China Meteorological Administration

China Meteorological Administration’s communication system became a burden as it expanded to reach more customers across the nation. Running on three disparate platforms, the old system could no longer keep up with the agency’s increasing demands. By moving to SUSE® Linux Enterprise Server, the agency increased security and improved its ability to provide more services, while dramatically reducing costs.

Overview
The China Meteorological Administration (CMA) is a public service agency directly affiliated with the State Council of the People’s Republic of China. CMA’s network of more than nine national research institutes manages operations for meteorological services across the country that serve the government agencies involved in national economic construction, social development and security.

Challenge
CMA relies on real-time communication to provide timely and accurate weather information around the clock. The agency’s meteorological service system consists of multiple sectors including weather forecast and climate prediction. In recent years, CMA expanded its meteorological service to more customers and regions. As a result, the old communication system became insufficient to meet the agency’s needs. The agency needed a high performance infrastructure to ensure data integrity, reduce system administration costs and prevent downtime.

CMA’s UNIX infrastructure, consisting of three disparate platforms including IBM UNIX, DEC UNIX and SCO UNIX, also placed a burden on the agency’s IT staff. Administration and maintenance costs were high, with IT staff spending a significant amount of time and effort on trying to improve operating performance of the system.

CMA recognized that to streamline its IT operation and improve its service, it needed to move to a more cost-effective, open system. This would help the agency achieve greater efficiency and provide 24/7 availability of critical weather information across the nation.

Solution
To upgrade its architecture, CMA evaluated several Linux providers, including Turbo Linux. The agency ultimately selected SUSE Linux Enterprise Server and SUSE Linux Enterprise Desktop to ensure the stability and performance of its communication system.

“We are pleased with the performance and simplicity of SUSE Linux Enterprise Server. The results speak for themselves: administration is easier, we’ve improved response times and security, and have greater flexibility.”

CHEN JIANJUN
Executive of Computer and Network Project Department Information Center
China Meteorological Administration

RESULTS

+ Reduced user administration costs by 70 percent
+ Increased security and scalability
+ Reduced administrative costs and decreased downtime

China Meteorological Administration at a glance:
Government agency responsible for meteorological services across China

Industry and Location
Government, China

Products and Services
SUSE Linux Enterprise Server
SUSE Linux Enterprise Desktop

Results
“SUSE solutions enable us to efficiently manage operations for meteorological services across the country and transmit weather data around the clock. We’ve seen significant savings in terms of administrative resources, but the real benefit will be to our citizens who will have better access to accurate and timely weather forecasts.”

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80 servers in the SUSE Linux Enterprise environment, increasing the agency’s capability to provide users with real-time information and enabling it to scale its systems as its requirements change.

“SUSE Linux Enterprise Server provides us with the scalable, high-performance foundation that we require to run our operation effectively,” said Chen Jianjun, executive, Computer and Network Project Department, Information Center, CMA. “Together with IBM xSeries, SUSE Linux Enterprise Server is the perfect solution for our mission-critical application environment and addresses our need for uninterrupted operation.”

With the unique and open management capabilities of SUSE Linux Enterprise Server, CMA’s IT staff may easily install, deploy, configure and update Linux servers securely, anywhere on the network. YaST® allows the staff to configure any aspect of the server, significantly reducing the time and costs involved in administration and maintenance.

With the integration of SUSE AppArmor®, SUSE Linux Enterprise Server also provides enterprise-class application security to protect against potentially harmful attacks, malicious applications and viruses by creating a firewall around applications, preventing intruders from getting inside the application firewall.

To improve its system monitoring capabilities, CMA deployed SUSE Linux Enterprise Desktop on approximately 30 IBM xSeries servers.

“With SUSE Linux Enterprise Desktop as a platform, we can now implement the monitor system we developed more effectively,” said Jianjun. “We are also more confident that the security and stability of our data transmission can operate flawlessly, 24 hours a day, seven days a week. It makes supporting and integrating a number of different applications easy for our staff, and it is also stable and scalable.”

**Results**

With SUSE Linux Enterprise Server along with SUSE Linux Enterprise Desktop running on IBM eServer xSeries 366, CMA minimized downtime and increased security and timely access to information.

“We are pleased with the performance and simplicity of SUSE Linux Enterprise Server, said Jianjun. “The results speak for themselves: administration is easier, we’ve improved response times and security, and generally have greater flexibility.”

The agency reduced its user administration costs by 70 percent. Because of the open nature of the system, CMA’s IT staff may also develop applications more efficiently.

“SUSE solutions enable us to efficiently manage operations for meteorological services across the country and transmit weather data around the clock,” said Jianjun. “We’ve seen significant savings in terms of administrative resources, but the real benefit will be to our citizens who will have better access to accurate and real-time weather forecasts.”