

Capitalize on BigData and Data Warehousing with Amazon Redshift



Introduction

Cloud Computing is no longer just another buzzword or 'hype-cycle' phenomenon.

The cloud may have begun as a niche curiosity for only the most tech-savvy of software development businesses, but it's since rapidly evolved. Companies everywhere are using cloud services today for managing retail sales, media content, customer service, human resources and much more. The majority of firms utilize the 'Better, scalable, cost-effective' infrastructure in the cloud now, and as the technology has gained popularity, it has become enormously profitable.

According to Forrester Research data recently reported by ZDNet, the global market for cloud services will continue to skyrocket throughout the rest of this decade, reaching a total value of \$40.7 billion by 2020. Infrastructure as a service (IaaS) alone will be worth \$5.9 billion by 2014. With this potential, it's no surprise that the cloud market has become intensely competitive. Vendors compete to offer their clients the best possible amenities – more choices of infrastructure, software templates, more storage space, special features, better customer service and of course lower prices.

In this landscape, Amazon Web Services (AWS) has by far been the trendsetter and leader by a mile. The Gartner Magic Quadrant for both 2012 and 2013 places AWS at the top of the pack, and predicts more conversion on new projects to AWS.

Please refer the 2013 report, just released, below in IaaS market.

<http://www.gartner.com/technology/reprints.do?id=1-11MDMZ5&ct=130819&st=sb>

More on Amazon Web Services

The Cloud services have burgeoned into areas beyond simple IaaS. AWS, among other providers, offers businesses a complete computing infrastructure that allows them to move everything into the cloud, from enterprise applications to big data projects.

AWS offers a myriad of services including Compute (EC2), Storage (S3), Development platforms (Beanstalk), DNS service (Route 53), Relational Database Services (RDS), Massively Parallel Processing (Elastic Map Reduce) and the latest data warehousing service, Redshift. The great news is that all the services work seamlessly with each other, allowing an organization to outsource IT easily to the AWS cloud.

Some examples:

With Microsoft SharePoint deployment, companies have a method to share their entire Office suite and the files produced therein. With the AWS Marketplace, they have an easy way to purchase more hardware, software and web-based products that will further improve their operations. AWS, with partners such as DISYS, offers fantastic customer service resources that will help businesses with technical support and other managed services that enable integrating cloud solutions with traditional

IT solutions.

Software and services are expected to be the largest areas of growth over the next half-decade, according to Transparency Market Research. As Amazon works to further distinguish itself in these areas, tremendous benefits are in store for customers.

Big Data

According to a recent market report published by Transparency Market Research, the total value of big data was estimated at \$6.3 billion as of 2012, but by 2018, it's expected to reach the staggering level of \$48.3 billion. That's almost a 700 percent increase - and with that growth, Amazon is expected to continue improving its services as demand only grows higher.

Moving to the cloud and embracing the "big data" craze go hand in hand. Across the business world, there are companies making both transitions - once they've put massive amounts of information online and made it easily accessible, they want to begin data analytics initiatives that will help them crunch numbers and discover important truths about their futures.

What is Amazon Redshift?

Amazon Redshift, is simply put, a data warehouse service that is a lot faster, simpler, and less expensive than alternatives available today. It is a massively parallel, fully-managed data warehouse service, designed for data sets from hundreds of gigabytes to several petabytes in size, and appropriate for an organization of any scale - from a startup to a multi-national corporation - at a price point that is astonishingly low. Amazon Redshift is fully managed, so customers no longer need to worry about provisioning hardware, installation, configuration or patching of system or database software. As data is critical to business, it can be protected by replicating all data within the Redshift cluster as well as in S3 storage.

First of all, it's reliable and fast. Redshift doesn't experience crashes or outages - users are able to find their data when they need it, every single time. It's powerful, offering instant access and a massive scale. It's also fully managed, meaning its resources are overseen by top-flight IT professionals with only the utmost qualifications and skills.

Amazon Redshift is optimized for data analytics. Its storage technologies enable businesses to break down their data and achieve real results at 10 times the speed of traditional data warehousing offerings.

Furthermore, Redshift is optimized for data sets of all sizes, meaning it's a good fit for large corporations, small businesses and everyone in between. It's competitively priced for all of the above groups, too - all companies will get a good value with Redshift, regardless of size. Companies with datasets as small as a few hundred gigabytes have been happy with their Redshift service, while those with massive petabyte-sized clusters have succeeded with the platform as well.

Benefits of Amazon Redshift

First of all, Redshift is built upon columnar storage technology that makes it easy to handle data sets of all sizes. With its fast query abilities and strong I/O performance, the solution makes it easy to store complex clusters of information, all the while retaining the ability to parallelize and distribute queries across multiple nodes.

The configuration makes it easier for data analysts to process information at great speed and accomplish more with it. Also, Redshift is also highly compatible with third-party tools that help with analytics. If you have large banks of data that you've already been working with prior to making the Amazon switch, Redshift is easily adaptable. You can integrate the new technology with your old projects easily.

As for pricing, Redshift is ideal for small and large businesses alike, as Amazon offers a variety of payment plans that are customizable based on your company's needs. First of all, Amazon charges \$0 up front, and from there, you're able to pay as you go for each specific service you require. Pricing is scalable, meaning that each individual client can pay for the exact amount of storage space that it needs.

Amazon Redshift, all in all, will cost less than \$1,000 per terabyte per year, about one-tenth the cost of most traditional data warehousing solutions. For that price you get all of the benefits listed above without any of the operational headaches associated with building and running your own data warehouse.

Market impact

Network World predicted in November 2012 that Redshift would soon transform the world of big data analytics. Because it's aimed directly at on-premise data warehousing systems, including those marketed by giants such as Oracle, SQL Server and Green Plum, it will be able to quickly reach a large portion of the analytics market. Merv Adrian, a Gartner analyst who tracks big data, told the news source to expect a noticeable shift right away upon Redshift's release.

"All these guys are suddenly confronted with a new full-featured SQL interface completely in the cloud with dramatically lower pricing," Adrian said. "This is a potentially massive disruption for traditional data warehousing vendors, but it can't come as a surprise."

Conclusion

Amazon Web Services is dedicated to helping companies upgrade their technology infrastructures in an affordable, scalable way. That's true of all AWS products and services, Redshift included.

There are numerous technology firms out there today vying for the chance to provide your business with cloud services. The options can be overwhelming, and it's difficult to distinguish any one of them from all the rest. But rest assured - with Amazon Redshift, you're getting a reliable solution from a trusted company with a track record of success.

DISYS is an Amazon partner. As a certified IT staffing and consulting company, DISYS works tirelessly to help tech companies across the world fulfill their professional needs, and through its partnership with Amazon Web Services, DISYS can help businesses optimize their tech infrastructures. We're living in a cloud-powered, data-crazed world, and together, DISYS and Amazon Redshift can help you capitalize on these undeniable tech trends.

About DISYS

DISYS is an ISO 9001:2008 certified IT consulting and business solutions company with core services in IT Staffing and Consulting, Finance and Professional Services, ERP Services, and Infrastructure Support Services. Our vision is to be a global business partner, delivering the highest quality and most consistent services at the best value to clients worldwide.

Incorporated in 1994 as a certified Minority Business Enterprise, DISYS has posted an eight-year average of 50% growth per year and currently ranks as the seventh-fastest growing company in the staffing industry. DISYS is headquartered in McLean, Virginia, with offices and delivery locations worldwide in North and South America, Europe, and the Asia Pacific region.

