

AvantGo Takes Secure and Assured Networking Route with Juniper Networks

**Organization:**

iAnywhere, a subsidiary of Sybase, Inc.

Industry:

Communications software

Challenge:

Replace unstable routers with a more reliable, cost-effective alternative and provide reliable firewall/VPN functionality to the distributed network

Solution:

Juniper Networks

Benefits:

- Faster, more reliable, more stable routing of information across network
- Reduced costs due to less maintenance needed for products
- Secure and assured networking experience

AvantGo is a free service from iAnywhere, a subsidiary of Sybase, that delivers rich, personalized mobile Websites to PDAs and smartphones. Today, hundreds of major brands, including American Airlines, CNET, GM, Rolling Stone and The New York Times, leverage AvantGo to target a highly desirable demographic of millions of registered users. AvantGo offers the convenience of anywhere, anytime access, seamlessly supporting both wireless and “sync and go” connectivity.

One of the keys to the AvantGo’s prolonged success has been its ability to stay ahead of its competition by delivering the most advanced mobile Internet technology to its customers. Driving these technological advances is the company’s commitment to providing its customers with easy access to the kind of information they need, anywhere, anytime, on any platform.

Within AvantGo’s vast technological infrastructure, routers play a vital role in ensuring that information moves rapidly and efficiently from where it is stored to where it is needed. So when their original router boxes began to reset themselves automatically whenever throughput demands increased, the AvantGo IT team knew they had to act quickly to resolve the problem. Although the router manufacturer provided numerous stop-gap code fixes in an attempt to resolve the problem, it became evident that the AvantGo infrastructure required a more practical, reliable and stable solution.

“In all the time AvantGo has been running the M20 routers, we’ve never had any network related down time, not even when we switched out the old routers and put in the Juniper ones.”

Mike Polter
Senior Network Engineer
AvantGo at iAnywhere

The Solution

Fortunately for the AvantGo IT team, the search for a new router vendor was a relatively fast and easy one. After assessing the pros and cons of each of the available choices, the IT team realized that only Juniper Networks provided the secure and assured solution they were seeking. Mike Polter, senior network engineer of AvantGo at iAnywhere summarized the team's decision by saying, "We chose to rely on Juniper Networks routers because they are known throughout the industry for their dependability and ease of installation. Their compact rack size and surprising affordability were major selling points, too."

The AvantGo service is using Juniper Networks M20 multiservice edge routers with 25.6 Gbps of aggregate half-duplex throughput as well as four flexible PIC concentrator (FPC) slots with 3.2 Gbps throughput per slot. Application-specific integrated circuits (ASICs), a definitive part of the router design, enable the router to forward data at the high speeds demanded by the current network. Each router also features switching fabric and routing engine redundancy to increase system availability and supports 16 PICs and up to OC-48/STM-16 uplink speeds.

In addition, the AvantGo Web Operations team invested in the Juniper Networks NetScreen-ISG 2000 appliances that provide scalable network and application security for large enterprise, carrier and data center networks. NetScreen-ISG 2000s are deployed in High Availability (HA) active/passive mode and provide scalable network and application security, while integrating best-of-breed Deep Inspection firewall, virtual private network (VPN) and DoS capabilities. Each appliance offers up to two Gbps of firewall throughput, 1 Gbps of 3DES VPN throughput and 300 Mbps of Deep Inspection performance for up to 512,000 concurrent sessions.

The Web Operations team also relies on Juniper Networks NetScreen-5GTs, which form a fast, safe and reliable VPN tunnel between AvantGo system administrators' home offices and the company's colocation facility in Sunnyvale, California. NetScreen-5GTs offer up to 75 Mbps of firewall throughput and up to 20 Mbps of 3DES IPSec VPN performance and feature embedded antivirus scanning, which provides an additional layer of application-level protection to help eliminate virus threats from the network.

The Benefits

Since switching to Juniper Networks routers, the AvantGo IT team has noted significant improvements in the stability and reliability of their communications network. According to Polter, "In all the time AvantGo has been running the M20 routers, we've never had any network related down time - not even when we switched out the old routers and put in the Juniper ones." Because the system generally takes care of itself, the IT team has more time to focus on what is really important: looking after their customers, not their hardware.

The compact router boxes have also proven to be a wise investment from a financial standpoint. Cost savings are realized in the initial investment, as the Juniper Network appliances cost significantly less than their larger, less reliable competitors and because the routers take up less room at the AvantGo collocation facility, the company has lower monthly rack space rental fees.

Another key benefit of the Juniper Networks networking solutions is the use of monolithic code used across all Juniper Network platforms, which results in simpler and more efficient software installation and maintenance on all Juniper products. Polter added, "With Juniper, there's only one code for all the platforms, so you don't have to waste time figuring out which software runs on which box in order to get the range of features you want. With the JUNOS operating system, you just download one code, put it on the box and it's done." This feature has become even more important recently as the AvantGo infrastructure has expanded to integrate an increasingly larger number of Windows boxes into the network. With standardized installation code in use on Juniper Network appliances, the AvantGo IT team is able to provide rapid and secured connectivity for third parties into their network while maintaining the firewall and IPSec VPN security capabilities that are such a vital component of the overall system.



CORPORATE HEADQUARTERS
AND SALES HEADQUARTERS
FOR NORTH AND SOUTH AMERICA

Juniper Networks, Inc.
1194 North Mathilda Avenue
Sunnyvale, CA 94089 USA
Phone: 888-JUNIPER (888-586-4737)
or 408-745-2000
Fax: 408-745-2100

www.juniper.net

EAST COAST OFFICE

Juniper Networks, Inc.
10 Technology Park Drive
Westford, MA 01886-3146 USA
Phone: 978-589-5800
Fax: 978-589-0800

ASIA PACIFIC REGIONAL
SALES HEADQUARTERS

Juniper Networks (Hong Kong) Ltd.
Suite 2507-11, Asia Pacific Finance Tower
Citibank Plaza, 3 Garden Road
Central, Hong Kong
Phone: 852-2332-3636
Fax: 852-2574-7803

EUROPE, MIDDLE EAST, AFRICA
REGIONAL SALES HEADQUARTERS

Juniper Networks (UK) Limited
Juniper House
Guildford Road
Leatherhead
Surrey, KT22 9JH, U. K.
Phone: 44(0)-1372-385500
Fax: 44(0)-1372-385501

Copyright 2005, Juniper Networks, Inc. All rights reserved. Juniper Networks and the Juniper Networks logo are registered trademarks of Juniper Networks, Inc. in the United States and other countries. All other trademarks, service marks, registered trademarks, or registered service marks in this document are the property of Juniper Networks or their respective owners. All specifications are subject to change without notice. Juniper Networks assumes no responsibility for any inaccuracies in this document or for any obligation to update information in this document. Juniper Networks reserves the right to change, modify, transfer, or otherwise revise this publication without notice.