



Stratus Edge
Computing Platform



**Stratus Edge Computing Platform Enables
Powder Processing Solutions Provider
to Enhance Visibility of Operations and
Improve Business Continuity**

Goal

- Enable high availability of edge server, an upgrade over a simple cold backup
- Eliminate unplanned downtime to improve business continuity
- Improve visibility into assembly line operations as part of digital transformation

Challenges

- Lack of suitable computing platform raises risk of unplanned downtime
- Need for high-performance solution that monitors and controls machines on the factory floor
- No dedicated manpower for maintenance and setup for edge server

Results

- Used Stratus ztC™ Edge server to provide high availability in manufacturing operations of powder processing machines
- Enabled company to focus more on building apps on a trusted platform
- Removed requirement for dedicated IT staff onsite with easy-to-maintain Stratus server

Based in Switzerland, the powder processing solutions provider has a long history of manufacturing machines that are used by pharmaceutical and food and beverage companies to blend, mix and convey fine powdery products. Its Asia-Pacific operations serve customers from the region, leveraging the powder processing technology that the company is renowned for.

Food and beverage companies rely on the company's machines to produce coffee powder, for example. Also available are machines for pharmaceutical customers, which help them meet stringent requirements in cleaning and processing their products.

High Availability for the Digital Future

To ensure that its operations run unhindered, the powder processing technology company knew it had to seek a replacement for its existing solution, which could not fulfill its business continuity goals.

It had relied only on a cold backup, running on a regular workstation, to keep the operations at the company going should a disruption occur. This, it knew, was not enough.

The backup had to be carried out manually and synchronizations were not always error-proof. More importantly, the snapshots may not always work for a full or fast recovery should things in the production system go wrong.

The company knew that high availability was a must for the mission-critical equipment used to manufacture the powder processing machines that its customers trust. Unplanned downtime poses the risk of lost revenue. It also requires a disproportionate amount of resources to get things up and running again.

Finding a Solution That Was Easy to Deploy

The powder processing provider at first sought to set up a warm backup system. However, this did not solve the challenge of business continuity. The company still required a way to quickly recover the data should an unplanned disruption occur.

Its technology partner, Winsys Technology, proposed a high-availability system built on the Stratus ztC Edge server. By placing it at an important part of its operations — at the edge of the network controlling and monitoring the manufacturing process — the powder processing provider was able to gain an improved understanding of the real-time situation.

With this, the staff could remotely monitor the machines without actually stepping onto the factory floor. It could be more proactive in managing any emergent issue with a manufacturing machine.

"As a system integrator, we provided a complete availability solution to our client that came with less effort and complexity in the infrastructure, so that we could focus on designing and programming the applications.

For our client, the system gave them added peace of mind so that they could focus on the performance of the manufacturing machines and deliver better customer experiences."

Eugene Yeo
Director, Business Development
Winsys Technology



"We like it that a VM could be easily duplicated to another ztC Edge server, which helped us to reduce the time needed for installation.

We can focus our resources and services on the operational requirements and new opportunities for the customer, while reducing time spent responding to customer service or maintenance calls."

Wang Lei
Technical Director
Winsys Technology

Building a Foundation for the Future With the Stratus ztC Edge Server

Key to the decision was the ruggedized Stratus design that makes the ztC Edge server built for industrial use. The high availability it offers is critical, because all data written to disk is mirrored automatically.

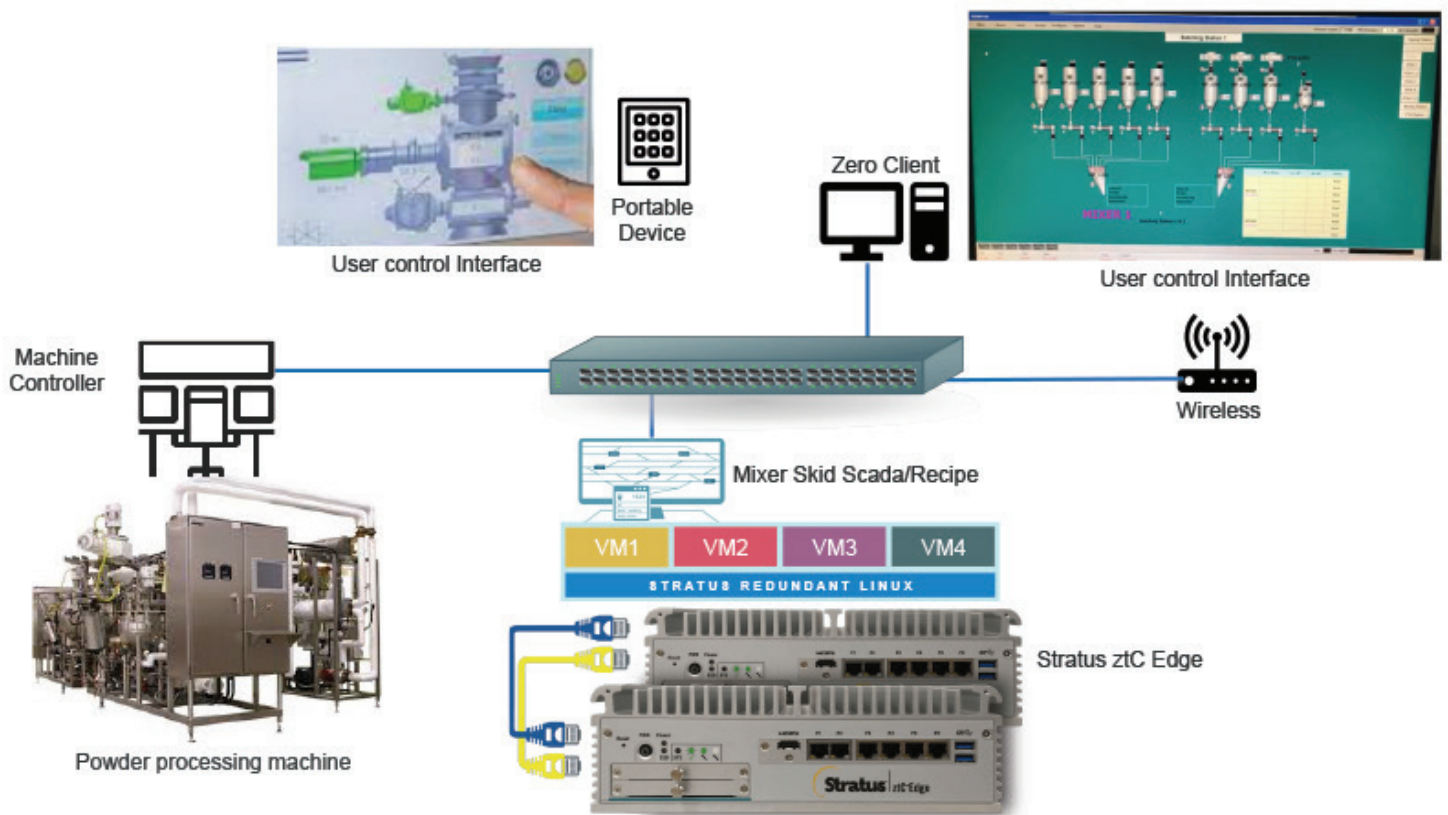
The Intel-based ztC Edge platform also delivered high performance. A single unit enabled the powder processing provider to monitor and control its manufacturing machines at its premises, running multiple workloads concurrently. This is because the ztC Edge server comes with built-in virtualization to allow customers to consolidate multiple applications onto a single platform. This means reducing cost and boosting agility.

Fast Deployment and Ease of Maintenance

At the same time, the ztC Edge server comes with the ease of installation and maintenance that Stratus is renown for. With rugged hot-swappable nodes and automated data protection and local site recovery, it helps reduce the complexity of a company's IT infrastructure.

For a systems integrator such as Winsys, which has experience integrating IT and operational technology (OT), the ztC Edge server demonstrated its ease of use quickly.

Winsys Architecture Diagram





It could easily prepare a virtual machine (VM) remotely and have it duplicated on another ztC Edge machine, which saves it a lot of time in terms of the basic installation. For each machine installed, it could save a day of manpower.

This was a key benefit for the powder processing provider, as the company did not have a full-time IT team to take care of the Edge Computing unit. In Addition, with the ztC Edge server's ease of use, the company could focus less on the infrastructure and more on its applications. This modernization of the company's equipment also provides peace of mind for their critical infrastructure, allowing them to concentrate on improving their solutions and focusing more on their customers in the long term.

Conclusion

The Stratus ztC Edge server has helped the powder processing provider to reduce unplanned downtime, thus improving the reliability and productivity of its production line. This has been critical in enabling it to forge ahead and build trust with its own customers.

The ease of use of the ztC Edge server also means that there is no need to hire a dedicated IT team to be on-station all the time. By being easy to maintain and operate, the system has enabled the company to focus on its core business.



"In this complex automation and IIoT scene, Stratus makes fault-tolerant solutions easy to set up and maintain with lower total cost of ownership. They are our go-to solution when any customer requires a fault-tolerant server solution. As such, we are proud to be Stratus's master distributor in Singapore serving system integrators and end customers."

Zen Tan
Solution Sales Manager
HoST Pte Ltd



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