

Combining cloud-like flexibility with cost-efficiency and control.

How **Crystal Service Integration** used Lenovo ThinkAgile VX to empower its developers to build rapidly scalable services on a hyperconverged hybrid cloud platform.

 **Lenovo Infrastructure Solutions**
for The Data-Centered

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Background

Crystal Service Integration (CSI) is a specialist solutions provider that develops and implements point-of-sale (POS) systems, cash registers, and retail automation software for large network retailers. Founded 26 years ago, the company has grown steadily and now provides services for more than 300 retail chains and 13,000 stores in Russia and neighboring countries.

CSI's business model depends on its ability to provide reliable, cost-effective software services to its clients, and to develop innovative software. Over the past few years, the company had started to move away from its legacy on-premises infrastructure and to embrace a cloud-first approach—but this strategy had both benefits and disadvantages.


Nikita Vernigora, Head of IT at CSI, explains: “We were running some of our services on-premises using legacy infrastructure, but the servers were eight years old and no longer reliable. We had also been keen to move to a paradigm of building everything on the cloud, but the costs were high. So, we had to make a decision on whether to move our services to the cloud or invest in a new local infrastructure.”

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Challenge

To help find the right solution, CSI consulted Vkorpe, a systems integrator that provides a wide range of services from supplying equipment to designing and implementing end-to-end solutions. The Vkorpe team initially proposed a new on-premises environment based on a traditional server and storage architecture, which would significantly reduce CSI's overall IT costs.

However, the CSI team had some concerns about this architecture: the need to manage servers, storage and networking independently meant that there were numerous potential points of failure, and scaling would be relatively complex.



“We wanted to move away from the previous classic server architecture in order to reduce the number of potential sources of incidents, to simplify the architecture as much as possible.”

Nikita Vernigora
Head of IT, Crystal Service Integration

Why Lenovo? Hyperconvergence boosts reliability, scalability, and cost-efficiency.

CSI and Vkorpe realized that a hyperconverged architecture could provide greater resiliency and scalability, while still keeping costs dramatically lower than a public cloud solution. The team began researching hyperconverged solution vendors and were impressed by Lenovo's credentials among IT industry analysts and in benchmarking studies.

After reviewing proposals from several top-five hyperconverged solution vendors, CSI put the project out to tender, and its evaluation showed that the Lenovo ThinkAgile VX Series platform offered the best value for money.





“We calculated the total cost of ownership of Lenovo hyperconverged systems, compared to our current and projected future cloud costs. It turned out that owning our own hardware would pay off in a little over a year.”

Nikita Vernigora

Head of IT, Crystal Service Integration

Rapid deployment and low-risk migration.

The CSI team consulted with Vkorpe, Lenovo and VMware to plan an initial deployment of four Lenovo ThinkAgile VX7531 Certified Nodes. The VX Series servers were delivered with VMware ESXi™ and VMware vSAN® software installed, integrated, and certified, which helped to accelerate the implementation significantly—the new environment went live within two weeks.

CSI then began the migration process, moving services from both its legacy on-premises servers and its cloud landscape onto the new hyperconverged infrastructure. As the migration progresses and the company develops new services, it will be able to scale the Lenovo ThinkAgile VX environment quickly and easily, simply by adding additional nodes to the cluster and managing them through Lenovo XClarity Integrator and VMware vCenter software.

Moreover, because the solution integrates seamlessly with public cloud services, CSI can use cloud resources to experiment and create prototypes, which it can then move into its hyperconverged landscape when they are ready to be deployed at scale.



“The hybrid environment has the advantage of allowing expansion through the public cloud. If a new project brings some significant results, then we can expand and scale horizontally on our local site.”

Nikita Vernigora

Head of IT, Crystal Service Integration

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Results

Today, CSI uses its hyperconverged platform to support a wide variety of use cases, from its software development, build and testing processes and internal IT and communications services, to software-as-a-service solutions that it provides to large retailers such as Lenta, one of Russia's largest hypermarket chains.

As the company moves more and more of its services onto the platform, it will be able to reduce its cloud spend significantly, and either retire its legacy infrastructure or repurpose it to host less-critical services that do not require 24/7 availability. As a result, the company predicts that it will be able to save approximately RUB 50 million (USD 680,000) over the next five years and will achieve a full return on investment within 14 months.



- ✓ **Provides a versatile platform to support both internal development and client-facing services**
- ✓ **Expected to deliver a full return on investment within 14 months**
- ✓ **Estimated total savings of more than USD 680,000 over five years**



“In the future, we want our Lenovo hyperconverged architecture to become a single platform that all our teams can use independently, enabling them to access the resources they need without affecting other departments.”

Nikita Vernigora

Head of IT, Crystal Service Integration

What will you do with Lenovo software-defined infrastructure solutions?

The Data-Centered benefit from greater resiliency and scalability with Lenovo smarter infrastructure solutions, powered by VMware.

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