



Overview Voice over IP

Doelgroep

Deze overview training is bestemd voor ICT medewerkers die betrokken zijn bij de migratie of overstap naar Voice over IP toepassingen.

Cursusduur

1 dag

Onderwerpen

In de training worden de volgende onderwerpen behandeld:

Overview of VoIP

- Voice and data convergence
- Why VoIP?
- Applications for VoIP
- Markets for VoIP
- Who uses VoIP?
- Components of a VoIP system
- H.323 architectural overview: Terminals, Gateways, Gatekeeper, MCUs
- Status of VoIP as an emerging technology

Operating Voice over IP

- The issues when operating Voice over IP
- Delay, Talker overlap, Echo
- Jitter, Packet loss
- Out of Order Delivery
- The role of Voice Processing and DSP
- Real-time Transport Protocol (RTP)
- The role of RTP
- Real-time Transport Control Protocol (RTCP)
- Implementing centralised number and dial plans
- Mapping E.164 addresses to IP addresses

Introduction to Voice over IP signalling

- The major architectures and standards for Voice over IP ITU H.323
- IETF SIP / SDP
- MGCP and Megaco/H.248
- Cisco SCCP ("Skinny")
- Asterisk IAX
- Current status: H.323 vs SIP vs Megaco

Understanding IP QoS

- The need for QoS
- Defining IP QoS
- IP Integrated Services (Int-Serv)
- Resource ReserVation Protocol (RSVP)
- IP Differentiated Services (Diff-Serv)
- The role of MPLS
- Interworking Int-Serv and Diff-Serv
- Common Open Policy Service (COPS)

Current Voice over IP Solutions

- Classifying Voice over IP products
- Mainstream VoIP manufacturers
- Mainstream VoIP Gateways and PBXs
- Mainstream IP-based PBXs
- IP Telephony Call Agents and Softswitches
- IP Soft Phones
- PC IP Telephony Cards
- VoIP test equipment

Developments in VoIP

- Commercial IP Telephony services
- Skype, Google Talk, and more
- Open Source VoIP
- Voice over Wi-Fi (VoWiFi)
- Roaming between cellular and VoWiFi hotspots
- VoiceXML applications

Locatie:

De training wordt verzorgd in de J.C. Kapteyn Sterrenwacht te Roden.