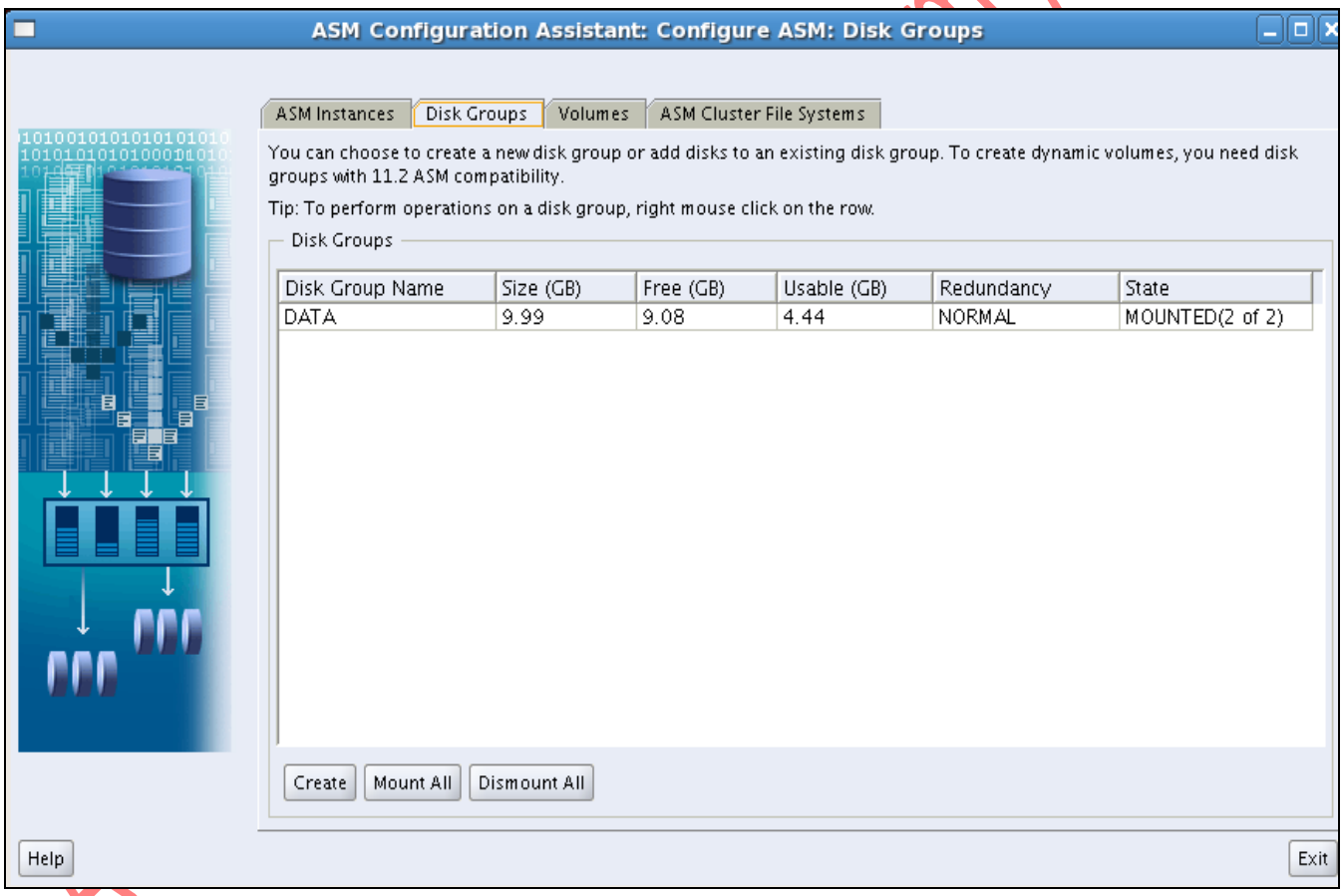
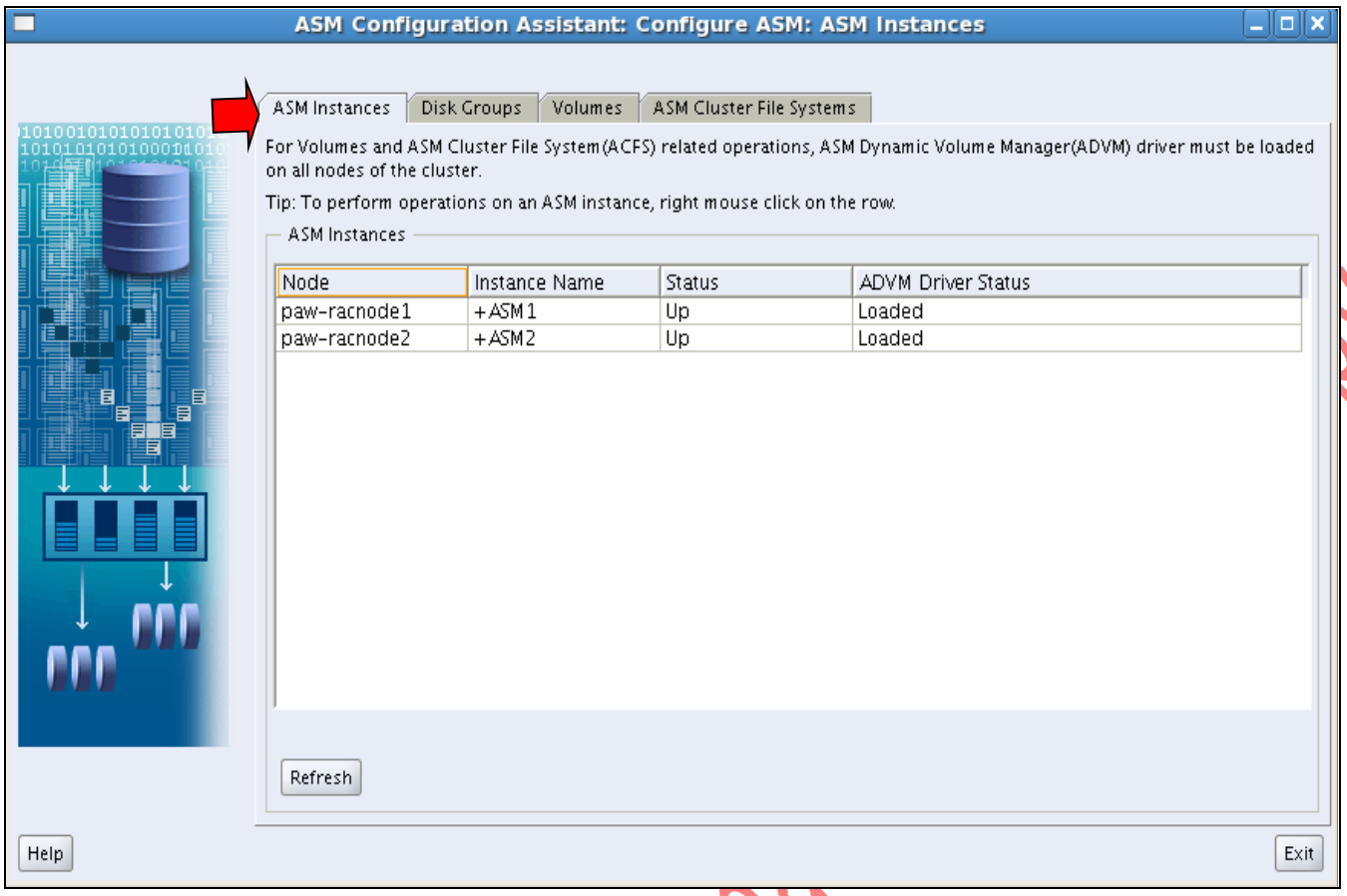
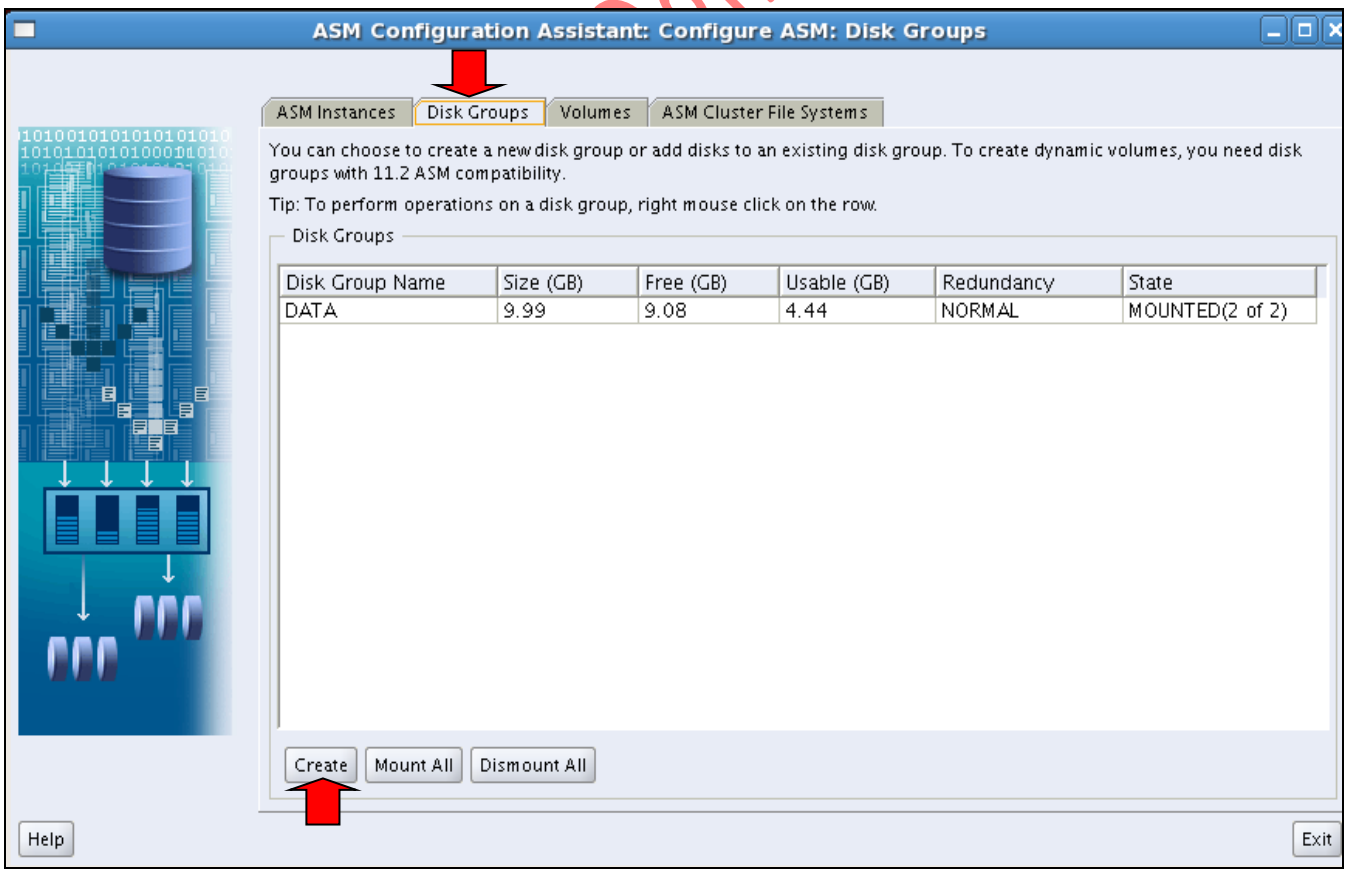
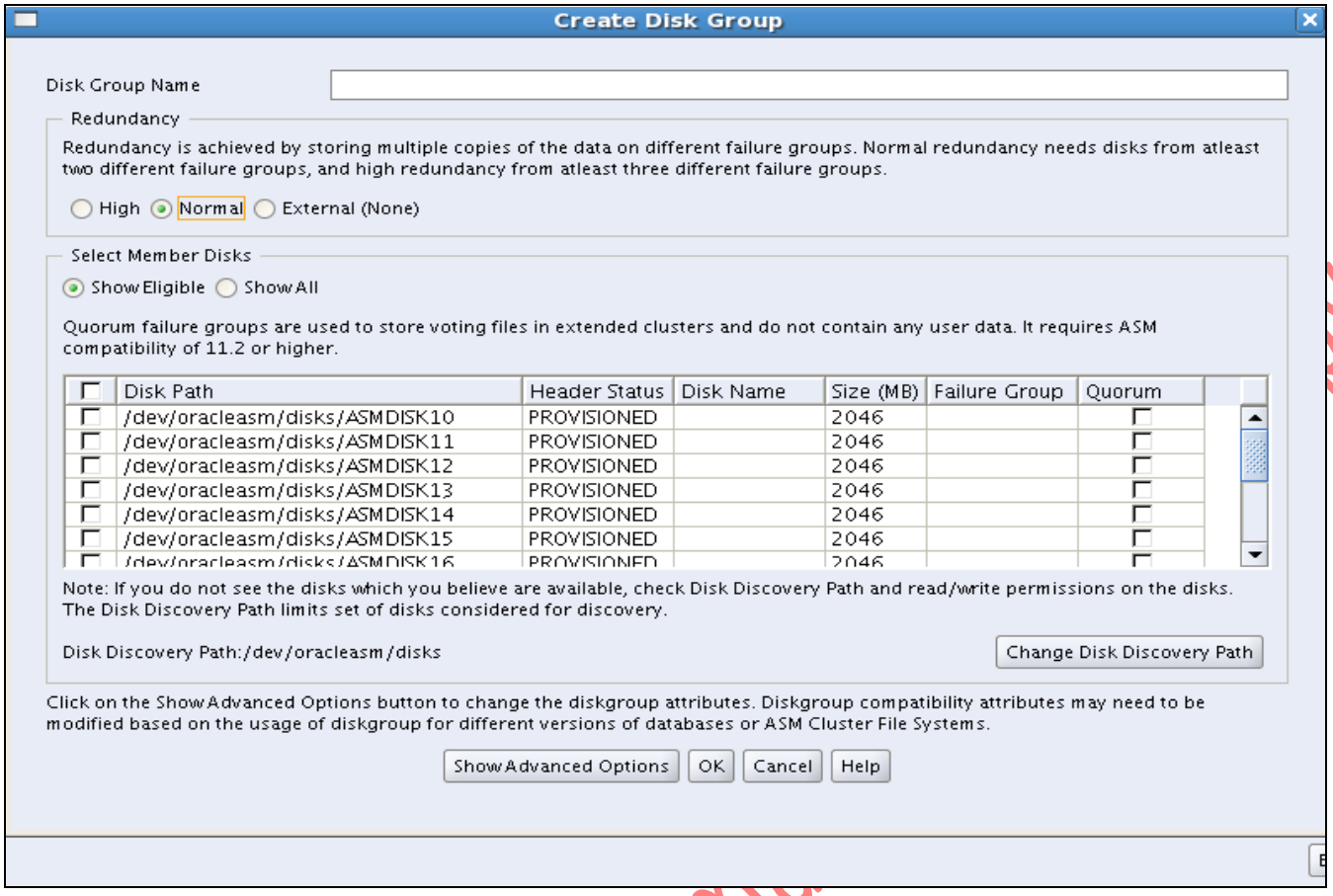
FRA Diskgroup Creation:

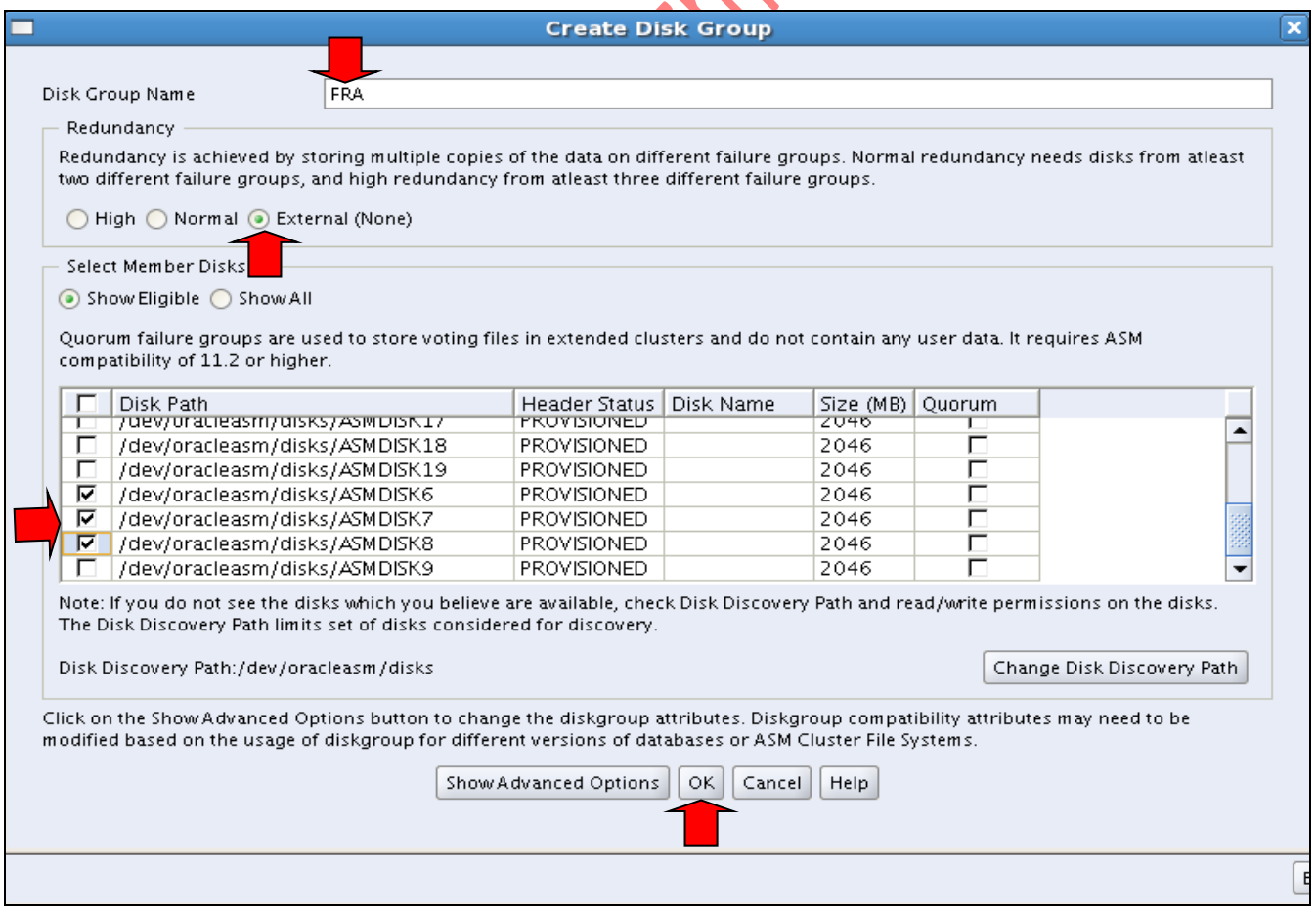
Before creating the Oracle database, first create a disk group (FRA) for Fast Recovery Area, using ASMCA.

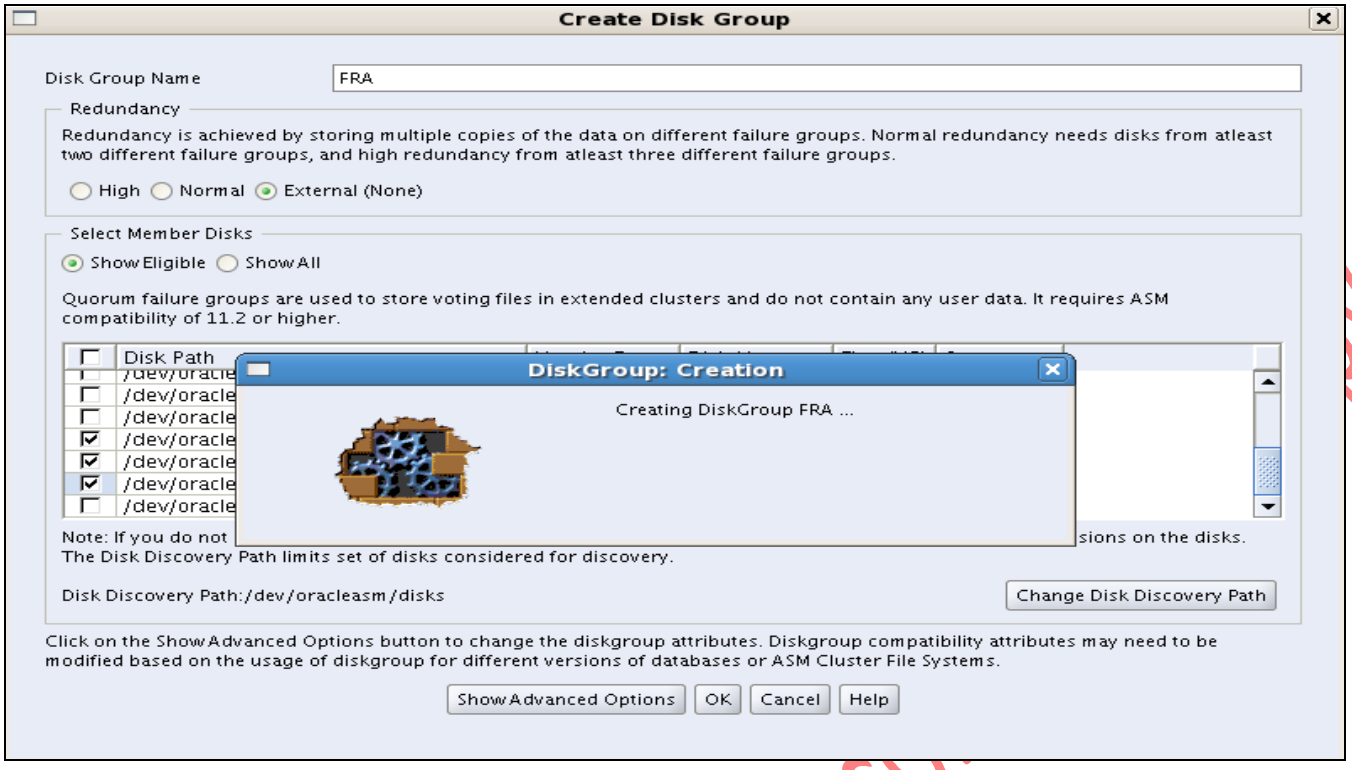


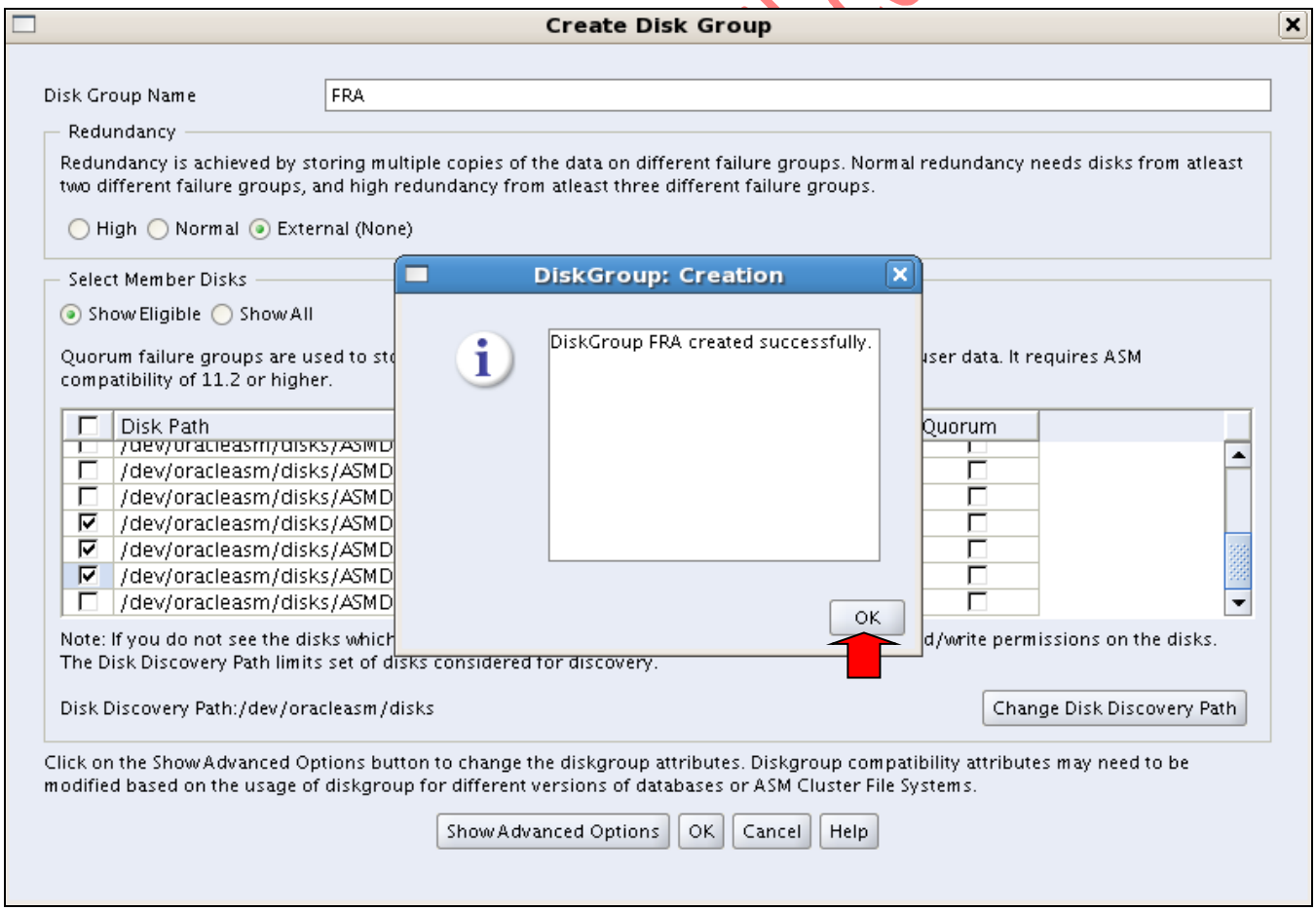

ASM Configuration Assistant: Configure ASM: ASM Instances
ASM Instances
Disk Groups
Volumes
ASM Cluster File Systems
For Volumes and ASM Cluster File System(ACFS) related operations, ASM Dynamic Volume Manager(ADVM) driver must be loaded on all nodes of the cluster.
Tip: To perform operations on an ASM instance, right mouse click on the row.
ASM Instances
Node
Instance Name
Status
ADVM Driver Status
paw-racnode1
+ASM1
Up
Loaded
paw-racnode2
+ASM2
Up
Loaded
Refresh
Help
Exit

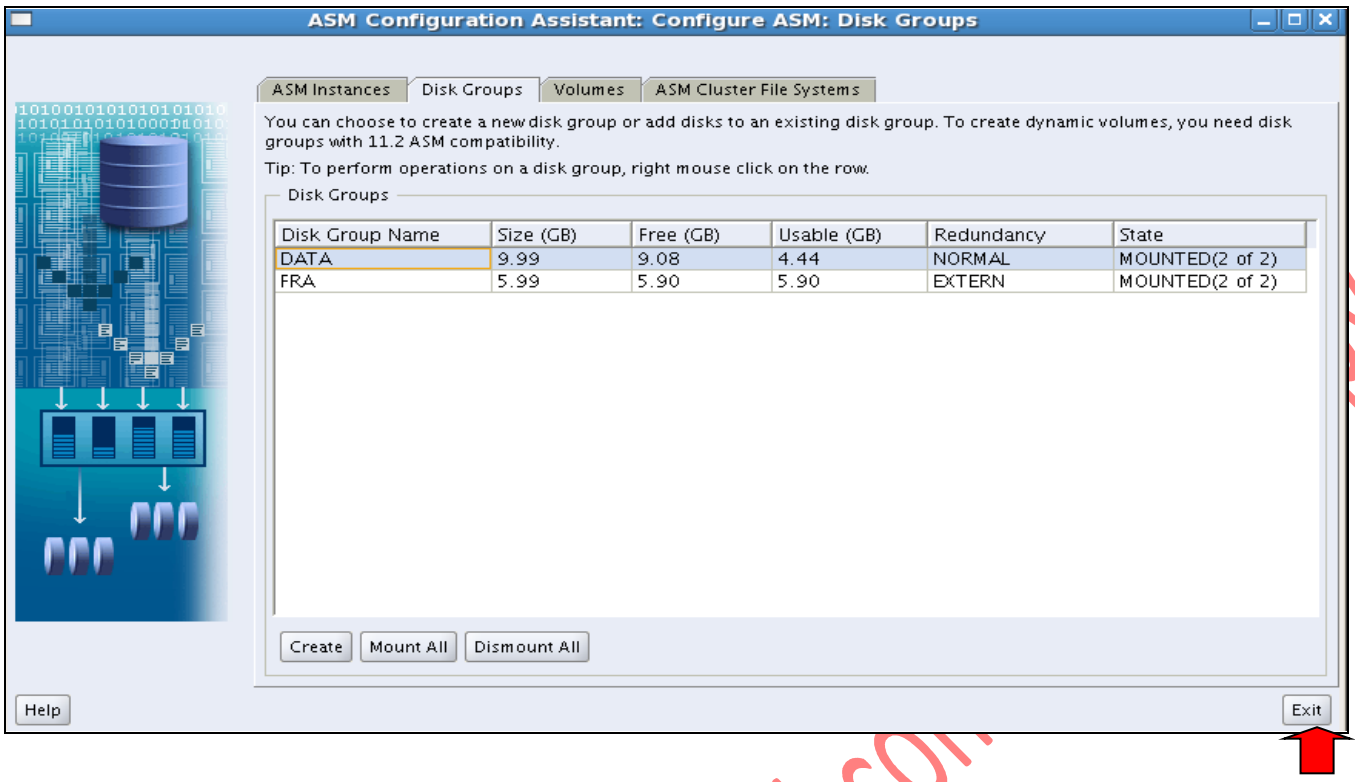

ASM Configuration Assistant: Configure ASM: Disk Groups
ASM Instances
Disk Groups
Volumes
ASM Cluster File Systems
You can choose to create a new disk group or add disks to an existing disk group. To create dynamic volumes, you need disk groups with 11.2 ASM compatibility.
Tip: To perform operations on a disk group, right mouse click on the row.
Disk Groups
Disk Group Name
Size (GB)
Free (GB)
Usable (GB)
Redundancy
State
DATA
9.99
9.08
4.44
NORMAL
MOUNTED(2 of 2)
Create
Mount All
Dismount All
Help
Exit

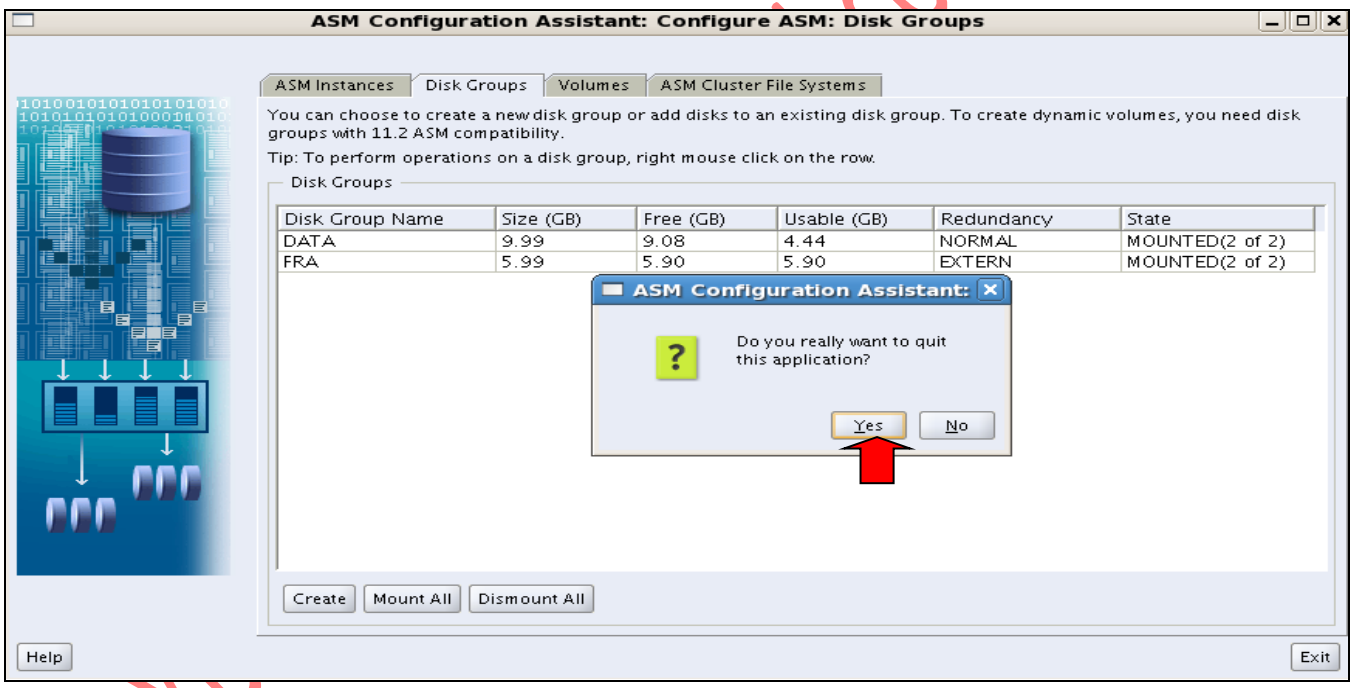

Create Disk Group
Disk Group Name
Redundancy
Redundancy is achieved by storing multiple copies of the data on different failure groups. Normal redundancy needs disks from atleast two different failure groups, and high redundancy from atleast three different failure groups.
High Normal External (None)
Select Member Disks
Show Eligible Show All
Quorum failure groups are used to store voting files in extended clusters and do not contain any user data. It requires ASM compatibility of 11.2 or higher.
Disk Path Header Status Disk Name Size (MB) Failure Group Quorum
/dev/oracleasm/disks/ASMDISK10 PROVISIONED 2046
/dev/oracleasm/disks/ASMDISK11 PROVISIONED 2046
/dev/oracleasm/disks/ASMDISK12 PROVISIONED 2046
/dev/oracleasm/disks/ASMDISK13 PROVISIONED 2046
/dev/oracleasm/disks/ASMDISK14 PROVISIONED 2046
/dev/oracleasm/disks/ASMDISK15 PROVISIONED 2046
Note: If you do not see the disks which you believe are available, check Disk Discovery Path and read/write permissions on the disks. The Disk Discovery Path limits set of disks considered for discovery.
Disk Discovery Path:/dev/oracleasm/disks
Change Disk Discovery Path
Click on the Show Advanced Options button to change the diskgroup attributes. Diskgroup compatibility attributes may need to be modified based on the usage of diskgroup for different versions of databases or ASM Cluster File Systems.
Show Advanced Options OK Cancel Help


Create Disk Group
Disk Group Name
FRA
Redundancy
Redundancy is achieved by storing multiple copies of the data on different failure groups. Normal redundancy needs disks from atleast two different failure groups, and high redundancy from atleast three different failure groups.
High Normal External (None)
Select Member Disks
Show Eligible Show All
Quorum failure groups are used to store voting files in extended clusters and do not contain any user data. It requires ASM compatibility of 11.2 or higher.
Disk Path Header Status Disk Name Size (MB) Quorum
/dev/oracleasm/disks/ASMDISK18 PROVISIONED 2046
/dev/oracleasm/disks/ASMDISK19 PROVISIONED 2046
/dev/oracleasm/disks/ASMDISK6 PROVISIONED 2046
/dev/oracleasm/disks/ASMDISK7 PROVISIONED 2046
/dev/oracleasm/disks/ASMDISK8 PROVISIONED 2046
/dev/oracleasm/disks/ASMDISK9 PROVISIONED 2046
Note: If you do not see the disks which you believe are available, check Disk Discovery Path and read/write permissions on the disks. The Disk Discovery Path limits set of disks considered for discovery.
Disk Discovery Path:/dev/oracleasm/disks
Change Disk Discovery Path
Click on the Show Advanced Options button to change the diskgroup attributes. Diskgroup compatibility attributes may need to be modified based on the usage of diskgroup for different versions of databases or ASM Cluster File Systems.
Show Advanced Options OK Cancel Help

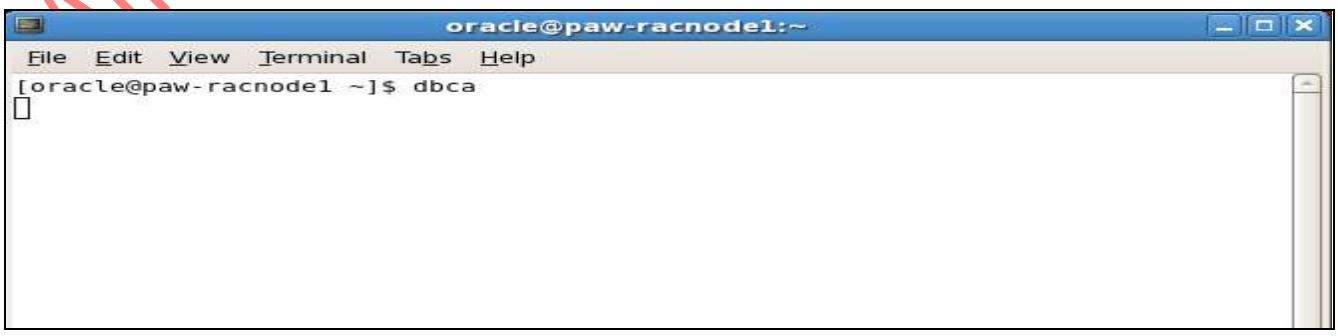

Create Disk Group
Disk Group Name
FRA
Redundancy
Redundancy is achieved by storing multiple copies of the data on different failure groups. Normal redundancy needs disks from atleast two different failure groups, and high redundancy from atleast three different failure groups.
High
Normal
External (None)
Select Member Disks
Show Eligible
Show All
Quorum failure groups are used to store voting files in extended clusters and do not contain any user data. It requires ASM compatibility of 11.2 or higher.
Disk Path
/dev/oracle
DiskGroup: Creation
Creating DiskGroup FRA ...
Note: If you do not
sions on the disks.
The Disk Discovery Path limits set of disks considered for discovery.
Disk Discovery Path:/dev/oracleasm/disks
Change Disk Discovery Path
Click on the Show Advanced Options button to change the diskgroup attributes. Diskgroup compatibility attributes may need to be modified based on the usage of diskgroup for different versions of databases or ASM Cluster File Systems.
Show Advanced Options
OK
Cancel
Help


Create Disk Group
Disk Group Name
FRA
Redundancy
Redundancy is achieved by storing multiple copies of the data on different failure groups. Normal redundancy needs disks from atleast two different failure groups, and high redundancy from atleast three different failure groups.
High
Normal
External (None)
Select Member Disks
Show Eligible
Show All
DiskGroup: Creation
DiskGroup FRA created successfully.
OK
Quorum failure groups are used to st
user data. It requires ASM compatibility of 11.2 or higher.
Disk Path
Quorum
/dev/oracleasm/disks/ASMD
Note: If you do not see the disks which
d/write permissions on the disks.
The Disk Discovery Path limits set of disks considered for discovery.
Disk Discovery Path:/dev/oracleasm/disks
Change Disk Discovery Path
Click on the Show Advanced Options button to change the diskgroup attributes. Diskgroup compatibility attributes may need to be modified based on the usage of diskgroup for different versions of databases or ASM Cluster File Systems.
Show Advanced Options
OK
Cancel
Help

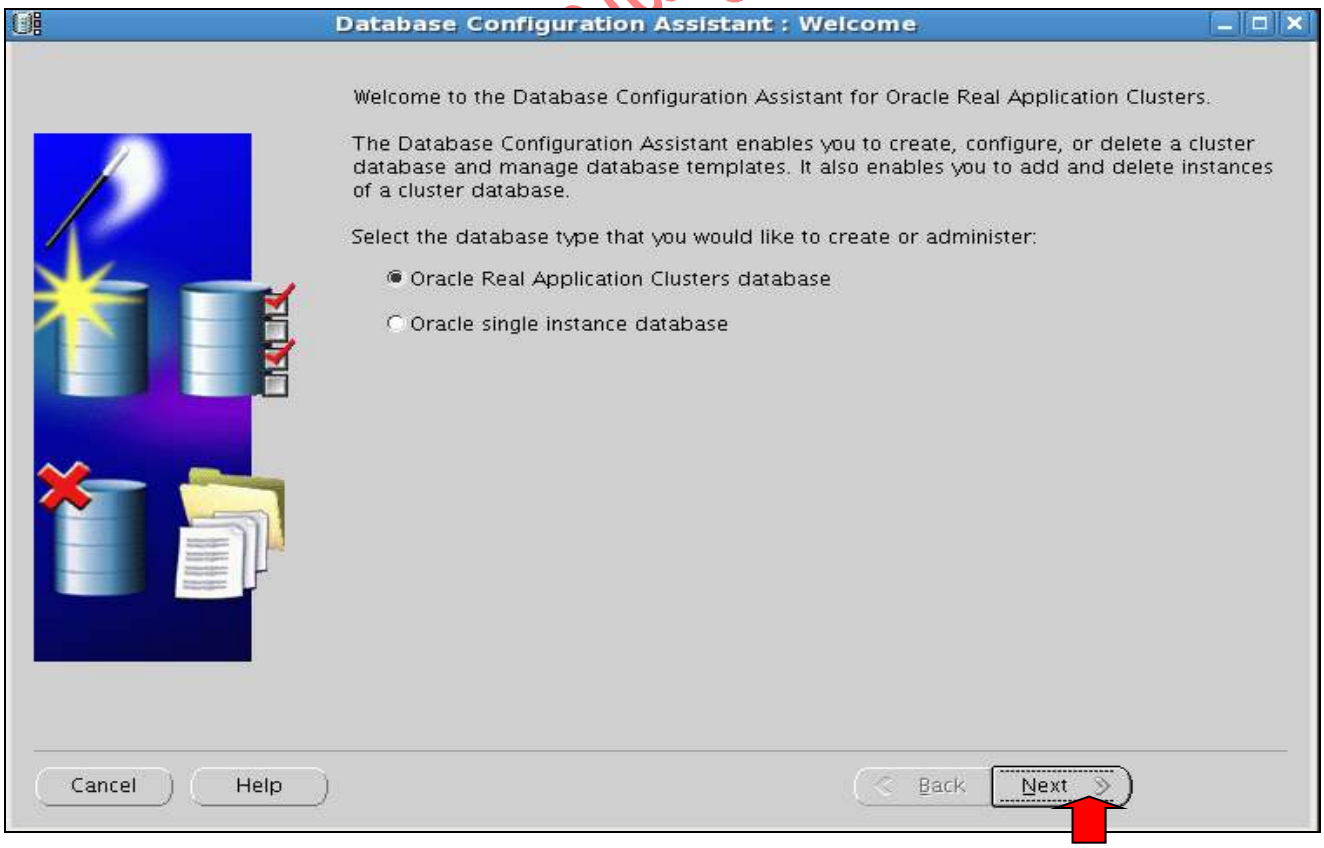


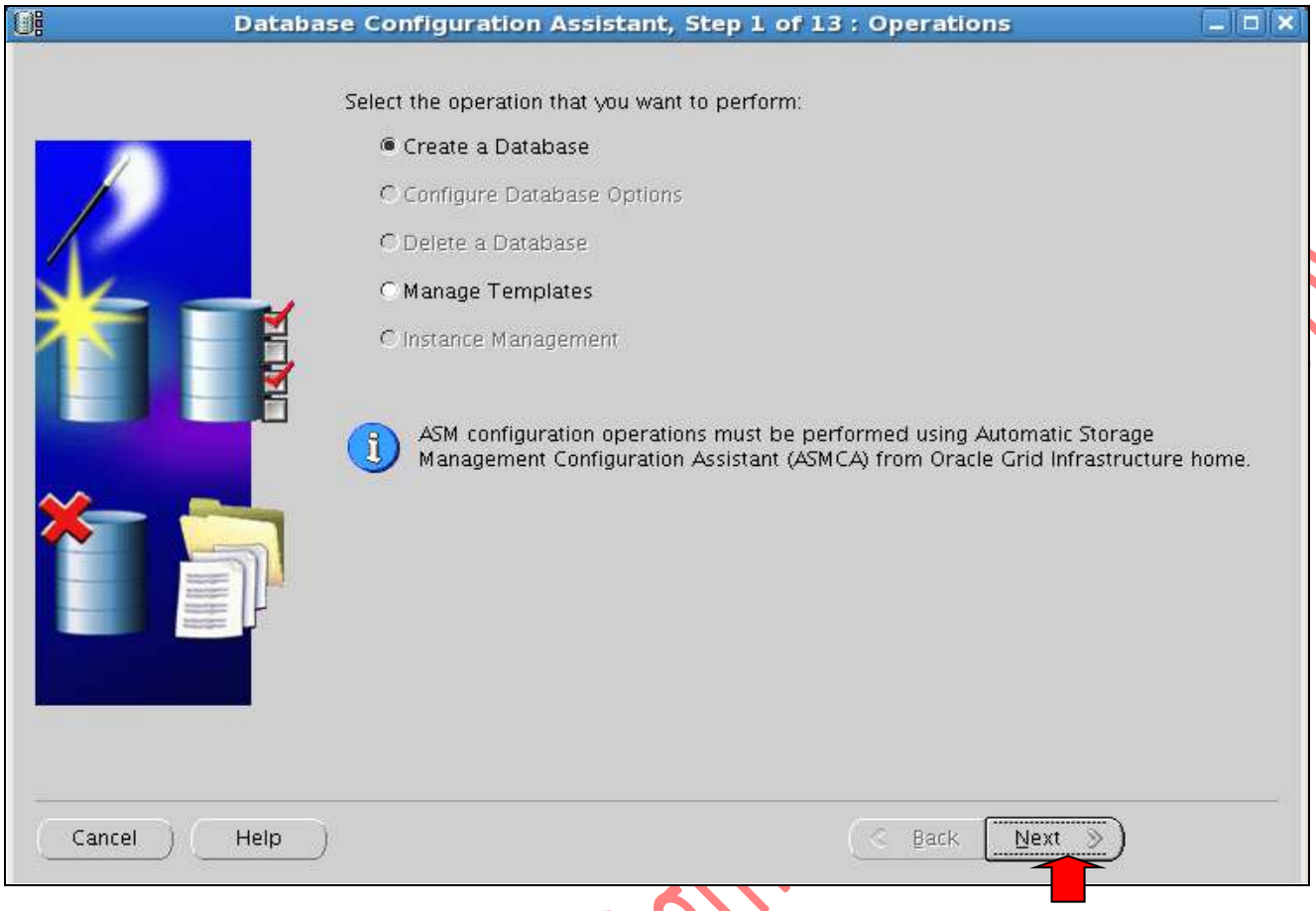


ORACLE 11gR2 Database Creation:

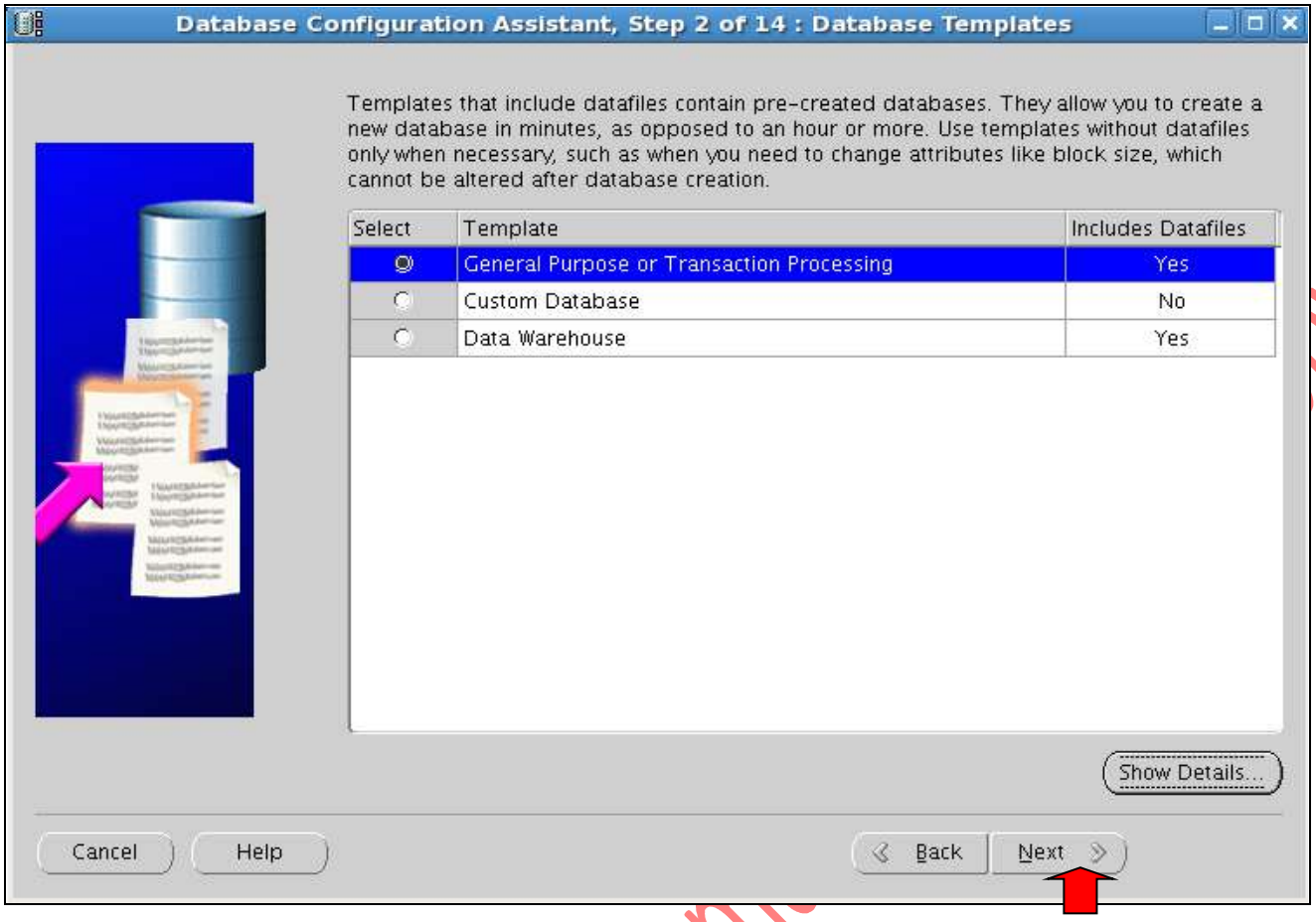


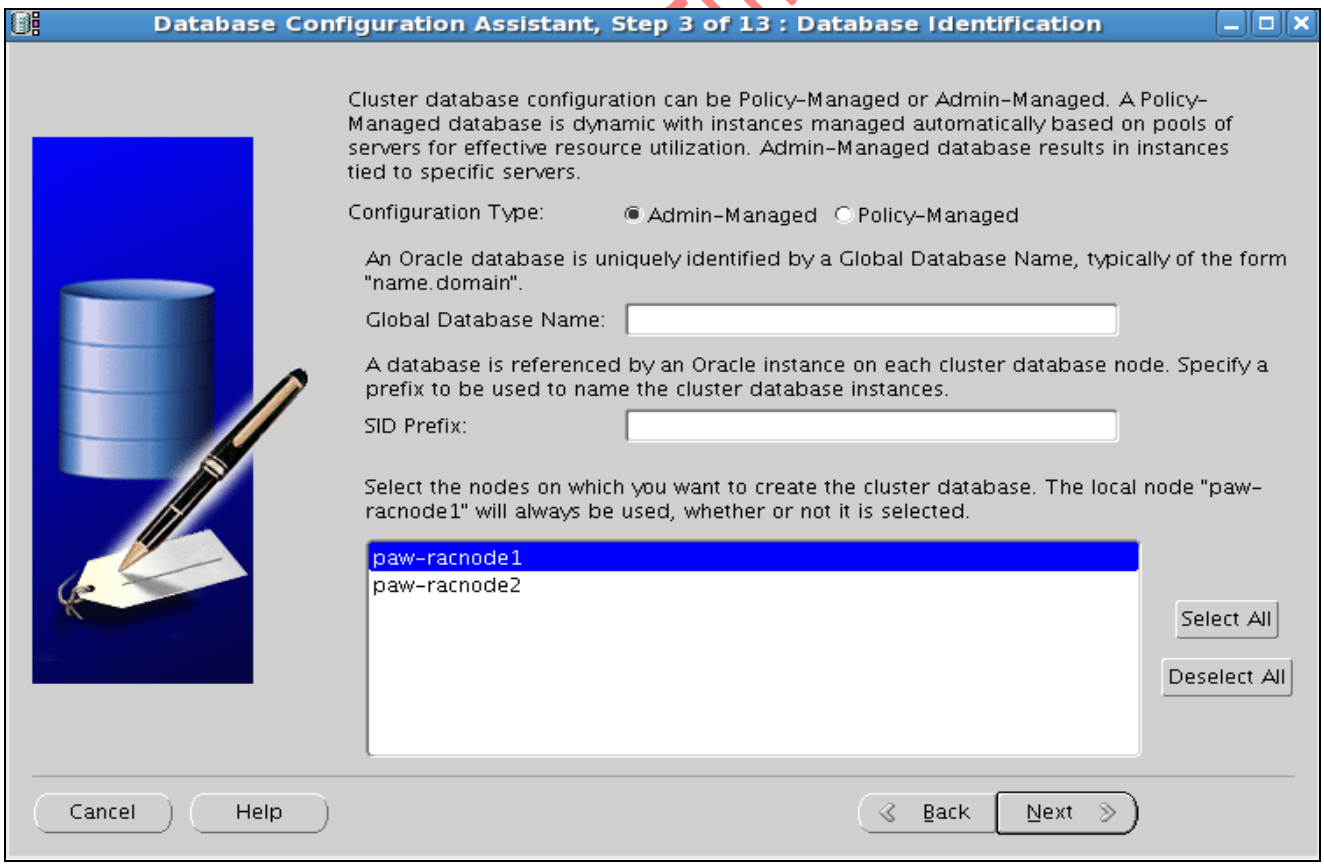
oracle@paw-racnode1:~
File Edit View Terminal Tabs Help
[oracle@paw-racnode1 ~]$ dbca
Database
Configuration Assistant
ORACLE
Initializing...
Copyright (c) 1998, 2009, Oracle. All rights reserved.

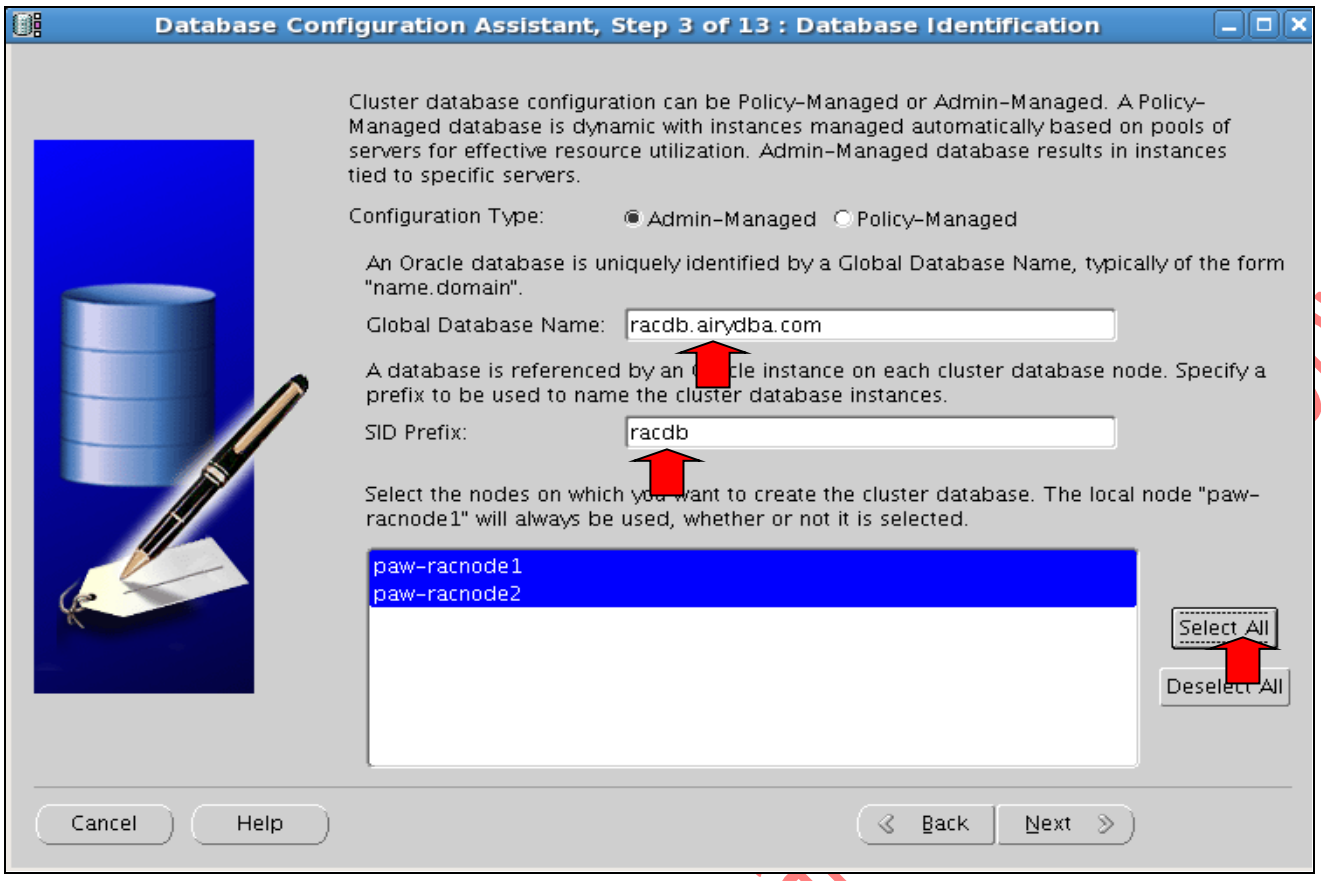

Database Configuration Assistant : Welcome
Welcome to the Database Configuration Assistant for Oracle Real Application Clusters.
The Database Configuration Assistant enables you to create, configure, or delete a cluster database and manage database templates. It also enables you to add and delete instances of a cluster database.
Select the database type that you would like to create or administer:
Oracle Real Application Clusters database
Oracle single instance database
Cancel
Help
Back
Next

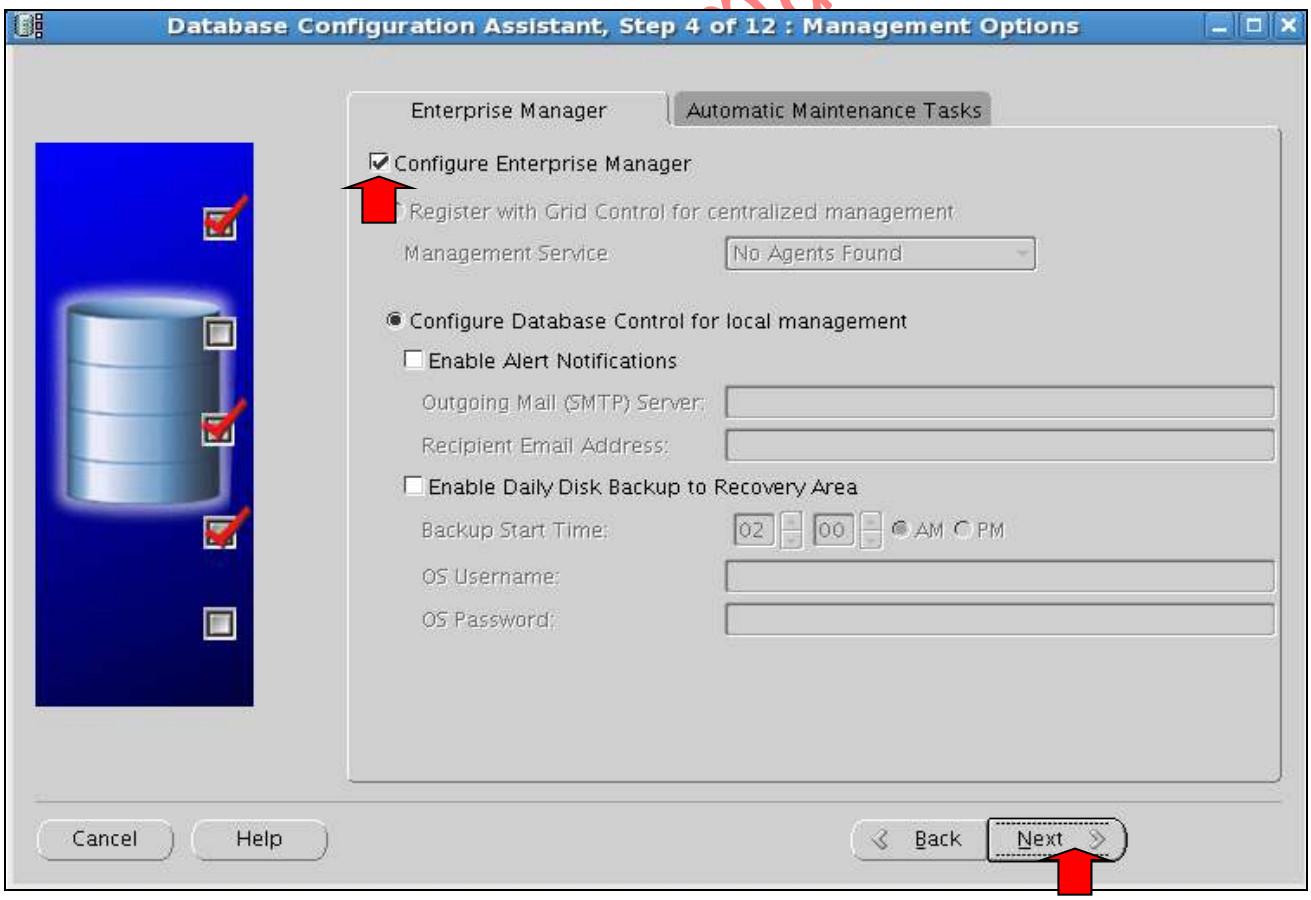


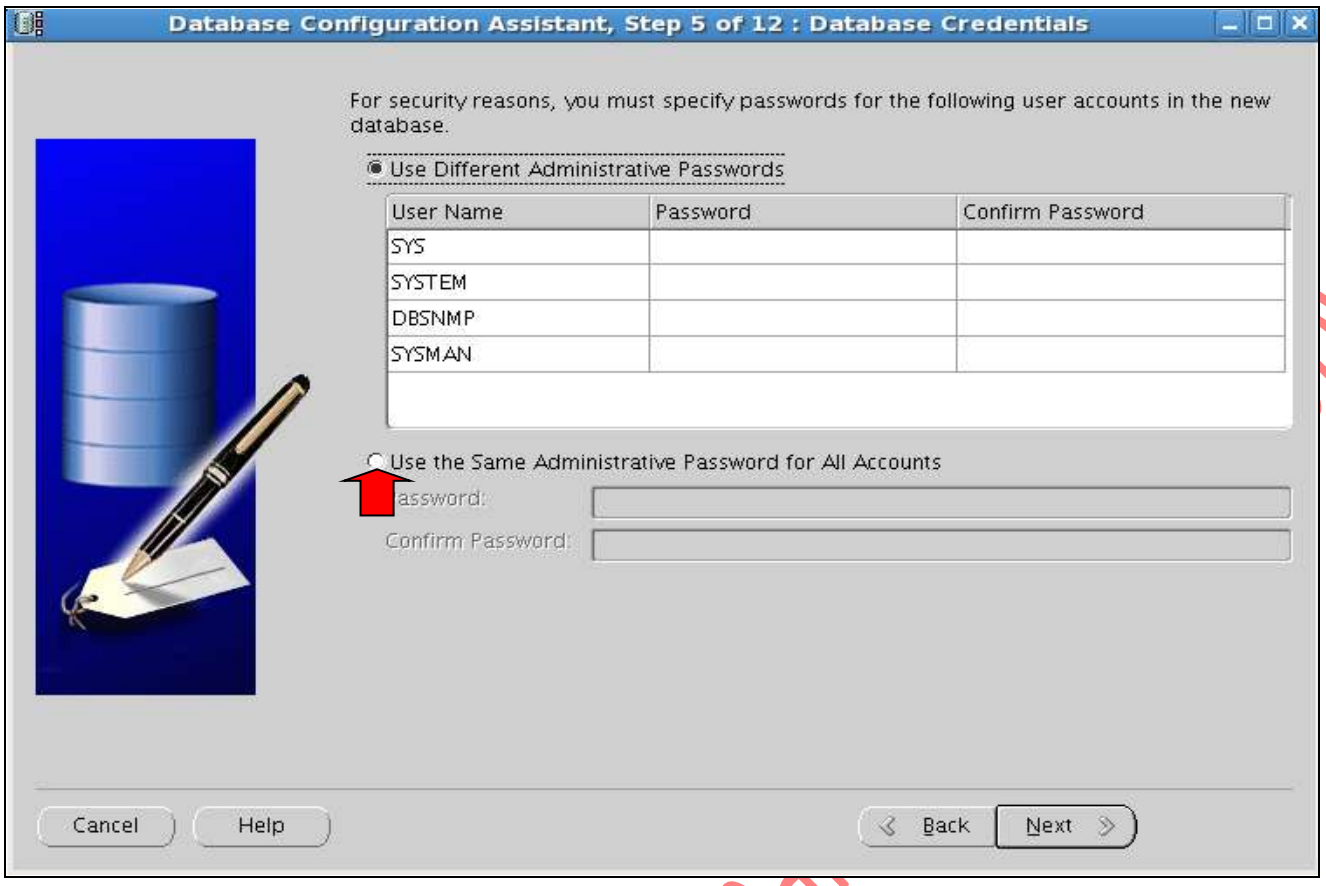
AIRYDBA (airydba@gmail.com)

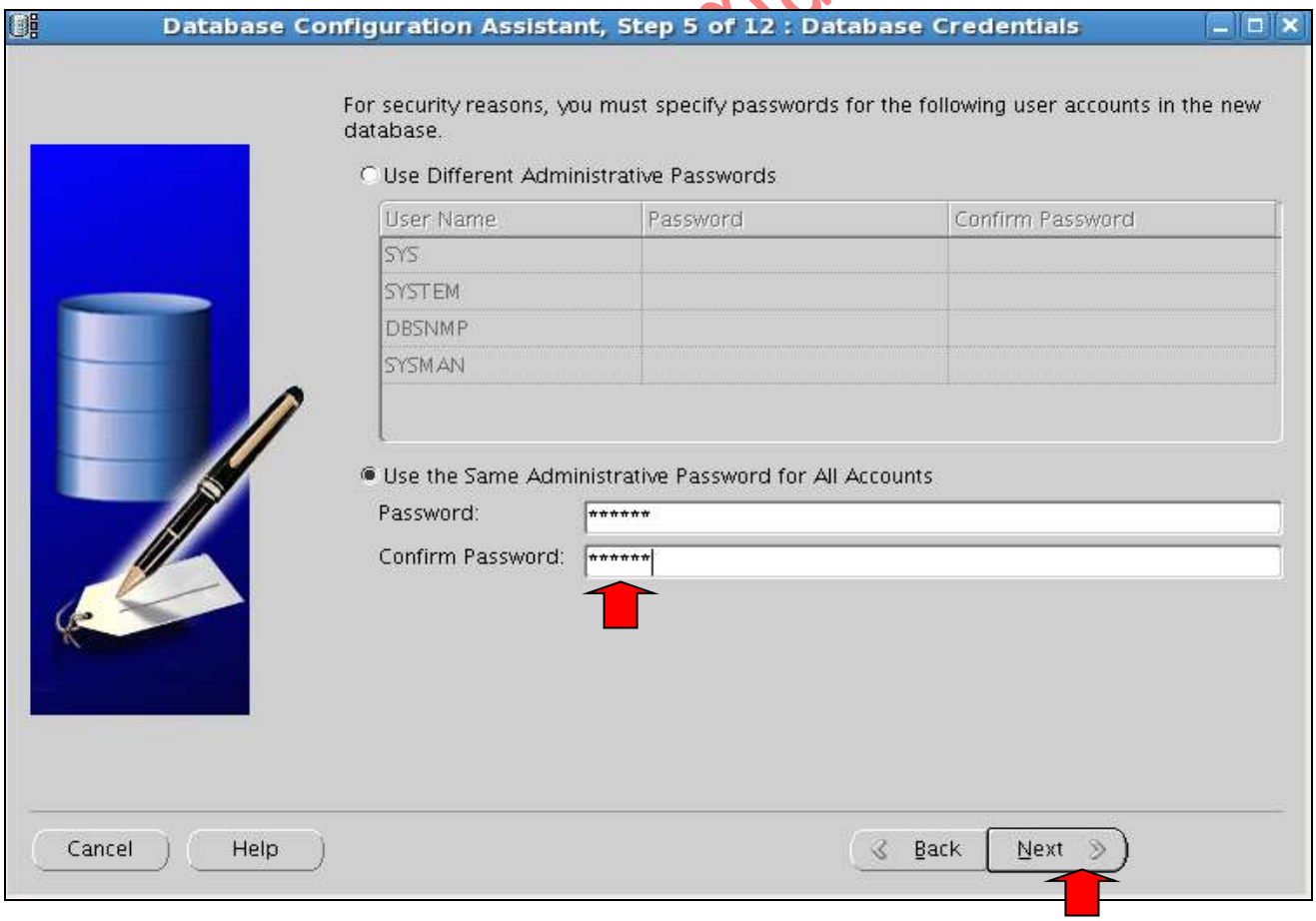

Database Configuration Assistant, Step 2 of 14 : Database Templates
Templates that include datafiles contain pre-created databases. They allow you to create a new database in minutes, as opposed to an hour or more. Use templates without datafiles only when necessary, such as when you need to change attributes like block size, which cannot be altered after database creation.
Select
Template
Includes Datafiles
General Purpose or Transaction Processing
Yes
Custom Database
No
Data Warehouse
Yes
Show Details...
Cancel
Help
Back
Next

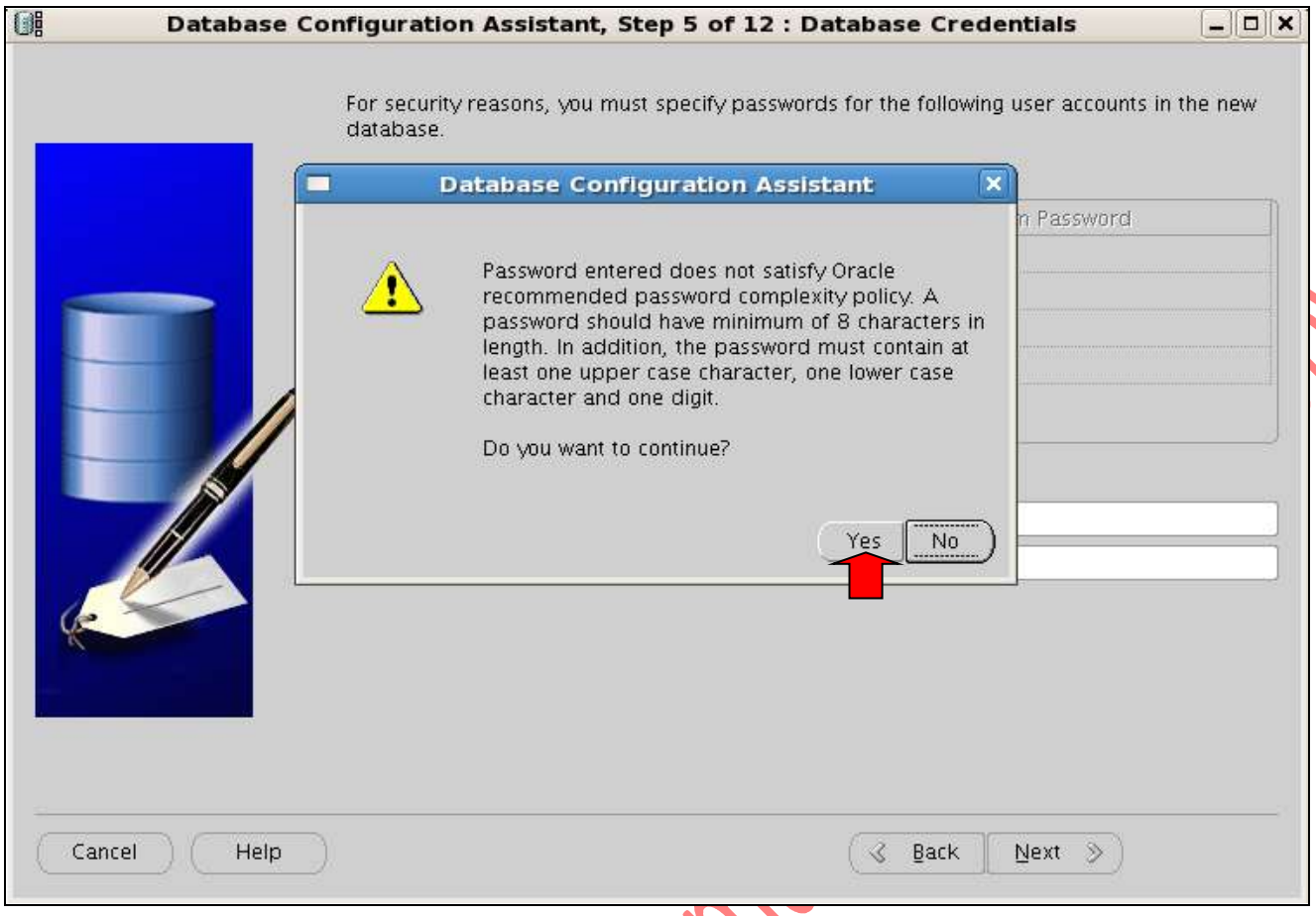

Database Configuration Assistant, Step 3 of 13 : Database Identification
Cluster database configuration can be Policy-Managed or Admin-Managed. A Policy-Managed database is dynamic with instances managed automatically based on pools of servers for effective resource utilization. Admin-Managed database results in instances tied to specific servers.
Configuration Type:
Admin-Managed
Policy-Managed
An Oracle database is uniquely identified by a Global Database Name, typically of the form "name.domain".
Global Database Name:
A database is referenced by an Oracle instance on each cluster database node. Specify a prefix to be used to name the cluster database instances.
SID Prefix:
Select the nodes on which you want to create the cluster database. The local node "paw-racnode1" will always be used, whether or not it is selected.
paw-racnode1
paw-racnode2
Select All
Deselect All
Cancel
Help
Back
Next

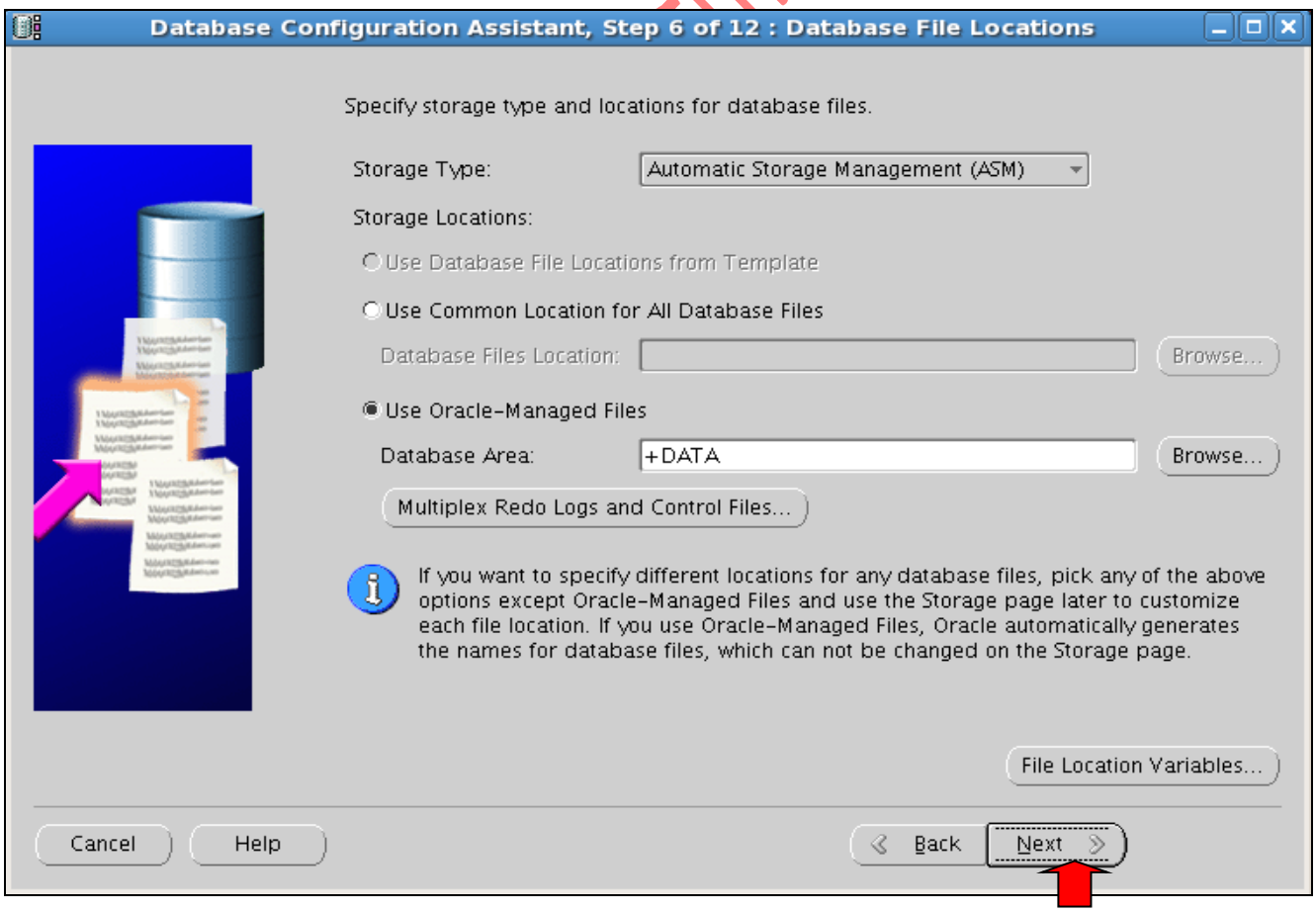

Database Configuration Assistant, Step 3 of 13 : Database Identification
Cluster database configuration can be Policy-Managed or Admin-Managed. A Policy-Managed database is dynamic with instances managed automatically based on pools of servers for effective resource utilization. Admin-Managed database results in instances tied to specific servers.
Configuration Type:
Admin-Managed
Policy-Managed
An Oracle database is uniquely identified by a Global Database Name, typically of the form "name.domain".
Global Database Name:
racdb.airydba.com
A database is referenced by an
cle instance on each cluster database node. Specify a prefix to be used to name the cluster database instances.
SID Prefix:
racdb
Select the nodes on which
want to create the cluster database. The local node "paw-racnode1" will always be used, whether or not it is selected.
paw-racnode1
paw-racnode2
Select All
Deselect All
Cancel
Help
Back
Next

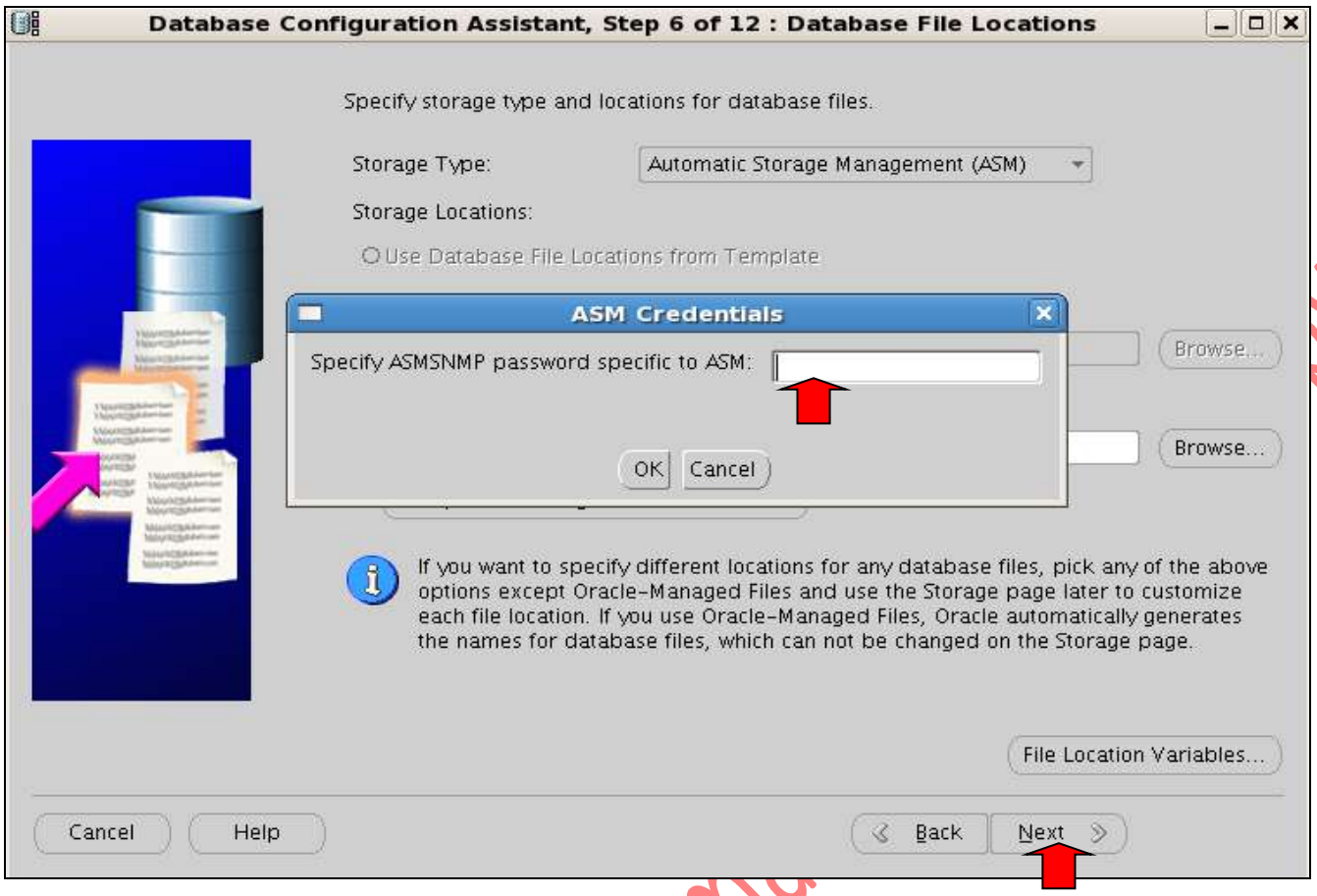

Database Configuration Assistant, Step 4 of 12 : Management Options
Enterprise Manager
Automatic Maintenance Tasks
Configure Enterprise Manager
Register with Grid Control for centralized management
Management Service:
No Agents Found
Configure Database Control for local management
Enable Alert Notifications
Outgoing Mail (SMTP) Server:
Recipient Email Address:
Enable Daily Disk Backup to Recovery Area
Backup Start Time:
02
00
AM
PM
OS Username:
OS Password:
Cancel
Help
Back
Next

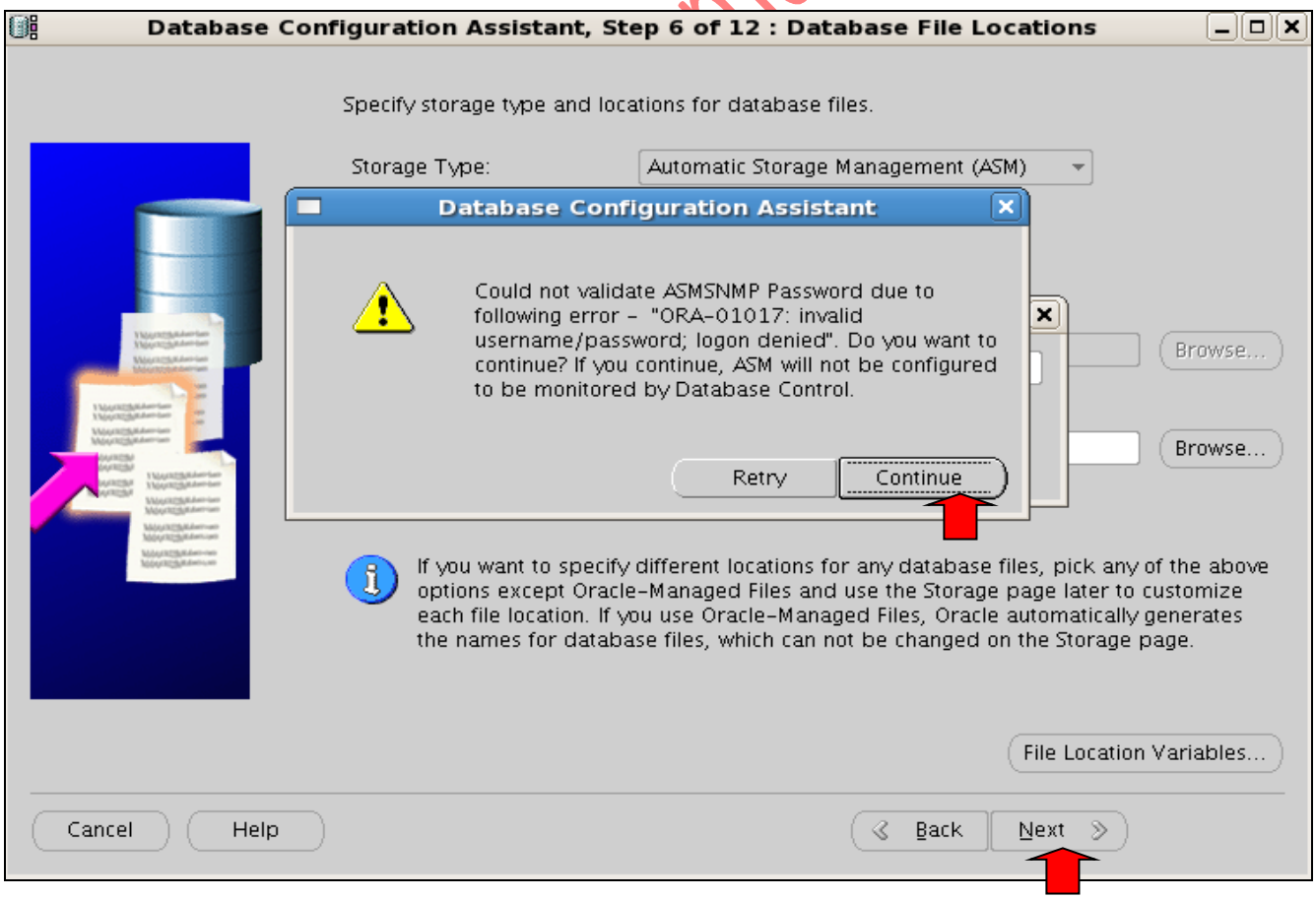

Database Configuration Assistant, Step 5 of 12 : Database Credentials
For security reasons, you must specify passwords for the following user accounts in the new database.
Use Different Administrative Passwords
User Name
Password
Confirm Password
SYS
SYSTEM
DBSNMP
SYSMAN
Use the Same Administrative Password for All Accounts
Password:
Confirm Password:
Cancel
Help
Back
Next

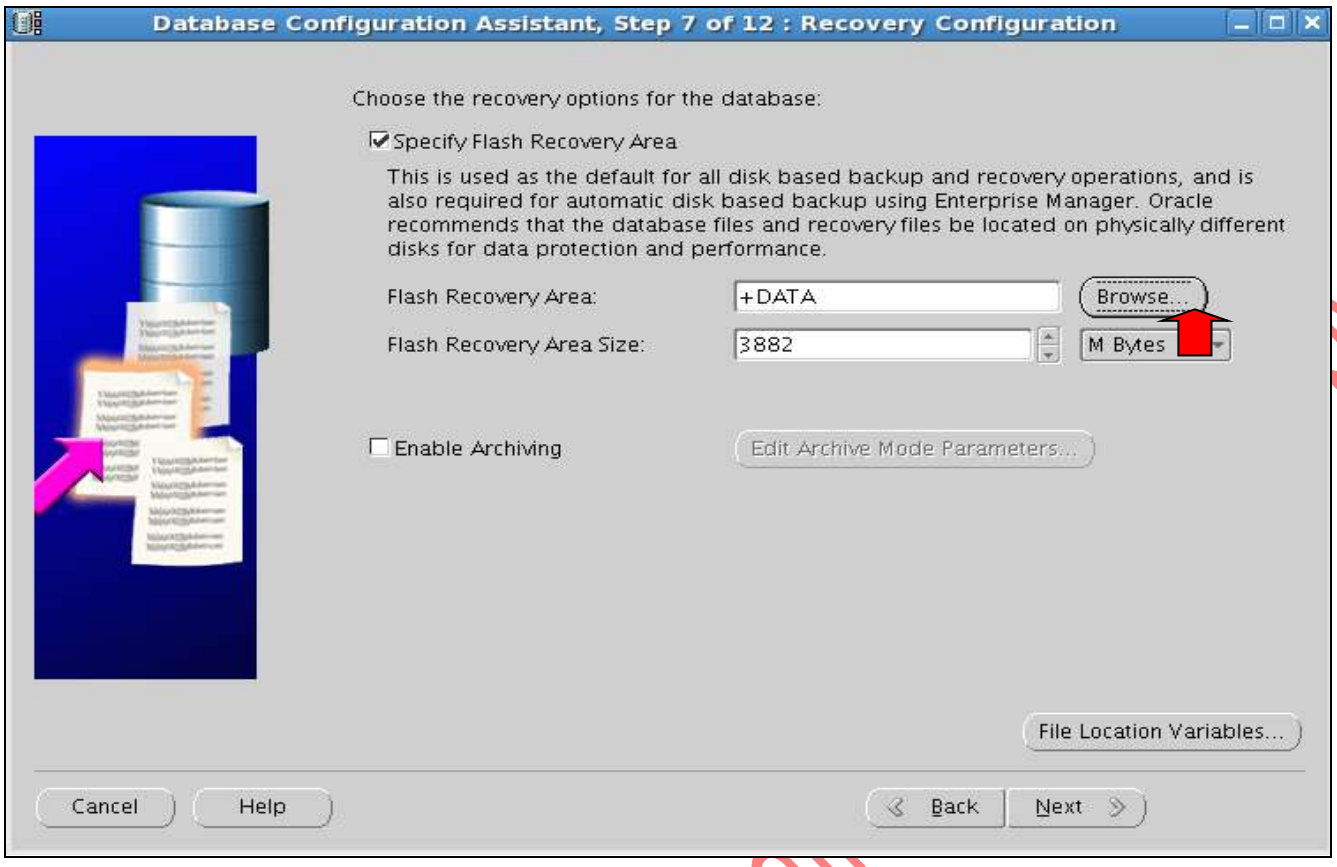

Database Configuration Assistant, Step 5 of 12 : Database Credentials
For security reasons, you must specify passwords for the following user accounts in the new database.
Use Different Administrative Passwords
User Name
Password
Confirm Password
SYS
SYSTEM
DBSNMP
SYSMAN
Use the Same Administrative Password for All Accounts
Password:
******
Confirm Password:
******
Cancel
Help
Back
Next

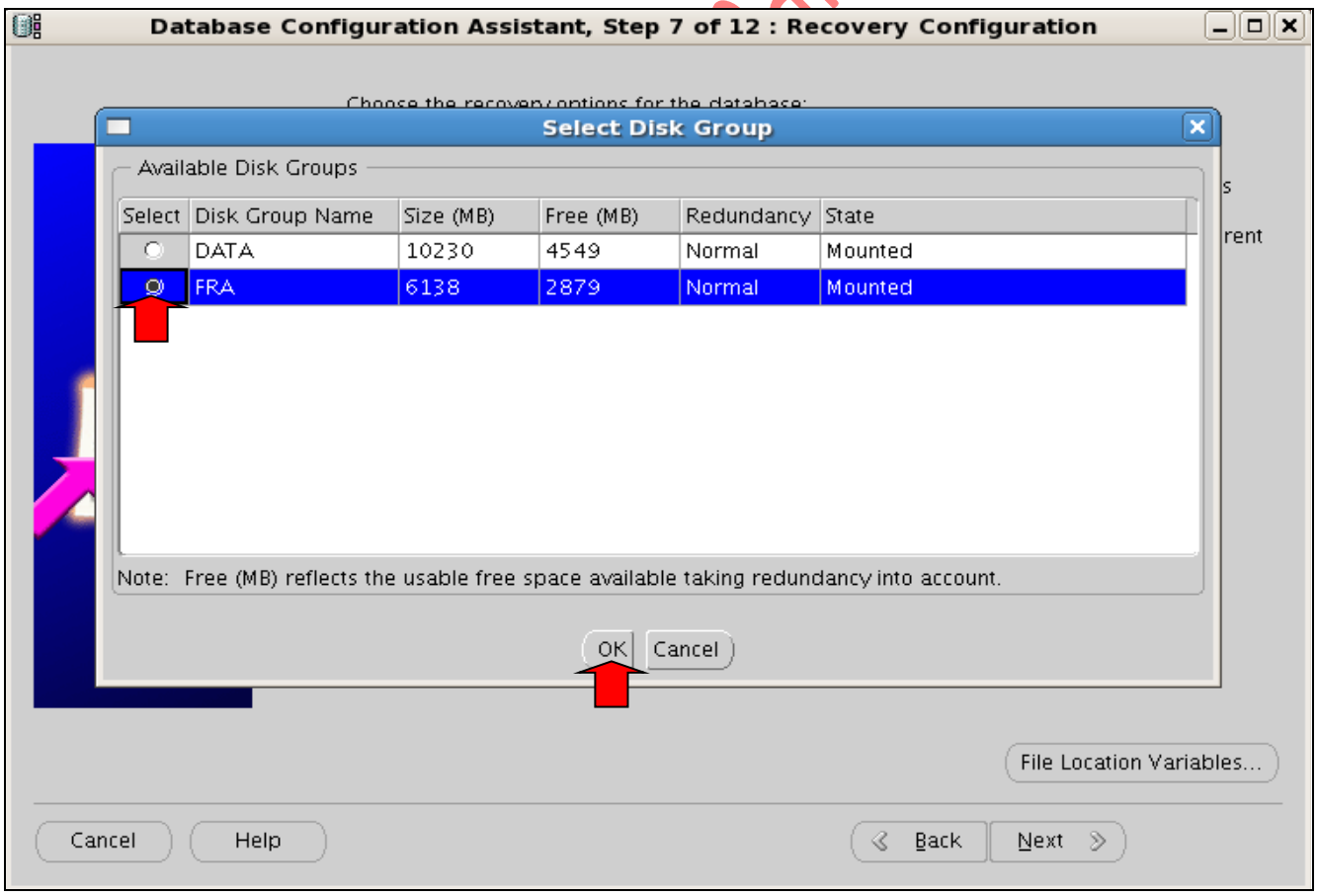

Database Configuration Assistant, Step 5 of 12 : Database Credentials
For security reasons, you must specify passwords for the following user accounts in the new database.
Database Configuration Assistant
Password entered does not satisfy Oracle recommended password complexity policy. A password should have minimum of 8 characters in length. In addition, the password must contain at least one upper case character, one lower case character and one digit.
Do you want to continue?
Yes
No
Cancel
Help
Back
Next

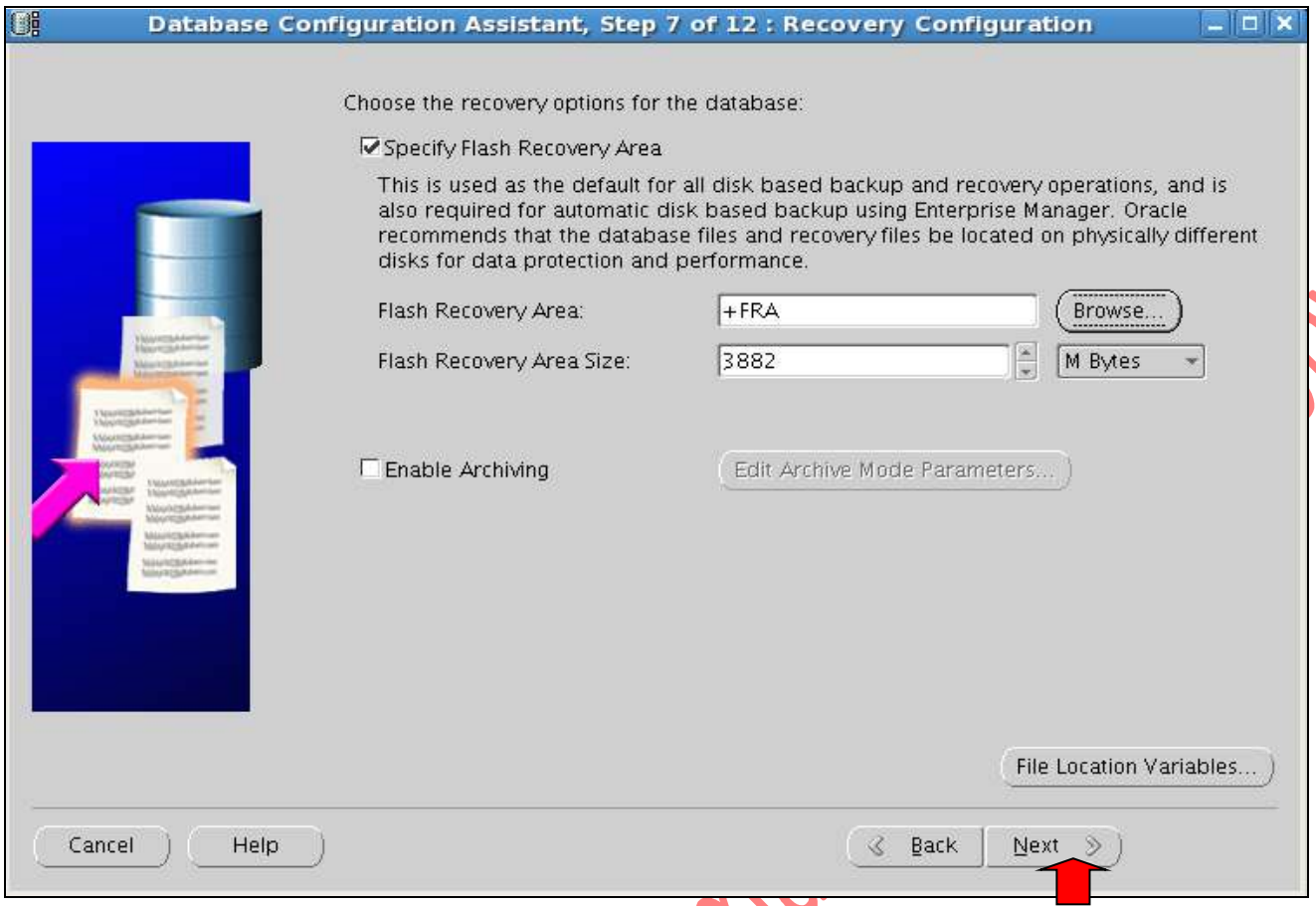

Database Configuration Assistant, Step 6 of 12 : Database File Locations
Specify storage type and locations for database files.
Storage Type:
Automatic Storage Management (ASM)
Storage Locations:
Use Database File Locations from Template
Use Common Location for All Database Files
Database Files Location:
Browse...
Use Oracle-Managed Files
Database Area:
+DATA
Browse...
Multiplex Redo Logs and Control Files...
If you want to specify different locations for any database files, pick any of the above options except Oracle-Managed Files and use the Storage page later to customize each file location. If you use Oracle-Managed Files, Oracle automatically generates the names for database files, which can not be changed on the Storage page.
File Location Variables...
Cancel
Help
Back
Next

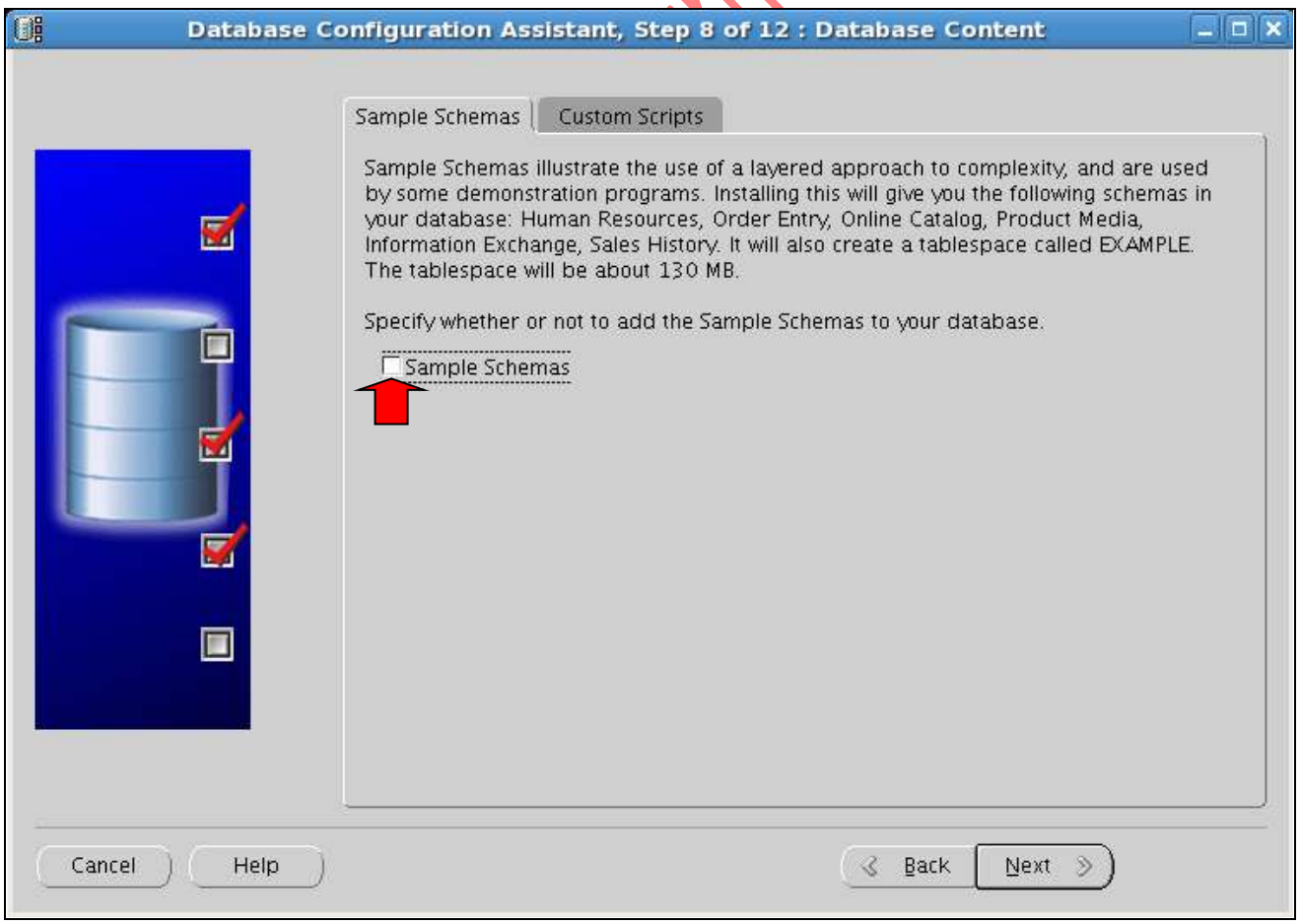

Database Configuration Assistant, Step 6 of 12 : Database File Locations
Specify storage type and locations for database files.
Storage Type:
Automatic Storage Management (ASM)
Storage Locations:
Use Database File Locations from Template
ASM Credentials
Specify ASMSNMP password specific to ASM:
OK
Cancel
Browse...
Browse...
If you want to specify different locations for any database files, pick any of the above options except Oracle-Managed Files and use the Storage page later to customize each file location. If you use Oracle-Managed Files, Oracle automatically generates the names for database files, which can not be changed on the Storage page.
File Location Variables...
Cancel
Help
Back
Next

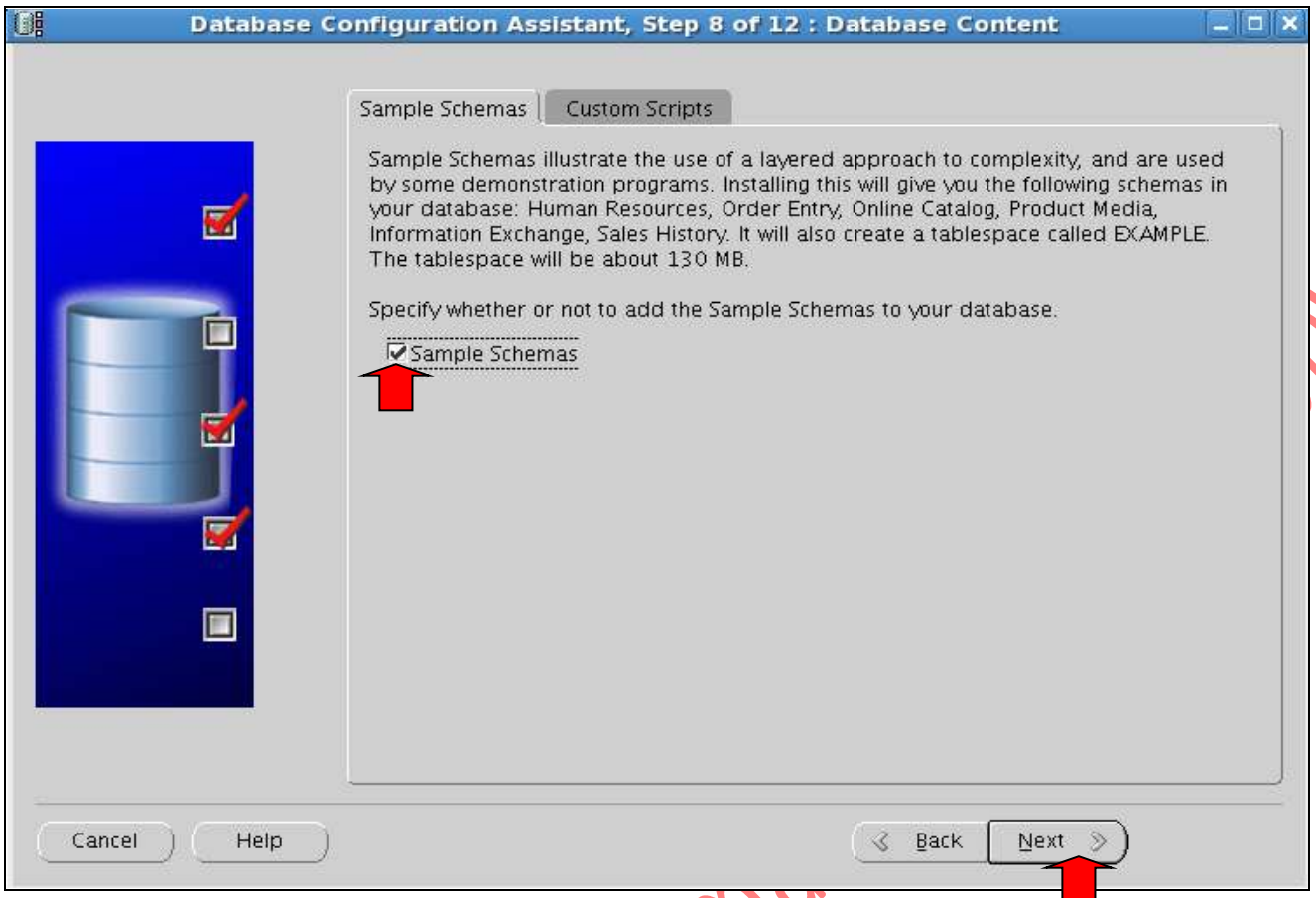

Database Configuration Assistant, Step 6 of 12 : Database File Locations
Specify storage type and locations for database files.
Storage Type:
Automatic Storage Management (ASM)
Database Configuration Assistant
Could not validate ASMSNMP Password due to following error - "ORA-01017: invalid username/password; logon denied". Do you want to continue? If you continue, ASM will not be configured to be monitored by Database Control.
Retry
Continue
Browse...
Browse...
If you want to specify different locations for any database files, pick any of the above options except Oracle-Managed Files and use the Storage page later to customize each file location. If you use Oracle-Managed Files, Oracle automatically generates the names for database files, which can not be changed on the Storage page.
File Location Variables...
Cancel
Help
Back
Next

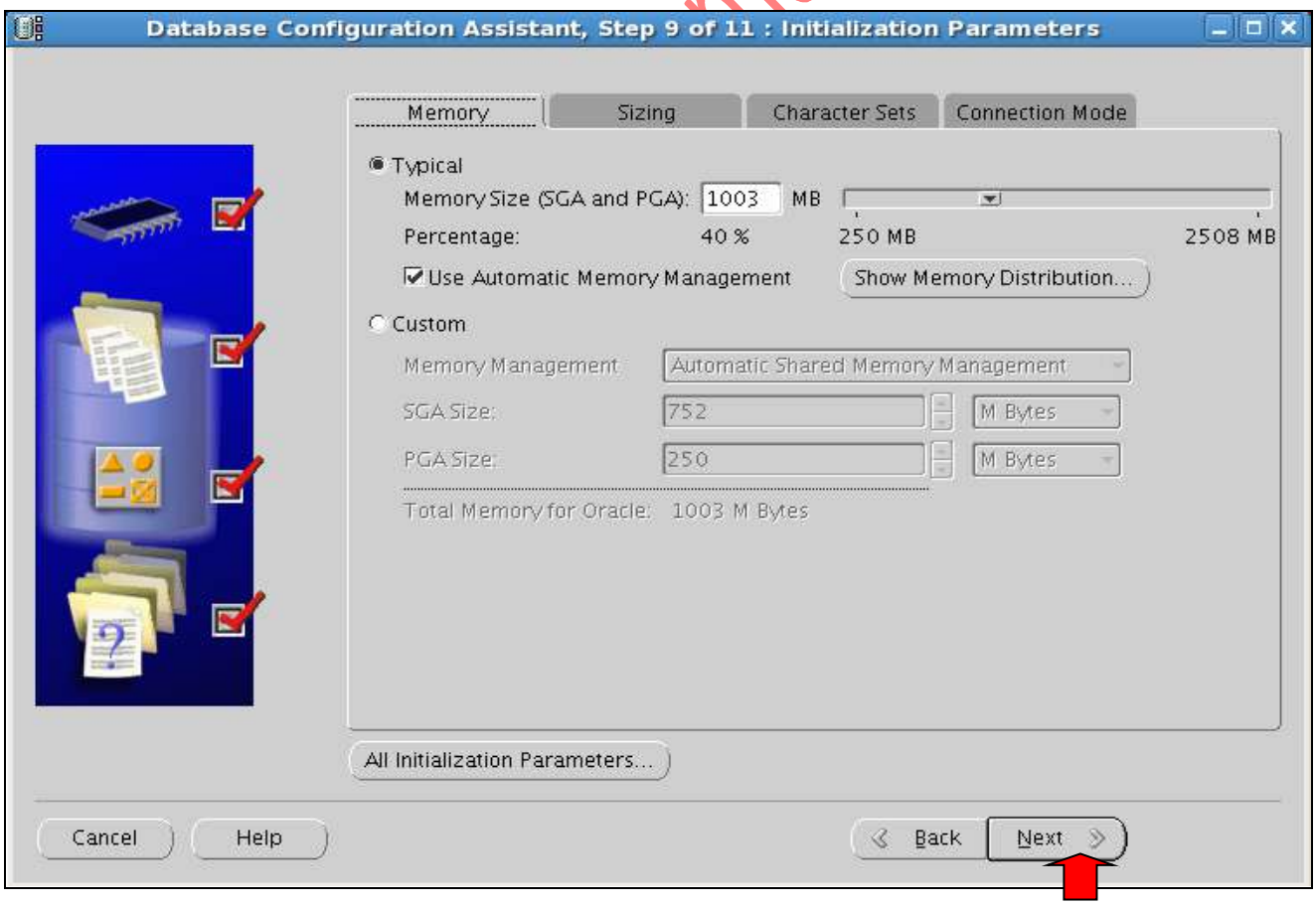

Database Configuration Assistant, Step 7 of 12 : Recovery Configuration
Choose the recovery options for the database:
Specify Flash Recovery Area
This is used as the default for all disk based backup and recovery operations, and is also required for automatic disk based backup using Enterprise Manager. Oracle recommends that the database files and recovery files be located on physically different disks for data protection and performance.
Flash Recovery Area:
+DATA
Browse...
Flash Recovery Area Size:
3882
M Bytes
Enable Archiving
Edit Archive Mode Parameters...
File Location Variables...
Cancel
Help
Back
Next

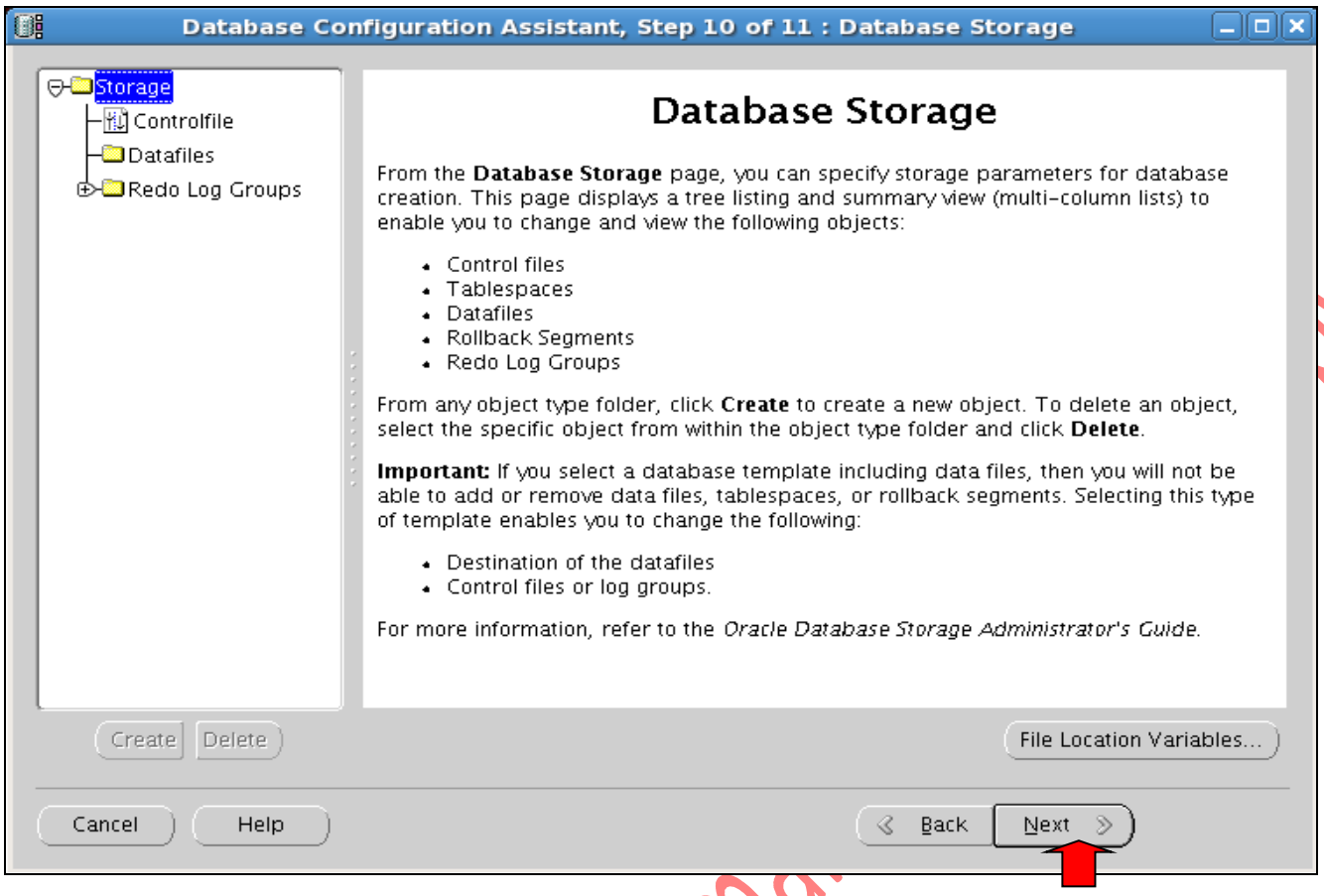

Database Configuration Assistant, Step 7 of 12 : Recovery Configuration
Select Disk Group
Available Disk Groups
Select
Disk Group Name
Size (MB)
Free (MB)
Redundancy
State
DATA
10230
4549
Normal
Mounted
FRA
6138
2879
Normal
Mounted
Note: Free (MB) reflects the usable free space available taking redundancy into account.
OK
Cancel
File Location Variables...
Cancel
Help
Back
Next

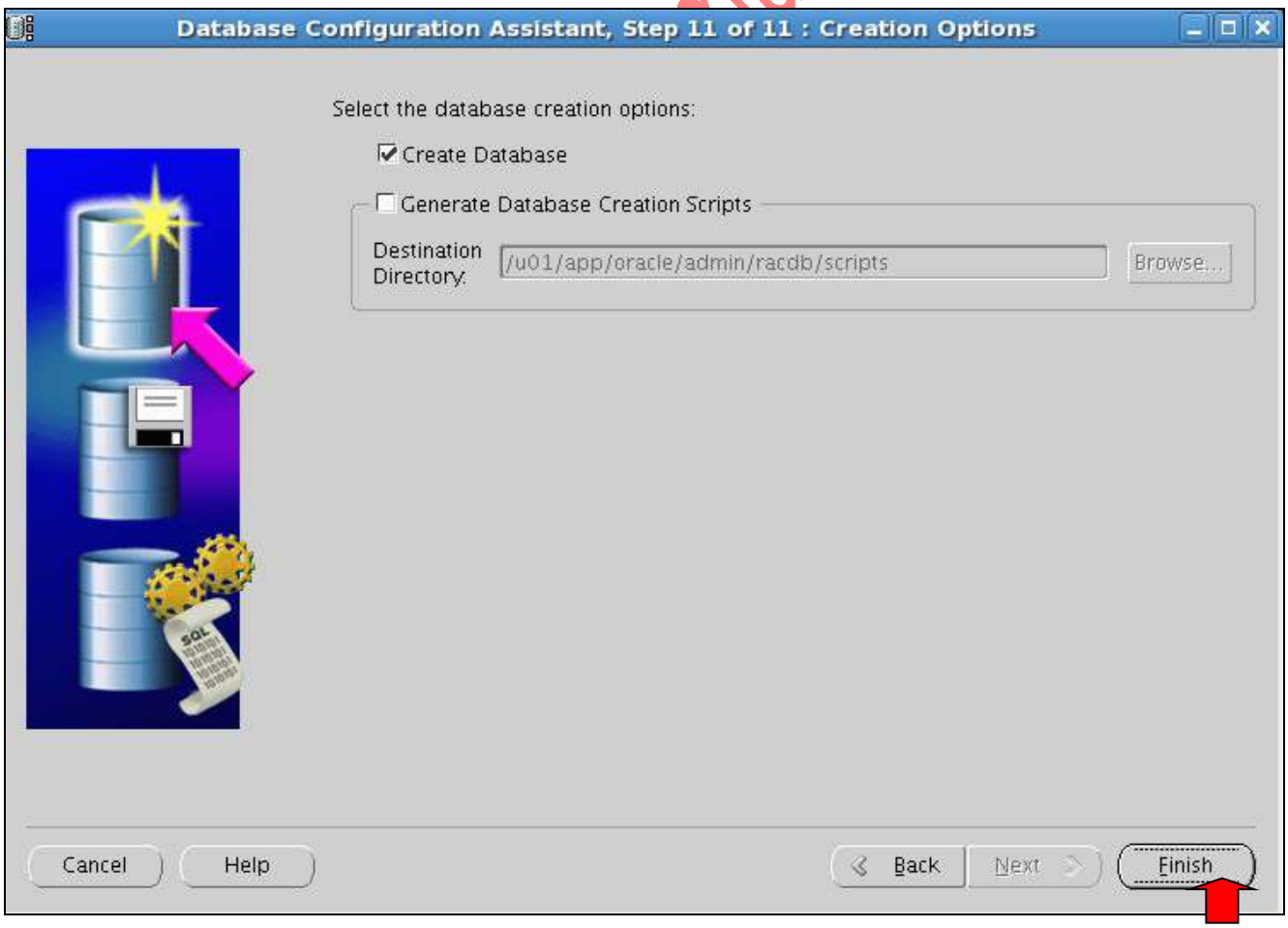

Database Configuration Assistant, Step 7 of 12 : Recovery Configuration
Choose the recovery options for the database:
Specify Flash Recovery Area
This is used as the default for all disk based backup and recovery operations, and is also required for automatic disk based backup using Enterprise Manager. Oracle recommends that the database files and recovery files be located on physically different disks for data protection and performance.
Flash Recovery Area:
+FRA
Browse...
Flash Recovery Area Size:
3882
M Bytes
Enable Archiving
Edit Archive Mode Parameters...
File Location Variables...
Cancel
Help
Back
Next

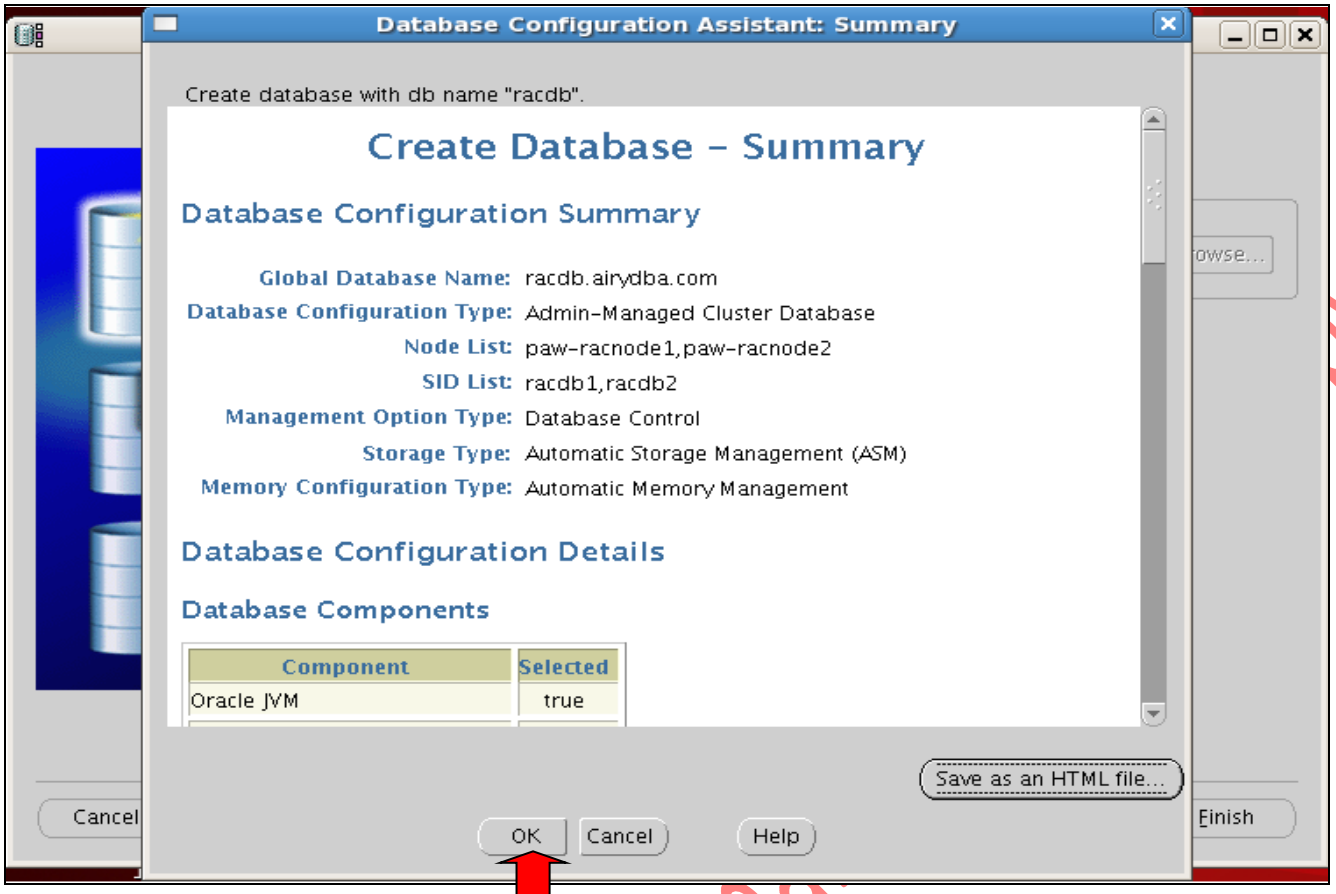

Database Configuration Assistant, Step 8 of 12 : Database Content
Sample Schemas
Custom Scripts
Sample Schemas illustrate the use of a layered approach to complexity, and are used by some demonstration programs. Installing this will give you the following schemas in your database: Human Resources, Order Entry, Online Catalog, Product Media, Information Exchange, Sales History. It will also create a tablespace called EXAMPLE. The tablespace will be about 130 MB.
Specify whether or not to add the Sample Schemas to your database.
Sample Schemas
Cancel
Help
Back
Next

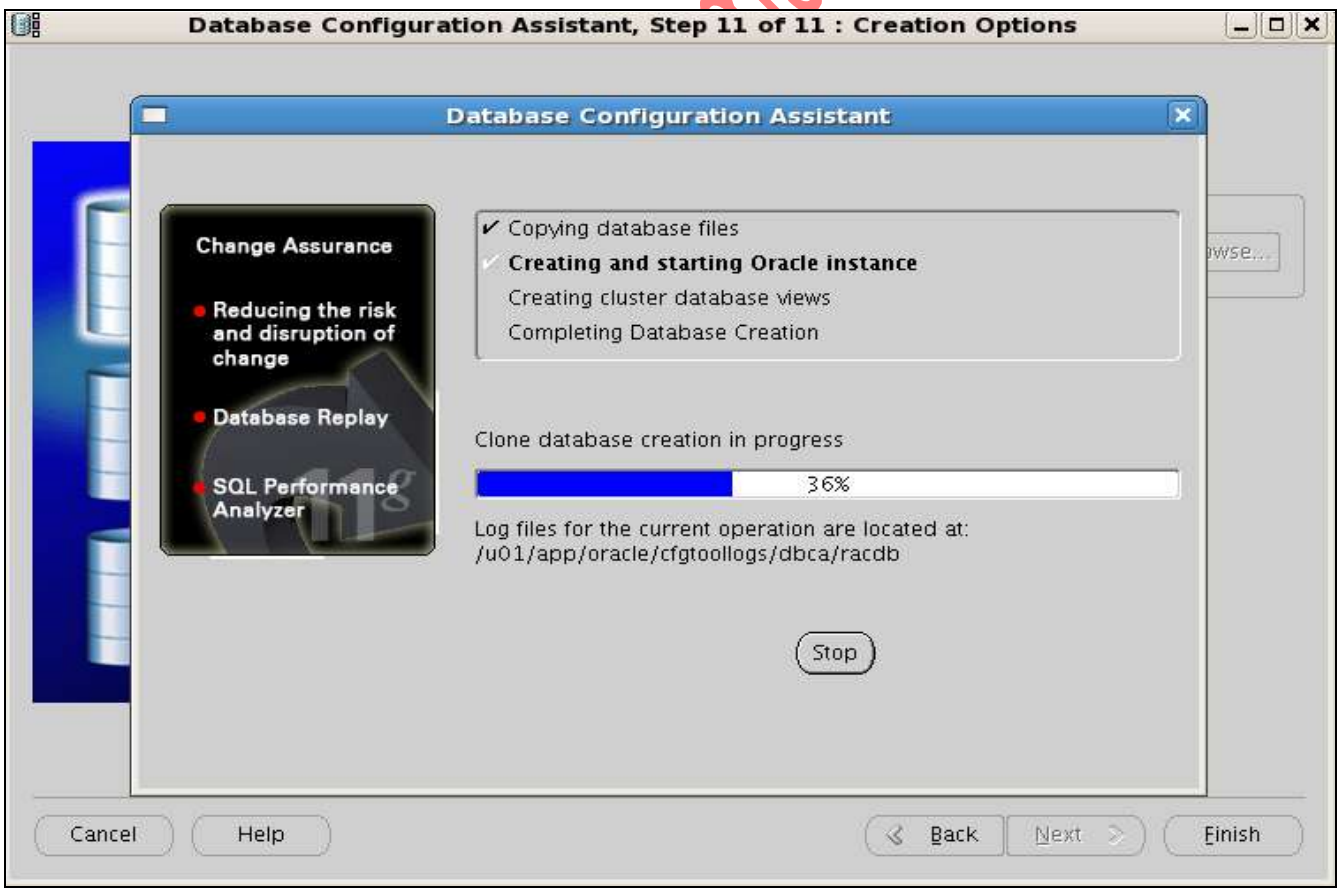

Database Configuration Assistant, Step 8 of 12 : Database Content
Sample Schemas
Custom Scripts
Sample Schemas illustrate the use of a layered approach to complexity, and are used by some demonstration programs. Installing this will give you the following schemas in your database: Human Resources, Order Entry, Online Catalog, Product Media, Information Exchange, Sales History. It will also create a tablespace called EXAMPLE. The tablespace will be about 130 MB.
Specify whether or not to add the Sample Schemas to your database.
Sample Schemas
Cancel
Help
Back
Next

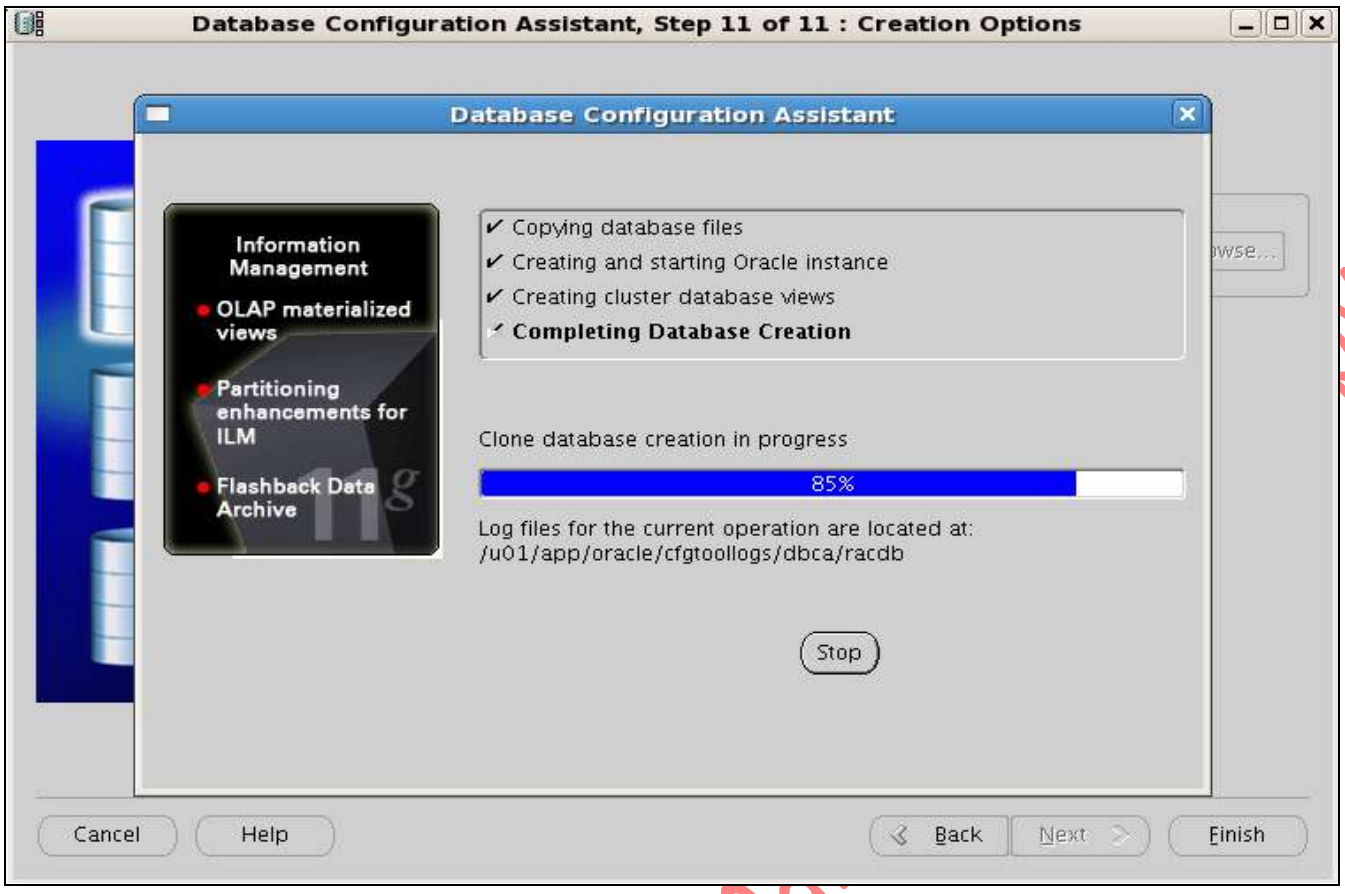

Database Configuration Assistant, Step 9 of 11 : Initialization Parameters
Memory
Sizing
Character Sets
Connection Mode
Typical
Memory Size (SGA and PGA): 1003 MB
Percentage: 40 %
250 MB
2508 MB
Use Automatic Memory Management
Show Memory Distribution...
Custom
Memory Management: Automatic Shared Memory Management
SGA Size: 752 M Bytes
PGA Size: 250 M Bytes
Total Memory for Oracle: 1003 M Bytes
All Initialization Parameters...
Cancel
Help
Back
Next

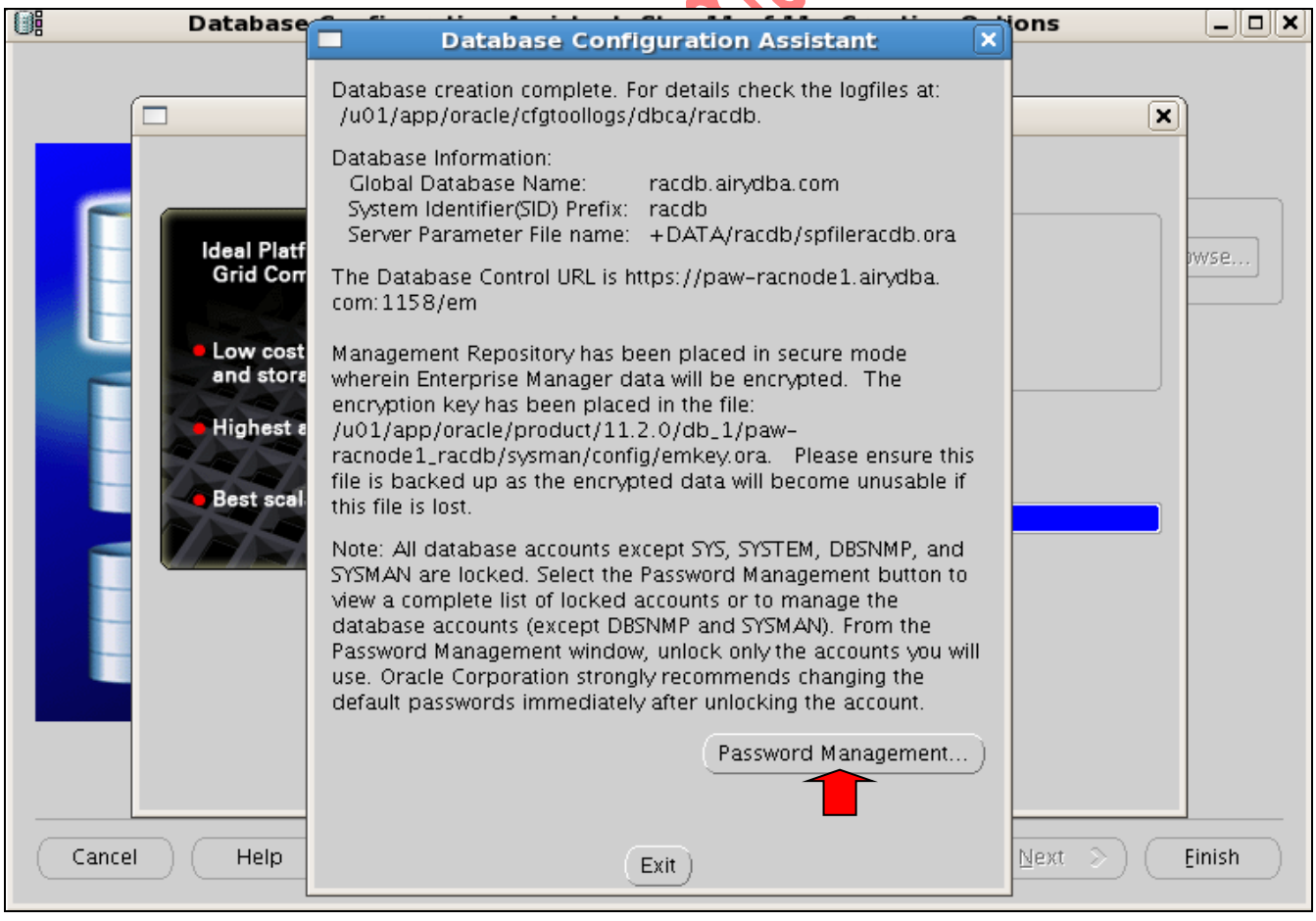

Database Configuration Assistant, Step 10 of 11 : Database Storage
Storage
Controlfile
Datafiles
Redo Log Groups
Database Storage
From the Database Storage page, you can specify storage parameters for database creation. This page displays a tree listing and summary view (multi-column lists) to enable you to change and view the following objects:
Control files
Tablespaces
Datafiles
Rollback Segments
Redo Log Groups
From any object type folder, click Create to create a new object. To delete an object, select the specific object from within the object type folder and click Delete.
Important: If you select a database template including data files, then you will not be able to add or remove data files, tablespaces, or rollback segments. Selecting this type of template enables you to change the following:
Destination of the datafiles
Control files or log groups.
For more information, refer to the Oracle Database Storage Administrator's Guide.
Create
Delete
File Location Variables...
Cancel
Help
Back
Next

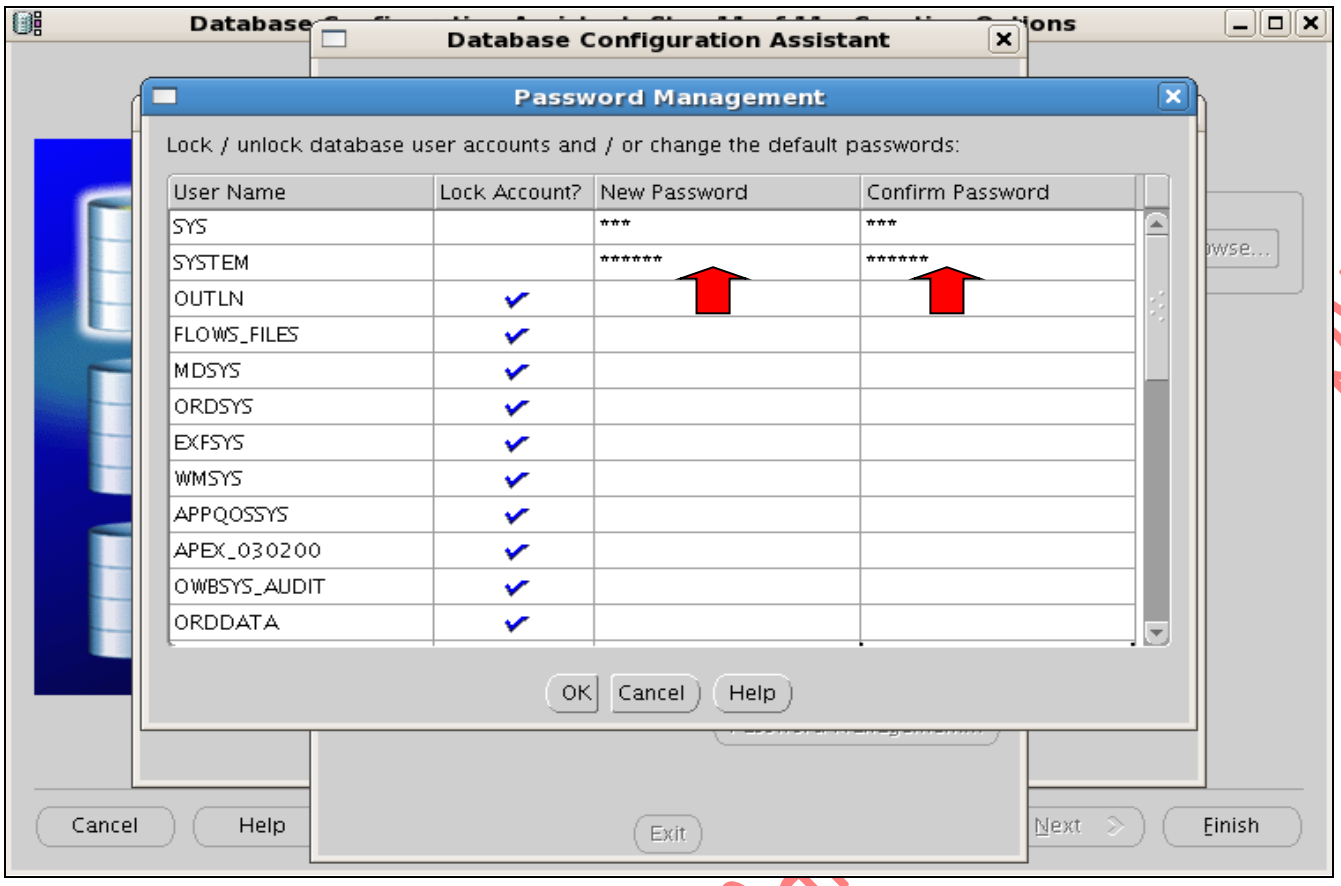

Database Configuration Assistant, Step 11 of 11 : Creation Options
Select the database creation options:
Create Database
Generate Database Creation Scripts
Destination Directory:
/u01/app/oracle/admin/racdb/scripts
Browse...
Cancel
Help
Back
Next
Finish

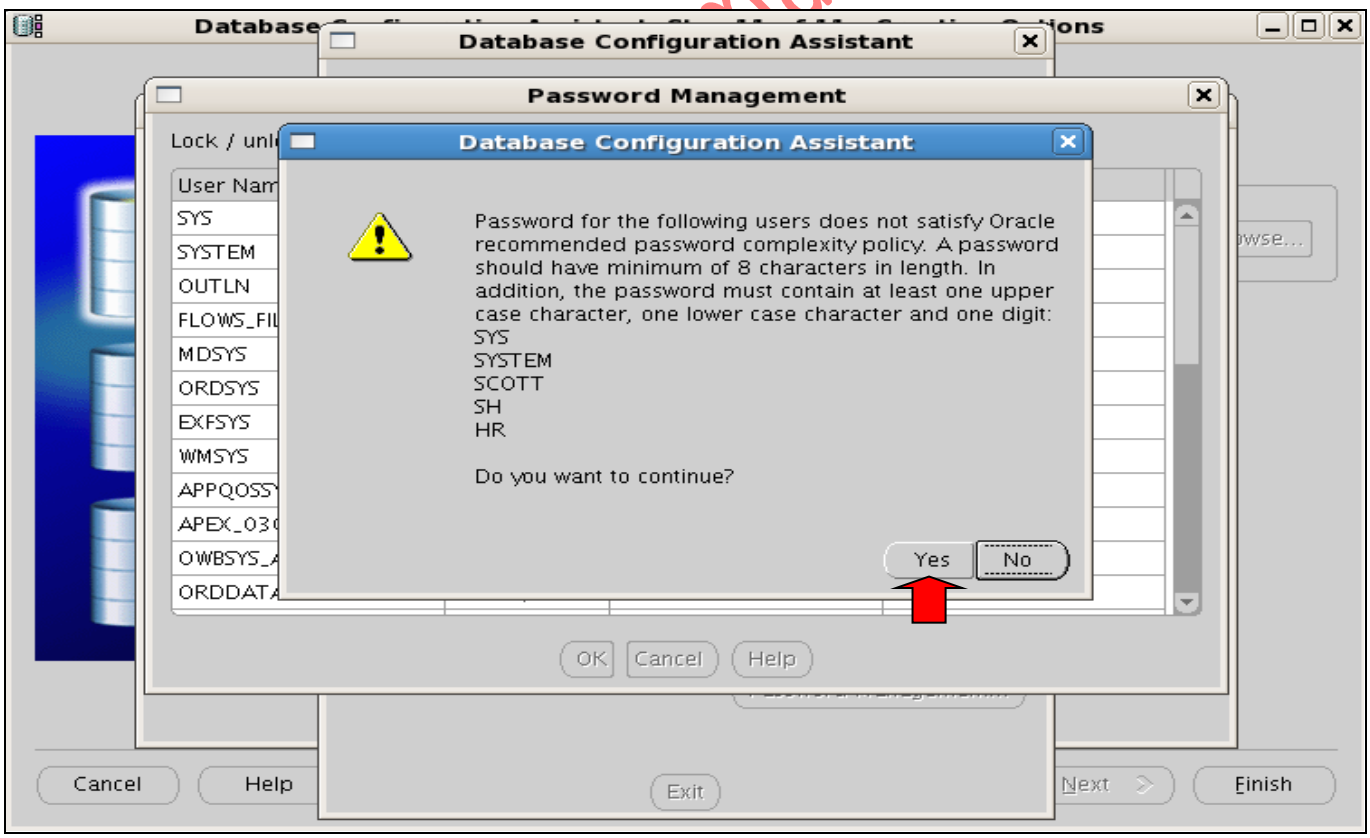

Database Configuration Assistant: Summary
Create database with db name "racdb".
Create Database - Summary
Database Configuration Summary
Global Database Name: racdb.airydba.com
Database Configuration Type: Admin-Managed Cluster Database
Node List: paw-racnode1,paw-racnode2
SID List: racdb1,racdb2
Management Option Type: Database Control
Storage Type: Automatic Storage Management (ASM)
Memory Configuration Type: Automatic Memory Management
Database Configuration Details
Database Components
Component
Selected
Oracle JVM
true
Save as an HTML file...
OK
Cancel
Help
Cancel
Finish

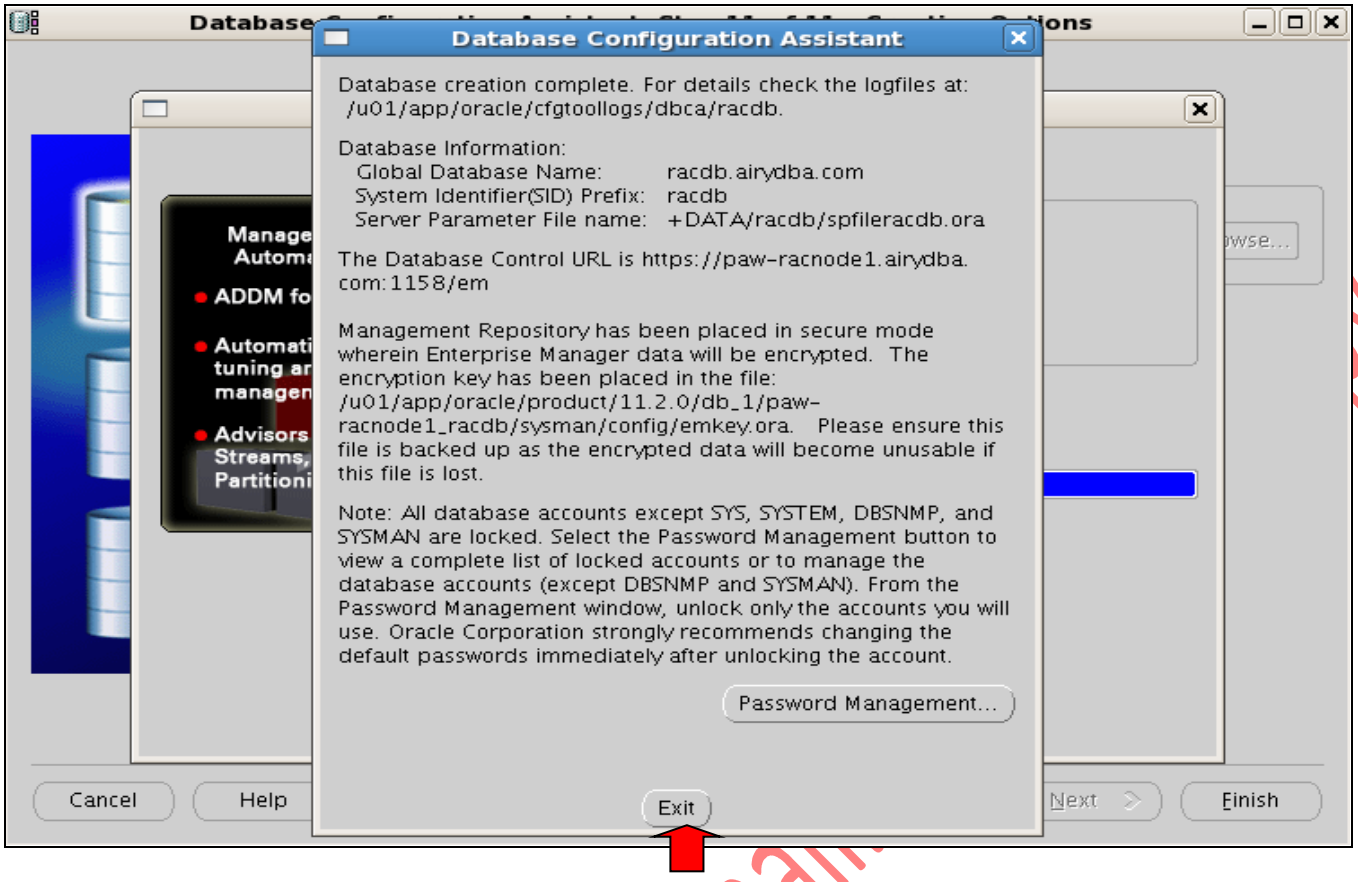

Database Configuration Assistant, Step 11 of 11 : Creation Options
Database Configuration Assistant
Change Assurance
Reducing the risk and disruption of change
Database Replay
SQL Performance Analyzer
Copying database files
Creating and starting Oracle instance
Creating cluster database views
Completing Database Creation
Clone database creation in progress
36%
Log files for the current operation are located at:
/u01/app/oracle/cfgtoollogs/dbca/racdb
Stop
Cancel
Help
Back
Next
Finish


Database Configuration Assistant, Step 11 of 11 : Creation Options
Database Configuration Assistant
Information Management
OLAP materialized views
Partitioning enhancements for ILM
Flashback Data Archive
Copying database files
Creating and starting Oracle instance
Creating cluster database views
Completing Database Creation
Clone database creation in progress
85%
Log files for the current operation are located at:
/u01/app/oracle/cfgtoollogs/dbca/racdb
Stop
Cancel
Help
Back
Next
Finish


Database Configuration Assistant
Database creation complete. For details check the logfiles at:
/u01/app/oracle/cfgtoollogs/dbca/racdb.
Database Information:
Global Database Name: racdb.airydba.com
System Identifier(SID) Prefix: racdb
Server Parameter File name: +DATA/racdb/spfileracdb.ora
The Database Control URL is https://paw-racnode1.airydba.com:1158/em
Management Repository has been placed in secure mode wherein Enterprise Manager data will be encrypted. The encryption key has been placed in the file: /u01/app/oracle/product/11.2.0/db_1/paw-racnode1_racdb/sysman/config/emkey.ora. Please ensure this file is backed up as the encrypted data will become unusable if this file is lost.
Note: All database accounts except SYS, SYSTEM, DBSNMP, and SYSMAN are locked. Select the Password Management button to view a complete list of locked accounts or to manage the database accounts (except DBSNMP and SYSMAN). From the Password Management window, unlock only the accounts you will use. Oracle Corporation strongly recommends changing the default passwords immediately after unlocking the account.
Password Management...
Exit
Cancel
Help
Next
Finish


Database Configuration Assistant
Password Management
Lock / unlock database user accounts and / or change the default passwords:
User Name
Lock Account?
New Password
Confirm Password
SYS
SYSTEM
OUTLN
FLOWS_FILES
MDSYS
ORDSYS
EXFSYS
WMSYS
APPQOSSYS
APEX_030200
OWBSYS_AUDIT
ORDDATA
OK
Cancel
Help
Cancel
Help
Exit
Next
Finish


Database Configuration Assistant
Password Management
Database Configuration Assistant
Password for the following users does not satisfy Oracle recommended password complexity policy. A password should have minimum of 8 characters in length. In addition, the password must contain at least one upper case character, one lower case character and one digit:
SYS
SYSTEM
SCOTT
SH
HR
Do you want to continue?
Yes
No
OK
Cancel
Help
Cancel
Help
Exit
Next
Finish



Now the Installation is completed.

AIRYDBA (airydba@gmail.com)