Syllabus Protocol Testing

SIP (Session Initiation Protocol)

Introduction of SIP

- Scope
- Architecture
- SIP network elements
- Server types
- Transaction
- Dialog
- Session
- Mandatory and Optional headers
- SIP Request and Responses
- Codecs
- B2B UAs

SIP Call flows

- Call Hold
- Consultation Hold
- Music on Hold
- Transfer - Unattended
- Transfer - Attended
- Transfer - Instant Messaging
- Call Forwarding Unconditional
- Call Forwarding - Busy
- Call Forwarding - No Answer
- 3-Way Conference - Third Party Is Added
- 3-Way Conference - Third Party Joins
- Forking
- Call Management
- Call Park
- Call Pickup
- Automatic Redial
- Click to Dial

IMS (IP Multimedia Subsystem)

Introduction of IMS

- IMS architecture
- IMS Entities and its functionalities
- Reference Points
- Internetworking with other networks

PCSCF Discovery

- PDP Context method
- DHCP Method

ICSCF Discovery

SCSCF Assignment

Application Server assignment

- Initial filter criteria
- Service Point Trigger

Precondition

IMS Charging

- Online Charging
- Offline Charging

P- Headers

IMS Call Flows

- IMS Registration
- VoLTE Call
- IMS to IMS Call
- Conference Call
- SRVCC Call
- PS to CS Call
- CS to PS Call

IMS Deployment

Cloud

- What is OpenStack
- What is Cloud
- Cloud components And Architecture
- Types of cloud
- How to use a Cloud
- Cloud Commands
- Practical use

Deployment

- Basic Overview of Deployment
- Deployment Prerequisite
- LLD, HLD and Other sheets
- Json and Yaml files Preparation
- Deployment Process E2E
- Configuration, Licenses
- Testing
- HOTO
- Practical set up with deployment of IMS node

Tools and Practical

Linux Commands

Resume Preparation

Project Explanation

Mock Interviews