

QOS IP in IP Networks (TK712)

Prerequisites

Participants should have basic knowledge of TCP/IP network and technology. Participant should have attended the courses Introduction to IP network and IP routing.

Target groups

Participants who wish to acquire in-depth knowledge of QoS enabled IP.

Duration

3.0 days

Course Content

The need for QoS

- QoS from an application perspective
 - Delay profiling applications
 - VOIP
 - Video
 - Interactive applications
 - Bulk transfer applications
 - Non delay apps
- QoS from a network perspective
 - Bandwidth VsQoS
 - Burst management

Different approaches to QoS

- Traffic Engineering
- Packet Classification

QoS Mechanisms

- Diffserv
- Rate Limiting and Policing
- Queuing and scheduling methods
- Discard mechanisms
- WRED
- Graceful discarding
- Layer 2 frame prioritization
- Special considerations for VOIP
 - Packet discard strategy
 - Matching telephone GOS to QoS

Network Monitoring Tools

- QoS Monitoring and Measurement Criteria
 - Drop rate
 - Round trip delay
 - Jitter
 - Uptime
- Sources of QoS performance data