Vendor: Oracle

Exam Code: 1Z0-593

Exam Name: Oracle Real Application Clusters 11g
Essentials

Version: Demo

QUESTION 1
Once OUI recognizes a set of nodes in a cluster, which three choices does it offer when installing the Oracle Database 11g Release 2 software?

A. You can only install the Oracle Database with the RAC option on selected nodes.
B. OUI forces you to configure ASM for shared storage before proceeding.
C. You can install the Oracle Database as a single instance or with the RAC option on all the nodes.
D. You can install the Oracle Database as a single instance or with the RAC option on selected nodes.
E. You can install Oracle RAC One Node.

Correct Answer: BDE
Explanation

Explanation/Reference:
B, D: Complete the prerequisite tasks for converting to an Oracle RAC database:

Oracle Clusterware and Oracle Database software is installed on all target nodes.

Oracle Clusterware is started.

(D) The Oracle Database binary is enabled for Oracle RAC on all target nodes.

(B) Shared storage is configured and accessible from all nodes.

User equivalency is configured for the operating system user performing the conversion.

Enterprise Manager agents are configured and running on all nodes, and are configured with the cluster and host information.

The database being converted has been backed up successfully.

E: Installing Oracle RAC One Node is available starting with Oracle Database 11g Release 2 (11.2.0.2).

Note:
* By default, the standard Oracle Database 11g software installation process installs the Oracle RAC option when OUI recognizes that you are performing the installation on a cluster.

QUESTION 2
In the following line, which is the result of a "crsctl query css votedisk" command (which is missing the column headers in the output) what does the [DATA] indicate?

1. ONLINE 62a46a99b0434f8abf16f338c85203160 (/dev/xvdc1) [DATA]

A. It Indicates that the Voting Disk contains Oracle Cluster ware data
B. It Indicates that the Voting Disk is managed in the ASM diskgroup "DATA"
C. It Indicates that the Voting Disk "DATA" is online on disk /dev/xvdc1
D. It indicates that the ASM diskgroup "DATA" stores only the Voting Disk

Correct Answer: B
Explanation

Explanation/Reference:
See example below.

Note:
* Use the crsctl query css votedisk command to display the voting disks used by Cluster Synchronization Services, the status of the voting disks, and the location of the disks, whether they are stored on Oracle ASM or elsewhere.

* Example:
The crsctl query css votedisk command returns output similar to the following:

$ crsctl query css votedisk
STATE File Universal Id File Name Disk group
-- ----- ---------------- --------- ---------
1. ONLINE 296641fd201f4f3fbf3452156d3b5881 (/ocfs2/host09_vd3) []
2. ONLINE 8c4a552bdd9a4fd9bf93e444223146f2 (/netapp/ocrvf/newvd) []
3. ONLINE 8afeee6ae3ed4fe6bfbb556996ca4da5 (/ocfs2/host09_vd1) [] Located 3 voting disk(s).

Reference: Oracle Clusterware Administration and Deployment Guide , CRSCTL Utility Reference

QUESTION 3
Which three items can be stored on the ACFS (Oracle ASM Cluster File System)?

A. Oracle Database Homes (shared home approach)
B. Any type of application-related configuration or log files
C. The Oracle Grid Infrastructure Home
D. Oracle Backup Sets (RMAN backup sets)

Correct Answer: ABD
Explanation

Explanation/Reference:
Oracle ASM Cluster File System (ACFS) is a general purpose cluster file system implemented as part of ASM. It can be used to store almost anything, including the database executables. The only things that should not be stored in ACFS are the Grid Infrastructure home and any Oracle files that can be directly stored in Oracle ASM.

Reference: Oracle ASM Cluster File Systems (ACFS) in Oracle Database 11g Release 2

QUESTION 4
When installing the Oracle Database with OUI, when are configuration scripts executed?

A. Before installation begins
B. After prerequisites check finished
C. After the software has been installed
D. Automatically throughout the installation process

Correct Answer: C
Explanation

Explanation/Reference:
If prompted, execute the root.sh script as the root user to complete the installation, and click OK.

Note:
* Oracle Universal Installer (OUI)

Reference: Oracle Database Client Installation Guide

QUESTION 5
You want to stop a CRSCTL command that is active. How should you do this?

A. With the abort command
B. With CTRL-C
C. With CTRL-X
D. With CTRL-A
E. With CTRL-ALT-DEL

Correct Answer: B

Explanation

Explanation/Reference:
Stopping Active SRVCTL Commands
Although you may be able to cancel running SRVCTL commands by pressing the Control-C keys, you may corrupt your configuration data by doing this.
You are strongly advised not to attempt to terminate SRVCTL in this manner.

QUESTION 6
You want to install Grid Infrastructure for a cluster and the Oracle Database software (with the RAC option). Do you need SSH user equivalency?

A. Yes, to ensure security during the installation.
B. Yes, to set up administrative privileges for the DBA.
C. Yes, to allow the use of SSH and SCP without being prompted for a pass phrase.
D. No, you don't need SSH user equivalency.

Correct Answer: C
Explanation

Explanation/Reference:
During the installation of Oracle RAC, OUI needs to copy files to and execute programs on the other nodes in the cluster. In order to allow OUI to do that, you must configure SSH to allow user equivalence.
Establishing user equivalence with SSH provides a secure means of copying files and executing programs on other nodes in the cluster without requiring password prompts.

QUESTION 7
Which two statements about the SRVCTL utility are correct?

A. SRVCTL must be run from the RAC database ORACLE_HOME/bin directory when used to manage that dababase.
B. The SRVCTL command cannot be used to manage Oracle Grid Infrastructure.
C. Every command requires an object on which to operate.
D. A comma-delimited list should be enclosed in single quotes.

Correct Answer: AC
Explanation

Explanation/Reference:
A: Always use SRVCTL from the Oracle_home of the database that you are administering.
C: SRVCTL expects the following command syntax:

srvctl command object options

Incorrect:
Not B: Guidelines for Using SRVCTL in Oracle Real Application Clusters Not D: On the Windows platform, when specifying a comma-delimited list, you must enclose the list within double-quotes ("...,...").

QUESTION 8
How do you enable automatic backup of the OCR?

A. With the ocrconfig autobackup command
B. With the ocrconfig -backup command
C. With the ocrconfig -backuploc command
D. You don't have to enable this, Oracle Clusterware does it automatically

Correct Answer: D
Explanation

Explanation/Reference:

Automatic backup of OCR is done by CRSD process and every 3 hours.

QUESTION 9
What does the Oracle Validated Configuration RPM do?

A. Configures parameters and adds new packages, where necessary
B. Validates hardware configuration for RAC
C. Performs cluster integrity checks
D. Installs pre-validated Oracle Database and Grid Infrastructure software

Correct Answer: D
Explanation

Explanation/Reference:
The Oracle-Validated rpm automatize the install of the numerous components required to setup OCW and RAC on Linux, and execute most of the required OS configuration steps.

QUESTION 10
List the syntax supported by the Cluster Verification Utility (CVU). (select all that apply)

A. comp - To show valid components with description
B. stage - To list pre and post checks of stages
C. asm - To list valid disks available
D. dbstat - To list number of instances available online

Correct Answer: AB
Explanation

Explanation/Reference:
A: To verify the minimal system requirements on the nodes prior to installing Oracle Clusterware or Oracle RAC, use the sys component verification command as follows:

cluvfy comp sys [-n node_list] -p { crs | database } } [-r { 10gR1 | 10gR2 | 11gR1}] [-osdba osdba_group] [-orainv orainventory_group] [-verbose]

B: To verify whether your system meets all of the criteria for an Oracle Clusterware installation, use the -pre crsinst command for the Oracle Clusterware installation stage as follows:
cluvfy stage -pre crsinst -n node_list
[-c ocr_location] [-r { 10gR1 | 10gR2 | 11gR1}][-q voting_disk] [-osdba osdba_group]
[-orainv orainventory_group] [-verbose]

QUESTION 11
Which is not a node app?

A. ASM
B. ONS
C. GSD
D. VIP

Correct Answer: A
Explanation

Explanation/Reference:
Note:
* srvctl modify nodeapps Options
Option Description
-n node_name
Node name.
-o clusterware_home
Oracle Clusterware home for node applications such as VIP, ONS, and GSD.

-A new_vip_address
The node level VIP address (name|ip/netmask[/if1[|if2|...]]).

* srvctl config nodeapps Option

Option Description
-n node_name
Node name.
-a
Displays the VIP address configuration.
-g
Displays the GSD configuration.
-s
Displays the ONS configuration.
-l
Displays the listener configuration.

Reference: Oracle Real Application Clusters Administration and Deployment Guide, A Server Control Utility Reference

QUESTION 12
You are creating a RAC database with DBCA. Which of these is NOT a main area of initialization parameters you can configure as part of the process?

A. Memory
B. page size
C. Character set
D. Connection mode

Correct Answer: B
Explanation

Explanation/Reference:
The Initialization Parameters page appears. By default, the Initialization Parameters page shows only the basic parameters, and only enables you to change the parameter file definition if you are using raw storage. Each tab on the Initialization Parameters page provides different sets of information that you can add or modify as follows:

a. Memory Tab.
b. Sizing Tab: Use this page to select the database standard block size and process count.

c. Character Sets Tab: Use this page to set the database character set value.

d. Connection Mode Tab: You can use this tab to select either dedicated or shared database connections to your database.

e. Parameter File Tab: This tab will only appear if you are using raw storage. Use this tab to enter a raw device name for the location of the server parameter file.

Reference: Oracle Database Oracle Clusterware and Oracle Real Application Clusters Installation Guide 10g Release 2 (10.2) for Microsoft Window, Creating an Oracle Real Application Clusters Database with DBCA

QUESTION 13
Which tool can be used to specify network interfaces and to retrieve component configuration information?

A. CVU
B. SRVCTL
C. CRSCTL
D. OIFCFG

Correct Answer: D
Explanation

Explanation/Reference:
The Oracle Interface Configuration (OIFCFG) command-line interface helps you to define and administer network interfaces. You can issue OIFCFG commands in single-instance and Oracle Clusterware environments to:

Allocate and deallocate network interfaces to components
Direct components to use specific network interfaces
Retrieve component configuration information

Reference: Oracle Interface Configuration (OIFCFG) Command Reference

QUESTION 14
You want to set full debugging for the communications and resource management components for the CRS module on nodes host01 and host03. How can you accomplish this?

A. crsctl set log CRS "CRSCTL: 5, CRSCOMM: 5" nodelist host01, host03
B. crsctl lsmodules crs set log CRSCTL: 5, CRSCOMM: 5 nodelist host01, host03
C. srvctl set log m CRSCTL5, CRSCOMM 5 n host01, host03
D. ocrconfig set log CRS "CRSCTL, CRSCOMM: 5" nodelist host 01, host03

Correct Answer: A
Explanation

Explanation/Reference:
To set log levels for the CRSRTI and CRSCOMM components of the CRS module:
$ crsctl set log crs "CRSRTI=1,CRSCOMM=2"

Reference: Oracle Clusterware Administration and Deployment Guide, CRSCTL Utility Reference

QUESTION 15
What would be the total space required for Clusterware files when stopping them in the ASM Diskgroup configured with NORMAL redundancy? (Assume each OCR and voting Disk files uses 300 MB.)

A. 1.5 GB
B. 2.4 GB
C. 600 MB
D. 900 MB

Correct Answer: A
Explanation

Explanation/Reference:
When you use normal redundancy, Oracle Clusterware automatically maintains two copies of the OCR file and three copies of the voting disk file.

Reference: About Oracle Clusterware

QUESTION 16
Which OCRCONFIG command backs up the OCR to the -backuploc location?

A. overwrite
B. backuploc pathname
C. manualbackup
D. export

Correct Answer: C
Explanation

Explanation/Reference:
ocrconfig -manualbackup

Use the ocrconfig -manualbackup command to back up OCR on demand in the location you specify with the -backuploc option.

Incorrect:
Not C: This command just defines the backuploc location.
ocrconfig -backuploc

Use the ocrconfig -backuploc command to specify an OCR backup directory location.

Syntax

ocrconfig [-local] -backuploc file_name
Example

To specify an OCR backup location in a directory:

ocrconfig -backuploc $Grid_home/cdata/cluster3

Reference: Oracle Cluster Registry Utility Reference

QUESTION 17
Which two statements about the Single Client Access Name (SCAN) feature are correct?

A. In typical Grid Infrastructure Installation, the SCAN name defaults to the cluster name
B. A SCAN listener runs on every cluster node
C. SCAN is available with any version of Oracle 11g RAC
D. SCAN provides location Independence of Oracle RAC databases in the cluster

Correct Answer: AB
Explanation

Explanation/Reference:
SCAN components in a cluster:

SCAN Name
SCAN IP, Oracle recommends 3 IP addresses for SCAN for a cluster SCAN Listener

SCAN Name will represent the cluster in the network. SCAN Name needs to be registered in DNS and resolved using round-robin

algorithm. To test the round-robin algorithm, perform nslookup on the SCAN Name. The DNS server should return those 3 set of IP

Address in different order each time

Incorrect:
Not C: Only from R2:

Prior to Oracle 11g R1 RAC, client connection to RAC Cluster will use each node VIP (virtual IP) address. So each

time a node is added to the cluster, the client tnsnames.ora file needs to be updated with the new VIP addition.

Oracle 11g R2 RAC introduces SCAN (Single Client Access Name) to handle that problem. SCAN provides single

name from clients to access the database running in the cluster.

QUESTION 18
How many Oracle Clusterware interconnect networks are required and why?

A. Only one; minimum requirement
B. Two; redundancy is required
C. One per node in the cluster
D. One per database in the cluster

Correct Answer: C
Explanation

Explanation/Reference:
Oracle Clusterware requires a cluster interconnect configured for inter-node communication.

Note:
* The Oracle Clusterware interconnect is a non-traditional interconnect and should be considered, in shared global cache applications, such as Oracle RAC, to be an I/O subsystem for inter-node global cache buffer transfers with the latency and bandwidth requirements of high performance cluster computing.

* The interconnect network is a private network using a switch (or multiple switches) that only the nodes in the cluster can access.

And

Oracle Clusterware requires that you connect the nodes in the cluster to a private network by way of a private interconnect. The private interconnect is a separate network that you configure between cluster nodes. The interconnect used by Oracle RAC is the same interconnect that Oracle Clusterware uses. This interconnect should be a private interconnect, meaning it is not accessible to nodes that are not members of the cluster.

Reference: Oracle Real Application Clusters (RAC) and Oracle Clusterware Interconnect Virtual Local Area Networks (VLANs) Deployment Considerations

QUESTION 19
Which command line tool can be used for working with the Oracle cluster Registry?

A. SRVCTL
B. OCRCFG
C. OCRCONFIG
D. CRSCTL
E. OEM
F. OUI

Correct Answer: C
Explanation

Explanation/Reference:
Reference: Oracle Cluster Registry Utility Reference

QUESTION 20
How do you modify Kernel Parameters to meet the minimum requirements for Oracle RAC? (Select all that Apply)

A. Pre-Oracle RAC 11g Release 2 manually changing the kernel Parameters is required to meet Oracle RAC minimum requirements.
B. With Oracle Grid Infrastructure / Oracle RAC 11g Release 2 fixup-scripts (CVU generated) can be used to set the appropriate kernel Parameters.
C. The Oracle Enterprise Manager can be used to modify kernel Parameters before the Installation of the Oracle RAC stack.
D. You do not need to change any Kernel Parameters for an Oracle RAC installation.

Correct Answer: AB
Explanation

Explanation/Reference:
A: In Pre-Oracle RAC 11g Release 2 we did manually changed the kernel Parameters to meet Oracle RAC mini- mum requirements

B: With Oracle Clusterware 11g release 2, Oracle Universal Installer (OUI) detects when the minimum require- ments for an installation are not met, and creates shell scripts, called fixup scripts, to finish incomplete system con- figuration steps. If OUI detects an incomplete task, then it generates fixup scripts (runfixup.sh). You can run the fixup script after you click the Fix and Check Again Button.

You also can have CVU generate fixup scripts before installation.

Reference: Installation Fixup Scripts

QUESTION 21
Which action is not available when right-clicking a ADVM volume in the ASM Configuration Assistant?

A. Enable
B. Disable
C. Version
D. Resize
E. Delete

Correct Answer: C
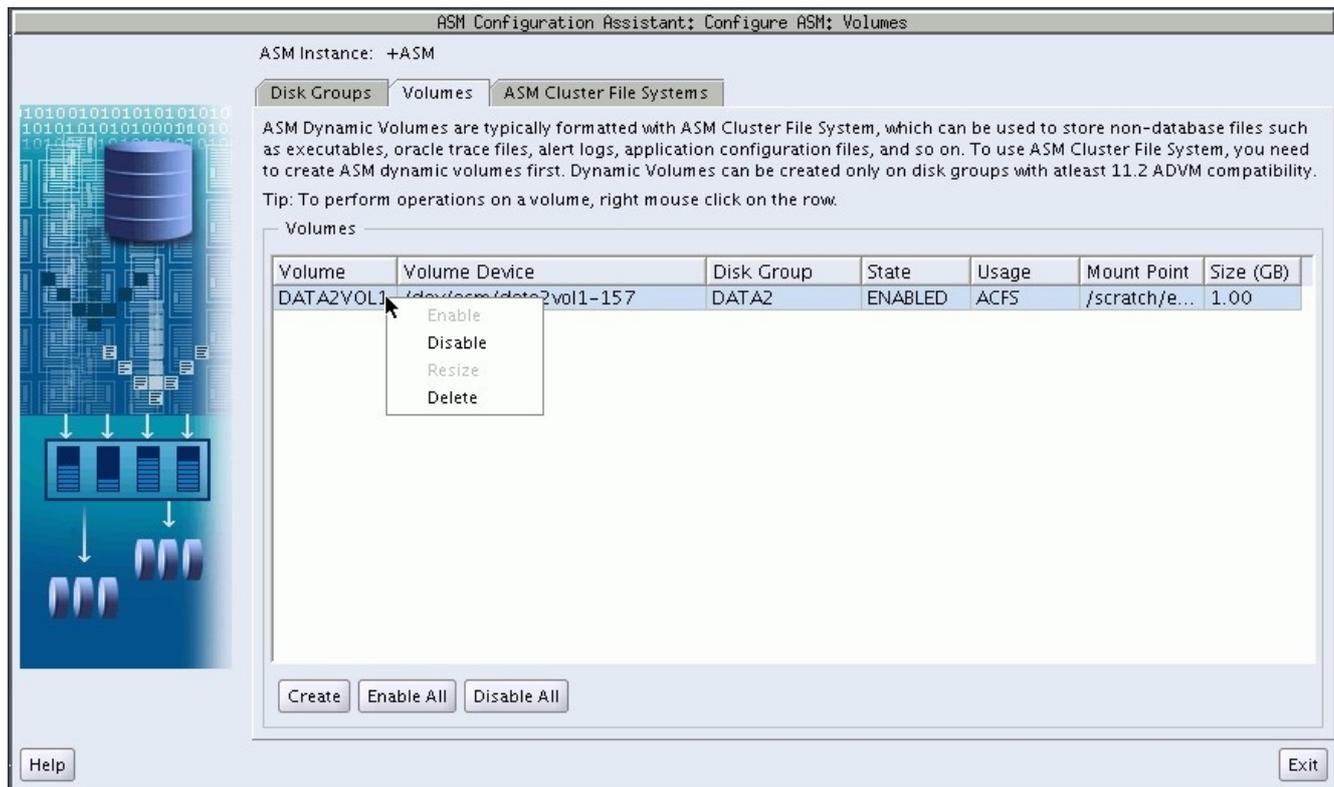**Explanation**

Explanation/Reference:
Right click a selected volume in the Oracle ASM Configuration Assistant screen to display the configuration options menu. The menu options include:

Enable a disabled volume

Disable an enabled volume

Resize a volume that has not been mounted on an Oracle ACFS file system

Delete a volume

Reference: Managing Oracle ADVM Volumes with Oracle ASM Configuration Assistant

QUESTION 22
Which two statements are true about starting and stopping all instances of a RAC database simultaneously with a single command?

A. The user must be SYSDBA.
B. The user must be a member of the OSDBA group.
C. The user can use SQL* Plus from local node.
D. The user can use SRVCTL.

Correct Answer: AD
Explanation

Explanation/Reference:
* Connecting as SYSOPER or SYSDBA enables you to perform privileged operations, such as instance startup and shutdown.

* When you use SRVCTL to perform configuration operations on your cluster, SRVCTL stores configuration data in the Oracle Cluster Registry (OCR). SRVCTL performs other operations, such as starting and stopping instances, by calling SQL*Plus on each node.

Reference: Overview of Administering Oracle Real Application Clusters with SQL*Plus

QUESTION 23
Identify three valid storage options for the OCR and voting disk for it new installation of Infrastructure 11g Release 2.

A. A certified Cluster File System (CFS)
B. A certified Network File System (NFS)
C. ASM Cluster File System (ACFS)
D. Automatic Storage Management (ASM)
E. Shared disk slices (block or raw devices)

Correct Answer: ABD
Explanation

Explanation/Reference:
Reference: General Storage Considerations for Oracle Grid Infrastructure

QUESTION 24
In the end of the database creation process using DBCA which two options can you choose from?

A. Create database
B. Generate database creation scripts
C. Initialize the database instance
D. Configure the database initialization parameters such as memory target, character set, etc.

Correct Answer: AC
Explanation

Explanation/Reference:
Database Creation Options

Check any of the following options for creating the database:

* Create Database--Check to create your database at this time.

* Save as a Database Template--Check to save the database definition as a template to use at another time.

* Generate Database Creation Scripts--Check to generate a SQL database creation script that you can run at a later time.

Reference: Creating a Database with DBCA

QUESTION 25
The Oracle Cluster Health Monitor can't _____.

A. Detect and analyze OS and duster resource for problems in Oracle Clusterware and RAC cluster
B. Track OS resource consumption at each node, process, and device level continuously
C. Be installed on Windows Server 20O3 SP1
D. Collect and analyze the cluster-wide data

Correct Answer: C
Explanation

Explanation/Reference:
Incorrect:
Oracle Cluster Health Monitor is designed to detect and analyze operating system (OS) and cluster resource related degradation and failures in order to bring more explanatory power to many issues that occur in clusters where Oracle Clusterware and Oracle RAC are running such as node eviction. It continuously tracks the OS resource consumption at each node, process, and device level. It collects and analyzes this cluster-wide data. In real time mode, when thresholds are hit, an alert is shown to the operator. For root cause analysis, historical data can be replayed to understand what was happening at the time of failure.

QUESTION 26
What value uniquely identifies an instance in a RAC database?

A. Location name
B. Node hostname
C. Listener and port
D. SID
E. VIP

Correct Answer: D
Explanation

Explanation/Reference:
The Oracle SID uniquely identifies the Oracle RAC database instance on the node where the instance is running.

QUESTION 27
You are preparing the storage for Oracle ASM, which two statements are correct?

A. You must create an ASMOWNER operating system user.
B. You must choose a RAID stripe size that is a power of 2 and greater than the ASM allocation unit.
C. Oracle ASMLIB is not a prerequisite to configure ASM.
D. You must change user and group ownership of devices to oracle:dba.

Correct Answer: CD
Explanation

Explanation/Reference:
C:
* ASMLib is an optional support library for the Automatic Storage Management feature of the Oracle Database.
* Automatic Storage Management (ASM) simplifies administration of Oracle related files by allowing the administrator to reference disk groups rather than individual disks and files, which ASM manages internally. On Linux, ASM is capable of referencing disks as raw devices or by using the ASMLib software.

D: Setting the ownership to oracle:dba is one example that corresponds to the default settings.

Incorrect:
Not B:
* It is recomended that the hardware RAID stripe size be configured as a power of 2 and less than or equal to the size of the ASM allocation unit.
* Choose a hardware RAID stripe size that is a power of 2 and less than or equal to the size of the Oracle ASM allocation unit.

QUESTION 28
Under which account(s) can the Oracle Clusterware processes run for the Linux platform?

A. only the root account
B. only the Grid Infrastructure owner account
C. only the database software owner account
D. some under the Grid Infrastructure owner account and some under the root account
E. some under the database software owner account and some under the root account

Correct Answer: D
Explanation

Explanation/Reference:

QUESTION 29

Which of these is not recommended as the basis for an ASM disk in a shared storage configuration?

A. Raw disk partition
B. NFS file
C. Raw logical volumes
D. iSCSI targets

Correct Answer: A
Explanation

Explanation/Reference:
* Block or raw devices are not supported by Oracle Universal Installer (OUI) or Database Configuration Assistant (DBCA). However, manually configured raw or block devices are supported by Oracle, but not recommended.

* Shared disk access requires some sort of networked storage
 iSCSI (not D)
 Fibre Channel/SCSI
 NFS (not B)

* A logical volume is supported in less complicated configurations where a logical volume is mapped to a LUN, or a logical volume uses disks or raw partitions.

QUESTION 30
Which two actions do you need to take in order to start up Oracle Grid Infrastructure automatically on boot?

A. If Oracle Grid Infrastructure was disabled on a node, use "crsctl enable crs" to enable the automatic startup.
B. Add the daemons to the system startup list.
C. Nothing. By default, Oracle Grid Infrastructure is set up to start automatically on server boot.
D. You must start clusterware daemons with individual commands in a batch file.

Correct Answer: AC
Explanation

Explanation/Reference:
We can use crsctl commands as follows to enable and disable the startup of the Oracle Clusterware daemons. Run the following command to enable startup for all of the Oracle Clusterware daemons:
crsctl enable crs
Run the following command to disable the startup of all of the Oracle Clusterware daemons:
crsctl disable crs

QUESTION 31
Which two answers are correct with respect to Oracle cluslerware configuration files and their purpose?

A. OCR records the cluster configuration.
B. OCR records the number of instances.
C. OCR records the number of databases.
D. A voting disk records the node membership information.
E. A voting disk records the cluster configuration.
F. A voting disk records the number of instances.

Correct Answer: AD
Explanation

Explanation/Reference:
Oracle Clusterware requires two configuration files: a voting disk to record node membership information and the OCR to record cluster configuration information.

Reference: Oracle Clusterware Administration and Deployment Guide

QUESTION 32
Which three types of files can be stored in Oracle ASM without extending it with ACFS?

A. Voting disks
B. OCR files
C. Oracle clusterware binaries
D. Database files
E. Trace files
F. Operating system files

Correct Answer: ABD
Explanation

Explanation/Reference:
* ASM supports most file types required by the database. However, you cannot store some administrative file types on ASM disk groups. These include trace files (not E) , audit files, alert logs, export files, tar files, operating system files (not F), and core files (not C).

* File Types Supported by Automatic Storage Management:
Control files
Datafiles
Redo log files
Archive log files
emporary files
Datafile backup pieces
Datafile incremental backup pieces
Archive log backup piece
Datafile copy
Persistent initialization parameter file (SPFILE)
Disaster recovery configurations
Flashback logs
Change tracking file
Data Pump dumpset
Automatically generated control file backup
Cross-platform transportable datafiles

QUESTION 33
Is not a valid option for configuring redundancy for ASM disk groups?

A. Internal
B. Normal
C. High
D. External

Correct Answer: A
Explanation

Explanation/Reference:
There are three types of disk groups based on the ASM redundancy level.
he redundancy levels are:

* External redundancy

ASM does not provide mirroring redundancy and relies on the storage system to provide RAID functionality. Any write error cause a forced dismount of the disk group. All disks must be located to successfully mount the disk group.

* Normal redundancy
ASM provides two-way mirroring. By default all files are mirrored so that there are two copies of every data

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