



## Liaoning Mobile

### EMC Consulting Services help support uninterrupted mobile services

Liaoning Mobile is a subsidiary of China Mobile (Hong Kong) Limited, the leading mobile services provider in Mainland China. Liaoning Mobile owns a cutting-edge, highly intelligent network that provides extensive coverage, comprehensive functions, and services to its 10 million mobile subscribers.

In 1999, Liaoning Mobile replaced its inflexible and difficult-to-manage distributed IT environment and became the first in the province to benefit from a centralized storage infrastructure in the China Mobile Group. Using advanced EMC® storage technology to support mission-critical applications such as accounting, billing, settlement, and statistics, Liaoning Mobile's highly successful, centrally managed networked storage implementation was accepted as a best practice and promoted in all the provincial companies. In 2003, Liaoning Mobile initiated a proposal to boost its disaster recovery capabilities. The idea attracted considerable support and the organization was designated by the China Mobile Group as the pilot unit for disaster recovery construction.

To ensure uninterrupted mobile services to customers, the service provider required an effective, standardized disaster recovery (DR) plan and engaged EMC Consulting Services to develop and deploy an advanced business continuity and information protection solution.

“We are susceptible to technology and infrastructure failures, so it's vital for us to have an effective set of disaster recovery policies, processes, and solutions in place,” says Wang Hai-Jun, vice president, Business Support Center of Liaoning Mobile.

In addition, Liaoning Mobile wished to implement an information lifecycle management (ILM) strategy which was integral to defining the RTOs (recovery-time objectives) in its DR policy and in facilitating the ability to gain the most value from information at every point in its lifecycle. EMC Consulting Services was engaged to help Liaoning Mobile in this endeavor. In addition to its reputation as an experienced, cooperative, and successful provider of forward-looking services, EMC Consulting was selected because of its unique focus on business requirements and related application RTOs.

“EMC solutions are well established and widely deployed in China and worldwide. This further boosts our confidence in its solutions and services,” says Wang.

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## Defining and implementing a complete solution

EMC Consulting Services for Liaoning Mobile covered business continuity planning and information protection. EMC Technical Solutions services were also engaged for SAN design and implementation, data migration, SRDF®/S implementation, and EMC ControlCenter® design and implementation.

Over the last two years, EMC Consulting has assisted Liaoning Mobile with the development and expansion of its ILM strategy. By classifying all of its data, EMC has helped the business create a single, tiered storage infrastructure where it can place application information in the appropriate location according to its business value.

In addition, EMC developed a plan to assess and classify application and operational RTOs as well as the related capacity and performance of the existing IT infrastructure. EMC worked with its partner, LINUS, a foreign business continuity consultancy, to support this effort. Apart from analyzing and identifying Business Resource Groups (which include all of the applications, data, systems, and dependencies to effectively fail over critical operations), specific policies and procedures were set to address the requirements of the RTOs. Today, RTOs for all major operations and applications are in place to ensure smooth operations and improved service. Different RTOs for critical applications such as accounting, billing, call center, and IT range from two to twelve hours.

“EMC Consulting Services played an integral role throughout the implementation. This support not only helped us deploy an effective disaster recovery solution, but also enabled us to implement critical disaster recovery policy and processes in a much less risky manner. EMC Consulting Services conducted thorough testing by simulating our environment which was important in ensuring that the disaster recovery solutions would function optimally.”

**Wang Hai-Jun**

**Vice president, Business Support Center of Liaoning Mobile**

EMC also established a customer service office in Shenyang shortly after Liaoning Mobile began its disaster recovery construction and appointed full-time customer support engineers. Additionally, EMC partnered with Liaoning Mobile to help perfect its service system and level of response to maintain a competitive advantage. EMC eServices, a complete suite of online support tools, have also helped. Among other proactive support features, EMC eServices have enabled Liaoning Mobile to quickly upgrade its system with the latest software simply by downloading new patches and releases from EMC’s customer extranet, Powerlink™.

The consulting services and deployment of the enhanced EMC storage infrastructure were completed in six months under a three-phased implementation.

Liaoning Mobile’s IT staff has been impressed with EMC’s strong sense of proactive service during and after implementation. EMC engineers were often the first to discover any issues with the organization’s long-distance management system and took the initiative to provide expedient service onsite or over the phone. In addition, EMC addressed any issues directly, taking the initiative to help solve problems.

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### Less risk, improved productivity

Liaoning Mobile operations are now supported by two powerful, highly reliable EMC Symmetrix DMX™ series systems, one located in the municipal area of Shenyang and another in its suburbs. EMC ControlCenter software is used to control storage management functions.

EMC TimeFinder®/Mirror and EMC SRDF/S backup and replication software as well as EMC PowerPath® path management software provide comprehensive support for ensuring a highly available environment. In the event of a data center outage or disaster, Liaoning Mobile can now recover in two hours instead of the three days it previously took in the old environment.

“This is certainly a significant improvement,” says Wang. “We have a very reliable platform to provide uninterrupted, 24x7 services to our customers.”

Faster batch processing, supported by the EMC Symmetrix® DMX systems, is an added benefit of the updated EMC storage environment. Liaoning Mobile can now expedite its billing cycle by two hours every day. The faster billing cycle allows employees to achieve higher work efficiency and enables them to spend more time on other important tasks.

### Sustaining leadership in mobile services

EMC Consulting Services has successfully helped Liaoning Mobile initiate and continue to develop its ILM strategy, as well as to define and build a highly reliable disaster recovery infrastructure.

This comprehensive EMC solution provides the company with unequalled capabilities to manage people, technology, and processes and respond to any unforeseen event in an effective and timely manner—all of which empowers Liaoning Mobile to sustain its leadership in the mobile arena.



EMC Corporation  
Hopkinton  
Massachusetts  
01748-9103  
1-508-435-1000  
In North America 1-866-464-7381

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Customer Profile

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