



# Cultivating global leadership in orchids and tropical plants with IoT-powered automation.

How **Floricultura** used a hyperconverged solution based on the ON DEMAND Lenovo and Scale Computing HyperCore Software (HC3) solution, running on Lenovo ThinkSystem SR630 and Lenovo System x3550 servers equipped with 2nd Gen Intel® Xeon® Scalable processors, to enable greenhouse automation—helping the company’s business bloom while cutting IT management time in half.

Lenovo Infrastructure Solutions  
for The Data-Centered



Lenovo

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## Background

Founded in 1933 and headquartered in Heemskerk, Netherlands, Floricultura is a market leader in the breeding and propagation of orchids and tropical plants. Supplying tens of millions of young plants each year to professional growers around the world, Floricultura operates in the Netherlands, India, Brazil, Poland, Taiwan, and the United States, employs 1,300 people, and generates annual revenues of nearly US\$90 million.

Floricultura plays a key role in the horticultural value chain, developing young plants for nurseries around the world to bring to maturity. Each year, the company cultivates dozens of new hybrids with the optimal mixture of traits—including color, flower size, resistance to disease, and more.

Growing tropical plants is a knowledge- and labor-intensive process, and the company relies on sophisticated methodologies and cutting-edge breeding technology to maintain high standards of quality across many millions of specimens.

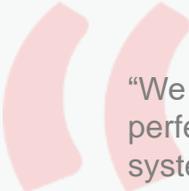
Rene Schoone, CTO of Floricultura, explains: “On average, it takes around two and half years before our orchids are ready to be sold to a nursery, and each plant requires continual care and monitoring throughout that time. To help us produce robust crops of orchids and other tropical plants year after year, we use a wide range of technologies. For example, at one of our facilities in the Netherlands, we use geothermally heated greenhouses to maintain optimal levels of heat, humidity, and hydration.”

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## Challenge

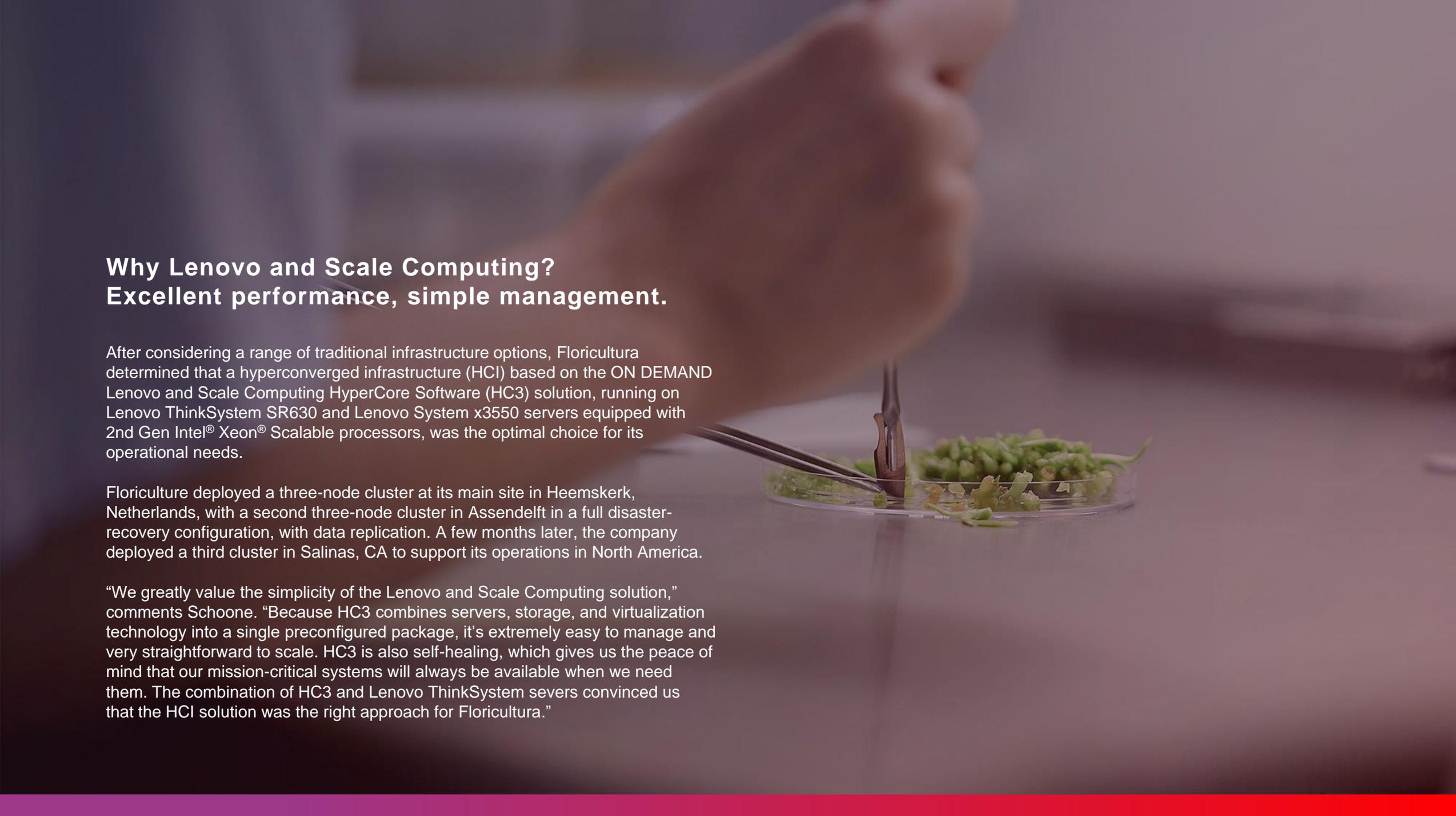
To help manage these operations efficiently at scale, Floricultura harnesses internet-of-things (IoT) sensors and programmable logic controllers to automate processes such as watering and climate control in its greenhouses in the Netherlands, Poland, Brazil, and the United States. To ensure healthy sales as well as healthy plants, the company's back-office employees use analytics and data visualization solutions such as Microsoft SQL Server and Tableau to perform activities including planning and forecasting.

"In the past, we used a traditional three-tier architecture to support our mission-critical information systems," Schoone continues. "Our business runs on data, so as our infrastructure approached end-of-life, it was important to find a new platform quickly. The aim was to mitigate the risk of unplanned downtime, while creating the compute and storage headroom for years of future analytics and data growth."



"We use thousands of IoT devices across our business to help us create the perfect conditions for strong, healthy plant growth. To keep these mission-critical systems running smoothly 24/7, we targeted a future-ready IT platform."

**Rene Schoone**  
CTO, Floricultura

A close-up photograph of a person's hands using tweezers to handle small green plant samples in a petri dish. The background is blurred, showing a laboratory or greenhouse setting. The text is overlaid on the left side of the image.

## Why Lenovo and Scale Computing? Excellent performance, simple management.

After considering a range of traditional infrastructure options, Floricultura determined that a hyperconverged infrastructure (HCI) based on the ON DEMAND Lenovo and Scale Computing HyperCore Software (HC3) solution, running on Lenovo ThinkSystem SR630 and Lenovo System x3550 servers equipped with 2nd Gen Intel® Xeon® Scalable processors, was the optimal choice for its operational needs.

Floricultura deployed a three-node cluster at its main site in Heemskerk, Netherlands, with a second three-node cluster in Assendelft in a full disaster-recovery configuration, with data replication. A few months later, the company deployed a third cluster in Salinas, CA to support its operations in North America.

“We greatly value the simplicity of the Lenovo and Scale Computing solution,” comments Schoone. “Because HC3 combines servers, storage, and virtualization technology into a single preconfigured package, it’s extremely easy to manage and very straightforward to scale. HC3 is also self-healing, which gives us the peace of mind that our mission-critical systems will always be available when we need them. The combination of HC3 and Lenovo ThinkSystem servers convinced us that the HCI solution was the right approach for Floricultura.”



“Many of the IT providers we considered kept the price of their offerings hidden—but our experience with Scale Computing couldn’t have been more different. Scale Computing publishes fully transparent pricing on their website, which made it easy to find the option that was right for us.”

**Rene Schoone**  
CTO, Floricultura

## Data center in a box.

Following a successful proof of concept, Floricultura deployed two ON DEMAND appliances consisting of Lenovo ThinkSystem SR630 and Lenovo System x3550 servers preloaded with HC3 in a high-availability cluster configuration and migrated its core applications from its legacy virtual machines to the new HCI infrastructure.

“Deploying the Lenovo and Scale Computing solution was very straightforward—it truly is a data center in a box,” comments Schoone. “If we ever have an issue or a technical question, Scale Computing quickly helps us route the enquiry to the right place: either to Scale Computing or to Lenovo. Because we have a single contract, there’s never any ambiguity when it comes to support responsibilities, and we are delighted with the service we receive from both organizations.”



“We’ve now been using HCI solutions from Lenovo and Scale Computing for more than three years. In all that time, we’ve never had a major issue—it’s an extremely reliable platform.”

**Rene Schoone**  
CTO, Floricultura



“Floricultura is one of the most innovative companies in its industry. As leaders in edge computing solutions, Scale Computing was a natural fit. With the explosion of IoT devices, control, management, and application up-time have become more important than ever. With the ON DEMAND solution from Lenovo, combining Lenovo ThinkSystem servers and Scale Computing HyperCore Software, Floricultura has improved its IT operations and is ready for the future.”

**Johan Pellicaan**  
Vice President EMEA, Scale Computing

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## Results

With the ON DEMAND program shipping tested, proven, and pre-configured appliance with HC3 and Lenovo ThinkSystem servers supporting its mission-critical business systems, Floricultura has gained a scalable, high-performance platform to support its operations for years to come.

“We have a lean IT team, and in the past, repetitive management and monitoring tasks consumed a significant portion of their working days,” explains Schoone. “Since we made the switch to HC3, we estimate that we’ve cut IT management time in half—liberating our IT team to focus on value-added activities.”

Based on its success with the HCI solution, Floricultura continues to invest in the ON DEMAND Lenovo and Scale Computing solution, and recently expanded its infrastructure in the Netherlands.

Schoone concludes: “The HCI solution from Lenovo and Scale Computing gives us a rock-solid—yet highly scalable—platform for our vital systems, including IoT technologies. Thanks to business systems running on our HCI platform, we can produce millions of young orchids each year to the highest quality standards.”



✓ **50% reduction in IT management time frees up personnel for value-added work**

✓ **Easy scalability creates headroom for business and data growth**

✓ **High availability helps to ensure mission-critical systems are online 24/7**



“I want to spend more time watering plants and less time worrying about our IT infrastructure. That’s exactly what our HCI solution from Lenovo and Scale Computing allows me to do.”

**Rene Schoone**  
CTO, Floricultura

## What will you do with Lenovo ThinkSystem solutions?

The Data-Centered drive global industry leadership with Lenovo smarter infrastructure solutions, powered by Intel® Xeon® Scalable processors.

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