



Who Should Attend?

The training is targeted at engineers who want to learn about use of the Diameter in LTE and IMS networks.

Course Scope

1. Introduction to LTE.
 - 3GPP Core Network Evolution.
 - EPC Architecture.
 - Protocols in EPC - overview.
2. VoLTE.
 - Circuit Switched Fallback (CSFB).
 - IMS - based.
 - VoIP Over-the-top (OTT).
 - CS over PS.
 - Road towards VoLTE - various deployment strategies.
3. Introduction to IMS Concept & Architecture.
 - IMS introduction.
 - IMS standardisation.
 - IMS architecture & functional elements.
 - IMS identities.
 - IMS interfaces & signalling protocols.
4. Introduction to Diameter.
 - Diameter architecture.
 - Diameter agents: Relay, Proxy, Redirection & Translation.
 - Diameter message structure.
 - Diameter peers and peers association.
 - Diameter user session.
 - Diameter accounting session concept.
5. Detailed discussion of selected Diameter applications.
 - Cx, Dx.
 - Dh, Sh.
 - S6a.
6. IMS procedures over SIP & Diameter.
 - Registration (initial registration, re-registration, deregistration).
 - IMS -to-IMS Call.
 - Non-IMS - to IMS call.
 - IMS to non-IMS call.
7. Q&A, open discussion.

Prerequisites



None.

Training Structure

Three-day training divided into logical sessions.

Methodology

Instructor-led training, presentation, and discussion; signalling trace analysis.