Optimize Your Heterogeneous SOA Infrastructure

SHARE Boston 2010

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Cloud Business Development

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The world is getting smarter – more instrumented, interconnected, intelligent.

Smart traffic systems

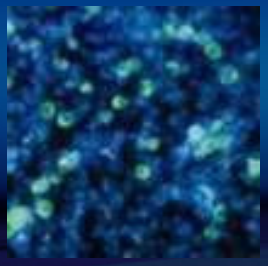
Intelligent oil field technologies

Smart food systems

Smart healthcare

Smart energy grids

Smart retail

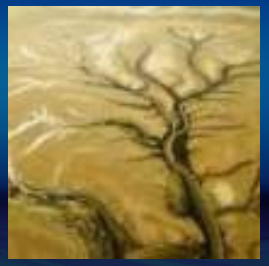


Smart water mgmt

Smart supply chains

Smart countries

Smart weather



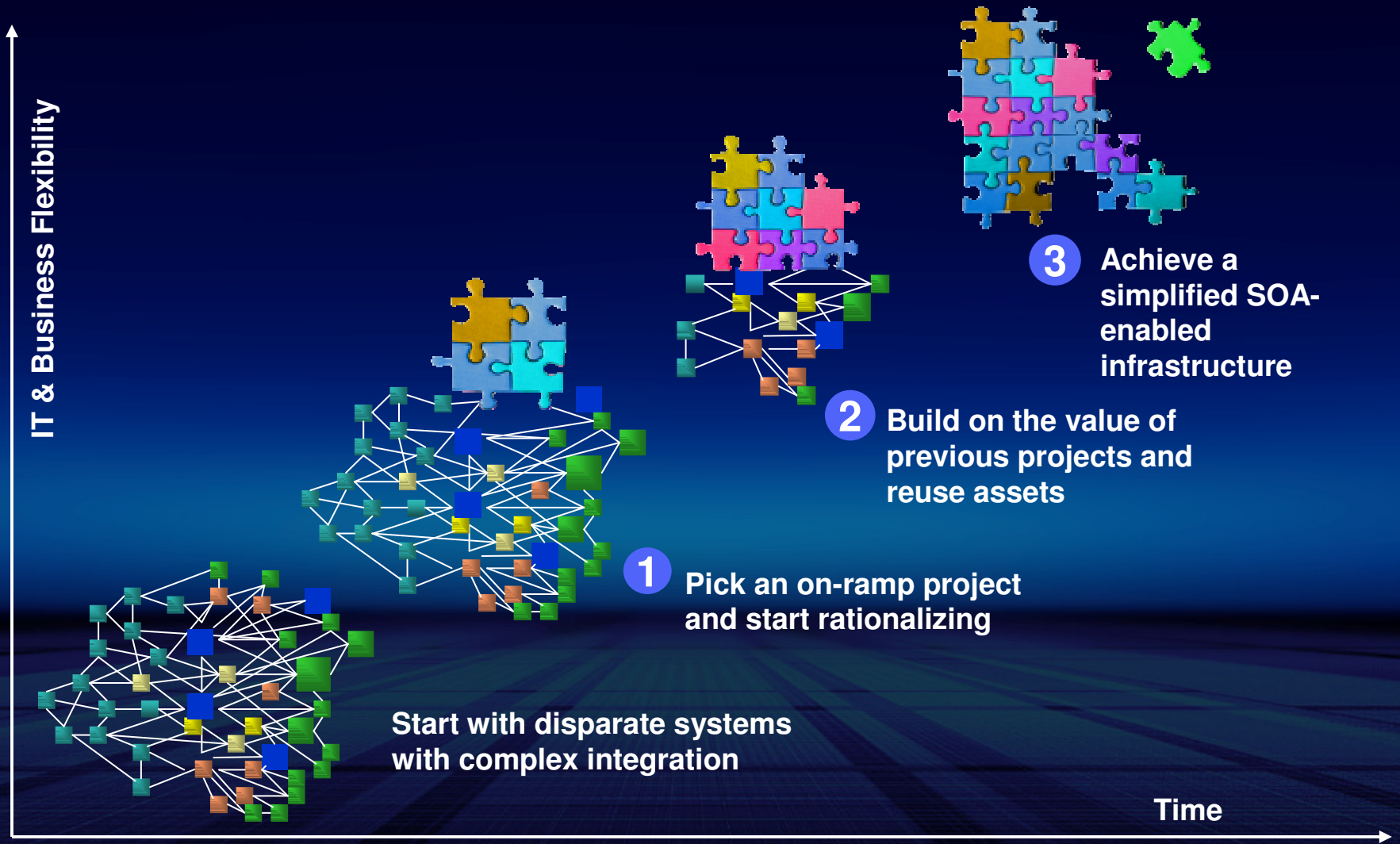
Smart regions

Smart cities

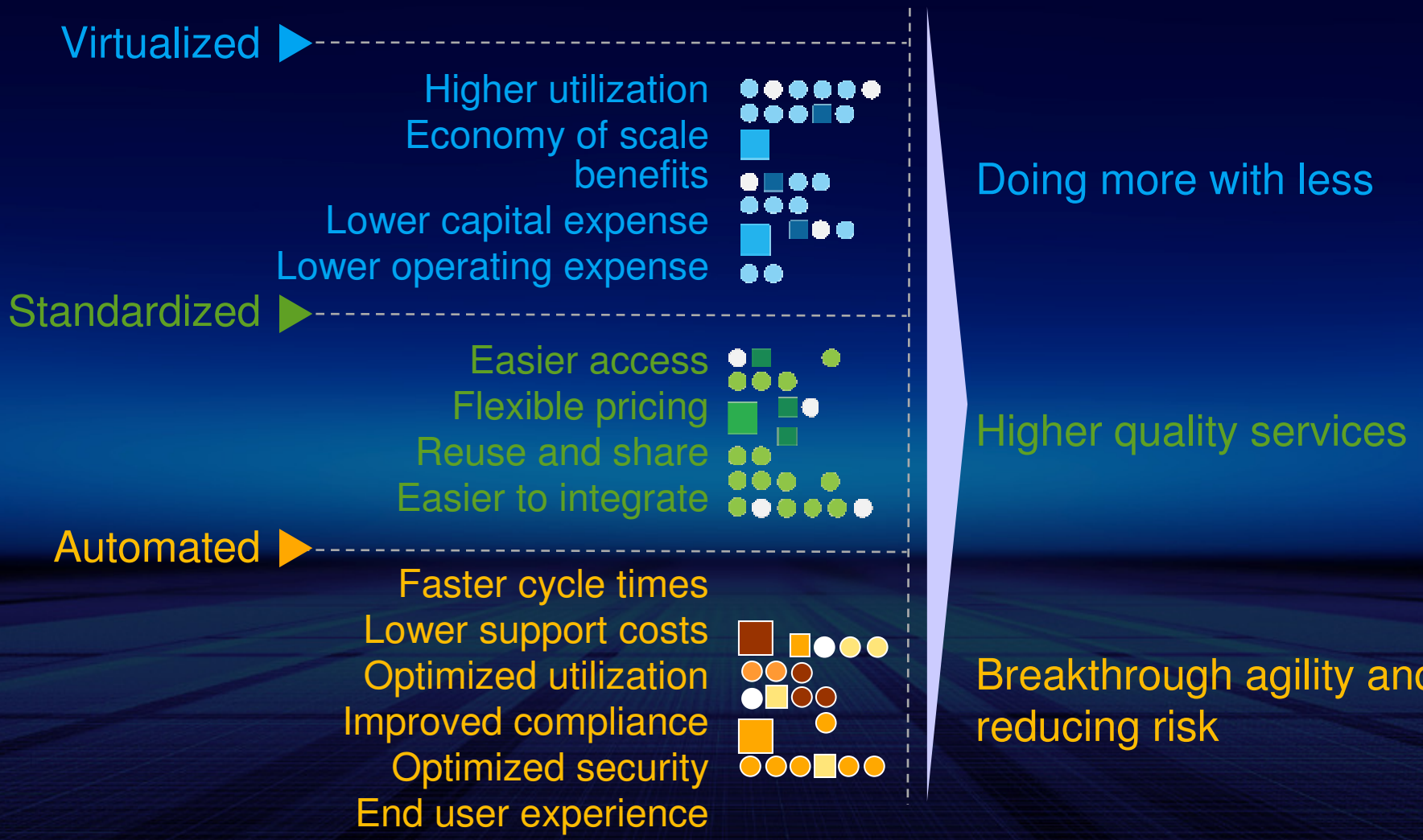
SOA was designed to enable these innovations

Adopting SOA is a Progressive Transformation of Applications, Processes and IT infrastructure

It is also a roadmap towards Cloud Computing…..

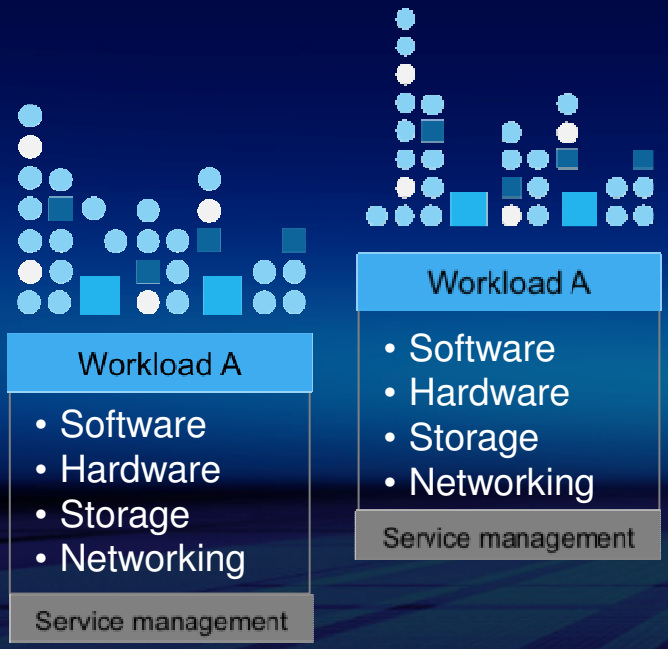


Cloud computing delivers IT and business benefits….beyond just agile applications based on SOA

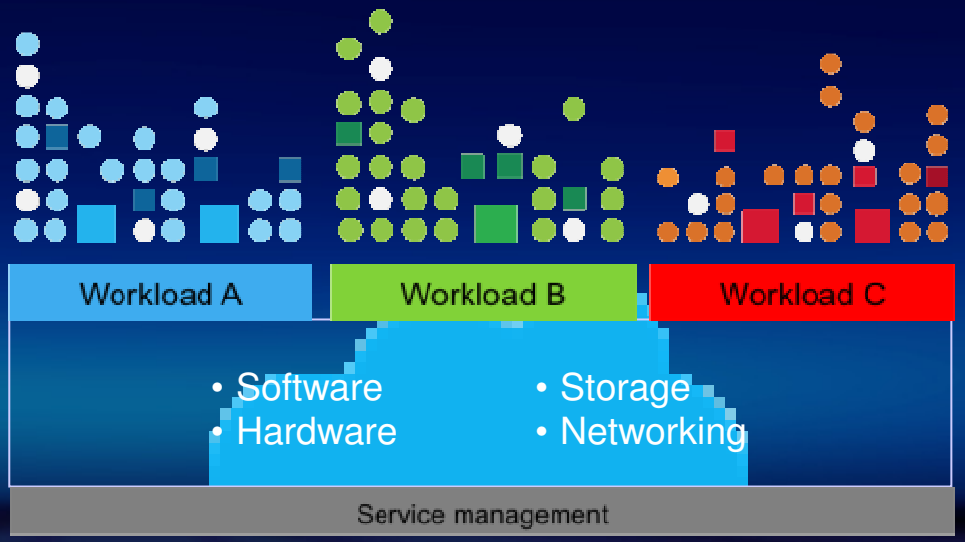


Cloud Computing is the optimized infrastructure that makes SOA services even more efficient

Without cloud computing



With cloud computing



- Virtualized resources
- Automated service management
- Standardized services
- Location independent
- Rapid scalability
- Self-service

Roadmap towards Cloud Computing rely on good SOA practices to realize its full potential

Consolidate

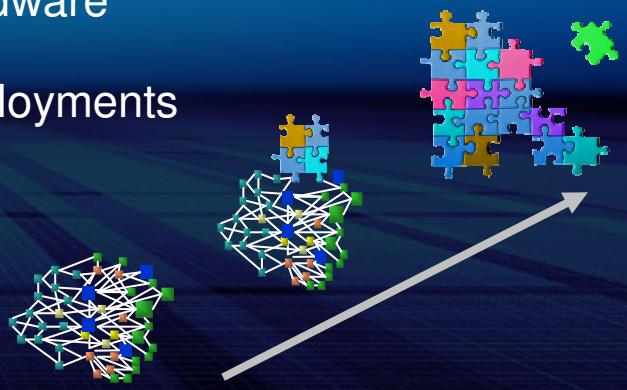
- Reduce infrastructure complexity
- Reduce staffing requirements
- Manage fewer things better
- Lower operational costs

Virtualize

- Remove physical resource boundaries
- Increase hardware utilization
- Reduce hardware costs
- Simplify deployments

Standardize and automate

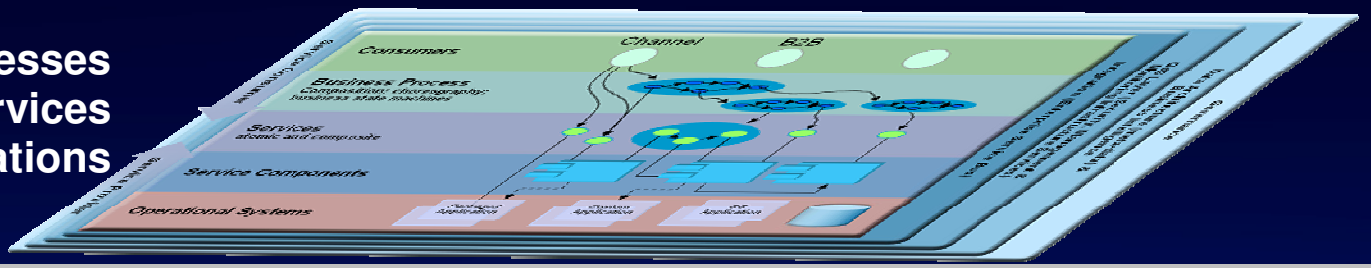
- Standardize services
- Reduce deployment cycles
- Enable scalability
- Flexible delivery



SOA and Cloud Computing

Cloud Services Delivery Framework is rapidly becoming available as the preferred way to host SOA based applications

SOA Processes
SOA Services
SOA Applications



Cloud Service Delivery Framework

Cloud Applications

Additional Partner Supplied Capabilities

Business Process as a Service and Software as a Service

Process Management | Collaboration | Analytics | ...

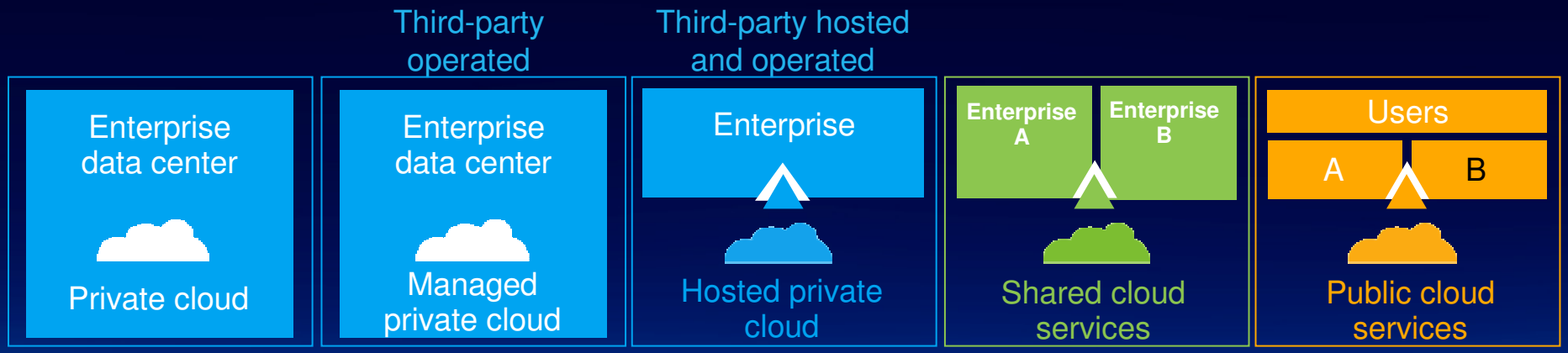
Shared Middleware

Infrastructure

Integrated Service Management

Lifecycle and Business Support Services

There is a spectrum of deployment options for cloud computing….all of them supporting SOA



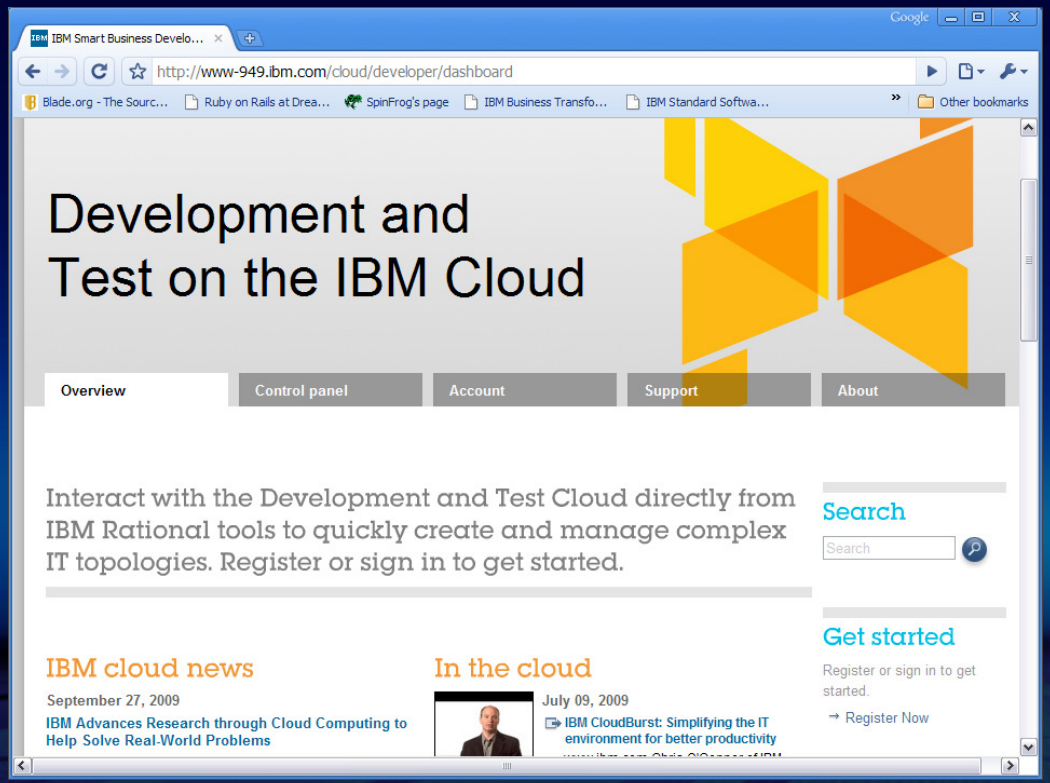
Private
IT capabilities are provided "as a service," over an intranet, within the enterprise and behind the firewall

Hybrid
Internal and external service delivery methods are integrated

Public
IT activities / functions are provided "as a service," over the Internet

Smart Business Development & Test on the IBM Cloud

IBM's Public Cloud

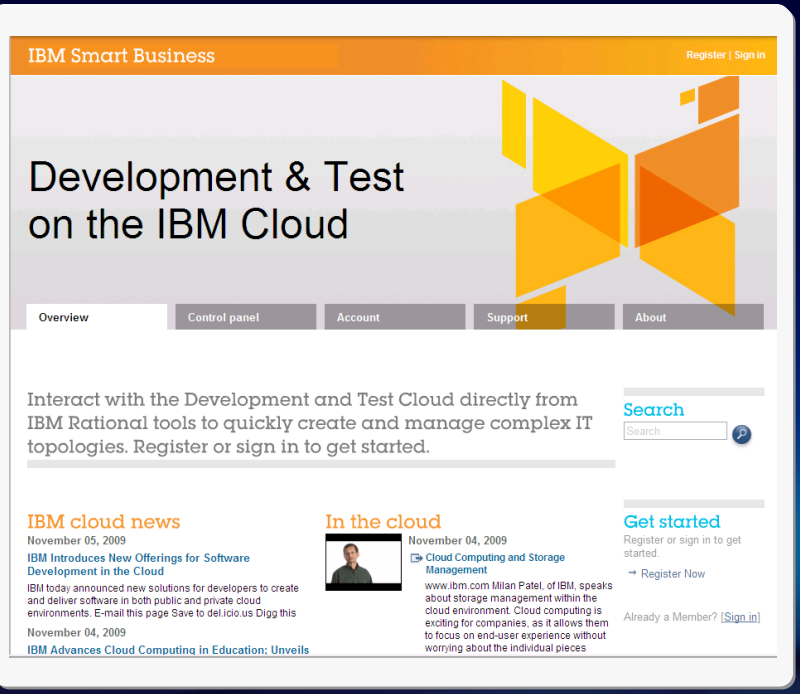


- **GA on May 25 in US**
- **Europe GA in 3Q**

Http://www.ibm.com/cloud

http://www.ibm.com/cloud/developer

IBM Smart Business Development and Test on the IBM Cloud provides you with an enterprise-class cloud environment for SOA applications Development, Testing and Production



Our solution provides the following:

- Choice of seven virtual server configurations
- Choice of pre-configured software images
  - Linux® operating systems; Red Hat and Novell SUSE
  - IBM Lotus®, WebSphere®, DB2® and Informix® stacks
  - IBM Rational® Application Lifecycle Management software
- Option to add persistent storage (charged for per gigabyte [GB] per month)
- Support options including a Web-based forum for users to submit requests

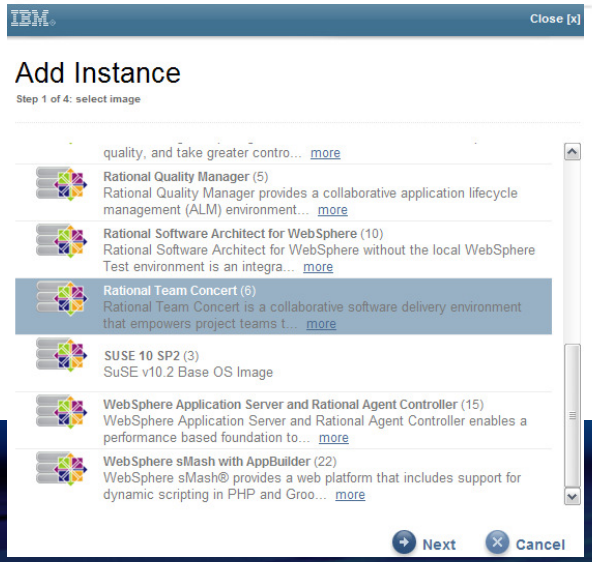
Payment options:

- Pay-as-you-go option (per virtual machine hour usage charge)
- Reserved capacity package options
  - Reserve a pool of resources in units of 64 base processors for 6 or 12 months
  - Monthly fee plus discounted usage rates
- Network bandwidth charged for per GB transmitted. IP addresses per hour.

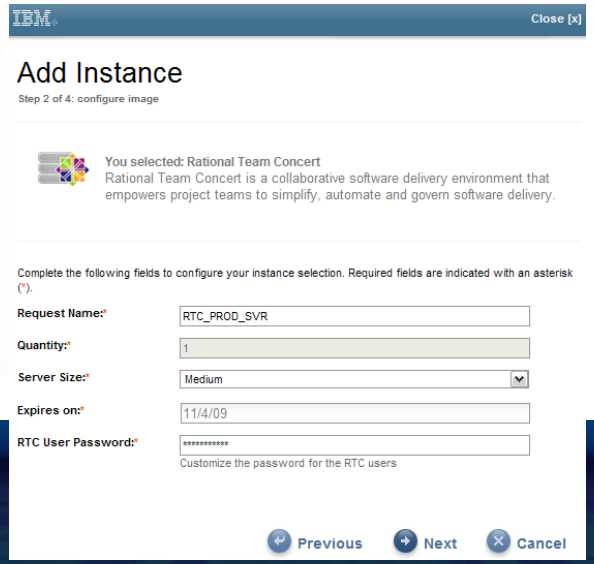
Deploy a Service with a few mouse clicks

Your Development environment ready in a only minutes…

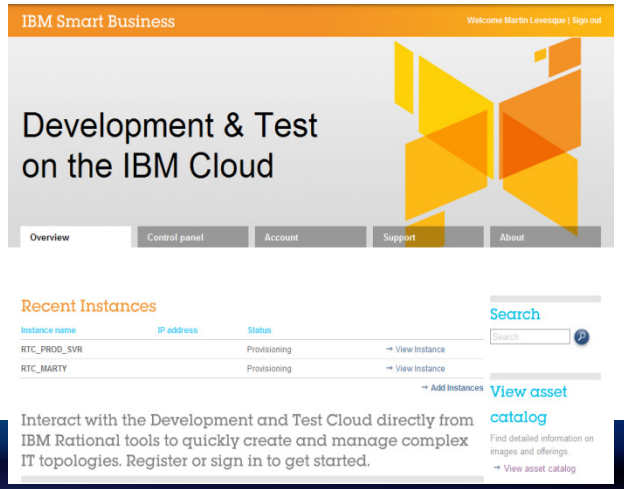
Step 1 Click the Add Instances button and select an Image



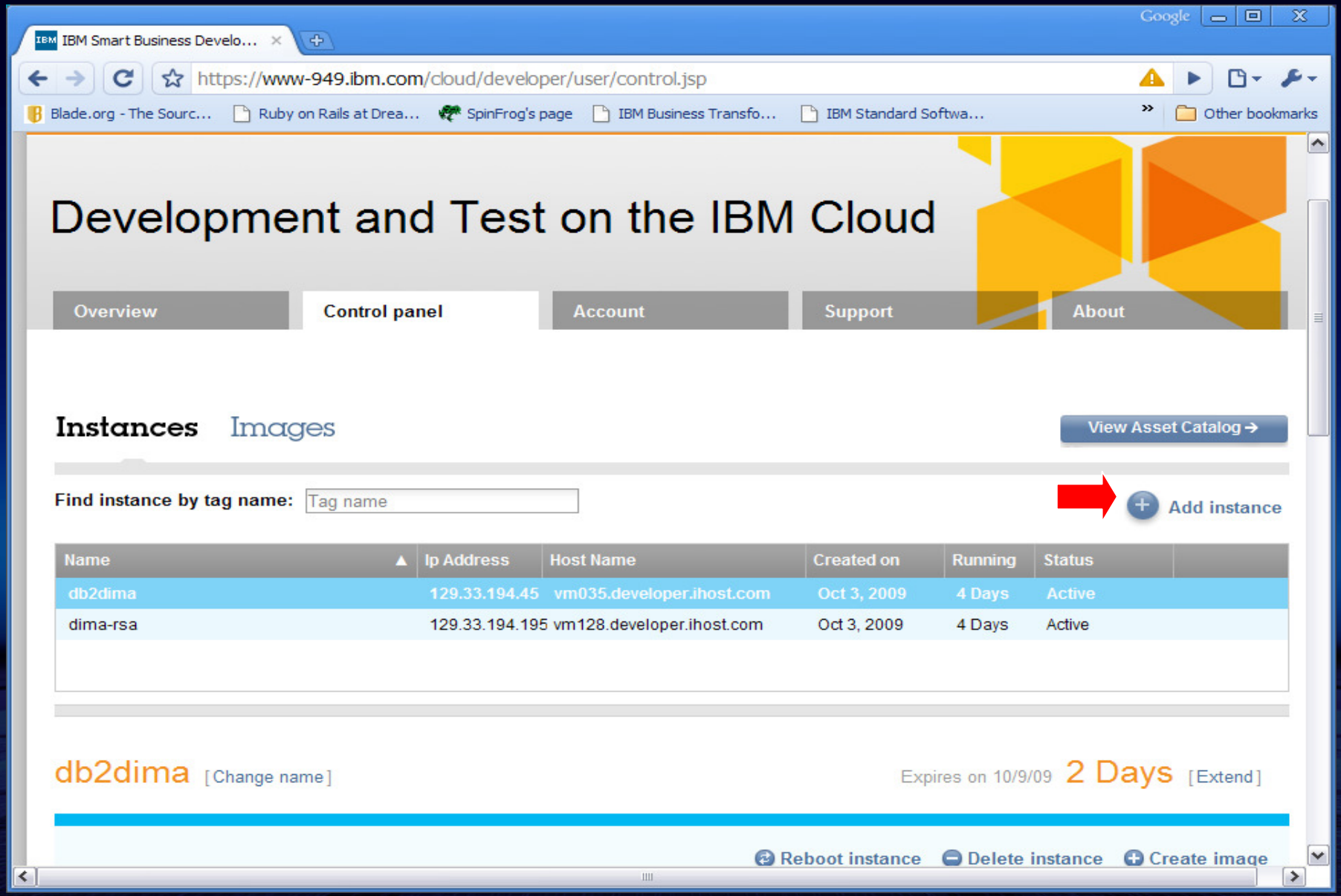
Step 2 View Image details and customize to your needs



Step 3 Watch your Instances provision and start managing



http://www.ibm.com/cloud/developer


IBM Smart Business Develo...
https://www-949.ibm.com/cloud/developer/user/control.jsp
Blade.org - The Sourc...
Ruby on Rails at Drea...
SpinFrog's page
IBM Business Transfo...
IBM Standard Softwa...
Other bookmarks
Development and Test on the IBM Cloud
Overview
Control panel
Account
Support
About
Instances
Images
View Asset Catalog
Find instance by tag name:
Tag name
Add instance
Name
Ip Address
Host Name
Created on
Running
Status
db2dima
129.33.194.45
vm035.developer.ihost.com
Oct 3, 2009
4 Days
Active
dima-rsa
129.33.194.195
vm128.developer.ihost.com
Oct 3, 2009
4 Days
Active
db2dima
[Change name]
Expires on 10/9/09
2 Days
[Extend]
Reboot instance
Delete instance
Create image

Packages for the IBM Cloud

Option 1: Pay-as-you-go (VM/hour)

	32-bit Configuration			64-bit Configuration			
VM Component	Bronze	Silver	Gold	Bronze	Silver	Gold	Platinum
Virtual CPU @ 1.25GHz	1	2	4	2	4	8	16
Virtual Memory (GB)	2	4	4	4	8	16	16
Instance Storage (GB)	175	350	350	850	1024	1024	2048

Option 2: Reservation Bundles (OTC + Discounted VM/hour)

	6 month	12 month
Small (64 CPUs)		
Medium (512 CPUs)		
Large (1,920 CPUs)		

Development and Test Software Image Catalog

All your SOA Middleware and Tools

Middleware Software

Information Management

- DB2 Enterprise
- DB2 Express-C V9.7
- Informix Dynamic Server Developer Edition V11.5

WebSphere software

- WebSphere Application Server V7
- WebSphere sMash V1.1

Lotus software

- IBM Mashup Center v2.0
- WebSphere Portal Server and Lotus Web Content Management Standard Edition V6.1.5
- Lotus Domino V8.5.1

Integration made easy with IBM Cast Iron…..SOA or not!

CAST IRON SYSTEMS

An IBM Company

Complete Flexibility

Cloud2

Cast Iron Cloud2™

Physical Appliances

Virtual Appliances

Total Connectivity

Complete Reusability

TIP

TIP Exchange

TIP

TIP Development Kit

TIP Community

For All Types of Projects

UI

UI Mashups

Process Integration

Data Migration

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An ecosystem of IBM Business Partners support Smart SOA and the IBM Cloud

IT Infrastructure Health for SOA and Cloud

How to evaluate where you are?

Infrastructure Flexibility

Is your IT Infrastructure ready for SOA? How easily can I deploy Cloud Computing? Is my business able to take advantage of Cloud and SOA to the fullest extend?

Middleware

Do you have the right middleware technology to meet enterprise wide business requirements?

Service Management & Cloud

Is the strategy clear? Do you know where to start?

Common infrastructure symptoms

Infrastructure Flexibility

- *Performance issues with demand peaks?*
- *Problems in tuning the system?*
- *Issues seem to pop up whenever changes are made to the systems?*

Middleware

- *Concerns about the scalability?*
- *Inconsistent communications plague the system?*
- *Asked to guarantee connectivity without knowing if that is possible?*

Service Management

- *System Performance is managed smoothly and efficiently?*
- *Changes are handled effectively and impacts to the system are known ahead of the change being deployed?*
- *Infrastructure is resilient and maintains high availability?*

IBM Healthchecks for SOA & Cloud Strategy Workshops

GBS — **Applications and Services Healthcheck Workshop for SOA**

GBS — **Application Development Services for Cloud Computing**

GTS — **Infrastructure Healthcheck Workshop for SOA**

GTS — **Cloud Strategy Workshop**

Video Demo

View demo
IBM
Development & Test
on the IBM Cloud
Creating Instances
on the Cloud

How we will differentiate IBM Cloud Computing

Clear economic value

IBM provides clear economic value and helps you work through the right mix of delivery models and choices (by workload) to reap the maximum benefit.

Integrated and open

IBM supports industry standards, has over 8 million developers, and provides a platform for open innovation.

Secure and ready for business

IBM provides Cloud solutions that are completely robust and secure, based on the demanding needs of today's businesses: rapid provisioning, clear visibility of assets, robust data governance, and seamless mix of delivery models.

Designing for simplicity

From sourcing to usage to maintenance, IBM Cloud solutions are designed to be simple, intuitive, and built based on how people actually work.

Globally relevant

IBM has partners, delivery centers, and a world-wide network of partners in 174 countries. And we have the experience of running a globally integrated enterprise, so we understand what it takes to make a global company run.

Thank You

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