

## Galaxy Provides Windows and UNIX Enterprise Data Protection for County of Fresno

### QUICK FACTS

#### Industry/Solution:

- County Government

#### Platform/File System:

- Microsoft Windows NT/2000
- IBM AIX

#### Applications:

- Microsoft Exchange
- Microsoft SQL Server
- Oracle
- PeopleSoft
- County government applications

#### Challenges:

- The County of Fresno California needed a data management solution to support enterprise backup and disaster recovery while providing extremely high data availability.
- Fresno sought a solution that was relatively simple to install, yet speedy enough to complete massive, 2.7TB backups during an overnight backup window.
- Needed seamless inter-operation with Wintel systems, UNIX/AIX systems, and SAN/NAS data storage architectures.
- Needed a true enterprise package.

#### Solution:

- CommVault Galaxy Backup & Recovery
- Synthetic Full Backup

#### Benefits:

- Offers seamless UNIX and Windows enterprise data management and protection
- High performance capability to do the job
- Service - CommVault is a great partner
- Simple and easy to use

### Customer Profile

Ron Talent's IT operation is the central IT shop for County of Fresno. They host servers for thirty different departments, running the gamut of applications. Applications include PeopleSoft™ for payroll processing, criminal justice applications, election software, court system case scheduling, e-Government packages, as well as popular desktop applications. Databases in use include both SQL and Oracle, with several Oracle apps running on RS-6000/AIX boxes, and many applications developed in-house running on Wintel platforms.

### Data Management Challenges

The County of Fresno California needed a data management solution to support enterprise backup and disaster recovery while providing extremely high data availability. Fresno sought a solution that was relatively simple to install, yet speedy enough to complete massive, 2.7TB backups during an overnight backup window. Whatever data management tool Fresno selected needed to offer seamless inter-operation with Wintel systems, UNIX/AIX systems, and the SAN/NAS data storage architectures the County plans to install in the near future.

### IT Trends at Fresno

According to Ron Talent, IT Division Manager, three trends have dominated IT growth and planning in Fresno. One is a re-centralization of previously distributed servers. The second is exponential growth in the amount of data, per server, that needed to be backed up each night. The third is increasing utilization of Wintel platforms.

Because most of their infrastructure is Microsoft-based, Fresno wanted their backup application to be Microsoft-based as well. Yet it needed to be a true enterprise package, capable of supporting the County's RS6000 systems as well. Says Talent, "Our NOS is WindowsNT/2000. We're working towards

becoming totally W2000. But UNIX/AIX plays an important part in large applications and we don't see that going away."

### The Galaxy Solution

Over the past few years the data residing on the typical departmental server has grown from a few gigabytes to an average of 30-50 gigs apiece. Consequently Fresno sought a data management application which, when combined with suitable hardware, would offer the sheer horsepower needed to back up as much as 2.7TB of data during an overnight backup window. For software, this was Galaxy.

For hardware Fresno installed fiber-accessed disk storage systems. These boosted backup performance considerably over optical storage systems and DLT tape, which are used off-line to make offsite and other copies. Compared to DLT the direct-to-disk solution provides a 2-5x faster backup, and 4-10X faster restore capability. Galaxy iDataAgents enable hot backing-up of Fresno's SQL databases, further improving system performance. "Without Galaxy," says Talent, "We'd be completely overwhelmed. The Galaxy solution absolutely best meets our needs."

### Galaxy's NAS/SAN Support Alleviates Future Upgrades

Fresno intends to adopt both NAS and SAN storage systems for critical databases and file storage tasks. Galaxy's support of popular SAN/NAS architectures meant Fresno wouldn't have to plan for expensive future upgrades when these systems are added. Galaxy's performance will be improved even further with the adoption of SAN/NAS storage. Fresno is considering adding a very high-speed private network within their central IT facility to remove the performance hit associated with backups performed over the user network. When you're backing up nearly 2.7TB per night, performance counts, even on Gigabit Ethernet LANs.

**Galaxy Supports Centralized and Distributed (Remote) Backups**

Not all County servers, however, are being re-centralized. Fresno needed a data management solution that was equally adept at handling its remaining distributed systems. More than 160 locations are connected via Fresno's county-wide network. CommVault Galaxy offers a number of features that boost the performance of remote backups. One feature is support for multiple streams. Fresno frequently has 15-20 different backup streams running simultaneously, from servers in diverse locations. Incremental backups reduce the amount of total data crossing the network each night. Finally, while not in use (yet) at Fresno, "Synthetic Full" backups allow Galaxy users to create full backups, often for offsite storage, from nightly incrementals.

Ron Talent, IT Division Manager at Fresno, comments, "CommVault Galaxy is the best thing we could find for our centralized and distributed environment."

According to Talent, "The real question was just how we could do this [2.7TB backup] at all. We've been moving away from mainframes. As we began to get many, many servers on the network it presented us with a very different backup challenge. We had to come up with a way to back up all the data, every night. Galaxy was the best thing we could find to work over the network, with 100's of Wintel and UNIX servers, in a distributed environment. Technically, it was "How could we do it at all." Galaxy answered that question.

**Robust Product and Top-Notch Service**

Fresno's greatest satisfaction with CommVault is simply Galaxy's ability to do the job. Second, according to Talent, is how great a partner CommVault has been. "We occasionally ask them for small enhancements. For instance, we asked for a counter/progress bar, and Palm/PDA support. When new releases of Galaxy came out, these and other features we asked for were there. We talk to someone at CommVault at least three or four times a week. Their support people take a genuine interest in our needs, and problems. They've been a great partner."

[www.commvault.com](http://www.commvault.com) | 888.746.3849 | E-mail: [info@commvault.com](mailto:info@commvault.com)

CommVault Worldwide Headquarters • 2 Crescent Place • Oceanport, NJ 07757 • 732-870-4000 • Fax: 732-870-4525  
Regional Offices: United States • Europe • Middle East & Africa • Asia-Pacific • Mexico & Latin America • Canada • India • Oceania

