



Automating and Programming Cisco Collaboration Solutions v1.1 (300-835)

Exam Description: Automating and Programming Cisco Collaboration Solutions v1.1 (CLAUTO 300-835) is a 90-minute exam associated with the CCNP Collaboration Certification and DevNet Professional Certification. This exam certifies a candidate's knowledge of implementing applications that automate and extend Cisco Collaboration platforms, including programming concepts, APIs and automation protocols, and Python programming. The course, Implementing Cisco Collaboration Automation Solutions, helps candidates to prepare for this exam.

The following topics are general guidelines for the content likely to be included on the exam. However, other related topics may also appear on any specific delivery of the exam. To better reflect the contents of the exam and for clarity purposes, the guidelines below may change at any time without notice.

- 10%** **1.0** **Network Programmability Foundation**
 - 1.1 Utilize common version control operations with Git (add, clone, push, commit, diff, branching, and merging conflict)
 - 1.2 Describe characteristics of API styles (REST, RPC, and SOAP)
 - 1.3 Describe the challenges encountered and patterns used when consuming APIs synchronously and asynchronously
 - 1.4 Interpret Python scripts containing data types, functions, classes, conditions, and looping
 - 1.5 Describe the benefits of Python virtual environments
 - 1.6 Identify the roles of load balancer, firewall, DNS, and reverse proxy in collaboration application deployment

- 25%** **2.0** **Unified Communication**
 - 2.1 Construct API calls to automate Cisco UCM user/phone moves, adds, changes, and using the AXL SOAP API
 - 2.2 Construct API calls to automate Cisco UCM dial plan and cluster config using the AXL SOAP API
 - 2.3 Describe the capabilities and use of the Cisco UCM CTI APIs TAPI/JTAPI
 - 2.4 Describe the capabilities and use of the Cisco UCM Serviceability Perfmon API and CDR interface
 - 2.5 Describe the capabilities and use of the IP Phone Services API
 - 2.6 Describe the capabilities of Finesse REST APIs and Gadgets

- 25%** **3.0** **Cloud Collaboration**
 - 3.1 Describe Webex REST API capabilities, use, application architectures, authentication mechanisms, and token types
 - 3.2 Implement administrative operations on Webex organizations, users, licenses, and compliance events using the Webex REST API
 - 3.3 Construct a Python script to automate creation of Webex spaces and memberships
 - 3.4 Construct a Python script to implement notification

- 3.5 Construct API calls to implement interactive bots (including buttons and cards)
 - 3.6 Describe Webex bots, embedded apps, guest issuer apps, and integrations
 - 3.7 Create a web application embedding Webex and messaging using Webex Widgets
 - 3.8 Describe the capabilities and use for the various Webex Teams SDKs
- 20%** **4.0 Collaboration Endpoints**
- 4.1 Construct API calls to automate Cisco collaboration room devices direct to the end point or via the cloud xAPI, Devices API, Devices configuration API, and Workspaces API)
 - 4.2 Construct a script to monitor Cisco collaboration room device events using the xAPI Python SDK
 - 4.3 Describe the capabilities, use, creation, and deployment of custom controls for Cisco collaboration room devices using the In-Room Controls Editor
 - 4.4 Describe the capabilities, use, creation, and deployment of Cisco collaboration room device JavaScript Macros using the Macro Editor
- 20%** **5.0 Meetings**
- 5.1 Describe Webex Meetings REST API capabilities and use to manage meetings and webinars
 - 5.2 Construct REST API calls to implement meetings management for Webex Meetings
 - 5.3 Construct REST API calls to configure Cisco Meeting Server