

Computer Services
China

China Telecom Wanwei

Adopting big data analytics to help protect Gansu Province from air pollution hazards.

Solution components Hardware

- Lenovo ThinkSystem SR650 Server
- Lenovo Distributed Storage Solution for IBM Spectrum Scale (DSS-G)

Software

- Lenovo Enterprise Analytics Platform HD (LeapHD)
- IBM Spectrum Scale
- Apache Kafka
- Apache Storm

Services

- Lenovo Assessment Services
- Lenovo Deployment Services - HPC
- Lenovo Design Services
- Lenovo On-site Services – Deployment
- Lenovo Post Warranty Services

To protect the health and wellbeing of citizens in Gansu Province, local environmental institutions engaged China Telecom Wanwei to create a smart environmental monitoring and early-warning system for air pollution covering the entire province. China Telecom Wanwei partnered with Lenovo to design and deploy a solution based on Lenovo's hardware, big data software, and environmental protection expertise. The company deployed 40 high-performance Lenovo ThinkSystem SR650 server nodes, two 2 PB-capacity Lenovo DSS-G storage systems, and Lenovo LeapHD—a big data platform and software services to support data processing and analysis. The Gansu Province Smart Environmental Protection Platform performs 500 trillion calculations per second, stores more than 3 PB of sensor data, and generates air quality forecast models at 1km*1km resolution, enabling the institutions to take rapid action to protect people across the region from pollution hazards.



“Lenovo’s HPC team has extensive experience in environmental protection and meteorology, and offered a complete solution: from architecture design and installation to job scheduling and system tuning services for our air quality forecasting model. The Lenovo platform delivers the same compute capacity with far greater operating efficiency, which other vendors could not match. We were very pleased with the quality of Lenovo’s pre-sales services.”

中电万维
CHINA TELECOM WANWEI

Yang Yang,
Project Manager, China Telecom Wanwei

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