

The Session Initiation Protocol (SIP) is a signaling protocol, widely used for setting up and tearing down multimedia communication sessions such as voice and video calls over the Internet. This course provides a good understanding of SIP/RTP architecture, protocol and services. A good knowledge of Internet Protocol would be beneficial for anyone attending this course.

Who Should Attend

This is beginner level course and suitable for telecom professionals & students who have little or no understanding of SIP & RTP.

Objective

After completing this course, the audience will be able to:

- Understand SIP/RTP Overview & architecture
- Describe SIP/RTP Protocols
- Explain SIP/RTP Call Flows
- Describe usage in Telecom Networks

Course Contents

SIP Overview

- What is SIP ?
- SIP History, Standards
- SIP working groups
- Why SIP ?
- SIP Features

SIP Protocol Description

- SIP Architecture
- Building blocks of SIP Network
- SIP Nodes
- SIP Messages
- Location service

SIP Call Flow

- SIP Registration
- SIP Session Establishment
- Session Establishment Proxies
- SIP REDIRECTION
- Unsuccessful Scenarios

SIP Security

SIP in Telecom Networks

RTP/RTCP Overview

- What is RTP ?
- RTP History, Motivation
- RTP Advantage

What is RTCP ?

RTP/RTCP over Transport Protocols

RTP packet details

RTP/RTCP Functions

RTCP packet types

RTP Translators and Mixers

RTP Profiles

RTP Usage Scenarios