integrations
162.	[Lab] CUCM and MS Teams Integration via Direct Routing with Cisco CUBE

Module 3 – Webex Administration, Webex Calling

1. History of Cisco Webex
2. Webex Teams Client
3. Spaces
4. Teams
5. Meetings
6. WebEx Control Hub Overview
7. Control Hub Deployment Life Cycle
8. [Lab] Local User Management in Webex Control Hub
9. [Lab] Domain Verification Manual
10. [Lab] Domain Verification with Azure AD
11. Claim the Domain
12. [Lab] Cisco Directory Connector
13. [Lab] Troubleshooting Directory Connector
14. [Lab] Auto Synchronize Azure Active Directory users into Control Hub
15. [Lab] Provision on Demand Synchronize Azure Active Directory users into Control Hub
16. Webex Teams SSO
17. Process of SSO Login
18. Metadata File
19. [Lab] Webex SSO with Azure AD
20. [Lab] Manually Assign License to the Users
21. Auto License Assignment
22. Organization Based License Assignment
23. Policies and Features
24. Enabling External Domain Messaging
25. [Lab] Workspaces
26. [Lab] Register Cisco DX70 in Cloud
27. [Lab] Register Cisco IP Phone to Webex Cloud with MPP conversion
28. Webex Calling Architecture
29. Webex Calling and PSTN Access Methods
30. Webex Dial plan
31. Trunks
32. Route Groups
33. Rerouting Mechanisms
34. Enable location for Webex Calling powered by broadcloudpbx
35. Connecting PSTN to a Site
36. Ordering DID Number from PSTN
37. Enabling Webex Calling powered by broadcloudpbx for Workspace
38. Enabling Webex Calling powered by broadcloudpbx for User
39. Local Gateway Registration Process

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40. [Lab] Deploy vCUBE Router (Cisco C8000V) in Azure
 41. [Lab] License Configuration for vCUBE
 42. [Lab] Integrate vCUBE for Webex Calling and PSTN Interconnect
 43. [Lab] Add Location in Webex Control Hub
 44. [Lab] Configure Trunk in Webex Control Hub
 45. [Lab] Configure Route Group in Webex Control Hub
 46. [Lab] Create Dial Plan in Webex Control Hub
 47. [Lab] Configure vCUBE for Webex
 48. [Lab] Configure vCUBE for PSTN
 49. [Lab] Set the PSTN Connection for Location
 50. [Lab] Assign PSTN DID Number to Webex User & Test Calls