Improving content delivery with professional deployment services

Shanghai Oriental Pearl Media meets the growing demand for 4K content in China by implementing a highly scalable storage platform, with 30 percent faster deployment services.

“We gained sufficient storage capacity and performance with our Dell Storage solution to support our 4K VOD production suite. We also ensured fast 10GbE network connections and a highly scalable infrastructure with our Dell Networking S4810 switches.”

Xu Feng Cheng, IT Manager, Shanghai Oriental Pearl Media

Customer profile

Company: Shanghai Oriental Pearl Media
Industry: Arts, Entertainment and Media
Country: China
Employees: 1,000
Website: www.oriental-pearl.cn

Business need
With new business opportunities from 4K content, Shanghai Oriental Pearl Media wanted to maintain its leading position as an IPTV service provider by establishing a 4K video-on-demand (VOD) content platform.

Solution
The company built the VOD platform using Dell Storage and networking solutions and ensured a successful implementation program by working with Dell ProDeploy Plus.

Benefits
• Enables the business to support a growing demand for 4K content across China
• Allows staff to focus on IT management by cutting deployment time by 30 percent
• Provides peace of mind with commitment from continued support deployment
• Maximizes the cost-effectiveness of the 4K VOD infrastructure
• Helps ensure long-term reliability of key IT environment

Solutions at a glance
• Enterprise Deployment
• Enterprise Support
• Data Center
We valued Dell’s commitment to service even after the migration was effectively signed off. It showed the organization’s pledge to serve customers well.

Xu Feng Cheng, IT Manager, Shanghai Oriental Pearl Media

High-definition (HD) content on TVs, the internet and in cinemas has been around for several decades now. In that time, the technology has evolved and the number of pixels per frame has increased. The latest formats are ultra-high definition and 4K, which more than doubles the number of horizontal and vertical pixels as offered by standard HD resolutions.

With growing sales of 4K televisions, media businesses such as Shanghai Oriental Pearl Media are upgrading their services to be able to offer content in the 4K format. In the case of Shanghai Oriental Pearl Media, which is the largest IPTV service provider in China with more than 16 million subscribers, it wanted to enhance the IT supporting its VOD service.

New demands on data capacity
In the past, the company worked with Dell to create a high-performance VOD platform offering significant Input/Output Operations per Second (IOPS) performance. To deliver speed and ease of scalability, the organization implemented Dell Storage PS6100XS arrays, which feature solid-state disks for high-frequency read/write data, as well as PS6100X and PS6100E arrays. Combined, the storage delivered more than half a petabyte of capacity as well as simplified management. At the time, Wenyan Lu, vice president, Cloud Technology Services, Shanghai Oriental Pearl Media, said, “Now, we can add capacity without any downtime. Standardizing on Dell Storage PS Series has ensured scalability, performance and reliability.”

Besides data storage capacity, processing power was also key to the success of the platform underpinning the VOD service. To this end, the company deployed a range of Dell PowerEdge servers, including R420, R620, R720XD and C6220 servers, all with Intel® Xeon® processors. Technicians configured the servers into a number of Apache™ Hadoop® clusters for the private cloud and Citrix® XenServer® software for the VOD’s virtualized environment. Finally, the solution was completed by Dell PowerVault tape drives for effective backups. Lu also said at the time, “Our business benefits from the reliable, high-performance CPUs of the Dell PowerEdge servers.

Products & Services

Services
- Dell ProDeploy Plus
- Dell ProSupport Plus for Enterprise

Hardware
- Dell Storage SC8000 arrays
- Dell Storage SC200 enclosures
- Dell Storage FS8600 NAS appliance
- Dell Networking S4810 switches
- Dell PowerEdge M630 blade servers
and the cost-effective backup provided by the PowerVault tape library. We have multiple systems running across our infrastructure, and the Dell PowerEdge servers combine with our Dell Storage to deliver enterprise-class business continuity and data protection for our subscribers.”

**Expanded engagement with a trusted IT solution provider**

Now, Oriental Pearl Media looked to build on this Dell solution to support 4K VOD content. It again approached Dell and began working on the design for an infrastructure that offered greater IOPS and advanced scalability to store the additional video data from the 4K format. It was clear to stakeholders at Oriental Pearl Media that the upgrade to the Dell platform required more internal resources than the company had available. Xu Feng Cheng, IT manager at Shanghai Oriental Pearl Media, says, “Our focus is on producing content, so our IT team is about 10 percent of our total engineering team. We knew we didn’t have the internal capabilities to deliver the upgrade, so we turned to Dell.”

**Additional resources to make implementation a success**

When Oriental Pearl Media stakeholders spoke to Dell, the local account team proposed the Dell ProDeploy Enterprise Suite to help the company install the solution and get the best out of the technology. Through Dell ProDeploy Plus, companies reduce the cost of implementing new technology and start managing their Dell investments more effectively from day one. A team of ProDeploy certified experts come onsite and help lead the implementation, planning hardware installations, configurations and knowledge transfers. Comments Xu, “We were already familiar with Dell services and valued the support of Dell ProSupport Plus. Therefore, when we engaged with ProDeploy engineers, we had a lot of confidence in the level of assistance we would receive.”

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**Scalability and performance are the solution for storage**

Oriental Pearl Media worked alongside the Dell ProDeploy Plus team, which started mapping the new environment and preparing a report around the deployment process. Oriental Pearl Media aimed to deploy Dell PowerEdge M630 blade servers and a combination of Dell Storage SC8000 arrays, Dell Storage SC200 enclosures and a Dell Storage FS8600 NAS appliance. In addition, the plan was to install Dell Networking S4810 switches for 10 gigabit Ethernet (GbE) connectivity between servers, between servers and storage, and finally the network core. Says Cheng Xu, “We gained sufficient storage capacity and performance with our Dell Storage solution to support our 4K VOD production suite. We also ensured fast 10GbE network connections and a highly scalable infrastructure with our Dell Networking S4810 switches.”

**A detailed approach to data migration ensures the right outcome**

To help ensure Oriental Pearl Media avoid issues after deployment, the ProDeploy team did a data migration analysis and followed the migration exercise with a thorough test and system verification. Xu says, “I saw the planning by Dell was highly professional with an emphasis on detail. Because the data migration piece was so crucial to our operation, the Dell ProDeploy team worked hard to ensure the work was a success. Indeed, the storage health check and monitoring were handled extremely well.”

**Support from deployment services reduces implementation time by 30 percent**

Oriental Pearl Media successfully migrated its VOD infrastructure to the enhanced platform and saved significant amounts of time. Xu comments, “We have been able to reduce deployment time by 30 percent through the deployment services.”
time by 30 percent, enabling us to start
developing our 4K VOD infrastructure
to launch new services to market quicker — all through the engagement
of ProDeploy Plus.”

Maximizes cost-effectiveness of the
4K VOD project
The company also reduced the expense
of the migration by avoiding errors
during the deployment program. From
the beginning, Oriental Pearl Media
understood it lacked enough internal
resource to deliver the implementation
as it wanted to. Therefore, it chose to
work with Dell ProDeploy Plus to reduce
the risk of problems occurring and
maximize the cost-effectiveness of the
deployment. Says Xu, “We reduced the
cost of our 4K VOD platform by working
with Dell ProDeploy Plus because
the Dell team helped ensure the
implementation was error-free. We also
avoided the expensive cost of upskilling
our team or adding new resources by
partnering with the Dell ProDeploy
service.”

The added value from a strong
commitment to service
Oriental Pearl Media was confident the
deployment would be a success, thanks
in part to the offer of Dell to return if
any issues arose with the infrastructure
after work was completed. As part of
ProDeploy Plus, Oriental Pearl Media
received 30-day post-deployment
configuration assistance. It meant
that if any fine-tuning was needed,
expert deployment personnel would
return to make the necessary changes.
Xu comments, “We valued Dell’s
commitment to service even after the
migration was effectively signed off. It
showed the organization’s pledge to
serve customers well.”

Company ensures maximum return
on IT investment
Given the scale of the IT infrastructure,
service support is crucial to the Oriental
Pearl Media business. That’s why it
selected Dell ProSupport Plus and a
dedicated Technical Account Manager
who acts as a single point of contact to
optimize support processes and ensure
business continuity. “We’re maximizing
the return on our Dell investments while
minimizing downtime through the
proactive and preventative maintenance
strategies provided by Dell ProSupport
Plus. The service is both highly
professional and 100 percent customer-focused,” says Lu.

Peace of mind for reliability over
the long term
The company can now develop it its 4K
VOD platform safe in the knowledge
the platform will perform at its best. It
has significantly reduced the risk of
technical issues occurring during the
lifetime of the infrastructure and can
therefore expect greater returns from its
investment. Xu is clear, “We will definitely
see improved KPIs as a result of the work
of Dell’s deployment engineers because
our platform is the best it can be. It
offers the stability and reliability we need
to drive our 4K VOD system as demand
for this content grows in China. We
would recommend ProDeploy Plus to
any company that wants to get the most
out of its technology.”

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Wenyan Lu, Vice President,
Cloud Technology Services,
Shanghai Oriental Pearl Media

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