



Using Vyatta for WAN Edge Connectivity, Security and LAN Segmentation



Challenge

Find an affordable T1 routing and security solution to securely connect remote sites

Solution

Vyatta Open Networking Software

Benefits

- Integrated routing and security
- Increased port density
- Hardware choice
- 50% cost savings over Cisco

KeyMark is a document management company that is growing rapidly and found itself in need of upgrading its network infrastructure. KeyMark's upgrade was based on the need to move from one giant subnet to a segmented internal network that would allow it to isolate workgroups and better manage bandwidth. The planned infrastructure upgrade required a solution that would scale easily and affordably to deliver higher port density, firewall security, LAN segmentation, and multiple connectivity options to ensure it was capable of future growth on the same platform.

Problem

As the KeyMark business and network traffic load grew, its network infrastructure was becoming increasingly taxed. Using a Cisco 1720 for its initial network build-out created a situation where KeyMark owned proprietary hardware that would not meet its planned network requirements in terms of performance and throughput, available interfaces, and offered no upgrade path. The current network was a basic architecture that employed a single subnet for all network users.

Facing a box replacement due to the Cisco 1720's limited features and port density, KeyMark got quotes for an upgrade to a Cisco's 2800 series router. To avoid future upgrade problems, David Nalley, of KeyMark Inc., was looking for a router platform that would offer continued expansion and decided to evaluate alternatives to Cisco. The requirements for the new KeyMark router were T1 edge connectivity, stateful inspection firewall security, VPN, multiple Ethernet ports, and the ability to scale all of these functions to allow for future growth. While the Cisco 2800 offered most of those features, it would not scale beyond them.

"We were upgrading our network configuration to better handle our traffic load and the existing Cisco router just wasn't up to the task. I wasn't thrilled about paying a lot of money to upgrade to more proprietary equipment that could do what we needed, so I started looking for alternatives."

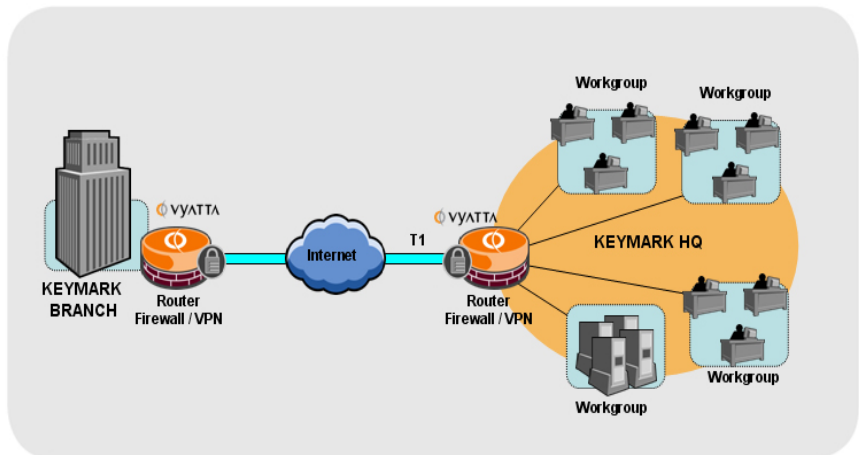
— David Nalley
KeyMark Inc.

KeyMark Router Requirements			
Features	Cisco 1720	Cisco 2800	Vyatta
T1 Edge Routing	✓	✓	✓
Firewall	✓	✓	✓
Network Address Translation	✓	✓	✓
IPsec VPN	✓	✓	✓
OSPF	✓	✓	✓
BGP	Requires upgrade	✓	✓
Scalable WAN Connectivity	T1 only	No T1 on 2801 - (2811 + scales to single T3)	Currently up to T3
802.1Q VLAN Encapsulation	✓	✓	✓
Scalable LAN Connectivity	One 10/100 Ethernet port	Two 10/100 Ethernet ports	10/100/1000 Ethernet port (limited only by HW)

Vyatta Case Study: KeyMark Inc.

"Vyatta was able to deliver everything we wanted at a low cost... and the support has been fantastic."

— David Nalley
KeyMark Inc.



Solution

After researching alternatives, KeyMark chose to purchase a Vyatta software subscription and a T1/E1 card from Vyatta. The Vyatta solution was able to deliver all of the technical requirements for managing KeyMark's growing business and offered the scalability required to ensure future needs could be met by the same platform.

Vyatta's open architecture and ability to leverage x86 hardware meant that Vyatta router/firewall/VPN solutions was not subject to the limitations of proprietary solutions, which often create situations similar to what KeyMark experienced. The Vyatta solution combined with x86 standard hardware was able to address the protocols, WAN connectivity, LAN connectivity, and security needs of KeyMark at less than half the price of a comparable router from Cisco. In addition, the Vyatta solution will scale to meet future performance and interface requirements, giving KeyMark room to grow.

With Vyatta, initial system purchases, support, and upgrades cost a fraction of proprietary systems, offering a structurally economic solution that delivers better TCO than proprietary solutions at purchase and over the life of the

product. By choosing Vyatta, KeyMark not only got the features and functions required to address their edge routing, security, and LAN segmentation requirements, but also an affordable solution that will scale with their business.

About Vyatta

Vyatta has reintroduced innovation to the networking industry by leveraging open source technologies and the performance increases of x86-based processors. This innovation has allowed Vyatta to create routing and security appliances that scale from the branch office to the service provider edge, use standard x86-based Intel/AMD hardware and components, run in VMWare, Xen and Hyper-V virtual environments and allow users to customize networks. Oh, and all of that can be done for a fraction of the cost of proprietary systems. For more info, visit <http://www.vyatta.com>



1301 Shoreway Road, Suite 200
Belmont, CA 94002
Tel: +1 650 413 7200
1 888 VYATTA 1