

# the **Oracle** Database Appliances "ODA"

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The Morgan of Morgan's Library on the web



Board Member: Western Washington OUG

## ■ Upcoming Presentations

- May 30-31: Harmony Finland
- Jun 1: Harmony Latvia
- Jun 14: Redwood Shores
- Jun 20: VanOUG
- Jun 21: VicOUG
- Sep: OpenWorld 2012: San Francisco



Official Beta Site  
**ORACLE**  
DATABASE **11g**

**ORACLE**  
**RAC SIG**

International  
zSeries  
Oracle SIG

# Syllabus

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- What is an ODA?
- Why an ODA?
- ILOM Management
- Issues
- Vendor vs Direct Purchase
- Conclusion

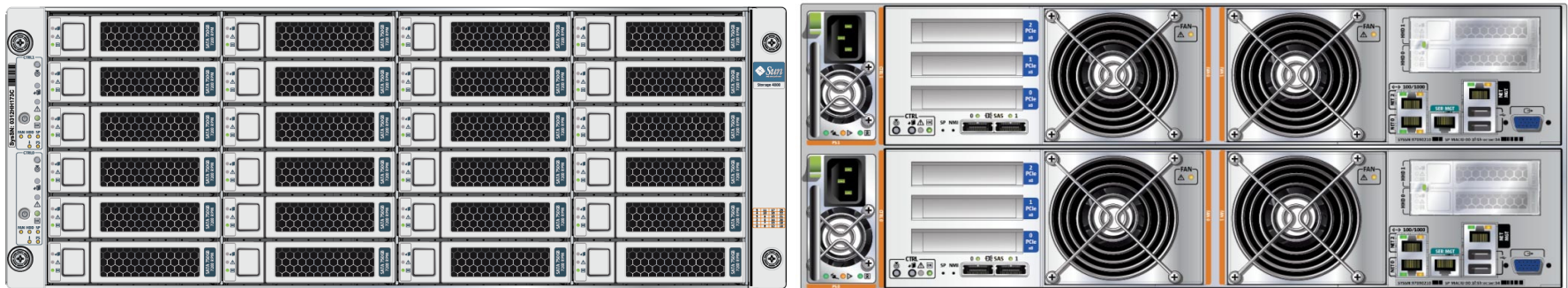
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# Discussion

What is an ODA?

# What is an ODA?

- Literally: An appliance
  - Though they did make us pay a separate charge for the power cords
- Announced Sept 2011
- Two server cluster with 24 cores of CPU, 96 GB memory per server and up to 12 TB of storage.
- One size fits all
- But you choose the number of CPU cores to license



# ODA Pics

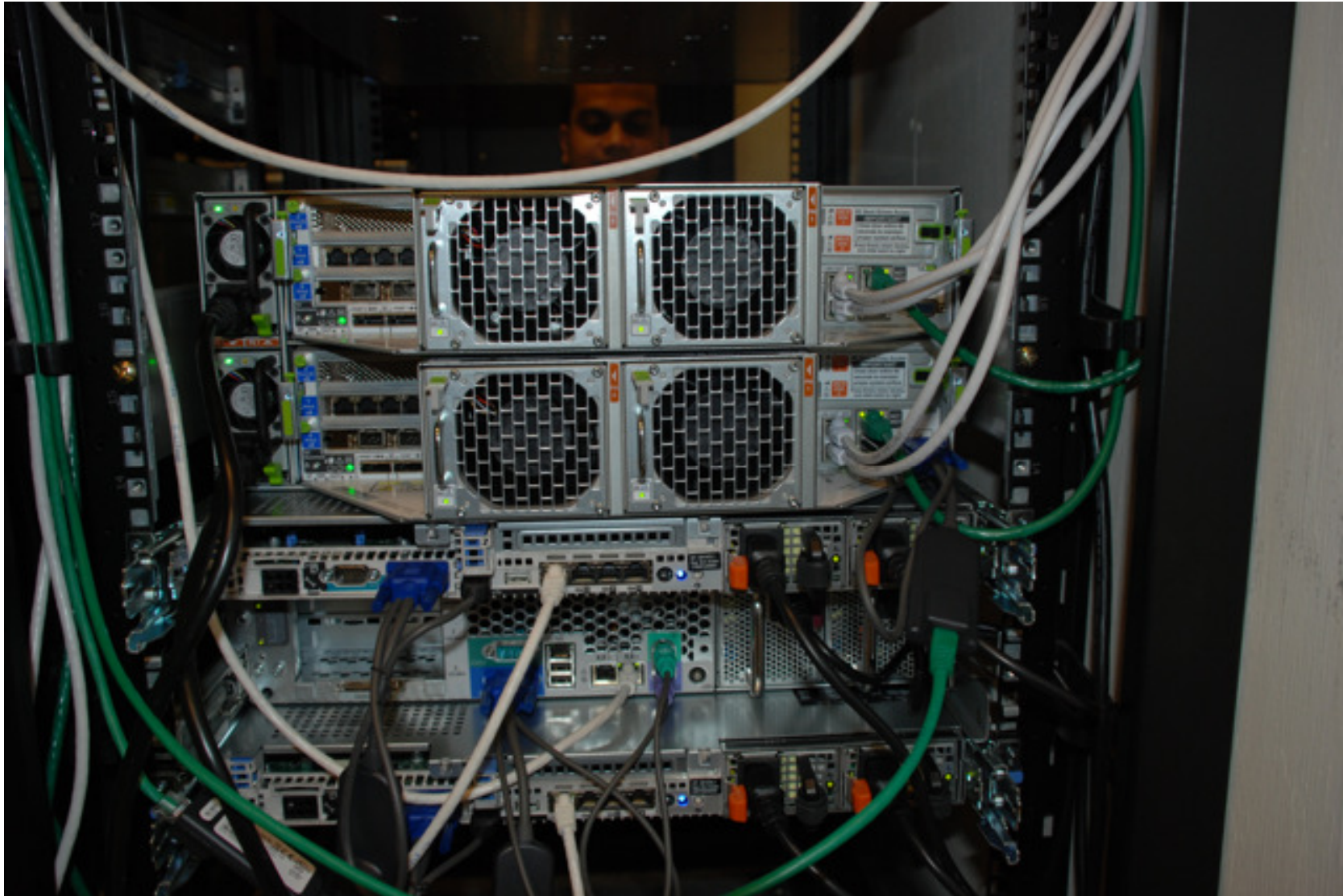
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# ODA Pics

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# Discussion

Why an ODA?



# Why an ODA?

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- Minimize complexity from rack-and-stack to initial configuration
- Fast installation and configuration
- Ease of maintenance and patching
- ZFS Interoperability
- Eliminate system, network, and storage admins

# Warning: They are not childproof

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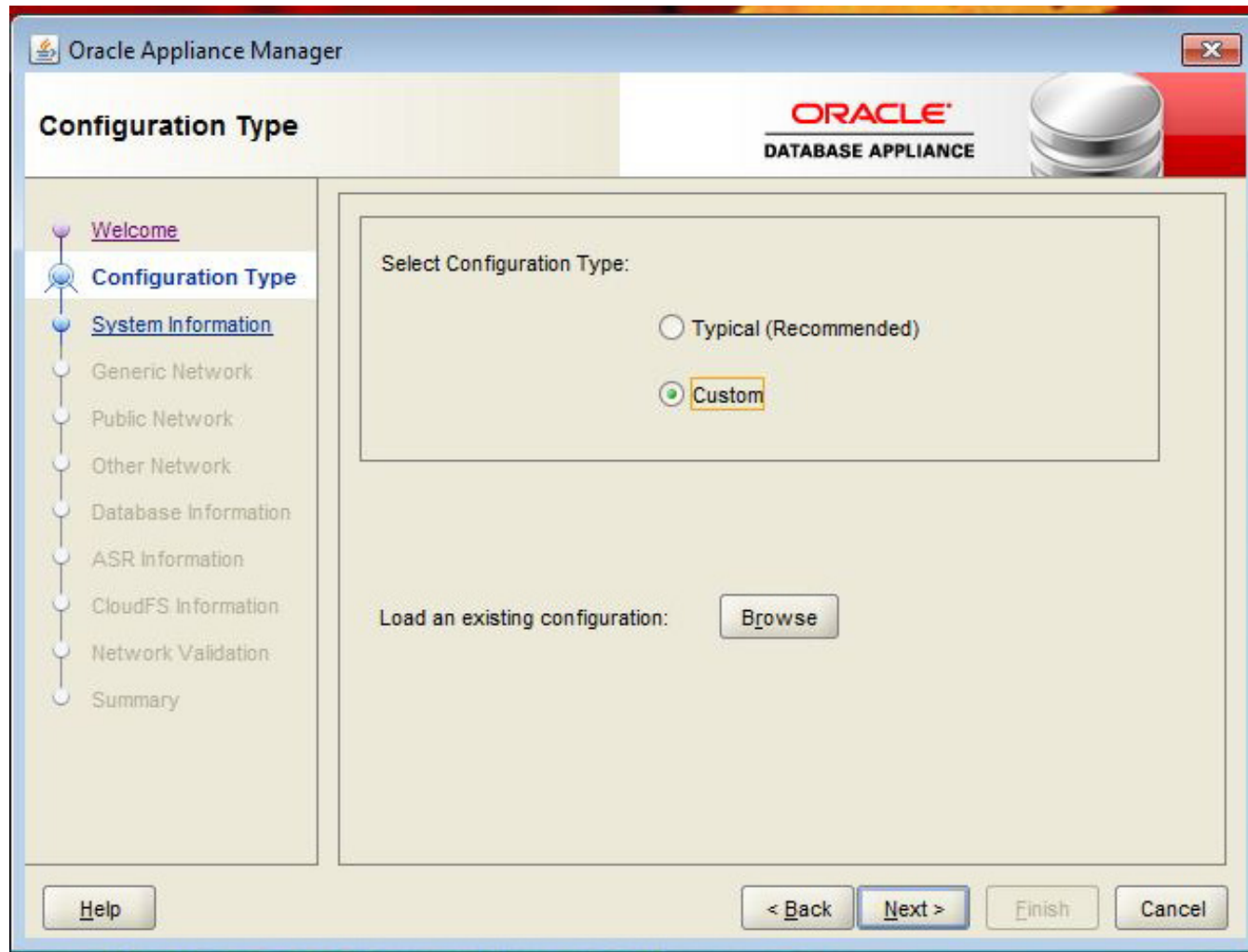
# Discussion

## Installation

# Install Screens: 1



# Install Screens: 2



# Install Screens: 3

Oracle Appliance Manager

**System Information**

ORACLE  
DATABASE APPLIANCE

- Welcome
- Configuration Type
- System Information**
- Generic Network
- Public Network
- Other Network
- Database Information
- ASR Information
- CloudFS Information
- Network Validation
- Summary

System Name:

Region:

Timezone:

Database Deployment:

Database Backup:

New Root Password:

New Root Password(confirm):

Help < Back Next > Finish Cancel



# Install Screens: 4

The screenshot shows the 'Generic Network' configuration window in the Oracle Appliance Manager. The window has a title bar 'Oracle Appliance Manager' and a red header bar with the 'ORACLE DATABASE APPLIANCE' logo and a disk icon. On the left is a vertical navigation pane with steps: Welcome, Configuration Type, System Information, Generic Network (selected), Public Network, Other Network, Database Information, ASR Information, CloudFS Information, Network Validation, and Summary. The main area contains the following fields:

- Domain Name: corp.drugstore.com
- ☐ No DNS Server available
- DNS Servers: 10.1.1.1, 10.1.1.2, and an empty field.
- NTP Servers: 10.1.0.2, 64.47.139.100, and an empty field.

At the bottom are buttons for Help, < Back, Next >, Finish, and Cancel.

# Install Screens: 5

Oracle Appliance Manager

**Public Network**

ORACLE  
DATABASE APPLIANCE

Welcome  
Configuration Type  
System Information  
Generic Network  
**Public Network**  
Other Network  
Database Information  
ASR Information  
CloudFS Information  
Network Validation  
Summary

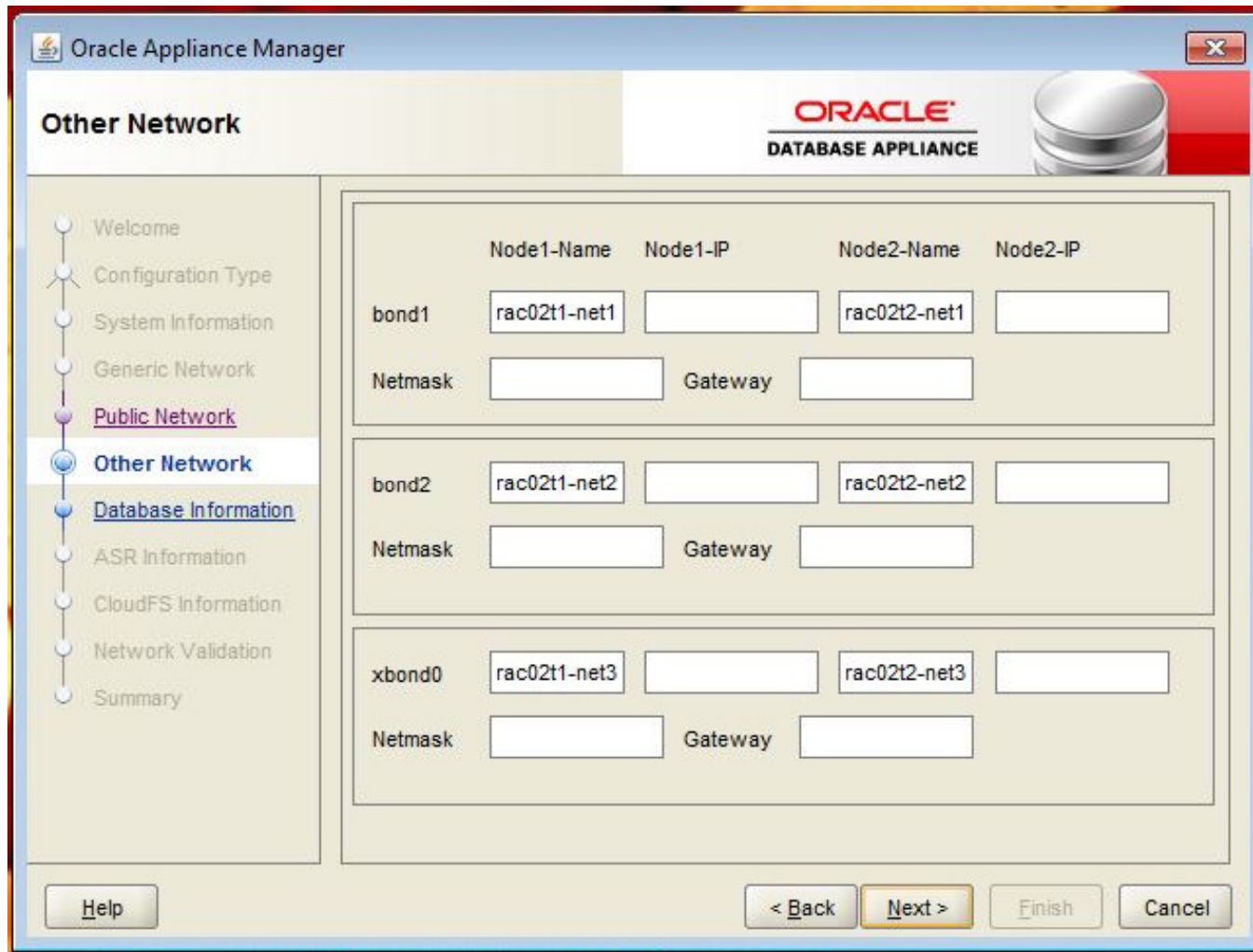
	Node1-Name	Node1-IP	Node2-Name	Node2-IP
Public	hqodrac02s	10.221.0.21	hqodrac02t	10.221.0.25
VIP	hqodrac02s	10.221.0.23	hqodrac02t	10.221.0.27
SCAN	hqodrac02t-s	Addresses	10.221.0.24	10.221.0.28
Netmask	255.255.255.0	Gateway	10.221.0.1	
Interface	bond0			

ILOM	hqodrac02s	10.221.0.22	larac02bt-ilor	10.221.0.26
Netmask	255.255.255.0	Gateway	10.221.0.1	

Help < Back Next > Finish Cancel

# Install Screens: 6



The screenshot shows the 'Other Network' configuration screen in the Oracle Appliance Manager. The window title is 'Oracle Appliance Manager'. The Oracle logo and 'DATABASE APPLIANCE' text are in the top right. A sidebar on the left contains a list of steps: Welcome, Configuration Type, System Information, Generic Network, Public Network, Other Network (highlighted), Database Information, ASR Information, CloudFS Information, Network Validation, and Summary. The main area is divided into three sections for bond1, bond2, and xbond0. Each section has fields for Node1-Name, Node1-IP, Node2-Name, and Node2-IP, followed by Netmask and Gateway fields. The bond1 section has Node1-Name 'rac02t1-net1' and Node2-Name 'rac02t2-net1'. The bond2 section has Node1-Name 'rac02t1-net2' and Node2-Name 'rac02t2-net2'. The xbond0 section has Node1-Name 'rac02t1-net3' and Node2-Name 'rac02t2-net3'. At the bottom, there are buttons for Help, < Back, Next >, Finish, and Cancel.

	Node1-Name	Node1-IP	Node2-Name	Node2-IP
bond1	rac02t1-net1		rac02t2-net1	
Netmask		Gateway		
bond2	rac02t1-net2		rac02t2-net2	
Netmask		Gateway		
xbond0	rac02t1-net3		rac02t2-net3	
Netmask		Gateway		

# Install Screens: 7

Oracle Appliance Manager

**Database Information**

ORACLE  
DATABASE APPLIANCE

Database Name: TEST

Database Class: Medium

Database Language: AMERICAN

Database Block Size: 8192

Database Characterset: AL32UTF8

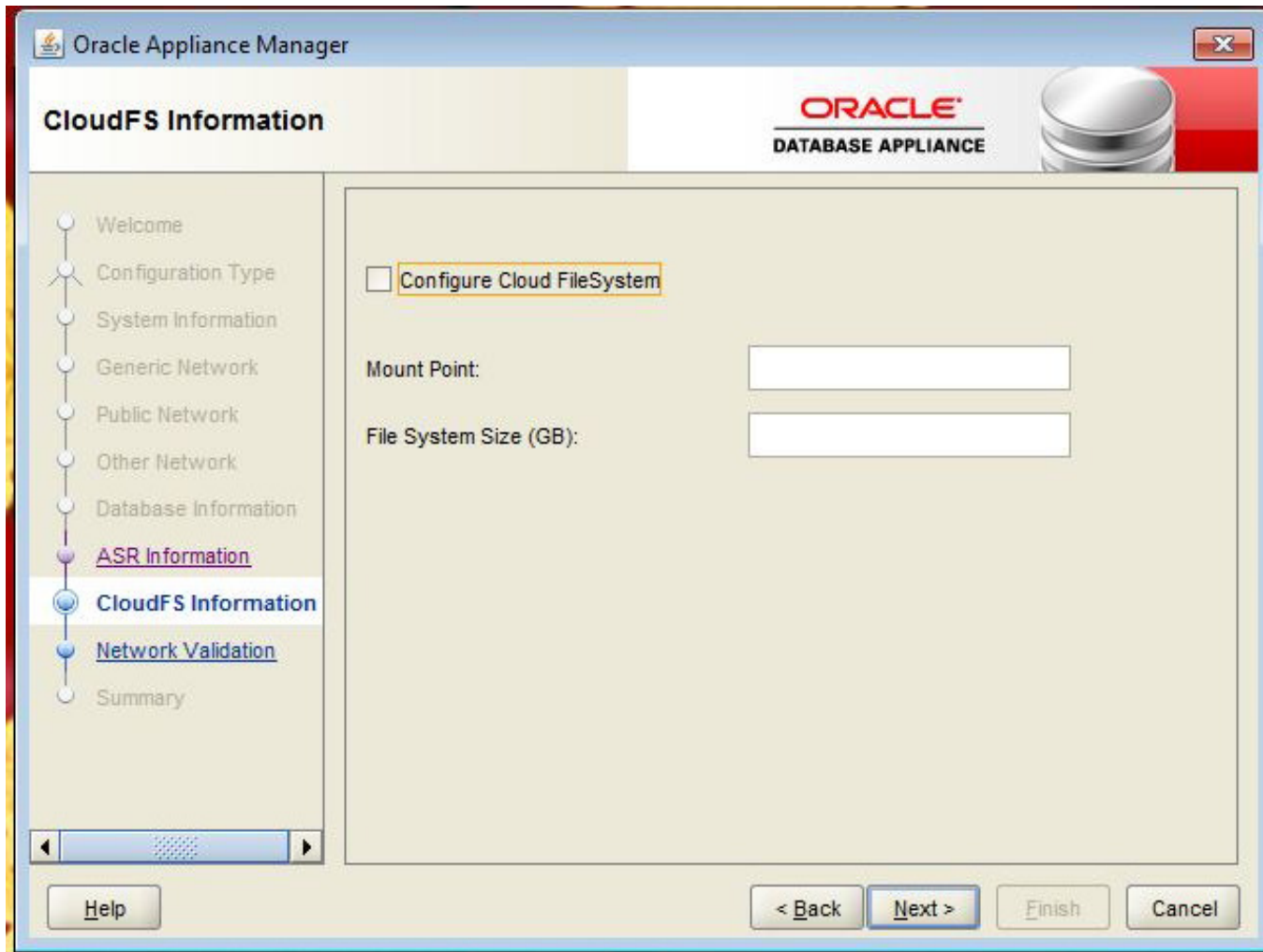
Database Territory: AMERICA

Help < Back Next > Finish Cancel

# Install Screens: 8

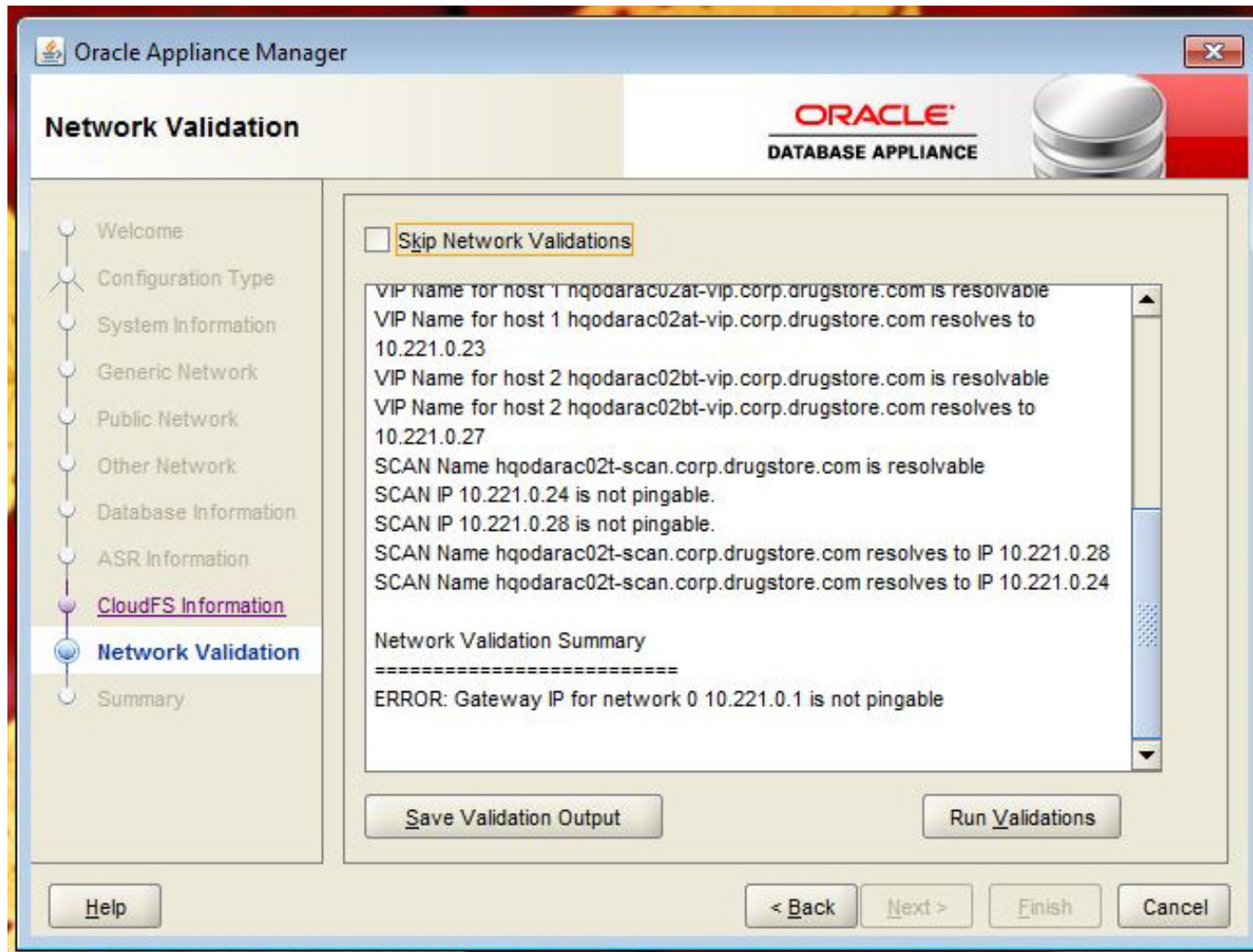
The screenshot shows the 'Oracle Appliance Manager' window. The title bar includes the Oracle logo and the text 'ORACLE DATABASE APPLIANCE'. The main window is titled 'ASR Information'. On the left, a vertical navigation pane lists the following steps: Welcome, Configuration Type, System Information, Generic Network, Public Network, Other Network, Database Information, ASR Information (which is highlighted with a blue circle), CloudFS Information, Network Validation, and Summary. The main content area contains a checkbox labeled 'Configure Oracle Auto Service Request (ASR)'. Below this are three text input fields: 'Proxy Server Name:', 'Oracle Online Account Username:', and 'Oracle Online Account Password:'. At the bottom of the window, there are four buttons: 'Help', '< Back', 'Next >', and 'Finish'. The 'Next >' button is highlighted with a yellow border.

# Install Screens: 9

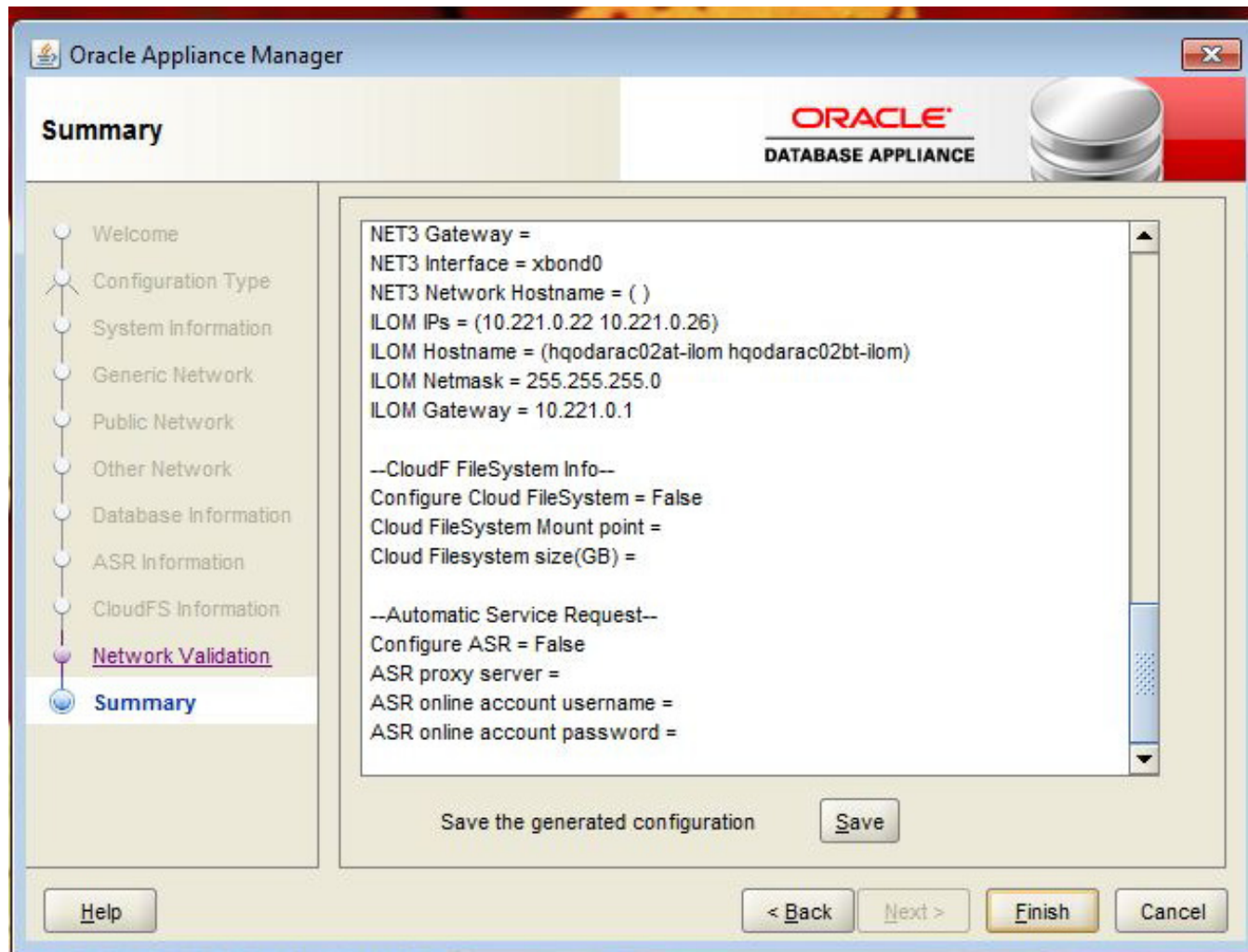




# Install Screens: 10



# Install Screens: 11



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# Discussion

## The ILOM

# System Information: System Information Overview

Oracle(R) Integrated Lights Out Manager - Windows Internet Explorer

https://hqedarac01at-ilom.com:2238/Configuration/Pages/suntab.asp

Certificate Error

Oracle(R) Integrated Lights Out Manager

ABOUT 1 Warning

User: root Role: auro SP Hostname: hqedarac01at-ilom

Oracle® Integrated Lights Out Manager

System Information System Monitoring Power Management Storage Configuration User Management Remote Control Maintenance

Overview Components Fault Management Identification Information Banner Messages Session Timeout Versions

**System Overview**

View system summary information. You may also change power state and view system status and fault information.

Product Name: SUN FIRE X4370 M2 SERVER

Part/Serial Number: 30480808+1+1 / 1207FMW00D

Host Power: On [Change](#)

System Status: Normal [View](#)

BIOS Version: 12010304

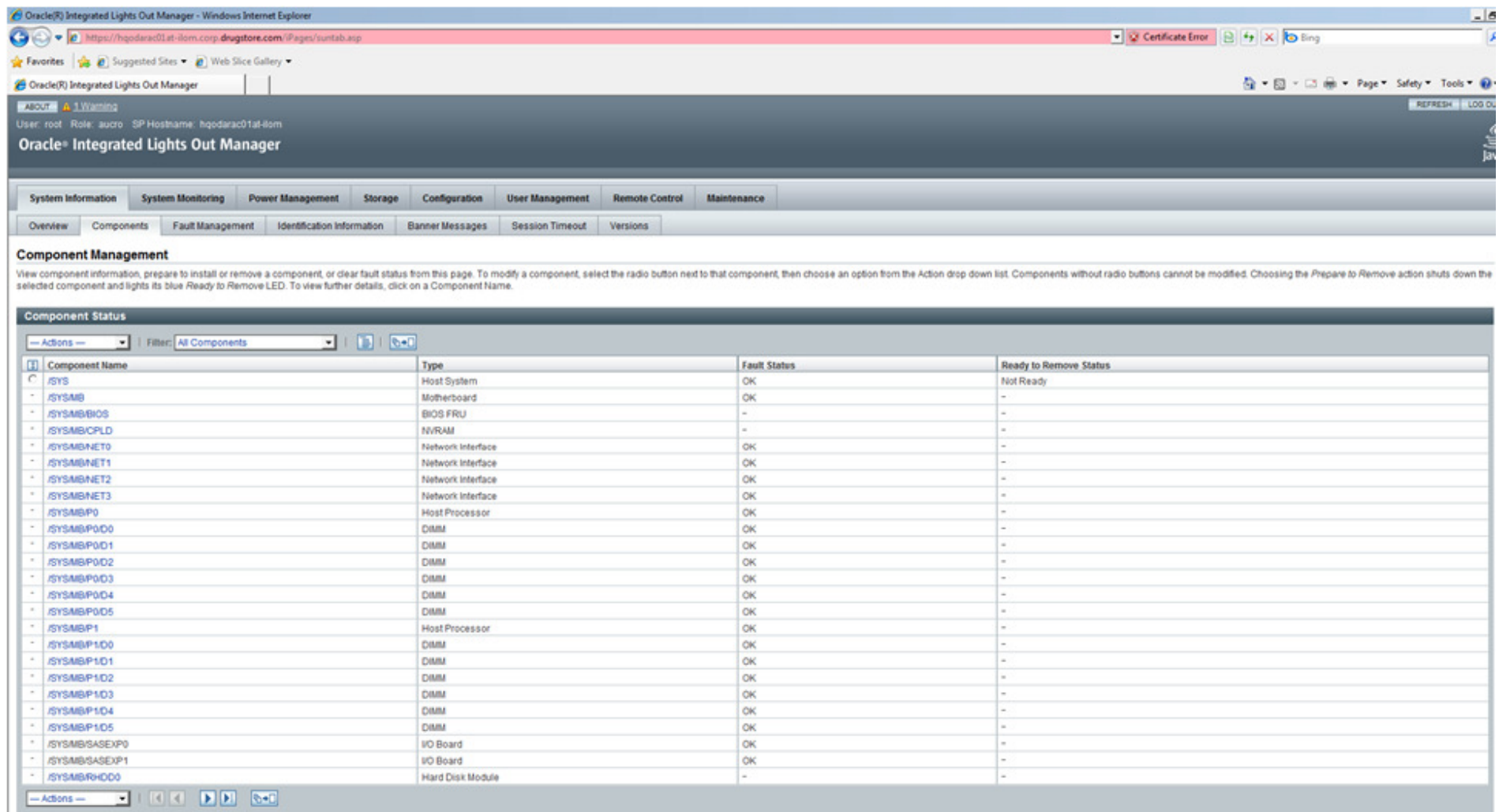
SP Hostname: hqedarac01at-ilom

Uptime: 70 days, 00:58:32

IP Address: 10.1.15.215

ILOM Version: v3.0.14.13.a.r70764

# System Information: Component Management



Oracle(R) Integrated Lights Out Manager - Windows Internet Explorer

https://hqedarac01at-ilom.corp.dugstore.com/pages/suntab.asp

Oracle(R) Integrated Lights Out Manager

System Information System Monitoring Power Management Storage Configuration User Management Remote Control Maintenance

Overview Components Fault Management Identification Information Banner Messages Session Timeout Versions

### Component Management

View component information, prepare to install or remove a component, or clear fault status from this page. To modify a component, select the radio button next to that component, then choose an option from the Action drop down list. Components without radio buttons cannot be modified. Choosing the Prepare to Remove action shuts down the selected component and lights its blue Ready to Remove LED. To view further details, click on a Component Name.

#### Component Status

Actions: All Components

Component Name	Type	Fault Status	Ready to Remove Status
/SYS	Host System	OK	Not Ready
/SYSMB	Motherboard	OK	--
/SYSMB/BIOS	BIOS FRU	--	--
/SYSMB/CPUD	NVRAM	--	--
/SYSMB/NET0	Network Interface	OK	--
/SYSMB/NET1	Network Interface	OK	--
/SYSMB/NET2	Network Interface	OK	--
/SYSMB/NET3	Network Interface	OK	--
/SYSMB/P0	Host Processor	OK	--
/SYSMB/P0/D0	CHIMM	OK	--
/SYSMB/P0/D1	CHIMM	OK	--
/SYSMB/P0/D2	CHIMM	OK	--
/SYSMB/P0/D3	CHIMM	OK	--
/SYSMB/P0/D4	CHIMM	OK	--
/SYSMB/P0/D5	CHIMM	OK	--
/SYSMB/P1	Host Processor	OK	--
/SYSMB/P1/D0	CHIMM	OK	--
/SYSMB/P1/D1	CHIMM	OK	--
/SYSMB/P1/D2	CHIMM	OK	--
/SYSMB/P1/D3	CHIMM	OK	--
/SYSMB/P1/D4	CHIMM	OK	--
/SYSMB/P1/D5	CHIMM	OK	--
/SYSMB/SASEXP0	I/O Board	OK	--
/SYSMB/SASEXP1	I/O Board	OK	--
/SYSMB/RHDD0	Hard Disk Module	--	--

# System Information: Fault Management

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# System Information: Identification Information

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# System Information: Banner Message Configuration

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# System Information: Session Time-out

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# System Information: Versions

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# System Monitoring: Sensor Readings

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# System Monitoring: Indicators

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# System Monitoring: Event Log

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# Power Management: Power Consumption

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# Power Management: Power Allocation Plan

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# Power Management: Power Statistics

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# Power Management: Power History

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# Storage: Controller Monitoring

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# Storage: Disk Monitoring

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# Storage: Volume Monitoring

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# Configuration: System Mgmt Access: Web Server

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# Configuration: System Mgmt Access: SSL Cert. Upload

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# Configuration: System Mgmt Access: SNMP Mgmt

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# Configuration: System Mgmt Access: SSH Server

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# Configuration: System Mgmt Access: IPMI Settings

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# Configuration: System Mgmt Access: CLI Settings

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# Configuration: System Mgmt Access: WS-Man Settings

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# Configuration: Alert Management Alert Settings

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# Configuration: Network Settings

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# Configuration: DNS Configuration

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# Configuration: Serial Port Settings

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# Configuration: Clock Settings

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# Configuration: Timezone Settings

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# Configuration: Syslog

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# Configuration: SMTP Client Settings

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# Configuration: Policy Configuration

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# User Management: Active Sessions

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# User Management: User Account Settings

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# User Management: LDAP Settings

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# User Management: LDAP/SSL Management

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# User Management: Radius Settings

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# User Management: Active Directory Management

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# Remote Control: Launch Redirection

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# Remote Control: KVMS Settings

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# Remote Control: Server Power Control

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# Remote Control: Diagnostics

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# Remote Control: Host Control

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# Maintenance: Firmware Upgrade

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# Maintenance: Configuration Backup/Restore

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# Maintenance: Configuration Management

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# Maintenance: Reset Service Processor

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# Maintenance: Service Snapshot Utility

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# Discussion

## Issues

# Issues

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- Patching Downtime
  - Rolling patches do not exist: You must take an outage
  - This is why we are buying in sets of two and using one as the primary and the other as a Data Guard Physical Standby
- Single Oracle Home
  - One Oracle version
  - One patch level



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# Discussion

## Vendor vs. Direct Purchase

# How To Buy an ODA

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- Vendor or Direct from Oracle
  - Vendor may/may not provide better pricing
  - Vendor should be able to ship immediately
  - Vendor may make a mess of transferring ownership of the support CSI
  - Vendor may claim to provide support but you can safely dismiss that as nonsense on every level except, perhaps, replacement hardware parts: You want your support to come directly from Oracle

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# Discussion

## Database Features

# Oracle Database Features

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- RAC
- Data Guard
- RMAN
- Streams
- OED
  - Diagnostic Pack
  - Tuning Pack
  - Data Masking Pack

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# Conclusion

**ODA's are brilliant**

**they will give you better hair  
and a vastly improved quality of life**

# Questions

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**ERROR at line 1:  
ORA-00028: your session has been killed**



**All code at [morganslibrary.org](http://morganslibrary.org)**

**Thank you**