hCloud Deployment Models

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The Safe Harbor

The following is intended to outline our general product direction. It is intended for information purposes only, and may not be incorporated into any contract. It is not a commitment to deliver any material, code, or functionality, and should not be relied upon in making purchasing decisions. The development, release, and timing of any features or functionality described for Oracle's products remains at the sole discretion of Oracle.

Cloud: What are *your* top issues?

- ✓ Faster Return on Investment
- ✓ Rapid Innovation, Seamless Integration
- ✓ Better Productivity, Efficiency
- ✓ Achieve Greater Scalability
- ✓Increase Flexibility, Less Capital
- ✓ Mitigate Risk, Secure Systems
- ✓Improve Availability and Performance
- ✓ Faster Response and Resolution
- ✓ Lower Overall Costs

Understanding Cloud

We've Come a Long Way...Or Maybe Not

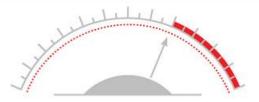
In a recent survey of over 1,000 adult Americans:

- 51% believe stormy weather can interfere with cloud computing
- 54% think they hardly or never use the cloud, but...
 95% use online shopping, banking, file sharing
- 22% admit that they've pretended to know what the cloud is
- 59% believe the "workplace of the future" will exist entirely in the cloud

Source: Wakefield Research

Today's IT Infrastructures Must Evolve

WE'RE AT A TIPPING POINT IN IT



Increasing Demands from Users
Explosion in Mobile Devices, Data, and Risk
State Pressures on Business / IT

BUSINESS REQUIRES NEW SERVICES

By 2020, IT departments will need to manage:



10× more Servers



50×



all with only

75×



1.5×
more IT Personnel

The Promise of the Cloud is Real

Enterprises Use Cloud Solutions to Simplify IT

CLOUD HAS THE POWER

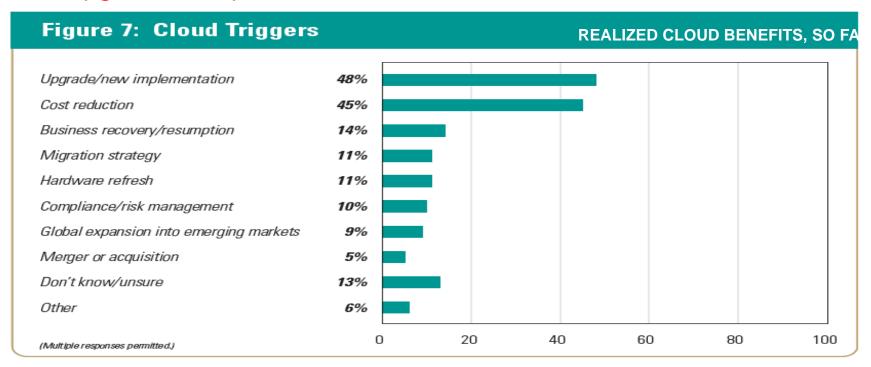


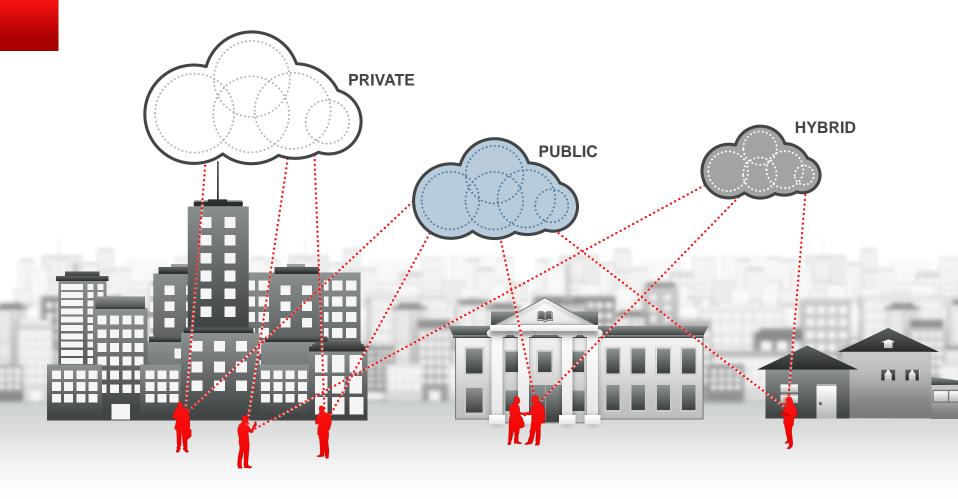




Key Cloud Adoption Triggers

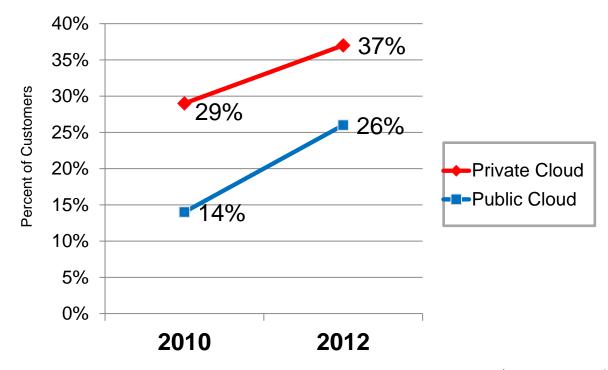
Upgrades / Implementations and Cost Reduction





NIST Definition includes "Community Cloud" too

Private and Public Cloud Adoption



(IOUG) ResearchWire_\M\

Source: IOUG ResearchWire, Aug-Sept 2010 and Aug-Sept 2012

hCloud Deployment Models



Traditional Silos

- Physical
- Dedicated
- Static
- Heterogeneous



Consolidated

- Virtual
- Shared platform & shared infrastructure
- Dynamic
- Standardized platform & infrastructure



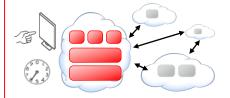
Private Cloud

- **Customer Specific**
- Dedicated VM
- Tight Controls
- **Customer Defined** Change Mgmt
- Dedicated Governance



Public Cloud

- Specialized
- Shared
- Standardized

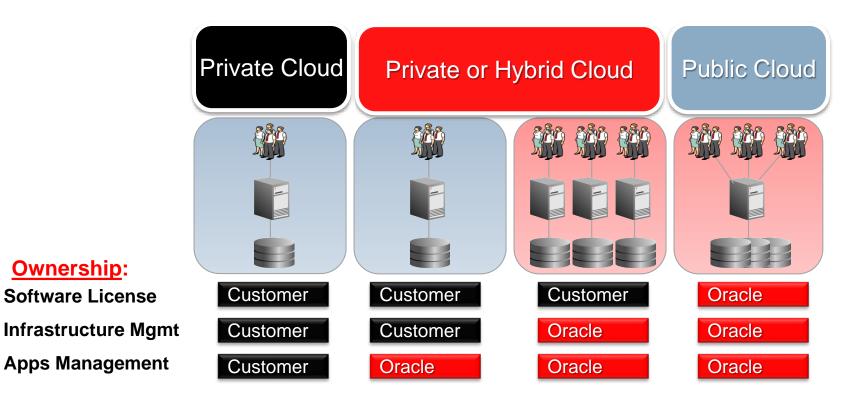


Hybrid Cloud

- Federation across public & private clouds
- Interoperability
- Cloudbursting

Start at any Point • Choose one Model or More • Operational needs Drive Choices

CHOICE. Ownership, Management, and Location.



Ownership:

Key Component for Enterprise IT

Benefits of Integrated, Global ERP Run in Managed Private Cloud

Existing Oracle customers can get core benefits of cloud in a managed private cloud deployment

- Protection from platform obsolescence
- No investment in talent or infrastructure to build & run system
- Predictable, monthly service costs

Customer Requirements	On- Premise	Managed Private Cloud	Public Cloud (SaaS)
Enterprise Software Criteria			
Support for custom code extensions		•	0
Support for new custom reports		•	0
Control of update schedule		•	0
Control of data location		•	0
Cloud Criteria			
No investment to build & run system	0	•	
Protection from Platform obsolescence	0	•	
Predictable, monthly service costs	0	•	
No license costs (no capital budget)	0	0	

Public vs. Private: Which is Best for Me?

	Public	Private
Change Management Control: Versions	Little to No Control	Full Control but may have limits
Change Management Control: Timing	Little to No Control	Full Control but can dependent on provider resources
Ease of Entry / Ease of Exit	Quick startup; global access immediately; Exit may prove to be a challenge	Start up is a project; exit can be straightforward
Customized Security	Generally not available	Available generally as add- on services
Scalability	Good	Can be good depending on how provider provisions
Cost Effectiveness	Depends on model; can change at points in scaling	Generally more in control of customer

Oracle Cloud Security Solutions

Layered Defense In-Depth Risk Management







Security Strategy



Security Technologies



Security Services



Governance



Manage RISKS



Prevent **THREATS**



Unlock **OPPORTUNITIES**

Layered Defense In Depth Risk Management







Security Strategy



Security **Technologies**



Security Services



Governance

Security Strategy

- ✓ Legal and Security Architecture Reviews
- √ Security Technical **Design Reviews**
- √ Security Assessments and Certified Configurations

Security Technologies

- √ Security Information Event Management (SIEM)
- ✓ Secure Web Gateways
- ✓ End Point Security (AV/HIDS/Disk Encryption)
- ✓ Intrusion Detection/Prevention
- √ Tape Backup Encryption
- ✓ Multi-Factor Authentication for Administrators
- √ Segregated Networks
- ✓ Power Broker for Privileged Management
- √SSL Accelerators

Security Services

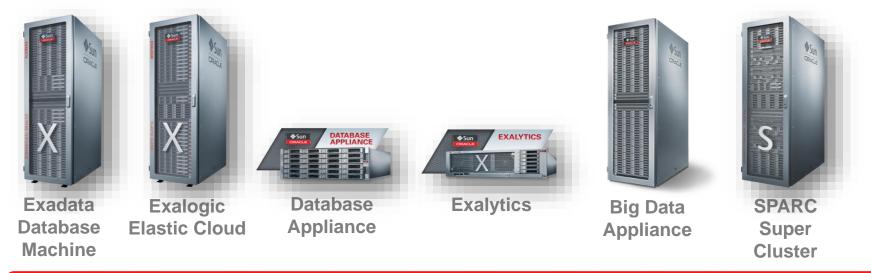
- ✓ PCI DSS and HIPAA **Security Services**
- ✓ Enhanced Security Services
- √ Government Security Services
- √21 CFR Part 11 Validation **Support Services**
- ✓ Identity Management Services (SSO, Provisioning,...)
- ✓ Disaster Recovery Services

Governance

- √ Objective 3rd Party Opinion via Audits (ISAE 3402 / **SSAE 16)**
- ✓ISO 27001 Certification / ISO 27002 Conformance
- √ Formal Risk Assessment
- ✓ Self Testing
- ✓ Security Training for Operations and Customer Delivery
- ✓ Customer Right to Audit

Engineered Systems in the Cloud

Extreme Performance. Managed Excellence.



- Design & Implementation Services
- Run & Maintain with up to 99.99 uptime SLA
- Flexible Deployment & Service options
- **One-stop Support**

- Transition Services, Upgrades and Migration Svcs
- On-going Continuous Improvements
- Performance Optimization for Oracle Apps on Exa
- Choice of OpEx based Commercial models

Oracle Managed Cloud Services

Key Component of Oracle Cloud Solutions Strategy

Singular Focus on Red Stack



- Accelerated upgrades
- Certified configurations optimized across stack
- Advanced SIEM with predictive incident management
- Go-Live Center reduces post-go-live issues 54%

Your Unique Connections to Oracle



- Find one fix many
- Early insights into patch releases
- Direct access to Oracle Product Dev for fastest issue resolution – no 3rd party delays
- Immediate input to Development roadmap

Massive Scale, Highly Secure



- 1.25Tn business transactions per day
- 5.34Bn database transactions/hr at peak
- World's largest Oracle VM & Linux Grid
- 41+ petabytes of managed storage
- The most Security offerings in the market



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Hardware and Software



Engineered to Work Together