



CASE STUDY: nextpoint

Nextpoint is a technology company that empowers litigators to manage the litigation life cycle through a secure cloud-based platform. Based in Chicago, IL, the company develops Software-as-a-Service (SaaS) applications that provide an integrated support system for trial preparation and evidence management. Nextpoint's mission is to deliver world-class technology with an uncompromising commitment to customer service, and in doing so have secured Fortune 100 corporations to top litigation firms as customers.

Developing and deploying a SaaS solution requires a secure, scalable, and reliable infrastructure in order to handle large amounts of data and high volume of traffic. And more importantly, it requires an infrastructure with dynamic flexibility to accommodate unexpected spikes in usage as in the case of electronic discovery (e-discovery) and litigation. The challenge most corporations and litigation firms encounter is managing the massive amounts of data and then processing that data to obtain meaningful results in a timely manner. Realizing the need for scalability and flexibility within the infrastructure, the company turned to Amazon Web Services (AWS) to power the applications within the Nextpoint portfolio.

Prior to using AWS, Nextpoint had leveraged other hosting providers and had not been convinced of their ability to scale easily and cost-effectively. As the Nextpoint team shared with AWS, "We had been using other 'slice' style hosting partners with some success, but saw a much greater opportunity to address our customers' core needs through Amazon Web Services. Those technical concerns, and the major technical challenges of our industry, have to

do with scale and elasticity so we began using Amazon's Elastic Compute Cloud (Amazon EC2) service shortly after its beta release and haven't looked back."

Utilizing the scalability of Amazon EC2, Nextpoint is now hosting three different applications on AWS, including Nextpoint Trial Cloud, Discovery Cloud, and Cloud Preservation. These three applications comprise Nextpoint's Cloud Platform, and this platform manages the end-to-end data processing, storage and support for the litigation lifecycle. Amazon EC2 and Amazon Simple Storage Service (Amazon S3) are the core components being used within Nextpoint's architecture for each of the SaaS offerings, and the synergy of these services has enabled Nextpoint to serve numerous Fortune 100 corporations and Am Law 100 law firms.

These clients require nothing short of world class service for themselves and for their customers. Meeting these exceptional quality standards is why Nextpoint selected AWS as their cloud computing infrastructure of choice. Serving these corporate giants means not just producing an elaborate, technologically viable solution, but also keeping costs in check as the volume of work skyrockets (to terabytes of data), which of course in the field of litigation, is inevitable.

"Immediately after launching with AWS we began assisting a Fortune 100 customer with document review and evidence management for a pending multi-district litigation. It was an unprecedented achievement in the legal technology industry made possible by cloud computing and Nextpoint's proprietary technologies."



Nextpoint's technology running on AWS provides exponentially faster processing, practically infinite storage capacity, industry-standard security, and the assurance of being on a platform that by its very nature will remain affordable and viable well into the future."

The Nextpoint applications largely leverage open source technologies like MySQL and Apache, both of which run on Amazon EC2. In addition, the applications are built using Ruby on Rails and Merb, and Nextpoint leverages several libraries written by AWS and by other 3rd party providers within the AWS Ecosystem. Using these sets of technologies and libraries enables Nextpoint to piece all the components together into a complete solution to meet their clients' requirements.

All web user sessions are transferred over HTTPS protocols between application users and AWS to enable secure connections. Also, firewalls have been enabled using the native EC2 Security Groups. Amazon Web Services has successfully completed a Statement on Auditing Standards No. 70 (SAS70) Type II Audit, and has obtained a favorable unbiased opinion from its independent auditors. AWS data centers are housed in nondescript facilities with military grade perimeter control berms. Physical access is strictly controlled by professional security staff utilizing video surveillance and state of the art intrusion detection systems.

Elasticity for processing and storing large amounts of data has been the most important metric for the company's clients. Nextpoint's clients regularly increase the processing power by 50x in order to complete critical, time-sensitive tasks for customers. Nextpoint's clients, for example, can go from utilizing 3 Amazon EC2 instances to 150 within minutes with no effort on their part. This enables Nextpoint to automatically provision capacity, process data, and then de-provision the capac-

ity once their client's processing is complete. Amazon EC2 offers a highly scalable, dynamic paradigm which Nextpoint successfully leverages to eliminate unnecessary cost burdens on their clients.

When it comes to cost, the AWS pay-as-you-go model had been most appealing as it gives a freehand to Nextpoint to knock down data related costs to a level previously unattainable. And in terms of costs savings, the company's Discovery Cloud e-discovery processing engine, running on Amazon EC2, has allowed them to disrupt the industry standard pricing models, which typically range from hundreds to over a thousand dollars per gigabyte. Now customers can get storage for a fraction of the price per gigabyte by using Nextpoint on Amazon S3.

According to Nextpoint, such an endeavor would have been impossible to achieve in a conventional data center. AWS' utility pricing model makes it possible for companies with enormous visions – like Nextpoint – to blur the lines between what was possible and what is now a reality. Nextpoint's business model of providing robust litigation services is in itself an act of ingenuity and when combined with the AWS cloud computing architecture is changing the course of the industry.

Nextpoint explains they had their best results by thinking outside of traditional web architectures and have found that elastic computing and infinite storage is every bit as profound as the web. As Ben Wolf, VP of Research and Development says, "The biggest technical challenge facing the litigation and e-discovery industry today is managing massive and exponentially increasing volumes of data from complaint to verdict. Nextpoint's technology running on AWS changes the dynamics dramatically, providing exponentially faster processing, practically infinite storage capacity, industry-standard security, and the assurance of being on a platform that by its very nature will remain affordable and viable well into the future."

To learn more about Nextpoint, visit:

<http://www.nextpoint.com>

Reprinted with the permission of Amazon Web Services. © AWS 2010. All rights reserved. Further duplication without permission is prohibited. To view this case study online, please visit: <http://aws.amazon.com/solutions/case-studies/nextpoint/>