

Course ID

BHAUL-E2E

Course Duration

1 day

Course Title

Mobile Backhaul End-to-End™

Related Courses

- Mobile Backhaul Business and Technology Briefing™ (BHAUL-BRIEF, 1 day)
- Mobile Backhaul Market Briefing (BHAUL-MKT, 1 day)
- Mobile Backhaul Application Case Studies (BHAUL-APP, 1 or more days)
- Mobile Backhaul Architecture and Implementation (BHAUL-AI, 2-3 days)
- Mobile Backhaul Standards and Protocols (BHAUL-STND, 2-3 days)
- Mobile Backhaul Security (BHAUL-SEC, 1 day)

Aimed At

This briefing is suitable for all audiences.

Group Size

5-25

Prerequisites

There are no prerequisites for this course.

Course in a Nutshell

In this short course, aimed at “general audiences”, we highlight some of the topics covered in more detail by other courses of the Eogogics Wireless Backhaul Curriculum. We will overview the major components of mobile backhaul: terrestrial TDM/SONET/SDH backhaul, wireless TDM/SONET/SDH backhaul, wireless RF Native Ethernet backhaul, and wireless optical native Ethernet backhaul. Covered are the key terms, configurations and applications of the four primary wireless backhaul implementation models. We will also discuss the benefits and problems of the four models.

Customize It!

This briefing can be scheduled as one day standalone course, one day of a multi-day course or as six one hour modules for delivery over the web. Any single module or selected modules may also be scheduled for web delivery. This program can be delivered as the final course in a larger curriculum on mobile backhaul or can be delivered as the sole course to a diverse audience to introduce the concepts and implementations of mobile backhaul when very little depth is needed or prior to further individual reading or study. The course can be optionally taught as a hands-on workshop at no added cost.

Learn How To

- Identify and describe the major components of mobile backhaul: terrestrial TDM/SONET/SDH backhaul, wireless TDM/SONET/SDH backhaul, wireless RF Native Ethernet backhaul, and wireless optical native Ethernet backhaul
- Contrast and compare mobile backhaul terrestrial TDM/SONET/SDH backhaul, wireless TDM/SONET/SDH backhaul, wireless RF Native Ethernet backhaul, and wireless optical native Ethernet backhaul technology, business and service aspects
- Describe the benefits and problems of the four primary mobile backhaul models

End-to-End Introduction

A high level overview of the topic and the briefing.

Quality of Service / Quality of Experience

A brief overview of multimedia QoS and QoE to set the stage for a better understanding of the application example.

- QoS vs QoE
- Classes of Service (CoS)
- Three + 1 Models
 - Prioritization
 - Route Optimization
 - Resource Reservation
 - Hybrids
- Undersubscription, Oversubscription and Discard
- Multimedia Application Impact

Application Overview

Pat is a mobile multimedia user with an Android hand held device. Pat accesses multiple personal and work applications including traditional browser, cellular and packet voice, images and video. The flow of Pat's application traffic across each of the four backhaul methods is contrasted and compared in this section. The following technical aspects and their impact on Quality of Service and Quality of Experience are considered:

- ✓ Service Level Agreements
- ✓ Class of Service
- ✓ VLANs/VLAN IDs
- ✓ Traffic Handling at Backhaul Ingress
- ✓ Traffic Management under varying loads
- ✓ Prioritization, Buffering and Discard
- ✓ Quality of Service / Quality of Experience

- Terrestrial TDM/SONET/SDH Backhaul
- Wireless TDM/SONET/SDH Backhaul
- Wireless RF Native Ethernet Backhaul
- Wireless Optical native Ethernet Backhaul

End-to-End Review and Summary

A review of the briefing topics and summary of the program.

Revised

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