

## Bringing the Benefits of Cloud Computing to the Enterprise

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## Platform Why You Should Care About Cloud

### Faster

- On-demand delivery of processing power
- Improved performance of business applications



### Cheaper

- Increase utilization through resource sharing
- Reduce CapEx & OpEx

**JPMorganChase** 

### Better

- Improved quality of service for end users
- Self-service resource procurement



## Platform Infrastructure Management Challenges



## **Platform** IT Infrastructure Sharing Benefits

- Smarter Allocation -> Faster response to business needs
- More Aggregation -> Higher utilization, lower costs



## **Platform**<sup>•</sup> Enterprise CIO Decision



## **Platform** Many Paths to Cloud Adoption



## **Platform** Resource Sharing Across Applications



### **Platform**<sup>•</sup> Private Cloud Components



Service Delivery

Allocation Engine

**Resource Integration** 

Virtualization Provisioning

Server Storage Network

Automation

Software

**Cloud Management** 

Infrastructure

### Platform Enterprise Requirements for Private Cloud

- 1. Heterogeneous systems support
- 2. Integration with management tools
- 3. Integration with middleware, workload managers, and applications
- 4. Configurable resource allocation policies
- 5. Support IT and business processes
- 6. Enterprise solution

## **Platform** Misconceptions of Private Cloud



All resources in the company must be managed by the cloud

• False: Start with Test & Dev or some of your web apps, within a LOB



#### I need to replace existing servers

· False: Integrate existing servers into your cloud



#### I need to change my entire IT organization

• False: Cloud services for suitable users & apps; existing infrastructure & teams continue



#### I need to change all my IT processes

• False: Cloud operates under existing regulation and compliance: builds, directory & security

## **Platform** Application Suitability for Cloud

### Location

Sensitivity to where the application runs

### Workload

Predictability and continuity of application load

### **Service Level**

Severity and priority of service level agreements

## **Platform** Areas of Cloud Adoption

#### **Location Independent**

#### **Critical Service Levels**



# USER CASES

## **Platform** SAS R&D: The Old Way - Silos



How did we get here?

- global R&D and testing
- many projects need distributed resources
- deploy/administer cluster silos per group

Source: SAS

development team

## **Platform**<sup>•</sup> Perspectives Leading to Cloud



#### Developer

- delay in resource availability
- inability to dev/test large # resources
  - Development Manager
    - allocation of resources for sysadmin
    - delays in delivering products
      - **Central IT**
      - too many siloed environments
      - hard to support everyone's needs
        - CTO
          - desire to accelerate R&D
          - wasted cost due to duplication

CEO

Source: SAS

Internal SAS Cloud

is the way to go!

## Platform The SAS R&D Cloud





The benefits of sharing

- partnership with Platform
- phase 1 208 8-way blades, will grow over time
- quickly change personalities of machines to meet different R&D needs
- much larger environment for dev/test
- enables IT to meet dynamic needs of all R&D teams

Source: SAS

### Major Financial Institution: Test / Dev Cloud

#### Major Financial Institution

Shared virtual servers across the deployment lifecycle

- Test/Dev environments in 15 minutes
- Eliminate manual setup and repurposing work
- Utilization tracking with accurate billing



- Integrated cloud for Test/Dev to production deployment
- Self-service reservation with policy-driven placement

### JPMC: Enterprise Corporate Cloud

- Cost reduced to 56¢ / application hr with full IT services
- \$1 Million dollars in savings 1<sup>st</sup> yr, More in subsequent years



### Citi: Grid to Cloud

- Simplified infrastructure management
- On-demand resources at reduced cost to improve performance



### Alatum: Singapore Public Cloud



Cloud Services Arm of Singapore Telecom serving multinationals, SMBs and government agencies

- Frees users from purchasing and Maintaining HW & apps internally
- Reduces ISVs CapEx for developing Commercial services



- Public cloud infrastructure across 2,400 hosts
- Self-service request with policy-driven VM lifecycle management

### **Platform**<sup>\*</sup> Summary

- Faster response to business needs
- Higher utilization, lower costs
- Dynamic, shared resources
- Private Cloud is still early, but many firms have proven it delivers value

### Platform<sup>•</sup> Pioneer & Global Leader

5,000,000 Managed CPUs 2,000 Customers worldwide 500 **Employees in 15 offices** 16 Years of profitable growth Leader in Grid & Cloud Mgmt

## **Platform** Industries Served by Platform Computing

Electronics	Financial Services	Industrial/Mfg	Oil & Gas	Gov't & Education	Life Sciences
<ul> <li>AMD</li> <li>ARM</li> <li>Cadence</li> <li>Infineon</li> <li>MediaTek</li> <li>Nvidia</li> <li>Samsung</li> <li>Sony</li> <li>Synopsys</li> <li>TI</li> <li>Toshiba</li> <li>Industries served by Platform Computing</li> </ul>	<ul> <li>BNP</li> <li>Citi</li> <li>Fortis</li> <li>HSBC</li> <li>JP Morgan</li> <li>Chase</li> <li>KBC Financial</li> <li>LBBW</li> <li>Mass Mutual</li> <li>Mitsubishi UFJ</li> <li>Nomura</li> <li>Prudential</li> <li>Sal. Oppenhein</li> <li>Société Générale</li> </ul>	<ul> <li>Airbus</li> <li>BAE Systems</li> <li>Bombardier</li> <li>Deere &amp; Co.</li> <li>Ericsson</li> <li>Goodrich</li> <li>Honda</li> <li>Nissan</li> <li>Northrop</li> <li>Grumman</li> <li>Pratt &amp; Whitney</li> <li>Volkswagen</li> </ul>	<ul> <li>Agip</li> <li>BP</li> <li>Bristish Gas</li> <li>China Petroleum</li> <li>ConocoPhillips</li> <li>EMGS</li> <li>Gaz de France</li> <li>Hess</li> <li>Kuwait Oil</li> <li>PetroBras</li> <li>Petro Canada</li> <li>Shell</li> <li>StatoilHydro</li> <li>Total</li> <li>Woodside</li> </ul>	<ul> <li>CERN</li> <li>US Dod, DoE</li> <li>ENEA</li> <li>Georgia Tech</li> <li>Harvard Med</li> <li>Japan Atomic</li> <li>Energy Inst.</li> <li>Mac Planck Inst.</li> <li>MIT</li> <li>SNU</li> <li>SSC, China</li> <li>Stanford Med</li> <li>TACC</li> <li>U. Tokyo</li> <li>Washington U.</li> </ul>	<ul> <li>Abott Labs</li> <li>AstraZeneca</li> <li>Celera</li> <li>DuPont</li> <li>Eli Lilly</li> <li>Johnson &amp; Johnson</li> <li>Merck</li> <li>National Institutes of Health</li> <li>Novartis</li> <li>Partners Health Network</li> <li>Sanger Institute</li> </ul>
Other Industries	■ AT&T ■ Telecom Italia	■ Bell Canada ■ GE	u Telefonio u Walt Dis	ca ⊔IR sney Co.	I

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