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Oracle Cluster Verification Utility
Linux x86 README File
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1. Availability of Cluster Verification Utility
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The Cluster Verification Utility (CVU) is a utility distributed with Oracle Clusterware to assist in the verification of the components required to install and run Oracle Clusterware and Oracle Real Application Clusters. CVU was first released with Oracle Database 10g Release 2. The CVU is available in following three forms:

- 1) Installed in Oracle Clusterware home
- 2) Available in Oracle Clusterware DVD as packaged version
- 3) Available in Oracle Technology Network (OTN)

CVU is backward compatible to all the previous Oracle Clusterware and Oracle RAC releases up to 10g Release 1. This version of CVU available supports 10g Release 1, 10g Release 2 and 11g for Oracle Clusterware and RAC products.

For each verification command that supports the optional `-r` option to specify the supported Oracle release, the default release is assumed to be 11g Release 1. To perform verifications for any previous release, `'-r 10gR1'` or `'-r 10gR2'` must be specified. If the verifications are to be performed for a specific release earlier than 11g Release 1 then use of `-r` option can be avoided by setting the intended release value (`'10gR1'` or `'10gR2'`) for `CV_ORACLE_RELEASE` property in CVU's configuration file (located under `<CVU installation root dir>/cv/admin` directory).

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2. CVU installation from OTN
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To install CVU from a zip file (`cvupack.zip`) downloaded from OTN:

1. Create a CVhome(say `/home/username/mycvhome`) directory. It should have at least 35M of free disk space.
2. Unzip `cvupack.zip` into `<CVhome>` directory.
3. (Optional) Set the environmental variable `CV_DESTLOC`. This should point to a writable area on `*all*` nodes. When invoked, the tool will attempt to copy the necessary bits as required to this location. Make sure the location exists on all nodes and it has write permission for CVU user. It is strongly recommended that you set this variable. If this variable has not been set, CVU will use `"/tmp"` as the default.
4. Run `cluvfy` from `<CVhome>/bin` directory. To verify, typically run `/home/username/mycvhome/bin/cluvfy`. This should show the usage.

3. References

For detailed information on using CVU, refer to:

Oracle Clusterware 11g Installation Guide
Oracle Real Application Clusters 11g Installation Guide
Oracle Clusterware 11g Administration and Deployment Guide

For queries on CVU, refer to:

CVU FAQ on OTN
(http://www.oracle.com/technology/products/database/clustering/cvu/cvu_download_homepage.html)

4. Enhancements

1. The execution of cluvfy doesn't need the specific JDK to be installed on the system. The CVU software bundle (cvupack.zip) carries with it the JDK that is compatible with cluvfy.
2. The execution of cluvfy doesn't need the environment variables CV_HOME and CV_JDKHOME to be set.
3. The shared storage discovery and verification of OCFS2 is supported.
4. The user equivalence is not required to be setup to the local node itself for performing a local node verification (identified as a cluvfy command without the use of -n option).
5. CVU issues a warning to the user if it is discovered that the user correctly belongs to the primary group but is currently logged into a group different from the primary group.
6. The node connectivity check provides the details of default gateway.

5. Known issues

1. Current release of cluvfy has the following limitations on Linux regarding shared storage accessibility check.
 - a. Currently NAS storage (r/w, no attribute caching), OCFS(version 1.0.14 or higher), OCFS2 and SCSI disks(if cvuqdisk package is installed) are supported. Note that, discovery of SCSI disks for RedHat Linux 2.1 is not supported.
 - b. For sharedness check on NAS, cluvfy requires the user to have write permission on the specified path. If the cluvfy user does not have write permission, cluvfy reports the path as not shared.
2. CVU does not recognize the disk bindings (e.g. /dev/raw/raw1) as valid storage paths or identifiers. Please use the underlying disk (e.g. /dev/sdm etc) for the storage path or storage identifier. On Windows, use "\\Device\\Harddisk<n>" notation such as "\\Device\\Harddisk1" for the storage path or identifier.
3. Bug 4393736: CLUVFY SHOULD ENSURE A PARTITION EXISTS.
DESCRIPTION: On Linux, a partition like /dev/sda9 may not exist, but the file /dev/sda9 exists anyways. cluvfy comp ssa -n all -s /dev/sda9 reports this partition as shared if the disk it belongs to (/dev/sda) is shared.