



VENDOR PROFILE

Dyn's Internet Performance Portfolio Offers Improved Visibility, Traffic Management, and User Experience

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IDC OPINION

Optimizing user experience (UX) is a critical goal for Internet-dependent enterprises. For many businesses, ecommerce, mobile device interactions, content delivery, and Web site performance are directly related to revenue, profit, growth, and competitive goals. Real-time actionable insight is essential to these businesses to make infrastructure- and network-related decisions that yield positive digital customer experiences. Application performance is one component of optimization, but any organization doing business via the Internet, through market-facing Web sites or Web-based applications, has to also optimize its Web-related throughput at the infrastructure and network levels. Further:

- Internet-dependent enterprises have a variety of ways to optimize their Web-based customer interactions. Many companies knowingly or not use hybrid approaches to this optimization, which may involve private or public clouds and multiple content delivery networks. But they rarely have insight as to whether their infrastructure and delivery systems are yielding the best user experience.
- Large-scale and high-end network assurance offerings need to embrace real-time, vendor-neutral approaches to Internet traffic management and monitoring, in combination with application performance management.
- Vendors that offer easy-to-implement solutions that quickly deliver value in analyzing and improving the user experience via infrastructure and Internet optimization are likely to be marketplace winners.

IN THIS VENDOR PROFILE

This IDC Vendor Profile analyzes Dyn, which competes in the cloud network management software segment of the cloud-based system infrastructure software-as-a-service (SISaaS) market. It reviews key potential success factors for Dyn, including its market potential, technology/solution, go-to-market and product strategies, value proposition, and differentiators, as well as its challenges and competition. The document also provides essential guidance for vendors in this market and technology adopters.

SITUATION OVERVIEW

Company Overview

Dyn is a cloud-based Internet performance optimization company that helps its clients monitor and optimize their online infrastructures. Its products include Internet performance data and analysis, Internet traffic steering and optimization, managed domain name system (DNS) services, and ancillary services such as domain registration, email delivery, and IP reputation management.

It uses a global network of real-time network sensors to monitor and measure Internet traffic based on tens of millions of IP addresses providing geolocation data, along with clusters of software agents at some of the world's largest infrastructure providers. This results in billions of daily, real-time performance and availability data points that can be used to find optimum paths along the Internet and detect slowdowns and blockages that might degrade both the speed and the reliability of Web site responses and transactions.

Started in 2001 to focus on dynamic DNS and remote access for homes and small businesses, Dyn, based in Manchester, New Hampshire, has since developed strong adjacent offerings in Internet performance management. Dyn's "as a service" offerings within these areas provide an alternative to on-premise appliances. Dyn has a broad customer base with enterprise, midmarket, and SMB customers and partners/resellers across a variety of categories including advertising technology, consumer Internet, media and entertainment, retail, service providers, software, and travel/hospitality. Customers include Adcash, RichRelevance, BT, CNBC, Etsy, Hershey's, HotelPlanner, Red Hat, Seeking Alpha, Twitter, Telenor, UPS, and Zillow.

Dyn became a premium domain registrar in 2004 and added enterprise managed DNS and advanced traffic management services in 2007 and email delivery services in late 2010. With the May 2014 acquisition of Renesys, Dyn beefed up its Internet performance monitoring and analysis services.

Dyn raised \$38 million in its initial round of venture funding in 2012 from North Bridge and has grown at a compound annual growth rate (CAGR) of 43% since 2010. IDC estimates privately held Dyn's revenue was \$64.1 million in 2014 – all SaaS.

Dyn has more than 3,500 enterprise customers, approximately 1 million self-service customers, and over 400 employees worldwide, with regional offices in the United Kingdom, Australia, and Singapore.

The acquisition of Renesys provided Internet performance monitoring and analysis offerings, a deep data science competency, and an expanded global sensor network. The new platform incorporating Renesys capabilities, Internet Intelligence, is focused at a much more technical and in-depth level than what Dyn was previously able to deliver. With a three-pronged approach to Internet intelligence – monitoring, analyzing, and planning – Dyn has created a more comprehensive Internet performance suite. This not only helped Dyn meet the growing demand for end-to-end network visibility but allowed the company to provide actionable intelligence and analysis and be more proactive with its traffic monitoring. Insights from Internet Intelligence allow customers to make decisions based on changing traffic patterns, such as moving traffic to another node and location or even switching datacenter or cloud providers.

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

Company Strategy

Go-to-Market Model

Dyn goes to market with multiple sales models. About 70% of its sales are direct and partner sales (direct sales plus OEM deals), while 30% is from self-serve. It has a strategic sales team targeting high-traffic-volume organizations, Fortune 1000, and Global 2000 accounts. It also targets any enterprise heavily dependent on Internet traffic. For example, Telenor, a multicontinent mobile services provider based in Norway, uses Dyn's managed DNS and Internet traffic management services to meet reliability, usability, and performance goals for its content delivery network rather than buying additional servers and load-balancing software and hardware.

Within its target organizations, Dyn is typically targeting network-oriented IT professionals with the focus on providing visibility and solutions to accelerate Internet performance and reliability as well as the performance and reliability of applications linked to the Internet. But Dyn also sees opportunities to address the business side because of its potential to directly and quickly improve business continuity by optimizing performance of online applications and to improve service uptime. The Dyn suite of Internet performance technology is quickly becoming table stakes for CIOs of large and small enterprises actively moving applications to cloud services.

Dyn has a sales team in the United Kingdom supporting EMEA and sales teams in Sydney and Singapore supporting Asia/Pacific, all of which account for approximately 20% of Dyn's sales.

Strategy

Dyn expects to gain market share by:

- Expanding to traditional enterprise businesses and service providers
- Cross-selling existing, new, and improved products to its installed base
- Targeting cloud and SaaS providers with a complete Internet performance management solution
- Getting more of its portfolio into self-service channels via direct and indirect marketplaces
- Accelerating investment in international sales through direct sales and partnerships
- Bringing expanded data and analytics offerings to market
- Developing deep integration partnerships with cloud service providers (CSPs) and on-premise hardware technology companies.

Pricing Model

All pricing is subscription based, whether based on usage/traffic or on platform, the number of modules or custom probes, alerts, and so forth. Pricing can range from \$40 annually for small businesses to hundreds of thousands of dollars annually for enterprises, depending on the solution and usage pattern of the customer.

Product Road Map

Key road map items for Dyn include:

- Tighter integration of its growing family of assets
- Eliminating manual steps and workflows
- Boosting the depth of its data and analytics portfolio
- Leveraging its position in Internet performance analytics to provide additional service modules to a variety of customers, including large firms with their own datacenters, to hosted sites, and to additional cloud services providers
- Adding intelligence that will allow alerting and traffic redirection using a flexible rules engine to optimize load balancing and performance decisions across multiple data and network assets
- Real-time traffic management for optimization based on application or Web site latency
- SLA analytics of cloud and SaaS providers
- Security-as-a-service opportunities

Differentiators

Among the differentiators that distinguish Dyn from its competitors in Internet performance management are:

- Vendor-agnostic connectivity layer and neutrality to online infrastructure
- Optimized real-time, actionable traffic steering for availability, security, performance, and costs
- Global service network
- Extensive monitoring network
- Global network partnerships
- Enabling reachability for customers – a new, critical aspect of availability
- Industry-leading data sets (real time and historical)
- Leading, in-house experts in global Internet routing, DNS, BGP (border gateway protocol) and SMTP protocols, and data science; actively involved in governance bodies including the IAB, ICANN, and IETF
- 24 x 7 x 365 global sales and support team
- World-class customer experience

Competition

In the Web performance analysis and traffic management categories, Dyn competes against Akamai, Allot Communications, Aryaka, Amazon Route 53, Neustar, ThousandEyes, and Verisign, among others. While Dyn does not have a direct competitor within its full suite of Internet performance offerings, it does have competitors within its individual product offerings. With its traffic management solutions, Dyn competes with Amazon Route 53, Neustar, F5 Networks, Citrix, Akamai, and Verisign. With its intelligence offering, it competes with companies such as ThousandEyes.

FUTURE OUTLOOK

Customer experience will remain a top priority for networked organizations globally. Dyn's positioning away from managed DNS to Internet performance offerings is an example of the need for end-to-end visibility and control to serve today's digital enterprises.

To serve growing customer requirements for visibility and transparency, the operations of global network infrastructure will continue to require insights into adjacent networks and, especially, the global Internet. Despite the openness of the Internet, infrastructure-dependent customers will need more sophisticated visibility into infrastructure performance offered by cloud and SaaS providers, CDNs, and hosting providers, to make a variety of decisions that ultimately lead to optimizing the experience of their users.

Internet-based companies increasingly understand that the integration of connectivity with infrastructure visibility is essential. The older approach of using passive and historical monitoring is no longer enough to drive today's digital experience. Instead, intelligence-based insights need to be integrated with decision making in real time, enabling the companies to take action using these insights. Dyn could benefit from these trends if it can position itself as a real-time actionable control plane offering its customers an independent, unbiased, and neutral provider of traffic insights and action.

Since 2009, application performance monitoring (APM) and network performance monitoring (NPM) tools have seen greater acceptance and adoption, as companies rely more heavily on online services. While these services have provided higher-quality information, the missing component has been the ability to monitor the public Internet for an end-to-end optimized customer experience. This is what Dyn does and how it provides a complementary view to current APM and NPM providers. Unlike any other provider in this space, Dyn offers a robust global traffic management infrastructure.

All Internet-facing companies stand to benefit from the proactive traffic management capabilities Dyn provides. As mentioned previously, cloud services are becoming preferable to on-premise appliances in many enterprises. Dyn can further capitalize on this trend by continuing to grow its cloud-based Internet performance offerings for the enterprise and enabling hybrid infrastructure choices for customers.

The potential sources of network intelligence will continue to expand. However, the ability of end-user organizations to consume and act on the intelligence will remain a work in progress for many SISaaS suppliers. Clearly aligning the intelligence with specific sets of infrastructure decision making, as Dyn proposes to do with its Internet Intelligence offering, will help end users quickly act on those insights – whether predictive or reactive. In addition, as a vendor-agnostic single source of intelligence across cloud, CDN, and hosting solutions, Dyn positions itself as a strategic-value vendor that can sit above any chosen infrastructure partners and provide objective insight.

Dyn sees Internet Intelligence as a solution with considerable appeal for Web-scale players, cloud service providers, and larger enterprises adopting public and private clouds. The analysis and intelligence inherent to the company's Internet Intelligence offering will enable these customers to make changes based on dynamic network conditions, such as availability, latency, geography, and performance. In some cases, customers will use Dyn's Internet Intelligence insights to shift traffic from one service provider's network to that of another provider. This positions Dyn's Internet Intelligence as a provider-agnostic technology that could be offered through multiple sales channels and processes targeting a wide variety of value chains.

The growth of hybrid cloud (and hybrid on-premise to cloud) will generate commensurate demand for tools and solutions that allow enterprises to control and harness the public Internet, encompassing a potentially wide range of connectivity options, technologies, and service providers.

ESSENTIAL GUIDANCE

Advice for Dyn

With more end users expecting SaaS providers to offer a "complete" workflow – as opposed to a partial one – it is important for vendors to expand product offerings to meet broadening customer demands for adjacent capabilities and deeper functionalities. Customers demand complete solutions and not simply point products in a cloud-centric world.

Participants in the largest networked infrastructures should keep an eye on the capabilities and role of service-enabling infrastructure. For CIOs and IT experts looking to learn from the Internet infrastructure and telecom experience, the operations of service-enabling infrastructure serve as a useful example. For the CSP community and CSP suppliers, the combination of insights with service-enabling infrastructure remains important. While the concept of insights into the Internet and service-enabling infrastructure is not new, real-time decision-oriented solutions such as traffic management highlight the need to optimize operational processes in real time. Dyn's Internet Intelligence services and forthcoming additional services take the company strongly in that direction.

Service providers should consider the extent to which Dyn's customers are engaging with actionable intelligence. Both the mission-critical infrastructure services offered by Dyn and the online services offered by Dyn's customers are poised to benefit from real-time Internet intelligence and traffic optimization, and the benefits to keeping cloud providers honest to performance and SLAs can't be understated.

For enterprises working to optimize the customer experience of their applications and infrastructure, Dyn's service provider-independent approach may be useful.

Advice for Buyers

Key benefits for potential buyers of Internet performance management and optimization services include:

- Incorporating real-time measurement to minimize outages and lost opportunities and maximize uptime, Web site performance, and UX
- Auditing the performance of Internet service/network providers versus SLAs (as opposed to relying on the service provider for SLA information)
- Adopting a low-maintenance (zero or low IT load) solution – no hardware or software to buy, upgrade, or maintain and no staffing required
- Lowering risk by using the free trial and test before/after to develop scope and ROI case

Buyers can mitigate risk in applying Internet performance management services by taking advantage of quick, free trials with solution architecture assistance and can adopt services incrementally and without significant lock-in issues.

Vendor neutrality, ease of implementation, pricing visibility and flexibility, ease of use, and depth of services (such as the number and geographic reach of those network monitors) are among the characteristics that buyers should examine as they make purchasing decisions.

LEARN MORE

Related Research

- *Worldwide SaaS and Cloud Software 2015-2019 Forecast and 2014 Vendor Shares* (IDC #257397, August 2015)
- *HomeAway Grows with Dyn: Looking Back Six Years After Going to the Cloud for a Much-Needed DNS Upgrade* (IDC #257246, July 2015)
- *Monitoring the Internet: Dyn Acquires Renesys* (IDC #249278, June 2014)

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