

Manufacturing | China

Accelerating R&D innovation

DMEGC

DMEGC partnered with Lenovo to build a unified R&D cloud platform that integrates full-stack IaaS and PaaS capabilities. The platform enables on-demand provisioning in minutes, high availability deployments, and intelligent security assurance—laying a solid foundation for business innovation.



1

Customer background

Who is DMEGC?

Founded in 1980, DMEGC is a leading global solar panel manufacturer and supplier, dedicated to providing high-efficiency solar panels and full-scenario photovoltaic solutions worldwide. With operations in 80 countries, the company produces a wide range of related products, including magnetic components, specialist machining tools, and lithium-ion batteries.

DMEGC

2

The challenge

DMEGC uses data to drive every aspect of its operations, from designing and developing new products to manufacturing, sales and distribution. Within DMEGC, the company's research and development (R&D) team is responsible for designing, building and maintaining the software tools that underpin day-to-day operations.

The R&D team at DMEGC uses a containerized architecture to support their work. Alongside Kubernetes, the R&D toolset includes systems for project and requirements management, continuous integration and deployment (CI/CD), code management, and code quality analysis.

2

The challenge

The data-driven business model of DMEGC requires its R&D team to build and maintain a complex software toolchain covering the entire process from design to distribution. The core technical challenge was to integrate a series of heterogeneous tools (including project requirements management, CI/CD, code management, quality analysis, and container runtime environments) within a cloud-native architecture, enabling a standardized, observable, and controllable end-to-end platform for R&D efficiency management while ensuring stability.

2

The challenge

Wu Zhenjian, CIO at DMEGC says: “The business is growing fast, and we aim to equip our teams with the capabilities they need to innovate. However, we relied heavily on manual processes and systems for software lifecycle management, which made it difficult to move as quickly as we wanted to. One of the key challenges was supporting established, slower-changing systems alongside faster-moving, experimental ones.”

DMEGC set out to modernize its approach to software development. By increasing integration and automation across its DevOps toolchain, the company saw an opportunity to drive up quality, improve operational efficiency, promote greater collaboration, reduce costs, and foster R&D innovation.

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“In the past, applying for a new server required several weeks of procurement, deployment, and system installation work. **To speed up this process**, we aimed to **create a shared pool of x86 and ARM resources** that would be compatible with the new software lifecycle management toolchain.”

Wu Zhenjian

CIO, DMEGC

3

The
solution

Removing development bottlenecks

To remove R&D bottlenecks, Lenovo helped DMEGC build a multi-core cloud digital foundation. Through the [Lenovo xCloud Private Cloud Platform](#), the company created an efficient and reliable pool of heterogeneous resources, achieving minute-level resource delivery and elastic scalability. The Lenovo xCloud Cloud Native platform, a PaaS offering, simplifies the full lifecycle management of Kubernetes clusters, significantly lowering the entry barrier for container technology and enabling the operations team to easily manage multi-cluster environments.

Services

[Lenovo Deployment Services](#)

Hardware

[Lenovo WenTian WR5220 G3 Server](#)

NetApp C400

Software

[Lenovo xCloud Private Cloud Platform](#)

[Lenovo xCloud Cloud Native Platform – Container Engine Management Platform](#)

[Lenovo xCloud Cloud Native Platform – Container Application Management Platform](#)

[Lenovo xCloud Cloud Native Platform – DevOps Platform](#)

3

The solution

The Lenovo xCloud DevOps platform integrated the entire process from requirements, development, and testing to deployment, realizing CI/CD. With visualized pipelines and automated toolchains, software delivery efficiency and quality were greatly improved, freeing the development team from tedious operational tasks and allowing them to focus on business innovation.

Zhang Chunxiao, Basic Operations Manager, says: “With Lenovo xCloud, we have built a unified and automated software lifecycle management platform. This unlocks operational cost-savings, improves efficiency, and gives us more control over software delivery.”

3

The
solution

Embracing automation

By partnering with Lenovo, DMEGC has transformed its approach to software lifecycle management. In the past, requirements management, development, and deployment often depended on manual work, which reduced efficiency and increased the risk of errors. With end-to-end automation from Lenovo, the entire process is orchestrated automatically via a single visual pipeline, accelerating software deployments from days to minutes.

“We test and validate all new code automatically, which helps us detect and fix defects earlier in the development process,” confirms Zhang Chunxiao. “This shift-left approach, combined with real-time performance and quality monitoring, is helping us to shape a more efficient and transparent approach to DevOps.”

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“Lenovo offered us **more than just a platform**—they also provided us with a set of **DevOps best practices, methodologies, and services** to help ensure our transformation project was a success. We also get the peace of mind of **24/7 support**, which will help ensure that **Lenovo xCloud meets our needs for the long term.**”

Wu Zhenjian

CIO, DMEGC

4

The results

In DMEGC's previous environment, physical servers often created a single point of failure, and recovering systems was a time-consuming and labor-intensive process. Today, the company can provision resources instantly from a single pool of x86 and ARM infrastructure.

“Our developers can now spin up compute, storage, and networking resources on demand without calling on our operations team, which empowers them to work with greater speed and agility,” says Wu Zhenjian. “Our CI/CD pipeline is also fully automated, which cuts release cycles from hours to minutes, and new software deployments from days to hours.”

4

The
results

Boosting availability

By shifting to Lenovo xCloud, DMEGC can ensure that its software lifecycle management capabilities are always online for its business users.

“Lenovo xCloud gives us self-monitoring and self-healing capabilities, which reduces the need for management work,” confirms Zhang Chunxiao. “Overall, we’re getting four nines of availability, which is a big improvement over the previous environment.”

4

The results

The Lenovo solution is also enhancing DMEGC's security posture. The hybrid cloud platform offers fine-grained user access permissions, built-in vulnerability management capabilities, and end-to-end traceability through unified logs.



Accelerates deployments from days to hours



Enables self-service resource provisioning



Strengthens information security



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“Lenovo xCloud gives us a future-oriented, sustainable, and cost-effective digital core that provides a solid foundation for our long-term digital transformation and business innovation efforts.”

Wu Zhenjian

CIO, DMEGC

Why Lenovo?

DMEGC selected Lenovo for its full-stack capabilities and strong alignment with the company's long-term DevOps goals.

“We view Lenovo as more than a supplier—they are a strategic partner that provides us with a complete and reliable technology stack within an open ecosystem,” comments Wu Zhenjian. “As well as providing implementation, integration, and training services, Lenovo's open technology helps us to avoid the risk of vendor lock-in.”

How can R&D teams accelerate innovation?

DMEGC harnessed Lenovo xCloud to build a unified cloud platform for R&D, enabling rapid provisioning, high availability, and supporting future innovation.

[Explore Lenovo Cloud Solutions](#)