

Cyso selects Arista as critical foundation for low cost, reliable and scalable public cloud service.

Highlights

Challenge

Cyso needed to build a cost effective cloud platform using OpenStack and required a scalable and high performance switching architecture to meet its business aims.

Solutions

- Arista 7150 Series Switches
- Arista EOS®

Results

- Deep support for OpenStack features for critical self-service features
- Seamless integration of Foreman for orchestration and Puppet for configuration management.
- Highly competitive pricing to support business model of OpenStack based cloud
- Proven success of Arista in OpenStack cloud led to deployment in VMWare based cloud platform

For Cyso, a dynamic managed hosting provider, the next step in its evolution is the offering of a full set of cloud services to meet the needs of its customers adopting hybrid IT. However, the highly competitive nature of the cloud sector meant the company needed to build a cloud platform able to meet critical cost considerations without sacrificing reliability and features. To deliver its new Fuga Cloud service, Cyso has used a combination of high performance Arista switches coupled with OpenStack based cloud technology to create an innovative service offering Pay-per-use instances with no long term contracts yet able to scale to the largest customer environments.



Project Background

Since its foundation in 1997 in Alkmaar in the north of the Netherlands, Cyso has grown rapidly and earned a reputation for helping its customers achieve success, by keeping their websites, business critical platforms and applications online 24x7. The company now runs infrastructure supporting over 2500 customers within 3 geographically separated tier-4 data centres and has endeavoured to maintain the highest levels of business and technical certifications including ISO 20000, ISO 27001 and NEN 7510. As a co-founder of the Dutch Hosting Provider Association, Cyso has participated in helping the industry evolve including the rise of cloud hosting as an additional service alongside traditional server hosting. With a highly technical team of developers and infrastructure specialists, Cyso began looking at options for creating its own cloud platform. The aim; to provide a competitive alternative to the like of AWS and Azure while retaining its reputation for customer service and responsiveness that has helped it become one of the largest independent hosting companies in the Netherlands.

Challenge

With such a bold plan in mind, Cyso understood that the choice of switching architecture would be critical to meet the performance demands of its cloud but also to enable automation features vital for its self-service ethos. As Tjebbe de Winter, co-founder of Cyso explains, "We selected Arista for its known performance and robustness. Being a proven technology in combination with the fact that it runs Linux provides us the flexibility we need in a switch platform supporting a fast changing technology such as OpenStack."

In the view of de Winter, delivering public cloud service can be quite demanding for the network supporting the cloud technology. While open platforms such as OpenStack can also make it a target for security incidents as criminals try to abuse the massive resources as potentially a source of or target for distributed denial of service attacks.

"A robust networking layer is needed to analyse any anomalies and act accordingly," says de Winter, "For us, it is very important that during this detection and analysis phase, the network keeps working as well as providing the openness and tools we need to create automated counter measures."

When Cyso began developing its cloud in 2014, de Winter points out that many of the networking vendors were still unsure about how they were going to support the OpenStack standards which were evolving quickly. "We liked the fact that we could work with the Arista team to align our technology with its releases. We believe it is beneficial to stay as close as possible to the OpenStack vanilla releases and we have a strict upgrade policy where we follow the major release cycle of the OpenStack project every 6 months. We also try to avoid implementing hacks or third party add-ons and this was an approach that Arista fully supported."

Solution

Following its two year development cycle, in September 2015, Cyso launched its public cloud offering under the Fuga.io brand. The service is hosted across resilient datacentres in the Netherlands and is implemented using Foreman for orchestration and Puppet for configuration management. "Everything we do to get things installed, configured and maintained is done through puppet configuration management," explains de Winter, "And that makes it easy to integrate with the Arista switches using this approach."

Fugi.io is highly automated and its use of OpenStack infrastructure allows the service to grow fast and keep up with the fast changing OpenStack software features. "The robustness of the Arista switching platform makes it possible to use one converged network for virtual machine traffic, storage and management," says de Winter, "Cost is also an important business driver for OpenStack based clouds and Arista delivered a high value solution. In our VMware based cloud setups we use 3 times the number of switches of our legacy vendor as we do for our OpenStack cloud on Arista on a per node basis."

Conclusion

The Cyso co-founder also commends the relationship his team has forged with Arista Networks, "It is clear that everybody wants the biggest customers and despite the fact that we started with a modest setup using a small number of switches we got the support we needed and both hardware and support were offered with competitive pricing," he says, "With Arista in place and delivering above our expectations it made us reevaluate other areas of our offering. As a result, we replaced a lot of our switches that we use in our other VMware based cloud with Arista and are currently upgrading to the latest OpenStack release Mitaka. For us, the choice of Arista has been crucial in helping is to deliver what we consider is an innovative, flexible and cost competitive private cloud environment."

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