



# **Define a clone strategy for Oracle databases**

## **SnapCenter Software**

Soumik Das, Archana  
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# Define a clone strategy for Oracle databases

Defining a strategy before cloning your database ensures that the cloning operation is successful.

## Types of backups supported for cloning

SnapCenter supports cloning of different types of backups of Oracle databases.

- Online data backup
- Online full backup
- Offline mount backup
- Offline shutdown backup
- Backups of Data Guard standby databases and Active Data Guard standby databases
- Online data backups, online full backups, offline mount backups, and offline shutdown backups in a Real Application Clusters (RAC) configuration
- Online data backups, online full backups, offline mount backups, and offline shutdown backups in an Automatic Storage Management (ASM) configuration



Oracle ASM configuration is not supported if `user_friendly_names` option in the multipath configuration file is set to yes and aliases or symbolic links are defined for the Oracle ASM disks using the udev rules file.



Cloning of archive log backups is not supported.

## Types of cloning supported for Oracle databases

In an Oracle database environment, SnapCenter supports cloning of a database backup. You can clone the backup from primary and secondary storage systems.

The SnapCenter Server uses NetApp FlexClone technology to clone backups.

You can refresh a clone by running the "Refresh-SmClone" command. This command creates a backup of the database, deletes the existing clone, and creates a clone with the same name.



The clone refresh operation can only be performed using the UNIX commands.

## Clone naming conventions for Oracle databases

From SnapCenter 3.0, the naming convention used for clones of file systems is different from the clones of ASM disk groups.

- The naming convention for SAN or NFS file systems is `FileSystemNameofsourcedatabase_CLONESID`.
- The naming convention for ASM disk groups is `SC_HASHCODEofDISKGROUP_CLONESID`.

`HASHCODEofDISKGROUP` is an automatically generated number (2 to 10 digits) that is unique for each

ASM disk group.

## Limitations of cloning Oracle databases

You should be aware of the limitations of clone operations before you clone the databases.

- If you are using any version of Oracle from 11.2.0.4 to 12.1.0.1, the clone operation will be in hung state when you run the *renamedg* command. You can apply the Oracle patch 19544733 to fix this issue.
- Cloning of databases from a LUN that is directly attached to a host (for instance, by using Microsoft iSCSI Initiator on a Windows host) to a VMDK or an RDM LUN on the same Windows host, or another Windows host, or vice versa, is not supported.
- The root directory of the volume mount point cannot be a shared directory.
- If you move a LUN that contains a clone to a new volume, the clone cannot be deleted.

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