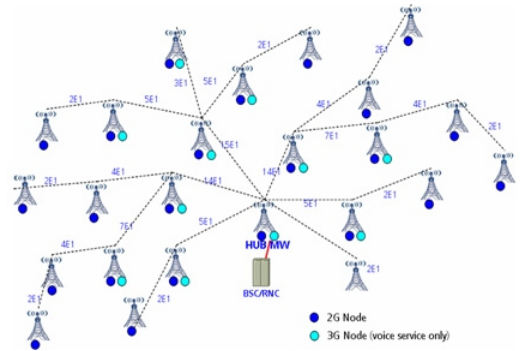


Telecom



Corporate Trainer's Profile

Corporate Trainers are having the experience of 4 to 12 years in development, working with TOP CMM level 5 companies (Project Leader /Project Manager) qualified from NIT/IIT/IIM and work exp in USA and UK.



CMM (Capability Maturity Model) level Project Standard:-

The Capability Maturity Model (CMM) is a method for evaluating the maturity of organizations on a scale of 1 to 5.

Get the Opportunities to work on Client Projects Of US/UK, which follow the all standard of CMM level 5 Company.

Projects



NOKIA

SIEMENS

symbian

ALCATEL

spice



MOTOROLA

UMTS Core Network Signaling
Course Duration: 3 Days

Training Course Description:

This two-day seminar describes how a distributed Release 4 CS-domain inter-works with voice over IP networks, and describes what can and cannot be achieved via the Release 4 PS-domain. It covers the signaling protocols required to establish both ATM and IP bearers and to signal quality of service requirements, showing how end-to-end QoS is achieved. It also gives an overview of the way IP telephony and multimedia services will be accessed via the Release 5 IP Multimedia Service (IMS) and the harmonization of the CS and PS domains.

Prerequisites:

The seminar is intended for engineers building UMTS networks, developing or testing UMTS equipment, or those concerned with the detailed planning of UMTS deployment. It takes a functional approach to describing the subject matter and includes many signaling-flow examples so that the sequence of signaling may be understood.

UMTS Core Network Signaling includes the following modules:

Voice over IP Signaling using SIP

- SIP sessions
- Basic SIP message types
- SIP proxy servers
- Registration
- Media description using SDP
- Basic SIP signaling examples
- SIP addressing architecture
- SIP message formats
- SIP inter-working with ISUP (SIP-T)
- Extensions to SIP for enhanced call control
- Resource reservation integration with SIP
- Example signaling flows

Media Gateway Control Protocol (H.248)

- The Media Gateway/Gateway controller architecture
- Terminations and contexts
- Media descriptions
- Voice and multimedia sessions
- Transactions

Bearer Independent Call Control (BICC)

- Principles of BICC operation
- Call Bearer Control
- UMTS extensions to BICC
- Example signaling flows

Signaling Transport (Sigtran)

- Carrying SS7 signaling protocols over IP
- Stream Control Transmission Protocol
- Applications of Sigtran in 3G networks

Distributed CS core architecture

- Signaling relationships
- ATM bearer establishment
- AAL2/ALCAP
- IP Bearer Establishment
- IPBCP/BCTP
- Example signaling flows

Signaling Quality of Service

- RSVP signaling of QoS
- IP Differentiated Services architecture
- Marking IP packets
- Traffic policing and shaping
- IP and ATM QoS inter-working

Multi-protocol Label Switching

- Overview of operation
- Label Switched Paths
- MPLS traffic engineering
- RSVP signaling for MPLS
- MPLS for QoS delivery
- Inter-working with Differentiated Services

Signaling in the CS Domain

- Call establishment with the PSTN
- Inter-working with voice over IP
- Signaling and Media Gateways
- Codec and resource negotiation
- Quality of service mapping
- Bearer establishment
- Example signaling flows

The IP Multimedia Subsystem

- Harmonization of the CS and PS domains
- Architecture of the IMS
- SIP servers and the CSCF
- Registration by the UE
- Session establishment
- Inter-working with the CS domain
- Inter-working with voice over IP
- Multi-party sessions