



With the Help of Govplace, the County of Orange Consolidates its IT Resources into a Primary Data Center.

A virtual infrastructure is leveraged to reduce operating costs and improve manageability

The County of Orange is the fifth largest county in the United States with a population of over 3 million people. The county government is comprised of 45 independent agencies including Sheriff, Social Services, Fire, Child Services, Healthcare, etc. each supporting specific needs of Orange County residents.

In 2006, each county agency maintained its own data center and managed the expenses and manpower associated with operating an IT infrastructure. While each county agency maintained autonomous control over their own data center, issues arose from the dispersed placement of multiple data centers with no centralized form of management.

Recognizing the Challenge

The County needed to create efficient centralized data services within a primary data center that could offer technical expertise and IT services to other Orange County agencies such as application housing, database administration, data warehousing, and hardware co-location. While the transition was not mandatory for county agencies, doing so would allow the agencies to focus more on their primary mission of serving county residents rather than focusing manpower and resources on technical and IT issues.

The most important factor was to provide all these IT services for the County of Orange while reducing operating costs, improving data center manageability and simplifying disaster recovery. The County of Orange determined that a simple consolidation of data centers would not produce a return on investment to make the project feasible. As a result, the county consulted with Govplace to determine what needed to be done in order to accomplish their objectives.

Building a Virtual Environment

Govplace is an enterprise IT integrator that specializes in Data Center Efficiency solutions. By reducing complexity, increasing utilization, and improving manageability in the data center, Govplace solutions can facilitate disaster recovery, business continuity, and information management. With a long history of providing IT solutions to public sector clients, Govplace works closely with Federal, State, and Local government agencies to develop data center efficiency solutions to meet their needs.

Govplace is an expert at leveraging a virtual environment to develop data efficiency solutions. The Govplace methodology for effectively implementing a virtualization solution resides in four well-defined phases: **Assess, Design, Deploy, and Manage**. The assessment phase allows Govplace professionals to gather information and define objectives while the design phase builds, reviews and designs the customized solution. The deployment process consists of extensive educational and planning involvement between Govplace professionals and the client. The Manage phase includes follow-up visits and ongoing training to ensure correct usage and maximum performance levels.

Govplace determined that a “virtualized” server environment and centralized storage strategy would allow the primary data center to realize its goal of reducing county wide IT operating costs, consolidating resources, improving manageability in the data center, and simplify disaster recovery.



Govplace found that the current server environment had a very low utilization rate. After assessing the existing data centers, it was determined that a 10:1 consolidation ratio could be achieved if new hardware was assigned to virtualization hosts. In addition to a low server utilization rate, silos of storage were not being used to its full potential. Govplace recommended the implementation of a 10TB Fibre Channel SAN.

Govplace worked directly with Orange County IT technicians to ensure a smooth transition by providing kickoff meetings, education and training for technicians about virtualization, and a clear and concise review of the deployment plan. Follow-up visits and ongoing training services assured correct usage and maximum performance levels for the data center.

Cost Effective Solution

A server consolidation ratio of 10:1 was realized by the county. Virtualization and consolidation would prove to be much more efficient than simply continuing to use and purchase single use physical servers. A return on investment for 3 years was calculated from this assessment and represented a \$500,000 cost savings and more than a 400% ROI from implementing a virtual infrastructure. The cost savings came from a reduction of physical hardware, which lead to lower management overhead, less physical floor and rack space consumption, and lower environmental costs, such as power and cooling.

To date, 37 of the 45 Orange County agencies have opted to utilize the Orange County Data Center. The flexibility of the data center's virtual infrastructure allows the county to adapt to ongoing changes in the IT requirements of the agencies while maintaining low operating costs.