PATTON SOLUTION

Monthly Savings = $979

ILEC Central Office
(Monthly Expense: $431)

PSTN · RAS Equipment · DSLAM · DSL User #1 ... DSL User #10

Switch · $350/month Co-Location Fee · Switch

Patton 1068 · Patton 1068

Local Loop 2,200 Feet of Twisted Pair

Link-A 1 Copper Pair $36/month · Link-B 1 Copper Pair $45/month

Patton 1068 · Patton 1068

PSTN · POTS · Internet · Switch · Server

GLORY ROAD
Network Operation Center
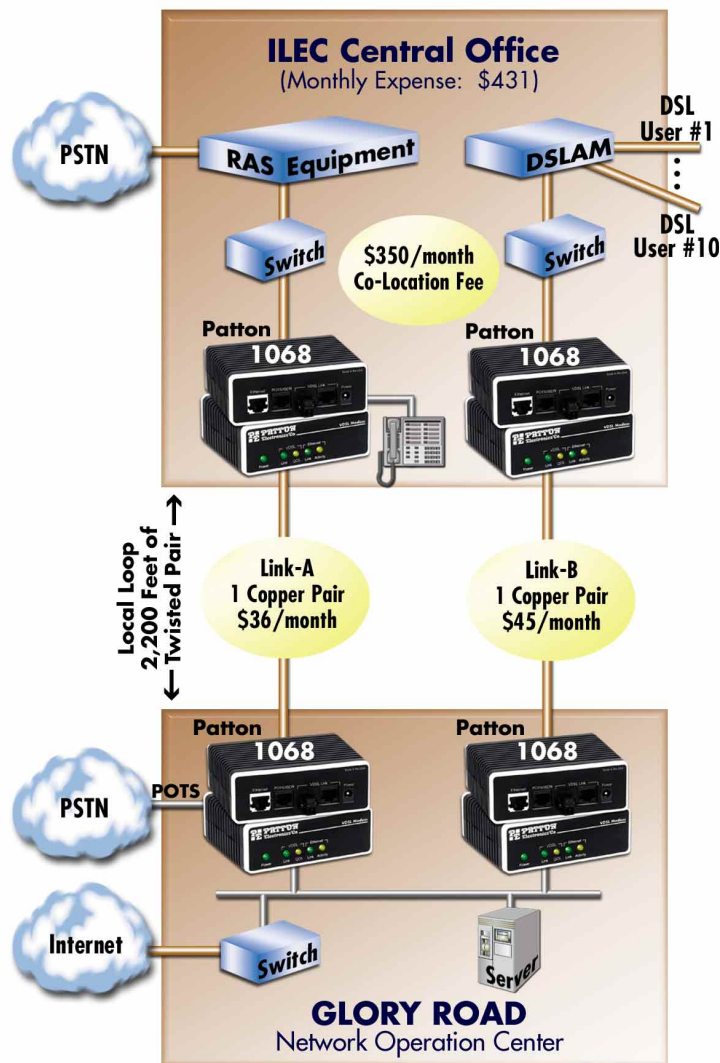
• **Attention Internet Service Providers...**

Patton VDSL Modems Slash Operating Expenses

Between modest revenues, and less-than-modest operating costs, profitability has been a challenging target for many ISPs. Controlling expenses--such as leased lines from Incumbent Local Exchange Carriers (ILECs)--lies in the critical path for survival. Here is the real life story of Mr. Bill Beaudet, Vice President of one such ISP, Glory Road Internet Services (GR) in Oxford, North Carolina and his Patton solution.

"The performance and recurring monthly savings are unbelievable and the POTS interface is a great bonus. Patton's VDSL Modems provided the bandwidth I needed at a fantastic price."

Bill Beaudet, VP
Glory Road Internet

The Problem

Links between their NOC and the Central Office (CO) were costing Glory Road $1,410 per month, taking a painful bite out of their bottom line (diagram page 2). Beaudet wanted co-location, but vendor solutions weren't delivering the required throughput... until he discovered Patton's Model 1068 Very-high-speed Digital Subscriber Line (VDSL) Modems.

Patton Solution

Deploying two pairs of Patton 1068 VDSL Modems enabled Glory Road to move their Remote Access Server (RAS) and DSL Access Multiplexer (DSLAM) equipment from their NOC to the CO. The co-location allowed GR to replace their 16 PRIs (Link-A) and 10 DSL loops (Link-B) with two high-speed Ethernet links. By consolidating 26 links onto two copper twisted pairs, Patton's solution cut Glory Road's monthly Telco charges by $979.

In the Glory Road NOC

Two Patton Model 1068 VDSL Modems:

• VDSL ports connect the CO with GR's NOC using two twisted pair telephone lines (Link-A and Link-B). The 1068's switch-selectable line rate feature enabled GR to adjust their line rates for maximum reliable speeds of 6.25 Mbps under noisy line conditions near the CO.

Key Benefits for ISPs

✔ **Recurring Monthly Savings**
Go Right to Your Bottom Line

✔ **Convenient POTS Connection**
Allows Concurrent Voice/Data Services

✔ **Quick & Easy Installation**
Just Set Your Line Rate and Go!

✔ **Switch-Selectable Line Rate**
Allows Integration Into Your Network Environment

✔ **Reliable High Speed Connections**
Up To 16.67 Mbps

✔ **Cost-Effective Point-to-Point Solution**
No Concentrator Required

- Ethernet ports connect to the Internet via GR's Ethernet Switch and Server with Network Interface Card (NIC).

NOC-to-CO Communication Links

Link A: Deploying a pair of Patton VDSL Modems, one twisted pair connects GR's Ethernet switch to their RAS equipment. A $36/month link replaces 16 PRIs ($960/month), saving $924 monthly.

Link B: Between a second pair of 1068s, another twisted pair links GR's server to their DSLAM. Replacing 10 DSL loops at $450/month with one

twisted pair at $45/month is saving GR $405/month in Telco costs for their DSL service. Plus, as GR adds twisted pairs to support new subscribers additional pairs of 1068s per DSLAM will multiply their gains.

"Bonus" Voice Link: Patton's 1068 supports simultaneous Plain Old Telephone Service (POTS) voice and VDSL data on one copper twisted pair. This feature became a deciding factor when GR learned the 1068's POTS port could provide convenient voice communications between their NOC and GR personnel working at the CO.

BEFORE PATTON

Monthly Expense = $1,410
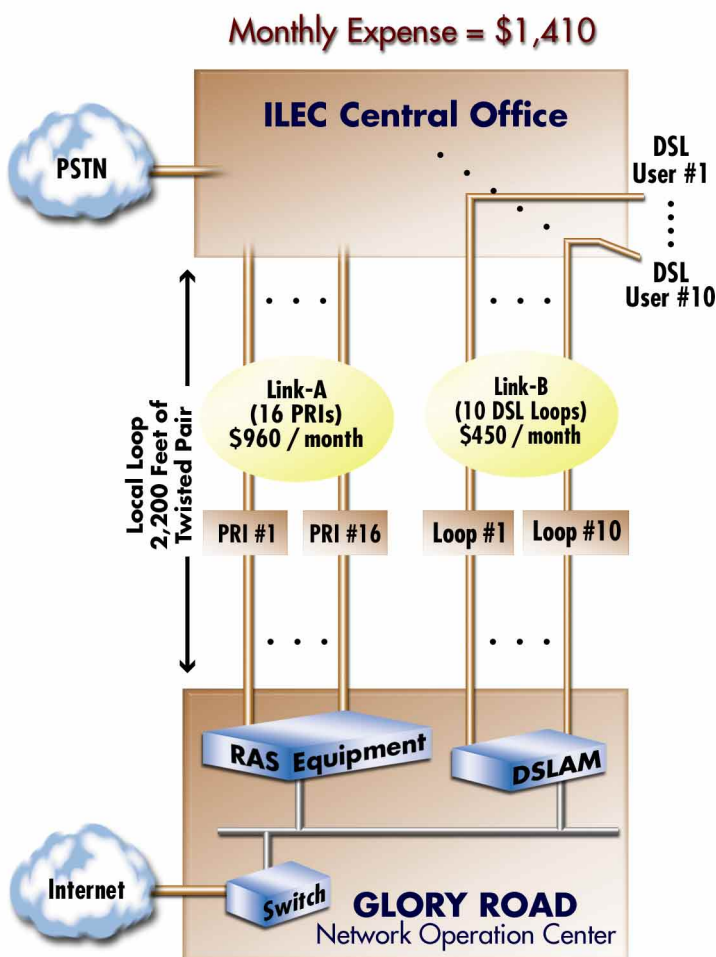
The Numbers

Before Patton
Recurring Monthly Expenses

16 PRIs at $60 each	$960
10 DSL loops at $45 each	$450
Total	**$1,410**

Patton Solution
Recoverable One-Time Expenses

2 Loop installations at $200 each	$400
2 Patton 1068DV/-2PK/UI at $870 each	$1740
Total	**$2,140**

Recurring Monthly Expenses

1 Digital loop	$36
1 DSL loop	$45
Equipment co-location fee	$350
Total	**$431**

Summary

Payback on one-time expenses	**2.2 months**
Recurring monthly savings	**$979/month**
First year net gain	**$ 9,608**
Subsequent annual net gain	**$11,748**

About Patton

Patton Electronics Company is a US manufacturer and marketer of data communications products, including Remote Access Products (V.92, V.90, K56Flex, V.34+, and ISDN dial-in), Last Mile/Local Loop Access Products (T1, E1, and xDSL modems, DACS, NTUs and CSU/DSUs), Multi-Service Access Products (Voice, Intranet, Extranet, and Frame Relay access), and Connectivity Products (interface converters, short range modems, multiplexers, and data line surge protectors). Patton Electronics is an ISO 9001 certified and BABT approved manufacturer. Patton products are CE marked.