

Microsoft SQL Server Customer Solution Case Study





Customer: Hong Kong Jockey Club Website: <a href="https://www.hkjc.com/home/english">www.hkjc.com/home/english</a> Customer Size: 26,000 employees

Country or Region: China

Industry: Media and entertainment—

Sports

#### **Customer Profile**

Established in 1884, the Hong Kong Jockey Club is a nonprofit organization and leading provider of horse-racing, sporting, and betting entertainment. It donates more than HK\$1.6 billion (approximately US\$200 million) annually to the Hong Kong community.

## **Solution Spotlight**

- Cuts cross-site failover from half an hour to two minutes.
- Expects to reduce server infrastructure by 30 percent, with benefits including lower costs and energy consumption.
- Reduces software deployment from two days to three hours.
- Gains better support for operational goals.

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## Racing Club Boosts Availability of Betting System with 15 Times Faster Failover

"Cross-site failover was taking up to 30 minutes, which we can't afford in our fast-paced business. With SQL Server 2012, that time frame will shorten to approximately 2 minutes."

Leo So, Executive Manager of IT Infrastructure, Hong Kong Jockey Club

Hong Kong Jockey Club is a leading provider of horse-racing and betting entertainment. To improve the availability of its mission-critical betting system, the club is implementing a solution that includes Microsoft SQL Server 2012 Enterprise and Microsoft System Center Configuration Manager 2012. As a result, it will cut failover time from half an hour to two minutes. The club is also consolidating its server infrastructure by 30 percent, cutting deployment time from two days to three hours, and gaining better support for operational goals.

## **Business Needs**

A nonprofit organization, Hong Kong Jockey Club hosts approximately 700 horse races each year, and it handles betting for local racing, a lottery, and overseas soccer events. The club, which has 26,000 employees and 23,000 members, is the largest taxpayer in Hong Kong and donates about HK\$1.6 billion (US\$200 million) annually to charity.

Electronic betting, both online and at venues, is the main source of the club's considerable revenue. In the past, its technology infrastructure had kept pace

with business needs, but that changed in 2003 when the club began handling betting for soccer events. Almost immediately, Hong Kong Jockey Club needed to provide round-the-clock availability. In addition, the organization faced increased competition from offshore casinos that also handled betting.

The club maintains two active data centers connected by a storage area network that replicates transactional data between them. When a bet is placed, the information is routed to the closest location, which copies data to the second







site before completing the transaction. If either data center goes down, betting comes to a halt until the club can fail over to the other facility, a process that could take up to 30 minutes. Hong Kong Jockey Club wanted a faster solution.

"Because of the nature of our business, we can't have any downtime, particularly not during horse racing," says Leo So, Executive Manager of IT Infrastructure at Hong Kong Jockey Club. "We have tens of thousands of punters trying to place a bet, typically at the last moment before a race starts."

The club also wanted a more streamlined environment, with fewer servers to manage and faster provisioning of software and security updates. "We have 300 database silos in our IT environment," says Kristy Wong, Technical Manager of IT Infrastructure–Database Engineering at Hong Kong Jockey Club. "It can take two days to perform patch management or a system upgrade."

### Solution

In 2011, Hong Kong Jockey Club heard about the upcoming release of Microsoft SQL Server 2012 Enterprise software and was eager to try the solution. Working closely with the Microsoft China Cloud Innovation Center Customer Advisory Team as well as the Microsoft Services Premier support team, the club designed a new solution that includes SQL Server 2012 running on the Windows Server 2008 R2 operating system. The project will be part of a major three-year refreshment program starting in July 2013. So says, "The Microsoft Services Premier Support team is proactive in addressing our business needs, and its work with the Microsoft China Cloud Innovation Center Customer Advisory Team will make this project a success."

In particular, the club looks forward to implementing multi-subnet clustering, a new configuration that will improve cross-site failover. Each failover cluster is connected to a different subnet or sets of

subnets that can be spread out across multiple data centers. The configuration provides a high level of availability because a cluster can come online as long as it connects to a valid IP address.

In addition, the club is taking advantage of contained databases, another feature in SQL Server 2012. Contained databases include all the metadata and settings used to define the database, including login information. Because the contained database is abstracted from the database instance where it is installed, it can be moved to a new instance with minimal configuration changes. The club anticipates that the feature will speed its consolidation project, as will the adoption of Microsoft System Center Configuration Manager 2012. Hong Kong Jockey Club can use the tool to automate the deployment of operating systems, SQL Server 2012, patch management and other configuration tasks.

### **Benefits**

With a Microsoft platform, the Hong Kong Jockey Club is improving the availability of its mission-critical betting system, consolidating servers, speeding deployment, and providing better support for operational goals.

### **Gains 15 Times Faster Failover**

By taking advantage of a new highavailability solution from Microsoft, Hong Kong Jockey Club can stay online and competitive with less interruption. "Crosssite failover was taking up to 30 minutes, which we can't afford in our fast-paced business," says So. "With SQL Server 2012, that time frame will shorten to about 2 minutes."

#### **Consolidates Servers by 30 Percent**

In addition to improving availability, the club looks forward to a more streamlined IT infrastructure. Wong says, "By taking advantage of enhancements in SQL Server 2012, we expect to consolidate our servers by approximately 30 percent."

So points out that the club will gain more than simplified administration. "We expect to see multiple benefits by consolidating with SQL Server 2012," she says. "These include lower licensing costs, a smaller footprint, and a more 'green' operating environment."

# Reduces Software Deployment from Days to Hours

New management tools will also help streamline IT operations. "Historically, it's taken at least two days to provision software and security updates across the organization," says Wong. "But by using System Center Configuration Manager 2012, we can reduce that time to three hours."

### **Provides Better Operational Support**

Hong Kong Jockey Club believes that a Microsoft platform provides better support for future operations. "We're moving toward a more cloud-like environment with Microsoft products," says So. "The technology just keeps getting better. For example, the features built into SQL Server 2012—including high availability and database mobility—make it a more enterprise-ready solution compared with some of the competitors."

## Software and Services

- Microsoft Server Product Portfolio
  - Windows Server 2008 R2 Enterprise
  - Microsoft SQL Server 2012 Enterprise
  - Microsoft System Center
    Configuration Manager 2012
- Services
  - Microsoft China Cloud Innovation
    Center Customer Advisory Team
  - Microsoft Services Premier Support

