

City Network Case Study

Scalable cloud storage powering a leading Scandinavia hosting provider



Introduction

City Cloud is a service provided by City Network Hosting, one of Scandinavia's largest hosting providers, focused on providing enterprises with a secure, scalable cloud computing platform. City Cloud enables customers to create virtual servers and scale them up and down as needed with a single click.

The City Cloud platform provides enterprises with a flexible cloud computing environment that scales on demand and charges users only for what they use. With over 10,000 customers, City Network is the only Scandinavian supplier with a 100 percent up-time guarantee, and it features multiple layers of security to deliver the reliable and secure service needed.

Challenges

As a leading cloud computing service, City Network is expected to meet the scalability and performance requirements of the most demanding customers. City Cloud is constantly growing, so City Network needed a trustworthy storage solution that could dramatically scale while maintaining stability and high performance. Additionally, City Cloud customers run their applications in virtual machines (VMs) requiring a storage solution that fits seamlessly in a large-scale virtualized environment. "We believe our business as a whole will, to a large extent, be judged on performance, as our leading cloud solutions continue to grow," said Johan Christenson, chairman of City Network. "With the sensitive services we run, our customers expect extreme performance from their applications so we need a storage solution that delivers reliability and can scale on-demand without hindering the quality of performance."



Solution

In addition to these key requirements, City Network was also looking for a cost-effective storage solution in order to pass on meaningful savings to their customers. They found monolithic proprietary solutions to be expensive and required storage capacity to be provisioned well in advance of demand. As City Cloud continues to grow they rely heavily on the elastic scaling capabilities of storage nodes. This reliance makes it necessary for storage to have extreme growth capacity, but most importantly to never sacrifice performance as that growth kicks in.

Customer applications run in VMs that are hosted on blade servers with multi-tenant access to the Gluster storage deployment. In the event of a blade failure, VMs can migrate to a new blade with continued access to the data. City Cloud uses Gluster's file replication capabilities to ensure high availability of the data. VMs and storage are provisioned dynamically and enable seamless growth.

"We have run various proprietary solutions from the larger vendors, as well as variations of NFS," explained Christenson. "With these other solutions we were unable to receive the performance and steadfast features we needed. Consistency in our data transfer needs to be perfect at all times, and it seems it is not as easy to get as one could imagine with the amount of volumes we run. Where the other solutions have failed, Gluster has proven to be able to provide the right balance of high performance, scalability and reliability."

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After reading about Gluster's technology in various publications and collecting feedback from the Gluster community, City Network began implementing Gluster in the second half of 2010. With Gluster's easy-to-use interface, City Network found it extremely simple to configure and deploy.

Results

Since deploying Gluster, City Network has been achieving dramatic savings on storage cost. The combination of Gluster's open source, software-only solution and commodity hardware provides an extremely cost-effective storage solution.

"Sometimes organizations select storage solutions that aren't as robust but are cheaper and allow IT to stay within their budget," said Christenson. "However, with Gluster you don't need to make that sacrifice. There are real savings in the fact that you can combine off-the-shelf hardware, while at the same time creating a powerhouse of reliability, scalability and performance."

City Cloud customers are also benefiting from the dependable storage that Gluster provides and experiencing performance rates that are higher than expected.

"With Gluster we are able to provide a very reliable service that continues to perform at or higher than our customers' expectations," explained Christenson. "This reliability is crucial for any cloud computing service, especially for City Cloud, as it is still a relatively new service that needs an outstanding reputation in order to rise above the noise of other cloud services providers."

Additionally, City Network needed a solution that easily integrated with Enomaly Elastic Computing Platform to deliver outstanding performance at peak times, specifically by eliminating I/O bottlenecks that were experienced with previous storage systems.

"We benefit greatly from the speed and dependability of Gluster," stated Christenson. "Gluster gives the sensitive VM's a continuous feed of data that never allows them to hesitate, unlike other proprietary systems we have tested."

Key Benefits

- ✓ Easy to deploy and manage
- ✓ Cost savings due to the technology's open source model
- ✓ Integrated seamlessly into existing infrastructure
- ✓ Provides the ability to seamlessly scale during times of increased activity without affecting performance
- ✓ Data is highly available through the use of replication with the ability to survive hardware failures

"We look forward to expanding our Gluster deployment to other sectors of the company to achieve the same benefits it has delivered to our City Cloud service."



Cloud



Hosting



Email