

Ethernet in Service Provider Networks

ONE OF THE TECHNOLOGY SERIES OFFERED BY GARY ZIELKE

Introduction

- ◆ Brief History of Ethernet
- ◆ Speed and Topology Evolution
- ◆ Ethernet Frame Structure
- ◆ Ethernet Addresses (structure and assignment)
- ◆ Layer 2 Bridging and Switching versus Layer 3 Routing
- ◆ Spanning Tree Protocol
- ◆ Ethernet QoS
- ◆ Ethernet VLANs

Ethernet in the Office

- ◆ Ethernet Switches
- ◆ VoIP and Data over Ethernet
- ◆ Power of Ethernet
- ◆ Ethernet Access Architectures

Wireless Ethernet

- ◆ WiFi networks
- ◆ Physical Layer Options
- ◆ WiFi Security
- ◆ Differences between wired and wireless Ethernet

Ethernet in the First Mile

- ◆ Proposed Applications
- ◆ Current Configurations
- ◆ Ethernet and xDSL

Metro Ethernet

- ◆ Service Model
- ◆ Ethernet Virtual Connection (EVC)
- ◆ Point to point and multipoint service
- ◆ Traffic Management
- ◆ Class of Service