Elastx is a Platform as a Service (PaaS) hosting provider based in Stockholm, Sweden that provides fully automated platforms with true vertical and horizontal scaling. Enterprise customers count on Elastx for application lifecycle management and the ability to host and easily grow their applications without vendor lock-in.

How Elastx started from the ground up to forever change how customers think of public hosting providers
As a new player in the elastic cloud service market in 2012, Elastx was able to seize an immediate advantage. They could develop a new, cloud-optimized platform from scratch to launch one of most robust and reliable platforms for hosting business-critical applications.

Without the burdens of transforming their infrastructure, Elastx avoided the performance variability challenges most cloud service providers face when using legacy storage systems. Instead, Elastx built two highly scalable, performance-oriented PaaS platforms that cater to both test/dev and performance-heavy enterprise applications.

"We knew we wanted an SSD-based system. We wanted deduplication, and a scale-out design was absolutely mandatory."
Henrik Grankvist
Elastx Business Development Manager

What this means to Elastx customers
Typical Elastx customers provide Software as a Service (SaaS), host websites, or deliver media. The Elastx easy: PaaS and ops: PaaS platforms allow these customers to create a complete, scale-out server environment for hosting Java, Ruby, and PHP-based applications.

With SolidFire all-flash arrays behind the Elastx PaaS offerings, Elastx now delivers a linearly scalable cloud hosting platform designed to ensure a predictable application experience to each tenant on the system.

“(SaaS providers) really like the scaling capabilities and being able to clone the environment. We also have number of websites that appreciate the platform as well. It’s very easy to maintain, and it can accommodate the varied loads in terms of users and visitors to their sites,” Henrik Grankvist, Business Development Manager of Elastx said.
“SolidFire allows Elastx to deliver a clean and simple elastic cloud experience with a guaranteed level of performance new to cloud computing.”

Joakim Öhman
CEO, Elastx

Most importantly, Elastx customers benefit from firm SLAs around performance.

The Whole Story
Elastx had the unique opportunity to build their PaaS from scratch, enabling them to consider a variety of storage options as they were developing the service. They understood that legacy storage architectures would not be capable of meeting their customers’ performance requirements and would be broadly unpredictable as more customers were added to the system. As a result, Elastx focused on the deployment of an all-SSD storage system.

“We knew we wanted an SSD-based system. We wanted deduplication, and a scale-out design was absolutely mandatory,” Henrik said.

Elastx also wanted the storage they selected to provide more IOPS per node, and to be fully redundant so they could lose a node without downtime. Additionally, Elastx’s third offering, the ops:iaas service, is a public Infrastructure as a Service offering that is based on OpenStack, making integration with the cloud software critical.

Elastx had five technology requirements for their new cloud platforms:

1. All-SSD system
2. Inline execution of all efficiencies (without any performance-limiting effects)
3. Integration with OpenStack and Jelastic
4. Linear scalability
5. Sub-millisecond latency

“When only SolidFire ticked all boxes in terms of requirements. SolidFire had deduplication and scale-out; we were getting the IOPS we needed.”

Henrik Grankvist
Elastx Business Development Manager

The Solution
After considering a long list of all-flash vendors, Elastx ultimately chose SolidFire for their PaaS.

“When only SolidFire ticked all boxes in terms of requirements. SolidFire had deduplication and scale-out; we were getting the IOPS we needed,” Henrik said.

Beyond pure performance, SolidFire’s scale-out capabilities have resonated with Elastx’s customers. “Once an application or website is up and running, it’s also how blazingly fast it scales up and down. It’s quite common when you have peak loads to get a glitch there, but with our platform and underlying architecture it goes instantly,” Henrik said.

“A user is used to a traditional hosting provider, but when they try our platform they get the ‘wow!’ experience on how easy it is to get a highly available environment up, deploy, and use,” Henrik said.

“Customers can be much more proactive vs. reactive with our platform, and they don’t have to do as much maintenance in terms of looking after the servers and configuring load balancers. It gives them more time for developing business offerings.”

SolidFire’s guaranteed performance Quality of Service (QoS) was also an important feature to Elastx. “You can guarantee IOPS to avoid the classical noisy neighbor issue. That’s very important in these high density environments.” Henrik said.

One storage architecture with multiple service offerings
Using the same underlying storage platform for both platform offerings just made sense. Elastx was able to reduce the number of vendors that required systems integration and was able to bring their cloud platform to market faster and more cost-effectively compared to using legacy cloud architectures.
Offer a reliable and predictable cloud hosting experience
By implementing an all-SSD-based system, Elastx was able to offer a very low latency hosting experience to both their test/dev and enterprise customers on the same storage platform. Elastx can now deliver a predictable cloud hosting experience giving enterprises the ability to grow from test/dev to production to high-performance – without migrating between systems.

No more legacy SAN
The Elastx team had significant experience with a variety of legacy SAN systems and, when faced with the opportunity of starting with a clean slate, they chose a storage technology that will allow them to scale both performance and capacity while avoiding the performance variability of legacy SAN architectures.

No more noisy neighbors
Using SolidFire and its ability to deliver true storage QoS, Elastx can now offer performance guarantees around both of their cloud hosting platforms without fear of noisy neighbors impacting application performance.

Improved customer loyalty
SolidFire’s ability to help deliver consistent cloud hosting performance helps improve customer loyalty, which results in higher profitability and reduced customer churn. Feedback from Elastx customers has been extremely positive. By switching to Elastx, one customer was able to drop latency for a database request query from 350ms to around 2ms.

Extreme customer density
SolidFire enables Elastx to deliver a predictable hosting experience to many thousands of tenants on one highly available cloud platform.

Linear scale
The SolidFire distributed cluster architecture allows Elastx to grow both capacity and performance at scale and on demand. SolidFire’s scale-out design makes capacity and performance simple.

Price and performance
Elastx has a predictable platform that eliminates the storage I/O bottlenecks commonly associated with legacy systems. Combined with the built-in efficiencies of deduplication, compression, and thin provisioning, Elastx offers a powerful high-performance cloud offering designed to handle the demands of both test/dev and mission-critical environments at a cost that makes sense to their customers.

Jelastic: easy to create, deploy, scale, and manage
By utilizing SolidFire’s complete REST-based API, systems management delivered by Jelastic allows Elastx to automate all systems’ functionality. By speeding up customer deployment and helping to reduce overall operational support costs, the Jelastic and SolidFire integration reduces the chance of customers experiencing configuration issues due to human error.