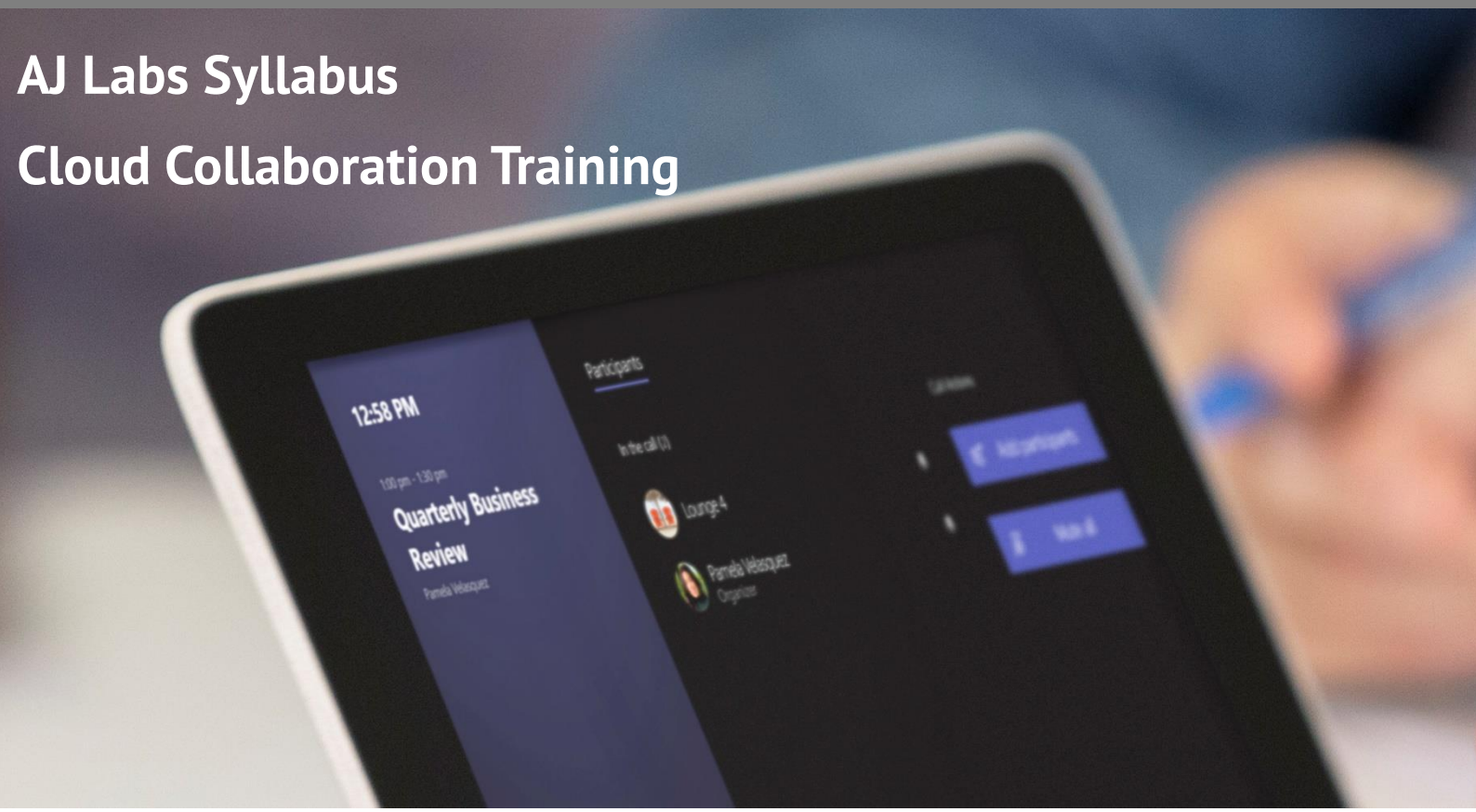
AJ Labs Syllabus

Cloud Collaboration Training

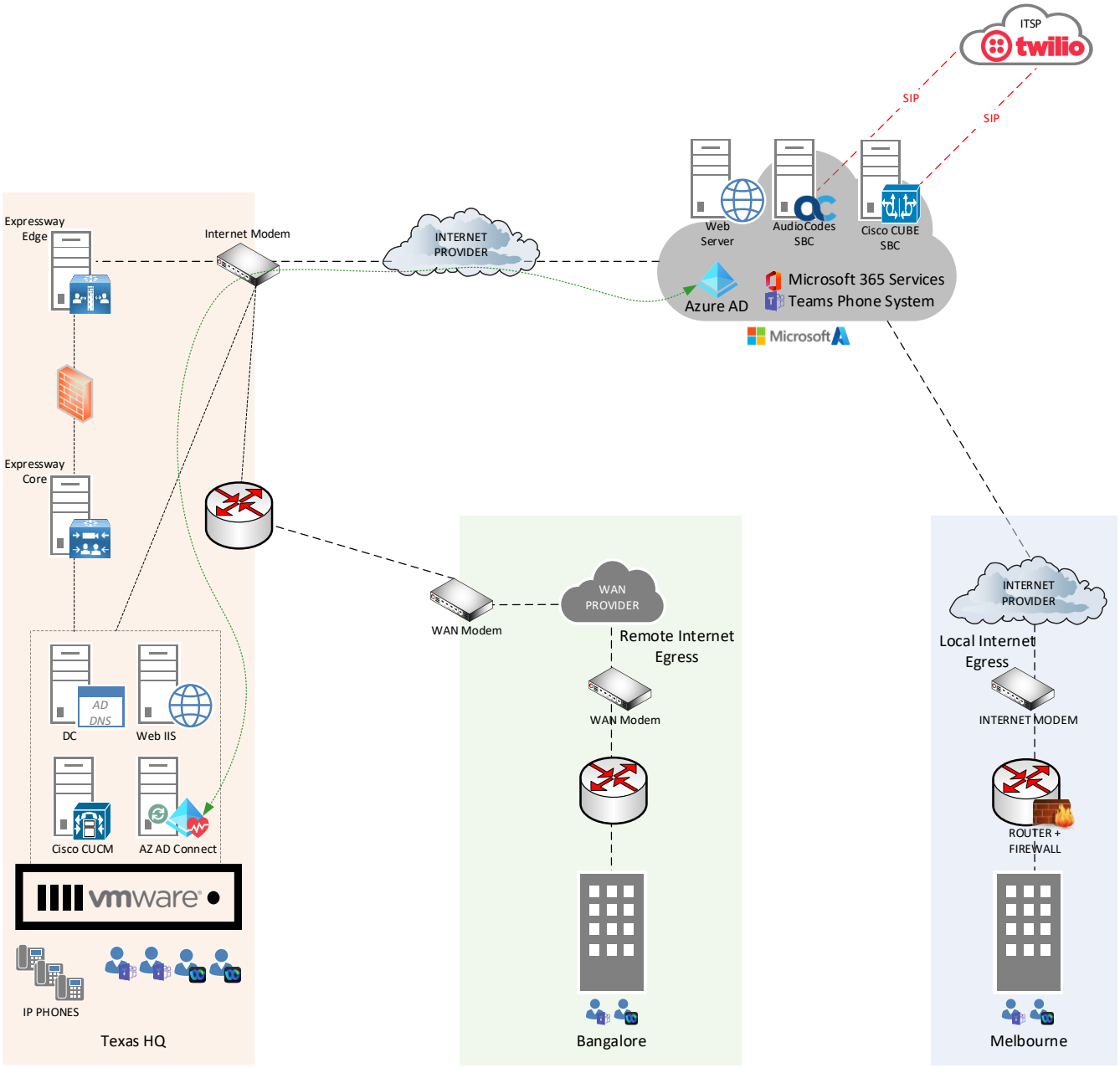


Training Details

- Online Recorded Class (33 Session, 85 hours in total)
- Remote real-time lab access
- Certification oriented (AZ900, AZ104, MS700, MS721, CLCEI 300-820)
- Other advanced study materials, eBook, Interview Questions, etc.
- Individual attention for learning, Post training community support

Contact: +91-79751119200

AJ Labs Cloud Collaboration Network Topology



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
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 129
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
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
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

142. Assign Microsoft 365 Licenses to End Users (Enable Teams Feature)
143. [Lab] Assign Microsoft 365 Licenses to End Users from Admin Portal
144. [Lab] Assign Microsoft 365 Licenses to End Users from Admin Portal Active User Page
145. [Lab] Assign Microsoft 365 Licenses to End Users from Azure Active Directory Portal
146. [Lab] Group Based License Assignment
147. [Lab] Access office Applications and Teams as End User
148. Getting Started with Teams Administration
149. Understanding Groups for Teams Administration
150. [Lab] Creating Microsoft 365 Group with Teams from Microsoft Admin Center
151. [Lab] Creating Microsoft 365 Group from Azure Active Directory
152. [Lab] Enable Teams to an Existing Microsoft 365 Group
153. [Lab] Creating Teams from Teams Admin Center
154. [Lab] End User Creating Teams from Teams Application
155. [Lab] Creating Teams and Adding Users Using PowerShell
156. [Lab] Group or Teams Assignment from User Page
157. Managing Users in a Team
158. [Lab] Team Member Requesting to Add another Member to the Owner
159. [Lab] Team Owner Adds Another Member
160. [Lab] Add Additional Owner to the Team
161. [Lab] Managing Teams Settings from Teams Admin Portal
162. [Lab] Managing Users in Teams Admin Center
163. [Lab] Dynamic User Group Membership
164. Governance and Life Cycle Management
165. [Lab] Naming policy for Microsoft 365 Groups
166. [Lab] Managing Group Expiration Policy
167. [Lab] Archiving and Restoring a Team
168. [Lab] Deleting and Un-Deleting
169. Managing Guest Access
170. [Lab] Configuring Guest Access
171. [Lab] Configure Guest User
172. [Lab] Remote Guest User
173. Managing Chat and Collaboration Experience
174. Global (Org-wide default) Messaging Policy
175. Custom Messaging Policy
176. View and Change Policy for individual User
177. Test Custom Messaging Policy
178. External Access
179. Standard Channel
180. Public Channel in Teams
181. Private Channel in Teams
182. Manage Channels from Team Admin Center
183. Global (Org-wide default) Teams Policy
184. Custom Teams Policy
185. Test Custom Teams Policy
186. Channel Email Integration
187. External Sharing from Teams
188. File Upload in Teams
189. File Management in Teams
190. File Sharing Link from Teams
191. External Cloud File Storage Options in File Tab
192. Enable or Disable External Clouds File Storage Options
193. Adding Google Drive to Cloud File Storage
194. Managing Meeting Experience
195. Configuring Meeting Settings
196. Meeting Policies

197. General
198. Audio &b Video:
199. Recording & Transcription:
200. Content Sharing:
201. Participants & Guests:
202. Custom Meeting Policies
203. Teams Federation and External Access
204. Managing Security and Compliance
205. Microsoft Teams Admin Roles from Microsoft 365 Admin Portal
206. Microsoft Teams Admin Roles from Azure Active Directory Portal
207. Teams Phone System for PSTN
208. Microsoft Teams PSTN Connectivity Options
209. Phone System Licensing
210. Calling Plan - Managing Microsoft Teams Phone Numbers
211. [Lab] Buy a Calling Plan from Microsoft 365 Admin Center
212. [Lab] Assigning and Verifying Phone System License along with Calling Plan
213. Calling Plan Teams Phone Number Types
214. [Lab] Acquiring Phone Numbers from Microsoft (Calling Plan)
215. [Lab] Assigning Phone Numbers to User (Calling Plan)
216. Network Topology
217. [Lab] Configuring Network Topology
218. Configuring Emergency Calling
219. [Lab] Manage Emergency Address
220. [Lab] Manage Location Information Service (LIS) database
221. [Lab] Create Emergency Calling Policy (Calling Plan, Operator Connect)
222. Phone System Policies
223. Calling Policy
224. Call Hold Policy (Music on Hold)
225. Call Park Policy
226. Caller ID Policy
227. Policy Packages
228. Inbound Call Blocking at Tenant Level
229. Inbound Call Blocking Individual User Level
230. Outbound Call Blocking
231. IVR Solutions with Call Queue
232. Call Queues
233. Call Que Routing Methods
234. Resource Accounts
235. Auto Attendants
236. [Lab] Design a Complete Voice IVR Contact Center Application in Microsoft Teams
237. [Lab] Acquire the Service Phone Number
238. [Lab] Creating Resource Accounts
239. [Lab] Assign 'Microsoft Teams Phone Resource Account licenses
240. [Lab] Assign Number to Auto Attendant Resource Account
241. [Lab] Creating Call Queues
242. [Lab] Creating Auto Attendant
243. Audio Conferencing in Meeting
244. [Lab] Configure Licenses for the Audio Conferencing
245. [Lab] Configure Audio Conferencing
246. [Lab] User Settings for Audio Conferencing
247. [Lab] Audio Conferencing Option in a Sample Meeting
248. Optimize Network Performance for Teams
249. Network Readiness
250. Network Performance
251. Network Validation Tools
252. Network Planner
253. Network Connectivity Test Tool

254. Network Assessment Tool
255. VPN Considerations for Teams
256. Dial Plan
257. Service Country Scoped Dial Plan:
258. Tenant Scoped Dial Plan
259. [Lab] Creating Custom Tenant Dial Plan
260. Inbound Call Handling Per User Features
261. Call Delegation
262. Simultaneous Ringing (Sim Ring)
263. Call Forwarding
264. Group Call Pickup
265. Inbound Call Handling Configurations from Teams Admin Center
266. [Lab] Teams Cloud Voicemail Configurations
267. Teams Client Devices
268. Microsoft Teams Room (MTR) Components
269. Microsoft Teams Rooms License
270. Microsoft Teams Room (MTR) Provisioning
271. Microsoft Teams Phones
272. Microsoft Teams Phones Provisioning
273. Configuration Profile
274. Basic Monitoring and Troubleshooting Teams
275. Azure AD Login Issues
276. PowerShell User Account Validation
277. Support Logs from Teams Desktop Client
278. Teams Media Logs
279. Teams Desktop Logs
280. Browser Logs
281. Microsoft Call Quality Dashboard (CQD)
282. Call Quality Report for individual users
283. Teams Usage Reports
284. Transport Relay
285. Direct Routing
286. Plan Design Direct Routing Call Flows
287. Microsoft Certified SBCs
288. License Required for Direct Routing
289. Steps required to deploy direct routing
290. Configuring Direct Routing SBC
291. [Lab] Add SBC in Microsoft Teams
292. [Lab] Voice Routes and PSTN Usage Record
293. [Lab] Voice Routing Policy
294. [Lab] Enable User for Direct Routing
295. [Lab] Add Public SRV Records and CNAMEs for Teams Phone System
296. [Lab] Implement AudioCodes SBC with Microsoft Teams
297. [Lab] Configure Network Security Group of SBC
298. Access the Web Interface of AudioCodes SBC
299. [Lab] Map Public DNS name to Public IP Address of SBC
300. [Lab] Configure the Public SSL Certificate for SBC
301. [Lab] Configure AudioCodes SBC for Direct Routing
302. [Lab] SIP PSTN Side Integrations

Module 3 – Webex Administration, Webex Calling

303. History of Cisco Webex
304. Webex Teams Client
305. Spaces
306. Teams
307. Meetings
308. WebEx Control Hub Overview
309. Control Hub Deployment Life Cycle
310. [Lab] Local User Management in Webex Control Hub
311. [Lab] Domain Verification Manual
312. [Lab] Domain Verification with Azure AD
313. Claim the Domain
314. [Lab] Cisco Directory Connector
315. [Lab] Troubleshooting Directory Connector
316. [Lab] Auto Synchronize Azure Active Directory users into Control Hub
317. [Lab] Provision on Demand Synchronize Azure Active Directory users into Control Hub
318. Webex Teams SSO
319. Process of SSO Login
320. Metadata File
321. [Lab] Webex SSO with Azure AD
322. [Lab] Manually Assign License to the Users
323. Auto License Assignment
324. Organization Based License Assignment
325. Policies and Features
326. Enabling External Domain Messaging
327. [Lab] Workspaces
328. [Lab] Register Cisco DX70 in Cloud
329. [Lab] Register Cisco IP Phone to Webex Cloud with MPP conversion
330. Webex Calling Architecture
331. Webex Calling and PSTN Access Methods
332. Webex Dial plan
333. Trunks
334. Route Groups
335. Rerouting Mechanisms
336. Enable location for Webex Calling powered by broadcloudpbx
337. Connecting PSTN to a Site
338. Ordering DID Number from PSTN
339. Enabling Webex Calling powered by broadcloudpbx for Workspace
340. Enabling Webex Calling powered by broadcloudpbx for User
341. Local Gateway Registration Process
342. [Lab] Deploy vCUBE Router (Cisco C8000V) in Azure
343. [Lab] License Configuration for vCUBE
344. [Lab] Integrate vCUBE for Webex Calling and PSTN Interconnect
345. [Lab] Add Location in Webex Control Hub
346. [Lab] Configure Trunk in Webex Control Hub
347. [Lab] Configure Route Group in Webex Control Hub
348. [Lab] Create Dial Plan in Webex Control Hub
349. [Lab] Configure vCUBE for Webex
350. [Lab] Configure vCUBE for PSTN
351. [Lab] Set the PSTN Connection for Location
352. [Lab] Assign PSTN DID Number to Webex User & Test Calls