



A DYNamic Duo In Infrastructure

Dynamic Network Services Inc. and NTT America



In 1998, Google was about to transform browsers, Microsoft launched a web-integrated Windows 98 and some ambitious engineers started a DNS-focused (Domain Name System) company out of a college apartment. Tom Daly, Dynamic Network Service's (Dyn Inc.'s) president and CTO, riding the Internet wave, became one of the original team members along with Jeremy Hitchcock, the company's current CEO. Dyn offered dynamic DNS services that let home users access their computer remotely and host their own Web sites. While the service started out free, the number of customers (and their demands for more features) transitioned the company through a variety of revenue models resulting in the popular software-as-a-service (SaaS) model the company uses today.

When the company reached two million active users they made a game changing discovery; some relatively large corporations were using the services that were primarily designed for the home and small business user. The light bulb went off for the company and they created a new service – the Dynect Platform – to provide the premium externally managed DNS option for corporate/enterprise customers who need global, 24/7 access and support.

As the world's fastest growing provider of managed DNS, Dyn continues to support its consumer and small business customers, but its corporate customers have spurred fast business growth and their evolving demands for performance and global access are the major reasons that Dyn has chosen to work with NTT America as infrastructure partners.

Both companies share a keen understanding of Internet and network infrastructure and Dyn can leverage a wide variety of NTT America's infrastructure assets including financial

stability, depth of services and a forward thinking approach on using innovation to help efficiently and cost effectively grow businesses.

Mastering the Domain

Because DNS is integral to any online business activity whether it's sending and receiving emails, serving Web pages or getting access to audio or video, speed is vitally important.

"For our customers, it's all about performance; our goal is to optimize the speed of response," said Daly. "That's why the only option is to go with a Tier-1 network



and NTT America is one of the best in the world. The investment required to keep a global network running at the performance levels we need is one of the major criteria in our choice of network partners.”



Tom Daly
Dyn Inc.'s President and CTO

As a Tier-1 provider, NTT America's Global IP Network (GIN) provides private peering and seamless service from a single global ASN (ASN2914), directly connecting telecoms, ISPs, content providers, CDNs and enterprises at the highest performance levels available. In addition to its US and Latin American networking capabilities, NTT America employs six transpacific cable systems to provide the shortest, fastest path for transpacific Internet traffic, meeting and often exceeding the performance metrics set by customers. In addition, the transpacific portion of the network has reached 300 gigabytes per second of available capacity, the highest available for any global Tier-1 network.

The traditional way to explain DNS is to think of it as an Internet phone book. When you type in an Internet address in your browser, the DNS looks it up and translates it into a number that

servers can use to locate the information someone is looking for. While it sounds simple, this process comprises multiple steps that involve caches, ISPs, and querying recursive and root name servers all around the world, yet it happens in mere milliseconds, transparently to the user, because of the high performance network.

“To be successful, we need to respond to look ups as fast as possible and perform at optimum speed,” said Daly. “For our customers like Internet retailer Zappos; online DVD rental service Netflix; or social networking site Twitter, low latency and high performance drives their business, that's why a Tier-1 network is critical.”

Playing in Traffic

Dyn's solutions for enterprises are based on the Dynect Platform, a scalable external DNS platform that directs Internet traffic, routes around outages and maximizes network performance. The platform has key features that enterprises demand in a premium service including active failover to avoid any outage events, efficient network load balancing and a CDN manager, which provides geographical or weighed load balancing to improve performance and cost efficiencies. Their robust SOAP and REST-based API's allow for very tightly integrated partnerships.

“The kind of advanced solutions we are able to offer depends fundamentally on two things, technical expertise and innovation, as well as support and

service levels that are second to none,” commented Daly. “Naturally, we want to partner with companies that have technology savvy but also truly understand the vital importance of customer service. Not only does NTT America bring some of the best implemented network technology to keep up with the bandwidth and performance needs of our customers, but their service level agreements and problem resolution are some of the best in the industry.”

“One of the things about NTT America that really impressed us and maybe it's because we are 90 percent staffed by engineers, is that if we have any issue or question, our calls are answered directly by a network engineer 24/7 in their Network Operations Center. You aren't routed to a call center where your call is triaged by someone who doesn't understand the issue. This is really critical to both us and our customers because we guarantee nearly 100 percent DNS resolution, just like NTT America guarantees 100 percent uptime.”

A World of Good

“We think one of the most amazing things about our service is its geographical reach. Other DNS companies might have good coverage in North American or Europe, but with Asia being one of the fastest growing global markets, our relationship with NTT America gives us access to the fastest network in that part of the world. Many of our customers want to deploy more assets overseas and expand their revenue opportunities and of course they want the same levels of



performance no matter where they are doing business.”

NTT America’s access to Asia has another benefit for Dyn, IPv6 capability. NTT America operates the world’s largest Tier-1 IPv6 backbone, spanning Asia, Europe, North America and Australia. The NTT Communications Global IP Network has been running dual stack (both IPv4 and IPv6) worldwide since 2001 allowing Dyn customers the ability to deploy new applications and reach new international markets. “We are ready for any customer who wants to take advantage of IPv6; some of its features like headers being formatted to speed routing is important for high performance and resource allocation options are particularly good for our customers in real time audio and video areas.”

Implementing IPv6 offers a variety of benefits including an almost infinite address space, scalability, better security, lower capital and operational expense and a number of enhancements for multicast and quality of service support. NTT America has also improved the built-in security features of IPv6 with IntelliSecurity IPv6 Managed Firewall solution, which complements the company’s existing suite of managed IPv6 Gateway Services with 24x7x365, round-the-clock monitoring of network threats.

Bringing Sexy Back

While infrastructure doesn’t sound sexy to most, Dyn has launched a campaign to highlight the core of what makes online businesses successful. “Our ‘DNS is Sexy’ campaign is designed to translate the business value of DNS to average Internet users,” said Kyle York, vice president of sales and marketing. “Just like NTT America’s backbone and network transit capabilities are fundamental to making the Internet work, DNS lets our customer’s customer have a better, faster and more secure experience; that’s pretty appealing to everyone.”

“Our experience with NTT America is that it’s one of the easiest implementations out there, they know what they are doing and they know how to get it done right both technically and on the business side,” said Daly. “We have the best of both worlds working with them and work hard to operate in a very similar manner.”

Information regarding the NTT Communications Global IP Network may be found at <http://us.ntt.net>, by calling 877-8NTT-NET (868-8638), or by emailing sales@us.ntt.net.