

Purposeful Clouds

**The Cloud is a  
business decision**

Walt Lapinsky, CCSK  
VP Cloud Security

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## Agenda

- Customer Challenges
- What is the Cloud?
- Is It Real?
- The Cloud in more detail
- The Value of the Cloud
- About Purposeful Clouds

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## IT Challenges

- Ever decreasing IT budgets
  - IT equipment often capital expense
  - Little relationship between cost and value
  - “Do more with less”
- Lack of Agility
  - Time to react to opportunities and competition
- Aggravation
  - How do I manage all
- ***And keep it secure***

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## What is the Cloud?

Cloud computing is a pay-per-use model for enabling available, convenient, on-demand network access to a shared pool of configurable computing resources that can be rapidly provisioned and released with minimal management effort or service provider interaction.

- On-demand self-service
- Ubiquitous network access
- Location-independent resource pooling
- Rapid elasticity
- Pay-per-use



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## What is Cloud Computing really?

- **It is a natural extension of virtualization to the Internet**
  - Virtual servers, storage, networks
  - Virtual platforms, software and solutions
- **It provides**
  - Pay-for-use
  - Near-instant scalability
  - Turns IT into a utility
  - Delivered by an organization with IT as their core business

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## Is it real?



- **Gartner:**  
More than 25% of all IT will be delivered via non-traditional models such as the Cloud, grid or Utility Computing by 2012
- **IBM:**  
The Cloud Computing market is expected to grow 7x faster than the overall IT market through 2013
- **Global Industry Analysts:**  
The market for Cloud Computing services will reach \$222.5 billion market by 2015

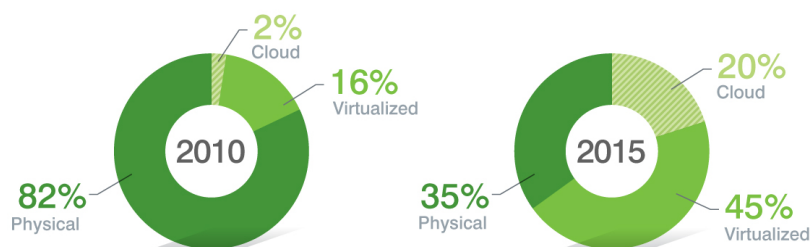
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## Oh yeah, It's real & ready for prime time

Where IT workloads run:



Percentage of enterprise workloads that will run in physical, virtual & public Cloud environments

*Novell estimates based on IDC and Gartner data*

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## Common perceptions of the Cloud

- Potential issues?
  - Security
  - Performance
  - Availability
  - Data size
  - Transition/Integration
  - Management
- The Cloud is not ready for everything, today
- But, the Cloud is evolving – quickly

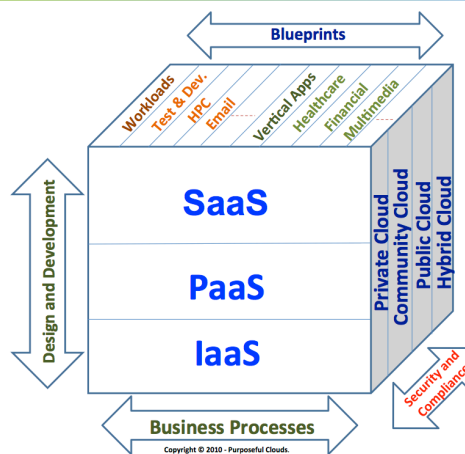


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## Our view of the Cloud

*For each workload, we find the right place in the Cloud Cube, the right Cloud Service and the right Cloud Model to meet those needs*



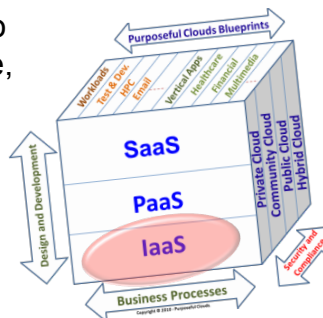
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## Infrastructure as a Service

**IaaS** is a provisioning model in which you outsource the equipment used to support operations, including storage, hardware, servers and networking components.

The service provider owns the equipment and is responsible for housing, running and maintaining it.



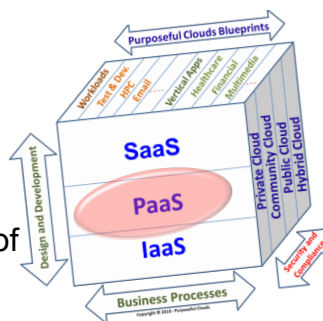
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## Platform as a Service

**PaaS** is the paradigm for delivering operating systems and associated services over the Internet without downloads or installation.

It's a platform that includes all the systems and environments comprising the end-to-end life cycle of developing, testing, deploying and hosting web applications to fully leverage existing services within the Cloud.



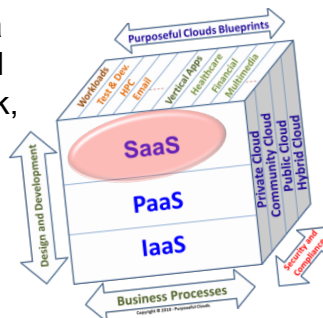
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## Software as a Service

**SaaS** is a software distribution model in which applications are hosted by a vendor or Cloud service provider and made available to you over a network, typically the Internet.

SaaS is becoming an increasingly prevalent delivery model for technologies that support web services and service-oriented architecture (SOA).

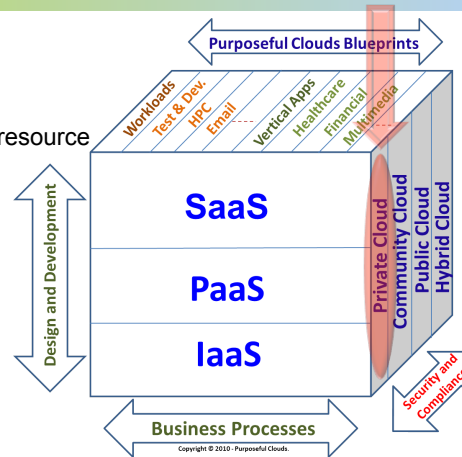


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## The Private Cloud Model

- Cloud-like environment
  - Within your IT
  - At the CSP, but your-use only
  - Usually using virtualization and resource automation
- Provides some of the financial values of a Public Cloud
- You control
  - Security
  - Governance
  - Availability
  - Reliability

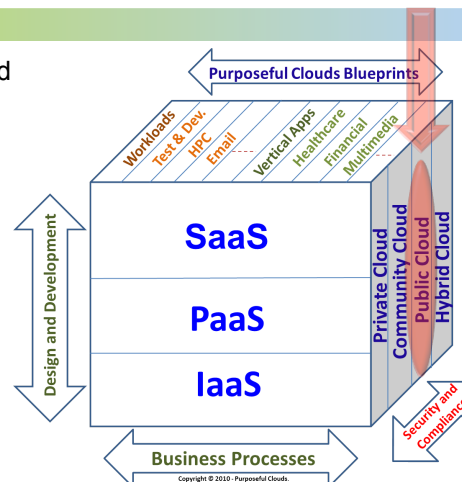


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## The Public Cloud Model

- Sometimes called External Cloud
- Dynamically provisioned
  - Fine-grained
  - Self-service
  - Utility pricing
- Deliver over the Internet
- Web-based applications or web services
- Off-site third-party provider
  - Shares resources among many customers

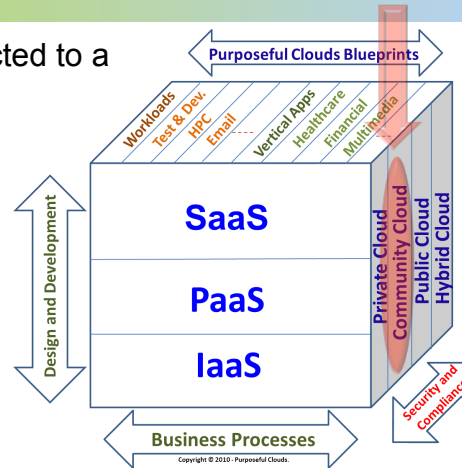


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## The Community Cloud Model

- A semi-Public Cloud restricted to a specific community
- Can help on standardizing
  - Security
  - Privacy
  - Policy
- More expensive than Public Cloud but less expensive than Private Cloud

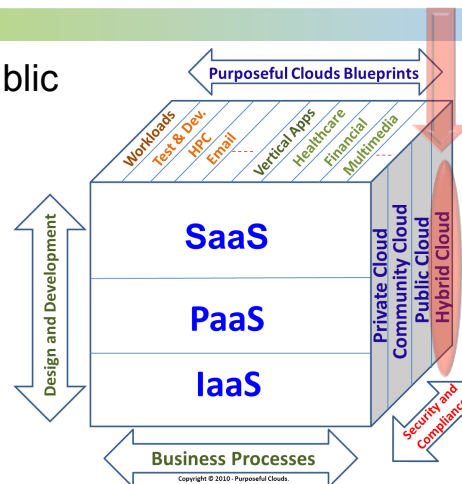


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## The Hybrid Cloud Model

- Multiple Private and Public Clouds
- Take advantage of
  - Public Cloud where appropriate
  - Private Cloud where more control required

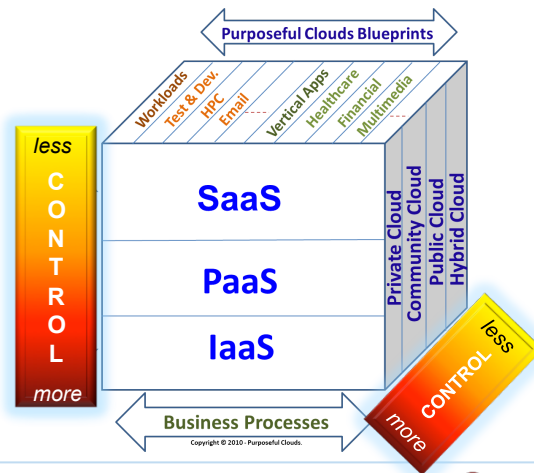


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## Loss of Control in the Cloud

The further back on the right face and up the front face, the less control you have

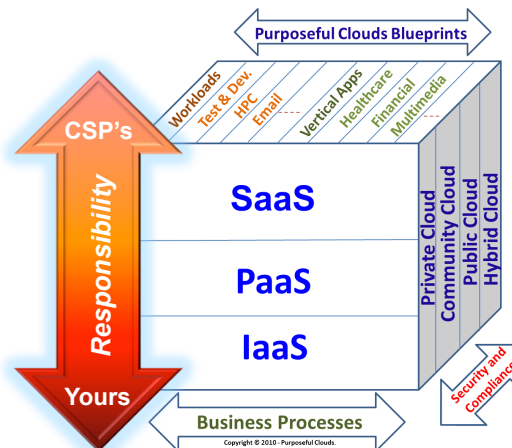


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## Responsibility in the Cloud

The further up the front face, the more responsibility the Cloud Service Provider (CSP) can provide.



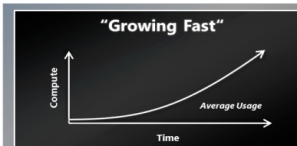
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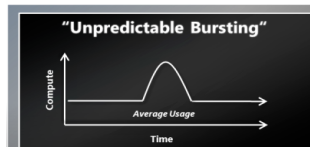
## Workload patterns for the Cloud



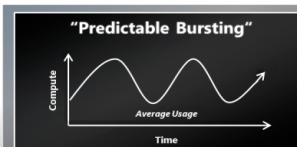
- On and off workloads (e.g. batch job)
- Over provisioned capacity is wasted
- Time to market can be cumbersome



- Successful services need to grow/scale
- Keeping up w/growth is big IT challenge
- Complex lead time for deployment



- Unexpected/unplanned peak in demand
- Sudden spike impacts performance
- Can't over provision for extreme cases



- Services with micro seasonality trends
- Peaks due to periodic increased demand
- IT complexity and wasted capacity

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## Use cases for the Cloud

- Development and testing
- Disaster Recovery and Business Continuity
- Scalable Web Services
- Media Processing and Rendering
- Data mining
- Online Training

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## Value of the Cloud

- Maximizes IT budget value
  - Moves capital expense to operating expense
  - Strong relationship between cost and value
  - Opportunity for significant real cost savings
- Improves Agility
  - Quick reaction to opportunities and competition
- Minimizes Aggravation
  - Somebody else manages all of this



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## Plus ...

- Opportunities for improved
  - Disaster recovery / business continuance
  - Backup
  - Archiving
  - Document management
  - Geographic expansion
  - Collaboration
  - Integration of social media

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## Summary

- The Cloud is here, and it is real!
- The Cloud represents unprecedented opportunities
- Going to the Cloud is not an event, it is a journey
  - Requires research, planning, commitment, and expertise

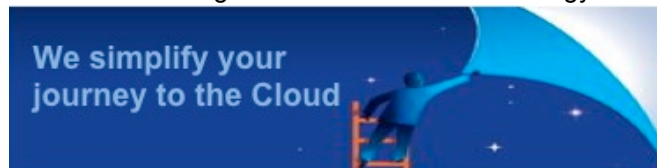
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## About Purposeful Clouds

Founded in 2008, Purposeful Clouds provides consulting and training services to large and small organizations looking to save significantly on IT costs by using Cloud computing technology. These organizations rely on Purposeful Clouds experts to simplify their journey to the Cloud as they transition their business, applications and processes. Because Purposeful Clouds is vendor neutral they select the best-in-class combination of technologies, Cloud Service Providers, products and services to meet the client's specific short- and long-term business and technology needs.



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## Our Cloud services portfolio

- Cloud Services
  - Strategy Workshop
  - Opportunity Assessment
  - Readiness Assessment
  - Security & Compliance Assessment
  - Implementation
  - Building Cloud Business
- Cloud Education Services



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## Thank you!



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