

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.

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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