



**NetApp™**  
Go further, faster



Software

# NetApp SnapManager for Oracle

Get fast, space-efficient, disk-based backup; rapid restore and recovery; and flexible cloning.

## KEY BENEFITS

### Increase productivity

Full integration with Oracle Databases 9i, 10g, and 11g, lets you completely automate Oracle data management for efficient operation.

### Reduce costs

You can achieve maximum performance and reduce costs with our space-efficient backup capabilities.

### Increase data protection

SnapManager lets you increase your backup frequency to better protect your data with no impact on your performance.

### Speed recovery

You can restore a failed database to full production in minutes regardless of the size of your database.

### Accelerate development and testing

You can create complete database clones in seconds for QA, development, and testing.

## THE CHALLENGE

### Optimizing availability and data protection

In today's data-driven enterprise, business-critical Oracle Databases must be operational around the clock to facilitate decision making, e-commerce, and a myriad of other business processes. Rapid increases in data volume and database demands make it increasingly difficult to ensure availability and protection of your valuable data assets. To succeed, your administrators need tools that help them achieve maximum efficiency. At NetApp, we know that your administrators need:

- Regular backups with minimal impact
- Quick restores
- Nondisruptive cloning for test and development
- Full database recovery in minutes, not hours or days

## THE SOLUTION

### Automate critical database management tasks with NetApp SnapManager for Oracle Database

NetApp SnapManager for Oracle integrates seamlessly with the Oracle Database, making the full benefits of innovative NetApp technologies available for Oracle data management. Because SnapManager

automates critical tasks such as backup, restore, database recovery, and cloning, your IT personnel will be free to focus more effort on value-added tasks. Your administrators no longer have to worry about the underlying data layout when performing routine data management tasks because SnapManager understands and takes care of the details. SnapManager fully supports environments that leverage Oracle technologies such as Direct NFS (DNFS), Oracle Recovery Manager (RMAN), Real Application Clusters (RAC), and Automatic Storage Management (ASM).

## REDUCE BACKUP TIME

With SnapManager for Oracle, you get fast, reliable, disk-based backup and restore. SnapManager builds on the capabilities of NetApp Snapshot™ technology to provide you with extremely rapid and space-efficient backups. These backups can be replicated to inexpensive secondary storage by using SnapVault® or SnapMirror®.

SnapManager automatically identifies the backup data set and puts the database in hot backup mode while a Snapshot copy is made to ensure consistency. You can immediately verify all backups, or you can choose to defer verification. Because

backups are quick and nondisruptive, you can perform them at regular intervals throughout the day, providing a higher level of data protection and ensuring that restores occur quickly with minimal disruption to ongoing operations.

### **SPEED RECOVERY**

The biggest nightmare for any database administrator is a failure that necessitates a full database recovery. SnapManager for Oracle can take the pain and uncertainty out of the recovery process. When a restore is necessary, your administrators can easily specify the level of granularity, from a full database to a subset of table spaces or data files. When you register your backups with Oracle RMAN, you can recover data at even finer granularity.

Using NetApp SnapRestore®, you can revert a failed database to a saved Snapshot copy in a matter of seconds, with no required data movement. Once your database has been restored to a saved Snapshot copy, you only

need to replay the intervening transaction logs to bring the database up to date. Because backups are typically created frequently with SnapManager, this can help you minimize log playback. Once the transaction logs are replayed, the database will be back in production. The entire recovery can be accomplished in minutes—rather than hours or days—regardless of your database size.

### **ACCELERATE DEVELOPMENT AND TESTING**

One of the most vexing tasks that your database administrator can face is creating database clones for development and testing. To create these copies, your administrator needs enough free storage to accommodate the clone before a time-consuming consistent copy of the database clone can be created, wasting time and affecting production. You can avoid these problems with the fast and highly storage-efficient cloning process of SnapManager for Oracle. SnapManager enables Oracle DBAs

to use an intuitive, wizard-based approach that eliminates the tedium of creating clones manually. Using the FlexClone® capability of NetApp Data ONTAP® 7G, clones that you create with SnapManager consume additional disk space only as you make changes to the clones. This extreme space efficiency means that you can create clones quickly when you need them at a cost of minimal additional storage space.

### **SOLUTION COMPONENTS**

#### **Server requirements**

- Oracle Databases 9i, 10g, and 11g
- NetApp SnapDrive® for UNIX® V3.0, NetApp SnapDrive for Windows® V4.2.1 or later
- NFS, iSCSI, or FCP
- Solaris™, RedHat Linux®, SUSE Linux, IBM AIX, HP-UX, or Windows

#### **NetApp storage system requirements**

- NetApp SnapRestore
- NetApp Data ONTAP 7G
- NetApp FlexClone

“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

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

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