

Elastx – a New Business Idea Based on New Technology

A completely new infrastructure from the beginning

Elastx's network environment consists of Cisco® Nexus® 9000 Series Switches, and along with Cisco Application Policy Infrastructure Controller (APIC). This is the foundation for Cisco Application Centric Infrastructure (Cisco ACI™).

“I had the opportunity to create a whole new infrastructure that was designed for multi-tenant cloud computing from the beginning. When we searched for and evaluated products for the platform, we had a long wish list, with one of the requirements being integration with OpenStack,” Öhman explained.

Elastx has therefore chosen a solution that combines Cisco ACI and OpenStack. Cisco ACI offers multi-tenant as well as centralized management of the virtual and physical network within the data center. This, along with the open interface, makes it possible for close integration with platforms such as OpenStack.

Elastx has also formed relationships with trusted Cisco ACI open ecosystem partners, and has included ecosystem partners' software from RedHat and SolidFire from NetApp in their solution.

Quick facts about Elastx

Elastx automates everything from infrastructure to applications.

They offer a redundant infrastructure, which reaches over three Swedish data centers with 100 Gbps of network capacity and the ability to deliver automated bare metal servers.

Elastx was founded in 2012 and today has 10 employees. The team provides sustainable IT operations and delivers genuine, automated, cloud-based services through the jelastic PaaS and OpenStack platforms in combination with Cisco ACI as IaaS. Elastx also helps other companies automate the whole flow, from code to production.



After 18 years of working with data center and storage solutions, Joakim Öhman felt he had seen all the IT industry had to offer. But he gave it one more chance, and founded Elastx in 2012. Today, Elastx has 10 employees who manage about 2000 servers for a growing number of customers.

However, even after founding and operating Elastx, a new, exciting technique was needed for Öhman to get excited about the IT industry again.

It all started in 2001, when Öhman founded 24 Solutions, which offers traditional network management services. During the last couple of years there, he noticed an increased demand by the company's customers for a more elastic and automated environment that could integrate with customers' business and DevOps procedures.

But it would take too much time to restructure 24 Solutions. Instead, Öhman founded the company Elastx, which specializes in offering cloud-based Platform as a Service (PaaS), Infrastructure as a Service (IaaS), and consulting services.

Completely automated delivery model

“The technical solution has been up and running for four years and works perfectly,” says Öhman.” It appeals to our customers because the delivery model is completely automated, without any limitations, and because customers have their own control panel. We measure by the minute so customers can decrease or increase their capacity by choice.”

Today, Elastx has 10 employees servicing customers on automation projects. The company also manages over 2000 servers. The Elastx team believes that one person should be able to handle at least 2000 servers in a completely automated IT environment. The usual estimate is one person per 20 servers for a smaller company and one person per 200 servers for a larger company. The 2000-servers-per-person estimate is a significant difference, made possible primarily by Cisco technology and the Elastx solution.

“With a whole new platform, we had expected more problems early on. But in comparison to other solutions, the availability has increased from day one with a significant improvement in operations organization. In comparison to manual labor, with automation, we perform exactly the same task every time. The human factor does leave room for errors,” says Öhman.

The Cisco ACI and OpenStack combination is unusual, but groundbreaking.

“If we ever have a problem, Cisco is always very attentive and offers competent support.” says Öhman. “It is also very clear that Cisco is investing in ACI.”



Benefits of Cisco ACI through OpenStack

Distributed OpenStack services

OpenStack Neutron, along with services such as NAT, are completely distributed through the OpenStack cluster. This makes it possible for significantly increased scalability. Cisco ACI also closely integrates with Cisco ASR 1000 Series Aggregation Services Routers. This allows for functions such as Edge NAT, and makes it possible to scale services such as NAT even for the most demanding of installations.

Integration and management of network functions from layer 4 to layer 7

Cisco ACI makes it possible to create automated service chains with network elements such as firewalls and load balancers from other suppliers.

The ability to choose between different network models in OpenStack, OpenStack Neutron ML2, or OpenStack Group Based Policy (GBP)

Through Group Based Policy (GBP) in OpenStack offers a more declarative network configuration in which developers can specify network protocols and services. The network model also provides built-in security from the start.

Simple troubleshooting

Teams can easily solve problems with advanced telemetry all the way to the virtual machine in OpenStack.

Quick facts about Cisco ACI

Cisco ACI is an extensive Software-Defined Networking (SDN) architecture. Through Cisco ACI, customers can reduce the time for establishing new applications and servers from weeks to minutes.

The benefits are made possible by integrating physical and virtual environments through a policy-based automation solution for networks, servers, storage, and security.

This solution supports business-related application policies and offers increased scalability through a distributed approach and wider visibility within the network.

The Cisco ACI ecosystem partner forum is a continuously expanding **solution** partner program. To date, it has more than 65 partners.