



Public cloud for global manufacturing system

Korea's first public cloud adoption in MES area for integrated global operation

*MES: Manufacturing Execution System

Challenge

A global leader in cathode material production was increasing manufacturing facilities in order to expand its global business. Accordingly, the manufacturer of the key component for EV batteries had higher needs for integrated and flexible management of the Manufacturing Execution System (MES), and required IT environments to apply smart factory technologies, including smart sensors, AI and big data analysis, for manufacturing innovation.

The company determined that cloud migration was mandatory for this purpose. However, transferring the MES, a core workload, into the cloud was not an easy decision to make due to concern over performance and security.

The customer needed a cloud-based MES which guarantees reliability, performance and security at a similar level as on-premise environments while enabling robust failure responses with fast infrastructure provision and a real-time monitoring system. Samsung SDS, a cloud service provider with extensive industry know-how and abundant cloud migration experience, was selected in this regard and sufficient preliminary review and validation on all risk factors have been conducted.



SDS Cloud Service

Cloud Implementation/Migration

Samsung SDS provides quick and reliable cloud implementation/migration services based on hybrid cloud platforms and the methodology accumulated from large-scale migration/operation experience.

- Optimized transition methods: Utilize SDS' own methodology, verified by decade-long experience of cloud migration for Samsung affiliates and other businesses
- Support for new technology application: Offer solutions and expert help on new tech, including AI, big data, blockchain, IoT, etc.
- TCO optimization: Migrate costly equipment/solutions to the cloud and open source

※ Hybrid cloud platforms: Global One View (GOV) for integrated resource management, Intelligent Monitoring Platform (IMP) for intelligent control and Multi-cloud Migration Platform (MMP) for automated migration

Solution

Cloud architecture design for high performance H/W

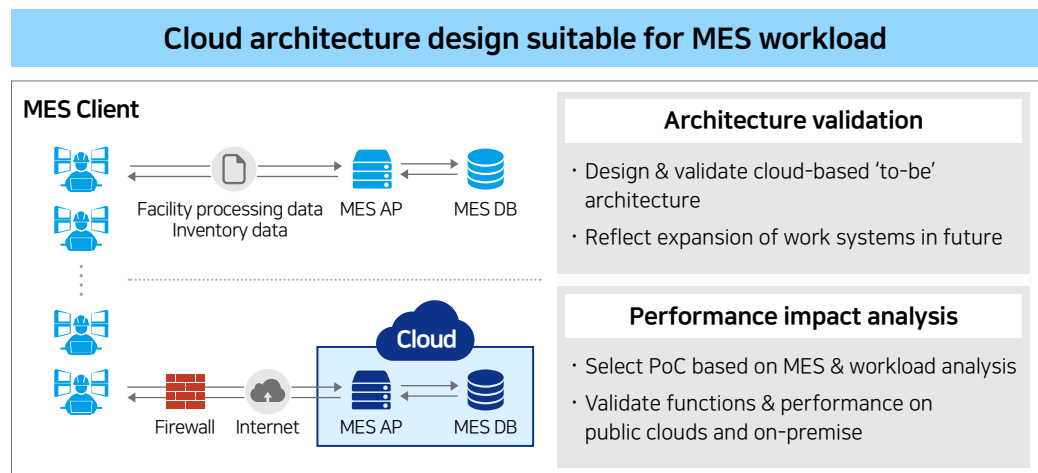
- Design architecture considering high performance and scalability by analyzing MES and workload characteristics
- Increase reliability and secure business continuity with application and N/W duplexing

Robust cloud security of Samsung SDS

- Manage account access for overall infrastructure and provide security control for data protection
- Employ 24/7/365 security control and violation response team

Global real-time monitoring system

- Manage performance and failure of various server/network equipment conveniently
- Enable quick failure detection/management with real-time monitoring and unified customer service



Benefit



TCO reduction

- 20% decrease in infrastructure purchase & operational cost



System reliability

- 5 mins downtime → seamless
- System, DB and network duplexing



Operation efficiency

- Integrated monitoring
- Integrated operation platform

FOR MORE INFORMATION

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