



# Deploying and running the scripts

## SnapManager Oracle

NetApp  
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# Deploying and running the scripts

You can deploy and run the `asmmain.sh` and `asmquerydisk.sh` scripts to support ASM databases without ASMLib.

These scripts do not follow the pre-scripts or post-scripts syntax and workflow is called when `initasm disks` is enabled. You can change anything related to your configuration settings in the scripts. It is recommended to verify if everything in the scripts are working as expected by performing a quick dry run.



These scripts do not harm your system on failures nor will they impact your system. These scripts are executed to update the ASM-related disks to have proper permissions and ownership, so that the disks will always be under ASM instance control.

1. Create the ASM disk groups with the partitioned disks.
2. Create the Oracle database on the DISK GROUPS.
3. Stop the SnapManager for Oracle server.



In an RAC environment, you need perform this step on all the RAC nodes.

4. Modify the `smo.conf` to include the following parameters:
  - a. `oracleasm.support.without.asmlib = true`
  - b. `oracleasm.support.without.asmlib.ownership = true`
  - c. `oracleasm.support.without.asmlib.username = user name of your ASM instance environment`
  - d. `oracleasm.support.without.asmlib.groupname = group name of your ASM instance environment`

These modifications set the permissions for the absolute path only, which means instead of partition device, permissions will be set only for `dm-*` device.
5. Modify the plugins scripts available in `/opt/NetApp/smo/plugins/examples/noasmlib` to include your configuration settings in the scripts.
6. Copy the scripts to `/opt/NetApp/smo/plugins/noasmlib` before starting the SnapManager for Oracle server on the host.
7. Navigate to the `/opt/NetApp/smo` directory and perform a dry run by running the following script: `sh plugins/noasmlib/asmmain.sh`

The `etc/initasm disks` file is created, which is the main file that is used.

You can confirm that the `etc/initasm disks` file contains all the devices related to configured the ASM database, such as:

```

chown -R grid:oinstall /dev/mapper/360a98000316b61396c3f394645776863p1
  chmod 777 /dev/mapper/360a98000316b61396c3f394645776863p1
  chown -R grid:oinstall
/dev/mapper/360a980003754322f7a2b433469714239p1
  chmod 777 /dev/mapper/360a980003754322f7a2b433469714239p1
  chown -R grid:oinstall
/dev/mapper/360a980003754322f7a2b433469714241p1
  chmod 777 /dev/mapper/360a980003754322f7a2b433469714241p1
  chown -R grid:oinstall
/dev/mapper/360a980003754322f7a2b433469714243p1
  chmod 777 /dev/mapper/360a980003754322f7a2b433469714243p1

```

8. Start the SnapManager for Oracle server.

9. Configure SnapDrive for UNIX by adding the following to `snapdrive.conf` file.`disconnect-luns-before-vbsr=on`

10. Restart the SnapDrive for UNIX server.



In an RAC environment, you need perform the Step 3 through Step 10 for all the RAC nodes.

The `/etc/initasmdisks` file created, must be executed from either one of the startup scripts or from a script that is newly defined in the `rc3.d`. The `/etc/initasmdisks` file should always be executed before the `oracleha` service starts.

### Example

```

# ls -ltr *ohasd*
      lrwxrwxrwx 1 root root 17 Aug  7 02:34 S96ohasd ->
/etc/init.d/ohasd
      lrwxrwxrwx 1 root root 17 Aug  7 02:34 K15ohasd ->
/etc/init.d/ohasd

```

In the following example, `sh -x/etc/initasmdisks` will not be available by default, and you need to append it as the first line in the function `start_stack()` in an `ohasd` script:

```

start_stack()
{
sh -x /etc/initasmdisks
# see init.ohasd.sbs for a full rationale case $PLATFORM in Linux
}

```

## Support for Oracle RAC ASM databases without ASMLib

If you are using Oracle RAC databases, the RAC nodes must be updated with the `initasm disks` file whenever an operation is performed in the master RAC node.

If no authentication is required to log in into the RAC nodes from the master node, the `asmmain.sh` performs a secure copy (SCP) of `initasm disks` to all the RAC nodes. The master node's `initasm disks` file will be called whenever restore happens, and the `asmmain.sh` script can be updated to invoke the same script in all the RAC nodes.

The `/etc/initasm disks` file created that must be executed from either one of the startup scripts or from a newly defined script in the `rc3.d`. The `/etc/initasm disks` file should always be executed before the `oracleha` service starts.

## Support for Oracle 10g ASM databases without ASMLib

If you are using Oracle 10g, the `asmcmd` command is not available for listing disks. You can use the sql query to obtain the disks list.

The `disk_list.sql` script is included in the existing scripts provided in the `examples` directory to support sql queries. When you execute the `asmquerydisk.sh` script, the `disk_list.sql` script must be executed manually. The example script lines are added with comments in the `asmquerydisk.sh` file. This file can either be placed in the `/home/grid` location or another location of your choice.

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