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Bienvenidos! y Muchas Gracias

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Oracle Database Appliance

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Basada en las siguientes presentaciones:

Oracle Database Appliance

Bob Thome, Senior Director of Product Management, Oracle Rhos Dyke, Executive Vice President, Cloud Creek Systems, Inc

Oracle Database Appliance Secrets Reveled

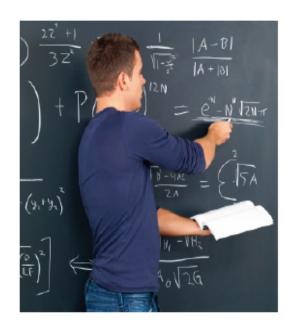
Paul Tsien, Product Manager, Database Group



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Growing Business Critical Services and Data

High Availability solutions desirable, but not easily deployed



Complex and Costly



Specific Skills Required



High Risk of Failure





Oracle Database Appliance

Simple. Reliable. Affordable.



Available Now







Oracle Database Appliance

Ideal for SMBs and Departmental Systems

- Simple to implement
- Designed and priced to scale
- Performance improves as you scale
- Highest levels of serviceability
- Highest availability for this class of machine









Fully Redundant Hardware

- 2 x dual-socket Oracle Linux servers
 - 24 Intel Xeon processor X5675 cores
 - 192 GB main memory
- 12 TB raw disk storage
- 292 GB solid state storage
- Built-in redundancy
 - Server, storage, network, power and cooling
- Single 4RU chassis









Highly Reliable Software

- Oracle Linux
- Oracle Database 11g Enterprise Edition
 - Automatic Storage Management
 - Oracle Clusterware
- Oracle Real Application Clusters
- Oracle Enterprise Manager
- Oracle Appliance Manager software





Three Tiers of Availability

Single Instance

- Good Availability
- Oracle Database 11g
 Enterprise Edition

Active – Passive

- Better Availability
- Oracle Database 11g
 Enterprise Edition
- Oracle Real Application Clusters One Node
- Can have mutual failover

Active – Active

- Best Availability
- Oracle Database 11g
 Enterprise Edition
- Oracle Real
 Application Clusters
- Mutual failover and loadbalancing





Easy to Install

Rapidly Deploy a Database Cluster

- Plug in the power
- Plug in the network
- Wizard-driven install

















- Configurator
- Deployment
- Validation
- Storage Management
- Patching
- Diagnostic Tools





Appliance Manager SoftwareConfigurator

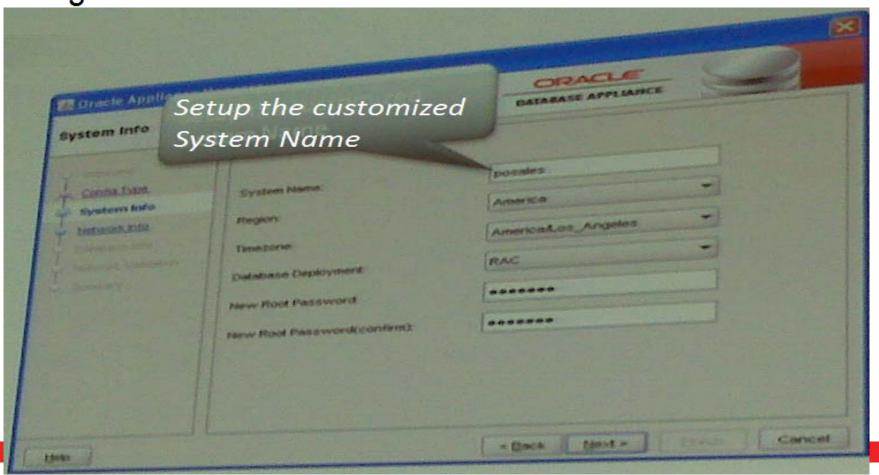
- Hides the complexity of setting up the cluster
- GUI-based enquiry collects configuration information
 - Cluster name, Domain, Networking Information, Database Size
- Validates gathered information
- Configures OS & Networks
- Deploys the Grid Infrastructure & Database







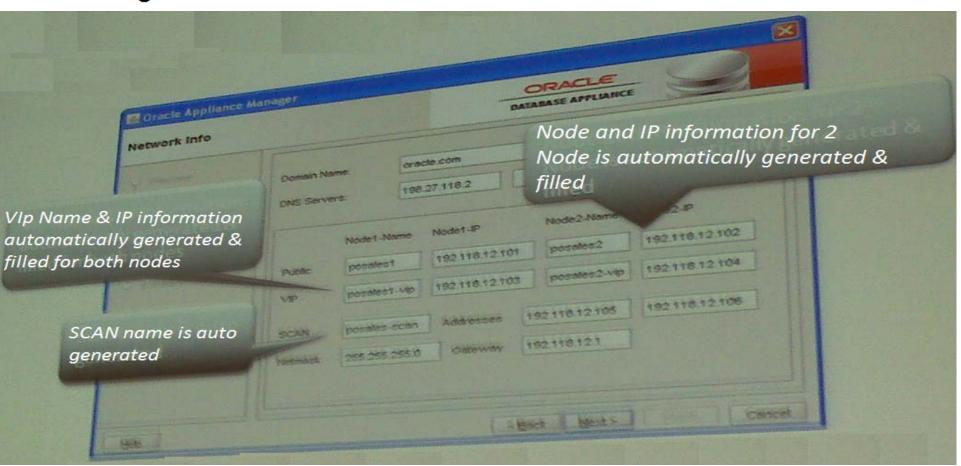
Configurator







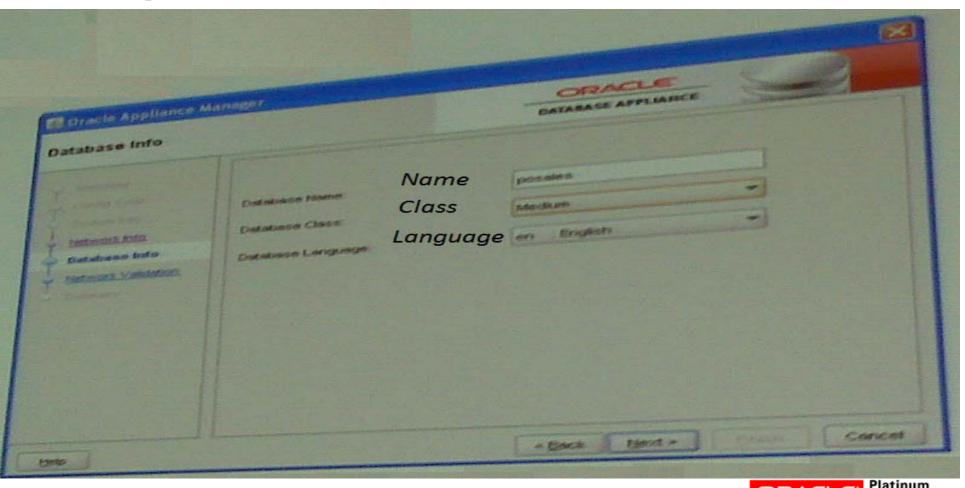
Configurator







Configurator







Appliance Manager Software Deployment

- Deploy OS, Oracle Appliance Manager, Grid Infrastructure & Database
- Configure Gl & Oracle Database
- Ensure correct configuration of disks & network
- Consisten Implementation of known Best Practices
- Configure optimal disk layout for ASM
- Performs initial configuration of Disks & ASM Disk Group(s)





Deployment

Oracle Database Class Options

- Very small
 200 processes, 16Mb log buffer, SGA 4096-8192Mb, PGA 2048-4096Mb, 1Gb redolog file
- Small
 400 processes, 16Mb log buffer, SGA 8192-16384Mb, PGA 4096-8192Mb, 1Gb redo log file
- Medium
 600 processes, 32Mb log buffer, SGA 16384-24576Mb, PGA 8192-12268Mb, 2Gb redolog file
- Large
 1200 processes, 64Mb log buffer, SGA 24576-49152Mb, PGA 12288-24576Mb, 4Gb redolog file
- Very Large
 2400 processes, 64Mb log buffer, SGA 49152Mb, PGA 24576Mb, 4Gb redolog file







Validation

- Validation tools provides detailed information about the both hardware and software
- System components based on ILOM sensor data
- OS disks and file system information
- Shared storage and multipathing information
- Disk performance
- Public and private network components







Appliance Manager Software Storage Management

- Oracle Appliance Manager Daemon (oakd) is started during boot
- Discovers storage subsystem
- Tracks configuration, layout, and status of storage
- Monitor disks for hard/soft failures
- Generate alerts on failures including slot#
- Takes corrective action on appropriate events
- Interacts with ASM for complete automation





Patching

- Provides a single interface and command to patch all the components including OS, firmware, BIOS, Grid Infrastructure (GI), Database and Appliance Manager Software
- Patching will update the repository to reflect the newly installed patches and firmware
- No user input is requiered to apply the patch





Appliance Manager SoftwareDiagnostic Tools

- Diagget tool collect all the diagnostics information and can be used when experiencing problems
 - OS logs, Clusterware logs, Database log and trace files, Cluster Health monitor (CHM), Appliance Manager log including validation logs, ifconfig, fdisk, etc.
- Healthcheck can be used to check the health of OS, Database, Clusterware and other Database Appliance components to ensure they are healthy and functionally optimally.





Easy to Manage

Appliance Manager Software

- One-button patching for entire stack
- Self-managing features pre-configured
 - Automatic Storage Management, Automatic Memory Management,
 - Automatic detection and correction of many failure conditions
- Fast problem diagnosis
 - Automated Service Request filing (phone home)
 - Relevant logs gathered and packaged for Oracle support
- Single point of contact for all support issues
- Phones home automatically to file Service Requests







'Pay-as-you-Grow' Database Licensing

- Single hardware configuration list: \$50,000
- Normal Oracle Database licensing rules
 - All database options eligible to be licensed
 - Licenses can be transferred on and off the appliance
- Database licensing scales from 2-24 processors
 - No hardware upgrades required
 - License database software just for the cores you use

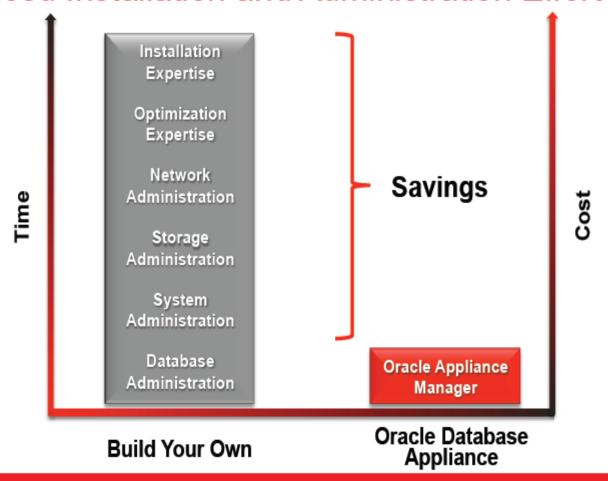






Easy to Deploy, Manage, and Maintain

Reduced Installation and Administration Effort









Low Capital and Operational Cost for High Availability

HP



- 24 processor cores
- Manual configuration & installation
- Multiple-vendor support contracts
- Minimum 24 processor core licenses

Oracle Database Appliance



- 24 processor cores
- One-button configuration & installation
- Single-vendor support contract
- Minimum 2 processor core licenses





When to Use the Oracle Database Appliance

Ideal for SMBs and Departmental Systems

- Higher availability for application databases
- Fast, efficient replacement of aging servers
 - Easy migration to full Oracle stack
 - New hardware without need for new licenses
- New database deployments with growing or unknown capacity requirements
- Consolidation of small databases





Engineered Systems for Oracle Database

Quarter Rack







Oracle Exadata

Database Machine







"We ran 9 of our most complex processes on the Oracle Database Appliance, and executed them in a fraction of the time it takes on our existing platforms. The multi-core head room enables us to do much more, with much less equipment, in much less time! That's truly great bang for the buck!"

Jason Scinocca

Chief Technology Officer, CallSource Inc.







En Conclusión

Oracle Database Appliance

Highly Available Database System in a Single Box

Simple

- Complete, plug-and-go hardware and software
- Easy to implement, manage and maintain

Reliable

- Highly available database cluster configured in minutes
- Advanced management features and single vendor support

Affordable

- Capacity on pay-as-you-grow basis
- Consolidation platform for small databases



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Para mayor información o compras por favor contáctenos:

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