Securing the Hybrid Cloud with the Brocade vRouter

Connecting Users Securely Wherever Data and Workloads Are Hosted

Today, over 60 percent of enterprises perform IT-related operations by utilizing cloud services. At the same time, enterprise workers and the data they use every day are becoming more geographically dispersed. Whether applications and data are hosted in private clouds with enterprise data centers, in virtual private clouds in managed data centers, or in public clouds, users must be able to securely access data and applications regardless of where they—or their data—reside.

Enterprises that leverage a mix of services from IaaS providers such as Google, Microsoft, IBM, and Amazon also need to be able to reliably and securely connect to cloud workloads while securing the interconnection of various clouds. This creates a challenge for enterprise infrastructure and network engineers, as cloud and traditional data center workloads continue to grow, and users become even more geographically widespread.

In order to reap the cost-saving and efficiency benefits of a hybrid cloud strategy, innovation needs to be driven to and inside the cloud, enabling enterprises to adopt networking technology that increases business value without sacrificing security or flexibility.

HIGHLIGHTS

• Securely provide access to the cloud for remote users, branch office, data center, or headquarters, as well as interconnect different Infrastructure as a Service (IaaS) providers
• Seamlessly secure intercloud redundancy with a reliable, high-performance solution designed for cloud environments
• Operationalize cloud integration and strategy with automated provisioning of networking
• Simplify monitoring and auditing for reporting and for corporate and regulatory compliance mandates
The Brocade Solution
Built for cloud and Network Virtualization, the Brocade® vRouter is the first virtual router capable of providing advanced networking and security in software with scale, reliability, and performance. It does this by providing high-speed, high-security connectivity between users, branches, and enterprise headquarters to private data centers, colocation facilities, and virtual public clouds hosted within IaaS providers. The Brocade vRouter bridges physical and virtual on-premises assets with resources in the public cloud or in virtual private clouds.

At the same time, the Brocade vRouter provides unprecedented deployment flexibility with support for a wide range of hypervisor and cloud platforms, including Virtual Machine (VM) and bare-metal options. This not only means that the Brocade solution runs on just about any public or private cloud, but that the heightened flexibility allows workloads to communicate across clouds to securely support users regardless of where they are located. (See Figure 1.)

Figure 1. Secure remote access to workloads for users.

Secure, High Performance in a Shared Cloud Architecture
The Brocade vRouter establishes secure end-to-end connectivity with IP security (IPsec) and Secure Sockets Layer (SSL)-based remote access Virtual Private Networks (VPNs), protecting critical data with a robust embedded firewall that intercepts and protects applications and network assets. The high-performance design of the Brocade vRouter allows efficient operation in shared cloud architectures, securely interconnecting sites while also supporting multiple popular protocols for maximum compatibility. Available across most major public cloud IaaS providers including Amazon, IBM SoftLayer, Rackspace, and others—the Brocade vRouter can easily be integrated with front-end data center application workloads within an HQ OpenStack cloud.

The built-in firewall provides improved density and maximum compatibility, and the built-in VPN provides efficient and fast encryption to ensure fast, secure connections between on-premises and cloud assets. This proven approach gives remote users direct and secure access through the Internet to a hosted cloud workload, while also supporting all major end device operating systems, including Linux, Mac OS X, and Windows. (See Figure 2)
Maximizing Efficiency and Cost Savings
The Brocade vRouter offers flexible licensing and per-vCPU pricing to ensure that the solution is sized appropriately to meet both the performance and cost requirements for each deployment. In addition, because the Brocade vRouter simplifies operational tasks, the management of various services and applications through the use of tested templates and automation tools reduces the burden on IT resources.

Further building upon the cost-saving benefits that the cloud offers, the Brocade vRouter helps to meet evolving demands, with the ability to scale up or down as business needs change. This eliminates or reduces the Capital Expenditure (CapEx) associated with the use of single-purpose hardware by utilizing existing servers for routing, firewall, and VPN.

Learn More
Brocade simplifies rapid service deployment and automated application delivery. To find out more about Brocade vRouter, or to arrange a demonstration or product evaluation, visit www.brocade.com.

About Brocade
Brocade networking empowers organizations to maximize investments for the New IP by transforming data center networking with open, virtual, and automated solutions. Our solutions help organizations achieve their critical business initiatives as they transition to a world where applications and information reside anywhere. Learn more at www.brocade.com.