



BUYER CASE STUDY

HomeAway Grows with Dyn: Looking Back Six Years After Going to the Cloud for a Much-Needed DNS Upgrade

Benjamin McGrath

Robert P. Mahowald

IDC OPINION

In 2009, HomeAway, a vacation rental marketplace, found itself facing a classic IT provisioning decision: build versus buy. After previously purchasing its domain name system (DNS) for a very low cost through its datacenter provider, an excessive number of outages caused HomeAway's operations team to consider either running DNS itself in-house or finding a cloud-based DNS provider to run it for the company. Lenny Tropiano, director of IT Operations/Infrastructure, HomeAway (senior systems architect at the time), initially opposed the idea of letting a cloud provider run the company's DNS. Having run DNS servers for other companies before joining HomeAway in 2008, Tropiano was hesitant to give up control of what he thought to be a relatively simple functionality. However, Tropiano and HomeAway ultimately moved the company's DNS to Dyn, which Tropiano now says has definitely been the right decision. Not only did the company make necessary improvement to its DNS – no outages since switching – HomeAway has also come to rely on Dyn for new Web infrastructure capabilities beyond DNS. Running DNS and other Internet performance functions in Dyn's cloud has supported HomeAway's growth to nearly 10 times the company's size since 2009, a jump in scale that would not have been possible while running its DNS in-house. The transition of a young online company, suffering from outages and purchasing DNS as an afterthought, one that has grown and prospered with its cloud-based DNS provider, offers several key lessons. The steps along that transition that are highlighted in this Buyer Case Study include:

- HomeAway's DNS situation before 2009, which created an obvious need for a change
- The decision-making process in which HomeAway considered building and running its own DNS capabilities alongside a set of cloud-based partners, including Dyn
- The immediate and long-term impacts of choosing Dyn
- How Dyn has helped HomeAway gain a competitive advantage in the very competitive hospitality and leisure industry

IN THIS BUYER CASE STUDY

This IDC Buyer Case Study examines the prior situation and the results of the decision by HomeAway to move its DNS from an add-on with its datacenter provider to Dyn's cloud-based solution. The details surrounding this decision and process provide best practices and key considerations for other organizations facing similar situations. This process is relatable to not only organizations focused on DNS but any organization deciding between IT on-premises and in the cloud.

SITUATION OVERVIEW

Organization Overview

HomeAway provides an online marketplace for property owners and managers to rent their vacation homes to travelers as an alternative to traditional hotel accommodations. Its mission is to make every vacation rental in the world available to every traveler in the world. Much of HomeAway's growth has been through acquisition, having purchased 20 companies since its founding in 2005. Today, the company has over 1 million live online listings, with a presence in 190 countries. Founded as WVR Group in Austin, Texas, WVR became HomeAway in June 2006 and launched HomeAway.com, its flagship vacation rental site. In 2011, HomeAway announced an initial public offering. In CY14, HomeAway earned \$446 million of revenue, nearly twice what it earned in 2011. As of February 2015 (the 10-year anniversary of the company), HomeAway was approaching 2,000 full-time employees.

When HomeAway was looking to upgrade its DNS in 2008 and 2009, it was already on a steep uphill trajectory, having received \$250 million in private financing. But it was still a midsize company then, with around 200 employees and two years away from being public.

Challenges and Solution

When Tropiano joined HomeAway in 2008, one of his first tasks was to find a way to improve the company's DNS. At the time, HomeAway was purchasing DNS through an arm of its datacenter provider. And while HomeAway still works with that datacenter provider and the company is happy with the services provided by the datacenter provider today, DNS was never the mission of the datacenter provider. That provider specialized in managed services and collocation, but for HomeAway, the provider added in DNS service for \$50-100 per month – almost as an afterthought. With the low cost of DNS came constant failures and outages. The number of outages alone made it a necessity for HomeAway to look for a better solution, with each outage resulting in missed revenue opportunities. As a growing company doing its business online, outages weren't allowable. HomeAway wasn't thinking about whether or not to upgrade – it just had to decide what the best course of action would be in order to upgrade.

Tropiano said that, before he joined HomeAway, there wasn't enough expertise within the young organization to run DNS in-house, which he preferred: Like most IT operations experts, for Tropiano, true control of IT assets means being able to know where exactly DNS is running. While HomeAway did evaluate multiple vendors, the most difficult decision was the initial one of whether to build or buy its improved DNS. Tropiano's initial hesitation was the feeling that when "you're in the role of providing that service, you somehow think that someone's going to take your job away because they're going to do it better." The hesitation to move to a cloud-based service wasn't about security or reliability or customization or any of the other commonly cited inhibitors of cloud adoption, but it was mostly a matter of control. Tropiano ultimately reconciled the loss of control with the realization that freeing up his time and his team's time for other work can be much more beneficial. DNS is a relatively simple service, but behind the scenes, there's a lot of complexity. And an IT staff doesn't have to do everything themselves. A good IT department can rely on experts from trusted vendors to do what they do best and focus on their own unique business needs.

From there, HomeAway went through a vendor evaluation process. The process centered on which vendor the company felt it could trust to have ultimate control over the company's domains and assets and be the first touch point for its customer support. Cost was not a major factor as all the company's options had similar pricing. In 2009, HomeAway signed with Dyn. The migration period took about four months after a brief but successful trial period.

Results

The most obvious and most necessary benefit from moving DNS to Dyn's cloud was the elimination of downtime for HomeAway.com – what used to be constant became never. And that alone made the switch to cloud worth it. However, HomeAway has benefited from working with Dyn in other ways that the company didn't expect. In hindsight, HomeAway's decision to choose Dyn was not just the right one but a no-brainer. Dyn talks a lot about the importance of speed – how every second counts when loading a Web site in terms of customer retention; both benefits came across well to HomeAway during its evaluation process and noticeably improved after working with Dyn. HomeAway operates in a very competitive industry, and Dyn's message of every second mattering rang true. Furthermore, HomeAway has a large international presence, and the company needs Dyn's datacenters around the world – another reason why, in hindsight, running HomeAway's own DNS was never a good option. And the freeing up of IT head count has proved to be beneficial, thanks to so much being done programmatically with Dyn. Finally, the peace of mind of having a reliable DNS and zero downtime has allowed for HomeAway to focus more on methods of achieving growth.

A great example of the benefits of the peace of mind of having a reliable DNS came in February 2010. Around that time, HomeAway decided to increase its outbound marketing tempo, and in October 2009, the executive team alerted the IT infrastructure team that it would be running a Super Bowl advertisement the following February. HomeAway spent millions of dollars for 30 seconds of Chevy Chase and Beverly D'Angelo teasing in a HomeAway-sponsored skit that reprises their role as the Griswolds from the *National Lampoon's Vacation* film series. And when 100 million people see an ad for HomeAway, which hadn't had a large advertising presence to date, that was immediately followed by unprecedented spike in traffic to the Web sites. Regardless of how many people were actually interested in HomeAway or were ever going to be interested in HomeAway, the Web site needed to support them all. HomeAway had a lot to take care of in terms of its own infrastructure in order to support that kind of traffic, but running a Super Bowl ad would not have been possible if the company was also running its own DNS. HomeAway did another Super Bowl ad the following year, and even though its daily traffic has increased substantially since 2011, it hasn't approached Super Bowl numbers any day since then. But the company maintained zero downtime and fast response time throughout the post-ad increases in traffic.

One thing HomeAway did in the months before the Super Bowl campaign was to become an Akamai CDN customer. A year and a half later, after HomeAway acquired some business in Brazil, one CDN provider wasn't enough as HomeAway needed a better South American presence. HomeAway then added EdgeCast and moved forward with a multi-CDN strategy. Dyn, through its traffic director, has helped HomeAway manage those two CDN providers. If, in any region, one provider is faster than the other, Dyn's traffic director can direct a certain percentage of HomeAway's traffic or even all of the company's traffic through one of the two CDN providers to optimize speed. One of Dyn's selling points is that "slow is the new downtime," and HomeAway would agree that the extra speed provided by Dyn's traffic director has helped tremendously. Now that zero downtime is already a given, consistent speed is becoming more of a necessity as well. In addition to CDN integration, Dyn's traffic director can also route Web site traffic to different datacenters and cloud providers by way of geolocation load balancing or ratio load balancing.

The story of HomeAway and Dyn is one of managing growth and scale. HomeAway went to Dyn to fix a specific problem with its DNS, but HomeAway has spent six years expanding its use of Dyn's services. Dyn has supported HomeAway throughout several company acquisitions, geographic expansion, and significant growth in terms of the number of customers and the number of daily Web

site clicks. In that time, Dyn has also experienced significant growth. Dyn has grown at a compound annual growth rate (CAGR) of 43% since 2010 and has earned \$64.1 million of revenue in 2014 – all SaaS. When discussing why HomeAway has worked more and more with Dyn every year, Tropiano cited not only his own company's growth but also Dyn's growth in terms of what the provider offers as key driving factors, in addition to continued overall satisfaction.

Perhaps most notably for Dyn's recent growth in product offerings is the acquisition of Renesys in May 2014. Renesys provided Internet intelligence offerings at a much more technical and in-depth level than what Dyn was previously able to produce. With a threefold approach to Internet intelligence – monitoring, analyzing, and planning – Renesys' assets combined with Dyn's specialty areas formed a more comprehensive Web performance suite. This not only helps Dyn meet the demand for end-to-end network visibility, but it allows the company to provide actionable intelligence and analysis and be more proactive with its traffic monitoring and make recommendations for customers based on changing traffic patterns, such as moving traffic to another node or datacenter provider. HomeAway expects to take advantage of these offerings and for Dyn to continue to support its own growth as an Internet-based company.

IDC identifies Dyn as a leader in the system infrastructure software (SIS) submarket – the second-largest cloud primary market after applications. SIS capabilities delivered as a service is projected at a CAGR of 19% through 2018, nearly five times that of the forecast growth rate for the noncloud SIS market.

ESSENTIAL GUIDANCE

The most difficult decision point for HomeAway in its journey with Dyn came before signing a deal and before the vendor selection process even began in earnest. But while HomeAway's decision to go to the cloud instead of running the company's own DNS in-house may have been a difficult decision at the time, it's clear today that it was the right one for many reasons. Looking back over the previous six years, Tropiano and HomeAway have learned useful lessons for any growing organization considering a cloud-based provider – for DNS or any other workload:

- When considering a move to the cloud, Tropiano suggests to think about all aspects of the move, including indirect benefits – such as the ability to redeploy IT personnel. Running an IT workload in the cloud can be beneficial to an organization even without added functionality or lower cost just by freeing up personnel for more important tasks.
- Along the same lines, Tropiano specifically recalls his shift in thinking about cloud, from worrying about a cloud provider taking away his job by doing it better to realizing that he can do a better job on his own by outsourcing certain workloads to an expert vendor. Tropiano advises others in similar situations to keep the big picture in mind when thinking about as-a-service offerings.
- When choosing a provider, HomeAway didn't have to think much about cost. Because of this, HomeAway was able to ask more useful questions in order to find a vendor it could trust for such an important role. When evaluating a cloud provider, IDC suggests organizations think about the following questions: Can the cloud provider provide the same levels of service that you are used to, and/or can the cloud provider improve to the levels you need? Does the cloud provider support integrations necessary for your business to run? Can you dynamically scale up and scale down? Does the cloud provider offer bursting technologies? Does the cloud provider align with an ecosystem, and do you already have ties to these ecosystems?

- For cloud vendors, with more end users expecting a SaaS provider to offer a "complete" workflow – as opposed to a partial one – it is important to be able to expand product offerings in order to continue to meet customer demand. HomeAway's needs with Dyn started with just DNS, but the adoption of Dyn by HomeAway has grown because Dyn has been able to offer a more complete workflow. By adding these capabilities, HomeAway didn't just outsource its DNS to Dyn but rather partnered with a cloud provider to grow its business.

LEARN MORE

Related Research

- *Worldwide SaaS and Cloud Software 2014-2018 Forecast and 2013 Vendor Shares* (IDC #249834, July 2014)
- *Monitoring the Internet: Dyn Acquires Renesys* (IDC #249278, June 2014)

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Global Headquarters

5 Speen Street
Framingham, MA 01701
USA
508.872.8200
Twitter: @IDC
idc-insights-community.com
www.idc.com

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