



ADDING VALUE TO ORACLE DATA GUARD DR COPIES WITH ORACLE'S SUN ZFS STORAGE APPLIANCE

ACCELERATE DEPLOYMENT WHILE
REDUCING RISK AND COST

KEY FEATURES

- Enhance the value of Oracle Data Guard DR copies
- Quickly identify how changes in code affect the storage system
- No new licenses required for Enterprise Edition customers
- Tested, validated, and supported by Oracle

KEY BENEFITS

- Utilizes the included Snapshot and Remote Replication services of the ZFS Storage Appliance
- Accelerate application deployment
- No additional licenses to procure and manage
- Reduce risk in the deployment of the solution infrastructure

"It's very attractive and very accessible. In fact, it may be the most complete filer interface I've ever seen, blowing the doors off Network Appliance's Web-based manager."

Paul Venezia, Infoworld, February 2009
(<http://blogs.sun.com/chhandomay/date/20090219>)

Database administrators face the challenge of efficiently duplicating their large mission critical databases to support continuous demands for application development and subsequent testing of the code.

Accelerate Application Deployment

Multiple copies (clones) are often required for each production database in order to support the many development and test activities associated with large production systems. It is important that the cloning process have zero impact to the production database. While the basic method of creating a clone is to restore a database from a recent backup on to a different database server, it is quickly obvious how such an approach is inefficient and highly time consuming. Absent an efficient solution for cloning production databases, enterprises are saddled with substantial administrative burden that diverts attention away from more time critical support functions along with increased storage consumption and high cost.

Many Oracle customers have already deployed Oracle Data Guard to provide high availability and disaster protection for their mission critical Oracle Databases. The addition of the Sun ZFS Storage Appliance to Oracle's solution portfolio offers Data Guard users a unique opportunity to address their cloning requirements. The Sun ZFS Storage Appliance can easily be added to an existing Data Guard configuration and provide an industry leading low-cost, time and space efficient solution to enterprise requirements for snapshots and clones.

The Sun ZFS Storage Appliance: Effective Platform for Development, Test, QA

The profound insight offered by DTTrace Analytics and the included features & functionality of the Sun ZFS Storage Appliance make it an ideal platform for Development, Test, QA and the like. Unlike traditional platforms, the Sun ZFS Storage Appliance doesn't license its data services (like thin provisioning, clones, compression, etc.) separately – they're all included.

The ZFS Storage Appliance fits into any Oracle Data Guard environment. Adding the Sun ZFS Storage Appliance to your existing Data Guard environment require minimal procedural changes. In fact, the cloning process can be automated for you with pre-defined scripts and workflows.

Oracle's acclaimed DTTrace Analytics provides insight to system activity from the kernel, to the application (in this case, database file level access), to the storage system, and out to the network. Based on Oracle's award winning DTTrace framework, DTTrace Analytics provides a view of activity at the individual database file level. Developers can now create code and see the effect their changes in code have on the storage system in real time.

The Value of the ZFS Storage Appliance

The ZFS Storage Appliance delivers superior performance and simplicity at up to **30** percent less cost than traditional solutions by using cost-effective components and providing a rich set of built-in, no licensing software features. You can use NFS, CIFS, FC, IB, or iSCSI and leverage compression, deduplication, snapshot, clone, thin provisioning, and remote replication features at no extra charge. Plus, no additional software licenses are required—eliminating hundreds of thousands of dollars in fees and license key management costs.

Unlimited Clones at No Extra Cost

Traditional methods of providing copies a production database for Development and Test require as much space on the storage system as the original database – for each copy. ZFS Storage clones require no additional space upon creation. Only as new data is written to the clone does the clone require space in the storage system. In addition to the savings associated with not having to procure and manage additional license keys, the space saving features of ZFS Storage clones also save on space and power costs as well.

Reduce Risk in Deployment

Oracle Maximum Availability Architectures that are tested, validated, and supported by Oracle help to reduce the risk associated with the implementation of your Oracle Development and Test environment. Oracle's Advanced Customer Services aid in optimizing your Oracle Development and Test architecture for your particular business requirements.

Ease of Management

Provisioning and management is dramatically simplified in the ZFS Storage Appliance with an easy-to-use management interface that takes the guesswork out of system installation, configuration, and tuning. In addition, the built-in suite of software data services and communication protocols eliminates add-on software evaluation and procurement hassles. DTrace analytics software provides the industry's only comprehensive and intuitive analytics environment. Administrators are provided with tools to quickly and intuitively identify and diagnose system performance issues, and perform capacity planning. With respect to provisioning, an independent validation study finds: "Overall, the Oracle Storage Appliance required 36 percent less time and was 30 percent less complex to manage than the NetApp Filer. These results are especially significant in organizations where administrators are frequently adding LUNS for a rapidly expanding pool of virtual servers." In regards to monitoring & troubleshooting, the independent study states: "What these results show is that not only is the overall troubleshooting process less complex on an Oracle storage appliance, but also that the time required and the complexity of identifying, selecting, and viewing fresh monitor data is less, as well." 31% less time and 50% fewer steps.

Contact Us

For more information about [insert product name], visit oracle.com or call +1.800.ORACLE1 to speak to an Oracle representative.



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