Advantages of using SnapManager

SnapManager Oracle

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Advantages of using SnapManager

You can use SnapManager for Oracle to perform different tasks on the databases and manage data efficiently.

SnapManager for Oracle works with storage systems and enables you to perform the following tasks:

- Create space-efficient backups to the primary or secondary storage and schedule backups.

  You can create full and partial database backups and apply retention duration policies.SnapManager (3.2 or later) enables you to create backups of only the data files and archive logs.

  - SnapManager (3.2 or later) enables you to perform preprocessing or post-processing before or after the backup and restore operations.
  - SnapManager (3.2 or later) enables you to protect backups by using the postprocessing scripts.
- Restore full or partial databases by using the file-based restore operation.
- Restore and recover database backups automatically.

  SnapManager (3.2 or later) enables the restoration and recovery of database backups automatically. SnapManager automatically recovers the restored database by discovering, mounting, and applying the archive log files from the backups.
- Prune archive log files from the archive log destinations when creating backups for only the archive logs.
- Retain the minimum number of archive log backups automatically by retaining only the backups with unique archive log files.
- Track operation details and produce reports by host, profile, backup, or clone.
- Verify the backup status.
- Maintain the history of SnapManager operations associated with a profile.
- Create space-efficient clones of backups on the primary storage.

Create backups using Snapshot copies

SnapManager enables you to create backups on the primary (local) storage and also on the secondary (remote) storage using postprocessing scripts.

Backups created as Snapshot copies are virtual copies of the database and are stored in the same physical medium as the database. Therefore, the backup operation takes less time and requires significantly less space than full, disk-to-disk backups. SnapManager enables you to back up the following:

- All the data files, archive log files, and control files
- Selected data files or tablespaces, all the archive log files, and control files

SnapManager 3.2 or later enables you to optionally back up the following:

- All the data files and the control files
- Selected data files or tablespaces along with the control files
- Archive log files

The data files, archive log files, and control files can be located on different storage systems, storage system volumes, or logical unit numbers (LUNs). You can also use SnapManager to back up a database when there are multiple databases on the same volume or LUN.

Why you should prune archive log files

SnapManager for Oracle enables you to delete archive log files from the active file system that are already backed up.

Pruning enables SnapManager to create backups of distinct archive log files. Pruning, along with the backup retention policy, frees archive log space when backups are purged.

You cannot prune the archive log files when Flash Recovery Area (FRA) is enabled for archive log files. If you specify the archive log location in Flash Recovery Area, you must ensure that you also specify the archive log location in the archive_log_dest parameter.

Archive log consolidation

SnapManager (3.2 or later) for Oracle consolidates the archive log backups to maintain a minimum number of backups for archive log files. SnapManager for Oracle identifies and frees the backups that contain archive logs files that are subsets of other backups.

Full or partial restoration of databases

SnapManager provides the flexibility to restore full databases, specific tablespaces, files, control files, or a combination of these entities. SnapManager enables you to restore data by using a file-based restore process.

SnapManager enables database administrators (DBAs) to preview restore operations. The preview feature enables DBAs to view each restore operation on a file-by-file basis.

DBAs can specify the level to which SnapManager restores and recovers information when performing restore operations. For example, DBAs can restore and recover data to specific points in time. The restore point can be a date and time or an Oracle System Change Number (SCN).

DBAs can use SnapManager to restore the database and use another tool to recover the information. DBAs are not required to use SnapManager for both operations.

SnapManager (3.2 or later) enables you to restore and recover database backups automatically without DBA intervention. You can use SnapManager to create archive log backups, and then use those archive log backups to restore and recover the database backups. Even if the backup's archive log files are managed in an external archive log location, you can specify that external location so those archive logs can help recover the restored database.

Verify backup status

SnapManager can confirm the integrity of the backup using standard Oracle backup verification operations.

Database administrators (DBAs) can perform the verification as part of the backup operation, or at another time. DBAs can set the verify operation to occur during an off-peak time when the load on the host servers is less, or during a scheduled maintenance window.

Database backup clones

SnapManager uses the FlexClone technology to create a writable, space-efficient clone of a database backup. You can modify a clone without changing the backup source.

You might want to clone databases to enable testing or upgrades in nonproduction environments. You can clone a database residing on primary. A clone can be located on the same host or on a different host as the database.

FlexClone technology enables SnapManager to use Snapshot copies of the database to avoid creating an entire physical, disk-to-disk copy. Snapshot copies require less creation time and take up significantly less space than physical copies.

See the Data ONTAP documentation for more information about FlexClone technology.

Related information

Data ONTAP documentation: mysupport.netapp.com/documentation/productsatoz/index.html

Track details and produce reports

SnapManager reduces the level of detail database administrators need to track the status of different operations by offering methods to monitor operations from a single interface.

After administrators specify which databases should be backed up, SnapManager automatically identifies the database files for backup. SnapManager displays information about repositories, hosts, profiles, backups, and clones. You can monitor the operations on specific hosts or databases.

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