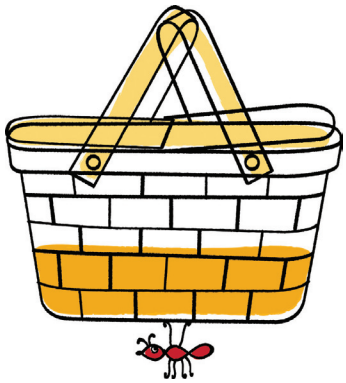


Datasheet

NetApp SnapManager for Oracle

Enable high availability, comprehensive data protection, and flexible development and testing

KEY BENEFITS

Maximum Data Availability
Space-efficient backups and full restores in minutes significantly reduce recovery time objective (RTO).

Comprehensive Data Protection
Manage local, secondary backups, and disaster recovery, all from a single interface.

Accelerate Development and Testing
Create production database clones in minutes for development, testing, QA, reporting, and more.

Increase Productivity
Full integration with Oracle® Database 10g and 11g releases.

Reduce Costs
Achieve high performance and reduce costs with space-efficient backup, cloning, and disaster recovery.

The Challenge

Optimizing availability and data protection

Your data-driven enterprise requires that business-critical Oracle Databases be operational around the clock to facilitate online transactions, analytics, and a myriad of other business processes. However, the rise in the amount of information assets puts more demand on your Oracle Databases, making it increasingly difficult to make sure of availability and protection of your valuable data. At the same time, you need a more efficient and economical way to replicate your Oracle Databases for application development and testing, data mining, quality assurance (QA), and other critical requirements.

To succeed, you need tools that help you with:

- Rapid backup, restore, and recovery processes that enable high data availability
- Comprehensive data protection that addresses all your business needs
- Quickly create space-efficient database clones for application development and testing

The Solution

Automate critical database management tasks with NetApp SnapManager® for Oracle

NetApp SnapManager for Oracle integrates seamlessly with your Oracle Database environment, making the full benefits of innovative NetApp technologies available for Oracle data management. SnapManager leverages Snapshot™, SnapRestore®, and FlexClone® technologies to enable your DBAs to simplify and automate processes such as backup, restore, recovery, and cloning. As a result, your IT personnel are free to focus more effort on value-added tasks, and they no longer have to worry about the underlying data layout when performing routine data management tasks. SnapManager for Oracle takes care of the details.

SnapManager fully supports environments that utilize advanced Oracle technologies such as Direct NFS (DNFS), Oracle Recovery Manager (RMAN), Real Application Clusters (RAC), Data Guard and Automatic Storage Management (ASM).

"SnapManager for Oracle does for block-based environments what NFS does for file-based systems—management of even an Oracle on SAN environment becomes automated and simple."

Hanan Hit
Senior Database Architect, Mercury Interactive

Enhanced Data Availability

Fast and space-efficient backups

With SnapManager for Oracle, you get fast and reliable disk-based backup and restore. SnapManager builds on NetApp Snapshot technology to deliver extremely rapid and space-efficient backups that don't impact performance. Since backups can be done in a matter of minutes, you can perform them throughout the day, creating recovery points that reduce the total amount of data to be restored. With the graphical scheduler integrated in SnapManager for Oracle, you can quickly create or modify schedules to automatically execute SnapManager backups on a regular, recurring basis.

Rapid restores and database recovery

SnapManager for Oracle allows you to restore data specifying the level of granularity, from a full database to a subset of table spaces or data files. SnapManager for Oracle backups can also be used with Oracle RMAN, enabling more granular restores. With SnapManager for Oracle, you have the option of instantaneously reverting to a previously saved backup using a volume-level SnapRestore operation. This avoids the time-consuming copies that are required with other disk or tapebased backup solutions—allowing you to restore and recover a database to full operation in minutes rather than hours. SnapManager for Oracle takes care of initiating the SnapRestore operation and the replaying of the transaction logs that occurred after the backup. The entire operation can be completed in minutes, and thus the time saved translates into big improvements in availability and productivity.

Fully automated archive log management

SnapManager for Oracle enables users to back up archive logs separately from datafiles by specifying different backup retention and protection policies for datafile backups and archive log backups. It also provides the ability to prune archive logs after a backup and automates using the archive logs from backups during recovery.

Pre and post script backup and restore

SnapManager for Oracle provides enhanced operational flexibility by allowing customers to automate the execution of scripts before or after a back up or restore operation. SnapManager for Oracle also includes built-in post backup scripts to update any existing SnapVault or SnapMirror relationships after a back up.

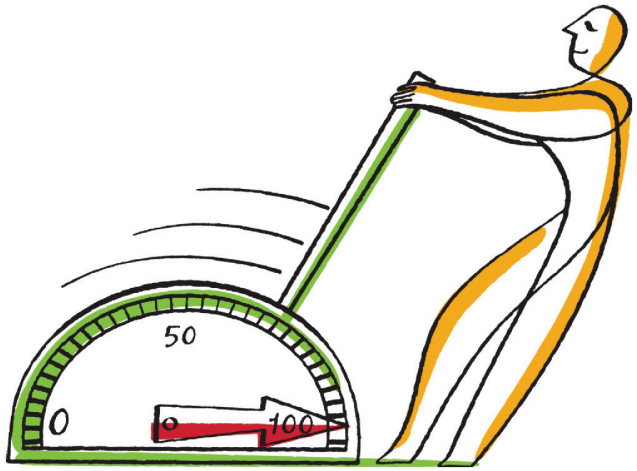
Comprehensive Data Protection

Policy-based automation

In traditional storage environments, DBAs and application administrators have to rely on storage administrators to perform storage-related tasks. The NetApp policy-based automation capabilities allow storage administrators to set policies and delegate authority for specific storage tasks. For example, SnapManager for Oracle integration with NetApp Protection Manager allows storage administrators to set data protection workflow policies to simplify and standardize database backups. Integration with Protection Manager also enables DBAs to restore secondary storage data directly to the original location or to a new location on the primary storage. These capabilities empower DBAs and administrators to manage their own data, which not only eliminates data management bottlenecks but also assures security and data integrity through strict policy enforcement and automation.

Integration with NetApp SnapVault and SnapMirror

With its integration with Protection Manager, SnapManager for Oracle lets you automate your use of NetApp



SnapVault® and SnapMirror® technologies. NetApp SnapVault allows you to keep backups on secondary disk storage (at a local or remote location) for an increased level of data protection. With SnapVault you can choose to keep a limited set of Snapshot copies on primary storage for immediate recovery needs while keeping Snapshot copies available on secondary storage—allowing you to quickly restore and recover databases from further back in time without resorting to tape.

NetApp SnapMirror provides the basis of a complete disaster recovery solution through reliable asynchronous replication of your database volumes to a remote site. Efficient bandwidth utilization helps reduce your wide area networking (WAN) costs, and you can mirror from primary storage to less expensive secondary storage if you so desire. These cost savings make it possible to provide disaster recovery for all of your applications.

Whether you choose SnapVault, SnapMirror, or both, SnapManager for Oracle and Protection Manager make it simple for you to leverage policies to simplify and standardize the protection of your critical Oracle data to secondary storage.

Accelerate Development and Testing

Creating database clones for development and testing requires enough free storage to accommodate the amount of new clones. Consistent copies of the database must be made, often wasting time and potentially affecting production cycles. SnapManager for Oracle avoids these problems using an intuitive wizard-based tool that streamlines the cloning process. Leveraging the FlexClone capability of NetApp Data ONTAP® 7G, 8.0, or 8.1, SnapManager for Oracle lets you quickly create clones that consume additional disk space only as changes are made. This space efficiency means that you can create clones quickly whenever you need them with minimal impact in terms of space and wasted time.

Clone on primary or secondary storage

With SnapManager for Oracle, you can create clones on your primary storage and leverage SnapVault or SnapMirror to create clones on your secondary storage. Cloning directly to secondary storage completely eliminates any impact on your production system.

Preclone and postclone scripting

Masking sensitive customer data stored in data set copies is often a necessity. SnapManager for Oracle allows you to automate the execution of scripts before or after a clone is created.

Solution Components

Server requirements

- Oracle Databases 10g or 11g
- NetApp SnapDrive® for UNIX®
- NetApp SnapDrive for Windows®
- NFS, iSCSI, or FCP
- Solaris™, RedHat Linux®, SUSE Linux, Oracle Enterprise Linux, IBM AIX, HP-UX, or Windows

NetApp storage system requirements

- NetApp SnapRestore
- NetApp Data ONTAP 7G, 8.0, 8.1 operating in 7 mode or Cluster Mode
- NetApp FlexClone
- Protection Manager
- Operations Manager

About NetApp

NetApp creates innovative storage and data management solutions that deliver outstanding cost efficiency and accelerate business breakthroughs. Discover our passion for helping companies around the world go further, faster at *www.netapp.com*.

Go further, faster®

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