ONDOTEC

SOLUTIONS POWERED BY INNOVATION

OndoBroadband Commercial Services Solutions

for

Cable Service Providers

OVERVIEW

Introduction

By addressing the needs of commercial markets, cable service providers can gain access to new high-margin, high-revenue service opportunities. The trend for businesses is to support multiple remote sites, including telecommuters' homes and branch offices. Cahners Business Information In-Stat Group expects that by 2005, more than 60 percent of the workforce will be considered remote from headquarters. Commercial customers such as telecommuters, small businesses, and branch offices typically have more complex feature requirements than the residential customer. Our OndoBroadband Commercial Services solutions are designed to give cable service providers the value-added features they need to serve this emerging market.

OndoBroadband Commercial Services solutions integrate Data-Over-Cable Service Interface Specification (DOCSIS), routing, security, and voice technologies with dedicated hardware for achieving high-speed performance. Fully standards-based, these solutions enable cable operators to launch revenue-generating services to the commercial markets. In turn, commercial services customers gain the benefits of a trusted provider with full business-class solutions.

Our OndoBroadband Commercial Services solutions include the following:

OndoBroadband Static IP Router Management: Provides business customers with a managed broadband router that is monitored 24 hours a day, 7 days a week. A permanent IP address is assigned to the router to insure undisrupted connectivity between the customer's LAN and the Internet.

OndoBroadband Managed Firewall: Provides an advanced, fully-managed firewall that protects the customer's key information assets across the cable network.

OndoBroadband Managed VPN: Provides remotely managed VPN client and site-to-site authorization and access control for organizations that require a secure, cost-effective means to increase remote access to critical online information.

OndoBroadband DirectConnect: Cable operators can now maximize their existing fiber infrastructure by providing state and local government agencies, universities, and corporate parks with dedicated fiber-optic links to the Internet using various technologies e.g. Packet-Over-SONET, Gigabit-Ethernet, ATM, etc.

OndoBroadband advanced solutions include the following:

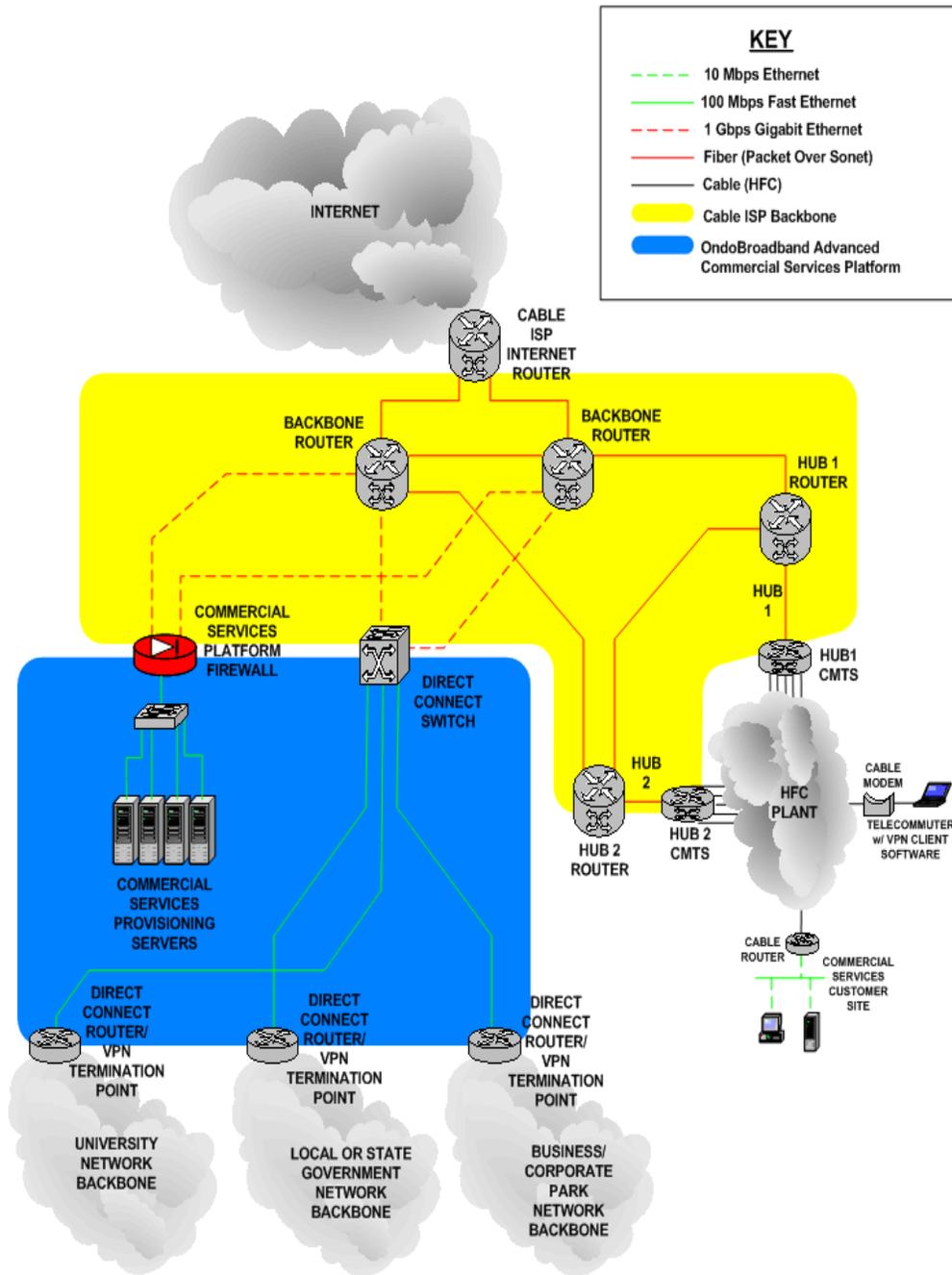**OndoBroadband Managed IDS (Intrusion Detection System)**
OndoBroadband Site Vulnerability Assessments
OndoBroadband Antivirus Protection

In the past, security was a stumbling block to make enterprise resources available to a remote workforce. Now, with reliable security measures such as IPSec for VPNs (Virtual Private Networks) and dynamic administration and management of public and private encryption keys, these features provide a big leap in supporting remote access from different venues outside a corporation. The business-class functionality of the OndoBroadband Commercial Services solutions allow cable service providers to increase revenues with advanced features such as firewall security protection and hardware-accelerated IPSec VPNs. Our solutions support secure IP data transmission over a DOCSIS-compliant cable plant.

These solutions empower cable service providers to deliver not only high-speed Internet and intranet access data services, but voice as well. Industry analysts have forecasted tremendous growth in the area of digital network-based telephony. An estimate reports a $2 billion worldwide voice service and equipment market by the year 2004. With our OndoBroadband Commercial Services solutions, service providers can add voice to their service offerings—comfortably and reliably. More service offerings lead to greater customer satisfaction and retention.

ONDOBROADBAND COMMERCIAL SERVICES SOLUTIONS TOPOLOGY MAP

KEY

- – – – 10 Mbps Ethernet
- ——— 100 Mbps Fast Ethernet
- – – – 1 Gbps Gigabit Ethernet
- ——— Fiber (Packet Over Sonet)
- ——— Cable (HFC)
- 🟨 Cable ISP Backbone
- 🟦 OndoBroadband Advanced Commercial Services Platform

INTERNET

CABLE ISP INTERNET ROUTER

BACKBONE ROUTER

BACKBONE ROUTER

HUB 1 ROUTER

HUB 1

HUB1 CMTS

COMMERCIAL SERVICES PLATFORM FIREWALL

DIRECT CONNECT SWITCH

HFC PLANT

CABLE MODEM

TELECOMMUTER w/ VPN CLIENT SOFTWARE

COMMERCIAL SERVICES PROVISIONING SERVERS

HUB 2

HUB 2 CMTS

HUB 2 ROUTER

CABLE ROUTER

COMMERCIAL SERVICES CUSTOMER SITE

DIRECT CONNECT ROUTER/ VPN TERMINATION POINT

DIRECT CONNECT ROUTER/ VPN TERMINATION POINT

DIRECT CONNECT ROUTER/ VPN TERMINATION POINT

UNIVERSITY NETWORK BACKBONE

LOCAL OR STATE GOVERNMENT NETWORK BACKBONE

BUSINESS/ CORPORATE PARK NETWORK BACKBONE

Features At A Glance

A. Network Management
- Static IP Router Management
  - o Centralized Configuration Libraries
  - o Managed Hardware and Software Upgrades
  - o Web-Based Configuration File Management
  - o Configuration Library Directory Structure (for multiple divisions)
  - o Secured Provisioning Servers
  - o Data Backup and Recovery
- Network Monitoring and Performance Management
- IP Address Space Management
- Routing Protocol Management
- Trouble Ticket Response and Handling
- Private and Public Address Conversion

B. Security Mangement
- Firewall Implementation and Management
- VPN (Virtual Private Network) Implementation and Management

C. Campus and Metro Connectivity
- Corporate Park High-Speed Connectivity
- University Campus Connectivity

D. Advanced Solutions
- IDS (Intrusion Detection System) Implementation and Management
- Scheduled Customer Site Vulnerability Assessments

Conclusion

OndoTec's OndoBroadband Commercial Services solutions coupled with the product selection have been proven to meet all of the requirements of cable service providers. The solutions are cost effective, manageable and maintainable. They also meet and surpass customer performance and security needs. Coupled with great product selection, the solutions will provide operators with the highest performance and quality available. Once implemented, these solutions will provide the stable investment that customers need to be able to access the Internet at high speeds and increase productivity without the threat of security breaches.