

Course Title:	IP Telephony (VOIP)
Duration:	Four (5) Days
Class Schedule:	
Target Participants:	Government and Private I.T. Personnel, Members of the Academe and College Graduates of Computer Science and I.T. related courses.
Total Hours:	35 Hours
Course Contents:	

Paradigm Shift in Communication Traffic
Internet
What is Protocol?
What is Internet Protocol?
Internet Protocol Suite & OSI RM
Internet Protocol Suite & OSI RM
Basic Internet Protocol Suite
The IP Seven Layered Model
What is TCP?
TCP & OSI RM
Internet Protocol Telephony
IP Telephony
Concept of IP Telephony
IP Telephony Infrastructure
COMPONENTS:
[Terminal](#)
[Server](#)
[Gateway](#)
[Conference Bridge](#)
[Addressing](#)
What is a Terminal?
What are Servers?
What are Gateways?
What is Conferencing Bridge?
What is an Address?
Telephone Number Mapping (ENUM)
IP Telephony
VoIP Services
IP Telephony
VoIP Protocols
IP Telephony
H.323 & SIP Protocol Stack/OSI RM
H.323
Multimedia communication over ATM networks (H.310, H.321)
H.323 timeline
H.323 version 2
What is Quality of Service (QoS)?
H.323 Network Architecture

H.323 Communication Phases
H.245 for media-oriented signaling, such as negotiating media types and setting up media channels.
• Establishment of audio-visual communication;
H.323 Communication Phases
Scope & Component Defined in H.323
Functional/Logical Components of H.323
Functional/Logical Components of H.323
Structure and Scope of H.323
H.323 Protocol Suite
H.323 Call Set Up Scenario
Basic Call Signaling & Conference Control Interactions
Signaling Model
Signaling Model
Signaling Model
Protocol Architecture
H.323 Advantage
What is SIP?
SIP stands for Session Initiation Protocol.
SIP Network Architecture
SIP Network Elements
User Agent
SIP Network Elements
Two Basic Types of Proxy Servers
Two Basic Types of Proxy Servers
What is SDP?
SIP Messages
Other SIP Requests Messages
Six Classes of Response
SIP Transactions
SIP Dialogs
Protocol Architecture in SIP
MGCP
Stands for Media Gateway Control Protocol