



# Avaya Aura SIP Trunking Training

## 5 Day Course | Lecture & Demo

### WHO NEEDS TO ATTEND

This class is suited to those who are new to administering Avaya systems, need to know how to send calls through an Avaya system, and would like to know more about the SIP protocol. This is not a class for marketing or salespeople; it is a class for administrators, architects, and engineers.

### COURSE DESCRIPTION

Students will learn how to plan, implement, and troubleshoot the Avaya Aura SM and SMGR as needed to support SIP trunking. Students will learn how to use Wireshark to perform much of the troubleshooting and testing.

Training is offered at the customer's site, online through our virtual video training platform, or at our training facility in Harrisburg, Pennsylvania. Telecom training classes can be customized to meet a customer's learning needs and scheduling is flexible. Contact us for quotes!

#### 1. Pre-Aura Architecture

- IP Enabled
- ESS Overview
- ESS Recovery
- G650 vs. H.248
- Processor Ethernet
- Migration to Aura

#### 2. Avaya Aura Architecture

- Avaya Aura Components
- Session Manager and SIP
- Call Flow Processing Feature Server and Evolution Server
- Session Manager Data Structure

#### 3. Avaya Aura Station Boot Configuration

- Overview of Boot Process by Station Type
- Dynamic Host Control Protocol
- Firmware Check

- Loading Settings
- 4. Avaya Aura SIP Endpoint Registration (Configuration)**
    - Required Configuration for Endpoint Registration
    - Building a User in System Manager
  - 5. Avaya Aura Dial Internal Extension – SIP to SIP (Configuration)**
    - CM Station to Station Calling Configuration
  - 6. Avaya Aura Station to SIP Trunk Call Flow (Configuration)**
    - Call Processing from SM to a SIP Entity
    - Communication Manager Configuration
    - Session Manager Configuration
  - 7. Avaya Aura Session Manager Routing**
    - Connecting Together the Routing Menu
    - Routing Policy
    - Location Policy
    - Time Range Policy
  - 8. Avaya Aura Session Manager SIP Entities and Entity Links**
    - Defining SIP Entities in Session Manager
    - Resolving FQDNs with DNS
  - 9. Avaya Aura Applying REGEX to SIP Trunks**
    - Session Manager Routing with REGEX
    - Common REGEX Usage
  - 10. Avaya Aura SIP Adaptation**
    - Effect of Adaptations on SIP Messaging
    - Adaptation Case Study
    - SIP Basics
  - 11. Avaya Aura Session Manager SIP Tracing Tools & Call Flows**
    - Session Manager Traces
    - Exporting Traces to \*.txt and \*.pcap
    - Avaya Aura Session Manager Call Flows (East/West Ladder Diagrams)
  - 12. Routing the Media**
    - RTP Relay in Avaya MGW
    - Avaya Examples of Session Description Protocol (SDP)
  - 13. SIP Essentials (Available Upon request for Live and Virtual Instructor-Led Courses)**
    - SIP Overview
    - Contact URI
    - SIP Proxy
    - CM / Back to Back UA
    - Domain

To book training or for more information, visit:  
[www.Alt3.com](http://www.Alt3.com)

- DNS
- Register with Authentication
- SIP Routing
- Loose Routing
- SIP Transaction
- SIP Dialog

**14. SIP Call Flow (Available Upon request for Live and Virtual Instructor-Led Courses)**

- Basic Call Flow
- Abandoned called
- Busy Call
- Vacant number
- INVITE Authentication
- SIP UPDATE in early dialog
- SDP analysis
- SIP MESSAGE