Introduction to Next-Generation SONET/SDH Testing

This one-day course covers the basics of next-generation SONET/SDH technology and its test applications using EXFO's FTB/IQS-8115/8120/8130 SONET/SDH Analyzers. This training session discusses both theoretical and practical aspects.

Content

Part 1: Next-Generation SONET/SDH — An Overview

› Packet-aware transport
› Generic framing procedure (GFP)
› Virtual concatenation (VCAT)
› Link capacity adjustment scheme (LCAS)

Part 2: Next-Generation SONET/SDH Testing Applications Using EXFO's FTB/IQS-8115/8120/8130

› GFP Testing
  › Conformance (EoS Qualification)
  › Alarm and error processing
  › Performance characterization
› VCAT Testing
  › VCAT conformance (HO/LO)
  › VCAT alarm and error processing
  › Differential delay
› LCAS Testing
  › LCAS conformance
  › LCAS alarm and error processing
› Multiservice Provisioning Platforms (MSPP) and EoS Service Turn-Up
  › Network elements — installation and commissioning
  › End-to-end EoS test
  › VCAT differential delay specification conformance

Pre-Requisites

› EXFO's FE-1081 — Introduction to Legacy SONET Testing
  or
› EXFO's FE-1082 — Introduction to Legacy SDH Testing
  or
› Equivalent knowledge of legacy SONET and/or SDH technology

Methodology

The first part of this course consists of lectures using PowerPoint presentations and demonstrations, while the second part consists of specific hands-on testing exercises using EXFO's FTB/IQS-8115/8120/8130 SONET/SDH Analyzers.

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Typical Schedule (can be modified to accommodate attendees' working schedule)

INTRODUCTION TO NEXT-GENERATION SONET/SDH TESTING

8:00 a.m. to 12:00 p.m.	Part 1: Theory of E1 Technology and ATS-QSIG › Overview of next-generation SONET/SDH
12:00 p.m. to 1:00 p.m.	Lunch
1:00 p.m. to 5:00 p.m.	Part 2: Hands-On Session › Next-generation SONET/SDH testing applications using EXFO's FTB/IQS-8115/8120/8130

Documentation

Attendees will receive a binder containing copies of presentations and other printed handouts, if applicable. When available, a CD containing the electronic version (PDF format) of the presentation, as well as related application notes, will also be provided.

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