

## **The City of Mission Viejo Implements a World-Class Disaster Recovery Plan, Consolidates Data Centers and Reduces Operating Costs.**

**Utilizing a combination of virtualization, disk-to-disk backup with de-duplication, and replication technologies, the City of Mission Viejo virtualized 80% of their servers and implemented a world-class DR solution that will allow the City to provide necessary IT services to its customers and to city residents during any disaster.**

The City of Mission Viejo is located in southern California. With a growing population of over 100,000 people, maintaining a fully functioning data center at all times is crucial. The City's goal was to develop an up-to-date disaster recovery (DR) plan that would ensure business continuity and a highly available environment in the case of disasters such as earthquakes, wild fires, and flooding.

### **Opportunities for Improvements**

Besides developing a first class DR plan, Mission Viejo also needed a way to reduce energy consumption and reduce costs, all while increasing the level of performance and agility. Mission Viejo was managing two data centers that were at the same physical location (which is not ideal for DR planning), had an informal DR plan, and no off-site DR location. Given the need to provide continued services to its residents at times of disasters, tremendous data growth in the data centers and an increase in service-level agreements, Mission Viejo wanted to adopt a more formal, efficient and cost-effective way to manage their environment.

Because of the limited resources available, a comprehensive solution had to be developed to address the current and, possible, future budget cuts.

### **Developing a Unique Solution**

Mission Viejo chose to work with Govplace based on Govplace's experience and expertise with similar challenges at other public sector organizations. With an exclusive public sector focus, Govplace was able to assess and develop a solution based on the City's unique needs.

The engineers at Govplace, along with their counterparts at Mission Viejo, established a list of objectives that had to be met such as cost-effective replication for critical applications and backup data, a DR plan that did not require infrastructure investment equal to the primary data center, and an infrastructure capable of providing IT staff with the flexibility and adaptability to accommodate their rapidly growing and changing services.

Using a proven methodology for successfully implementing a virtualization solution, Mission Viejo was able to rest assured that all aspects of the project – from defining objectives to a complete knowledge transfer for managing their new solution – were performed by a team of trained and experienced IT professionals.

### **Implementation**

By employing the four steps of Govplace's Methodology – **Assess, Design, Deploy, and Manage** – Govplace IT engineers designed and implemented a virtual infrastructure built from industry best practices tailored for the unique needs of the City of Mission Viejo. The solution enabled the:

- **Consolidation of physical servers.** In addition to consolidating physical servers, Govplace upgraded the storage area network (SAN) and established a main VMware ESX server farm. By upgrading older systems with newer, smaller and more efficient hardware, this enabled Mission Viejo to reduce the “footprint” of the data center and lower bandwidth utilization. Virtualization technology tools allowed for the use of dissimilar hardware in the new Mission Viejo data center.

- **Replication of the primary data center outside of the county.** Through virtualization, the City was able to replicate their main data center with lower amounts of bandwidth compared to traditional applications.

### **Achieving Impressive Results**

Through the dedication and hard work from the IT staff at Mission Viejo and Govplace, the City has virtualized nearly 80% of their physical servers using VMware ESX 3.5 and boasts of an impressive 50% reduction in its data center footprint. They now enjoy less management overhead providing time for other important projects, and lower power and cooling resource consumption.

A fully replicated environment at the DR site outside of Orange County will allow the City to continue providing necessary services to citizens and ensure critical taxpayer needs are met in the event of a disaster or emergency.