Leveraging IBM Rational Jazz on the Cloud for Efficient Software Delivery

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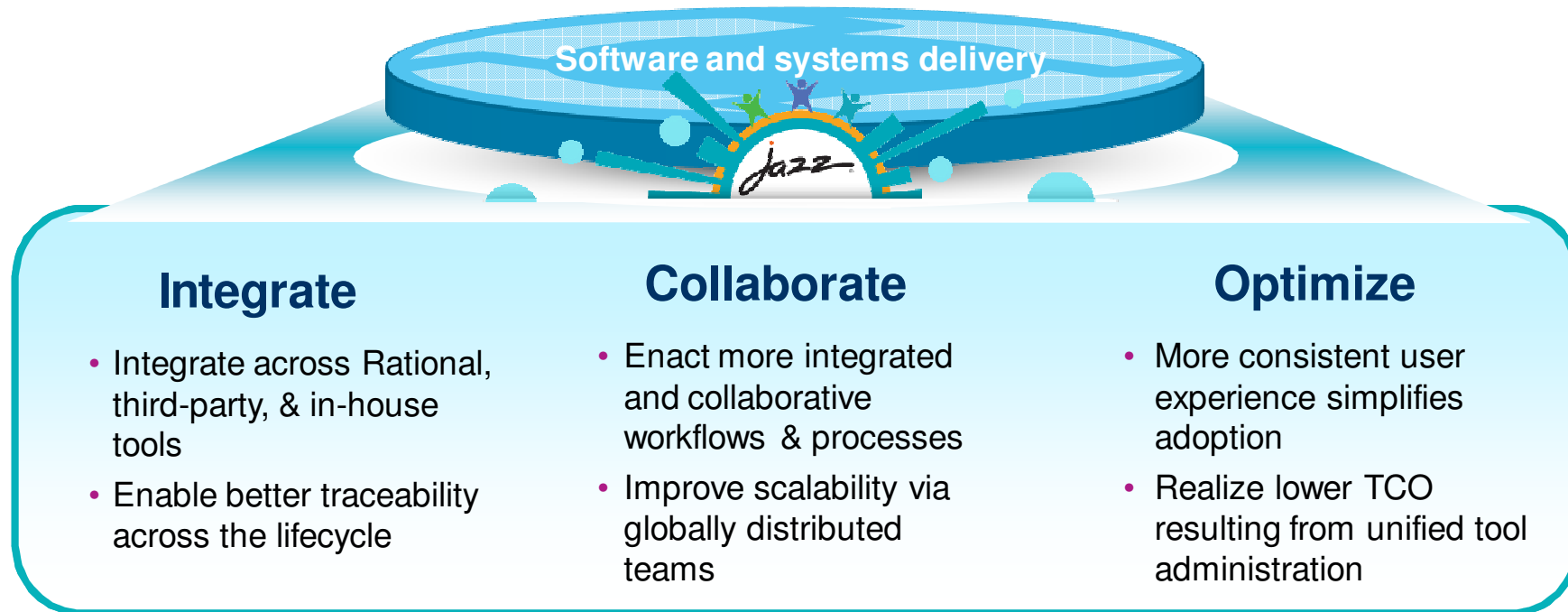
Agenda

- Cloud – new opportunities to deliver value

- Deploying Rational Jazz solutions on the Cloud
    - ▶ Challenges in deploying ALM solutions
    - ▶ IBM Rational Jazz solutions on the cloud
    - ▶ IBM SmartCloud Enterprise

- Summary and Questions

Business Value of Jazz
Improved productivity with an integrated ALM solution…

Software and systems delivery

jazz

Integrate

- Integrate across Rational, third-party, & in-house tools
- Enable better traceability across the lifecycle

Collaborate

- Enact more integrated and collaborative workflows & processes
- Improve scalability via globally distributed teams

Optimize

- More consistent user experience simplifies adoption
- Realize lower TCO resulting from unified tool administration

…but you need to deploy it and get it into the hands of the users

Can Cloud Address the Pains of ALM Deployments?
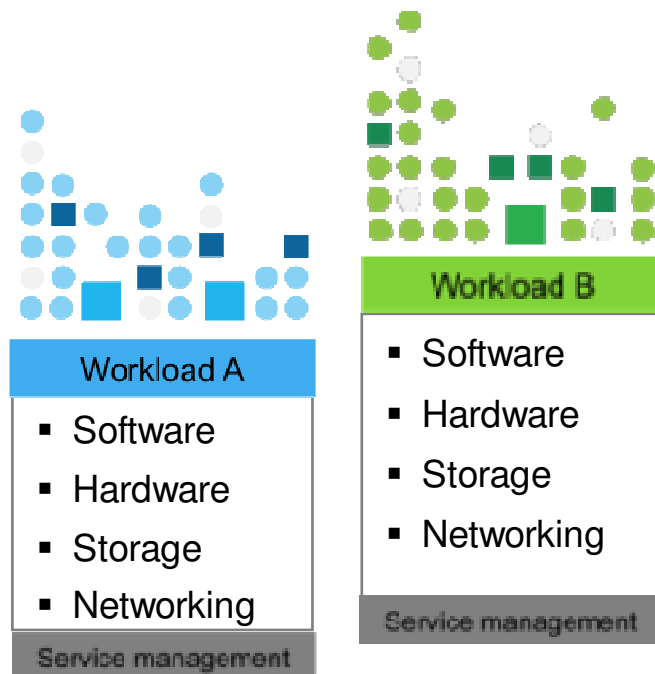
Barriers for Adoption of CLM

- IT unwilling to roll out new capabilities due to incremental cost and time

- Integrations require skills across multiple products

- Difficult to scale up for projects that require fast-ramp up
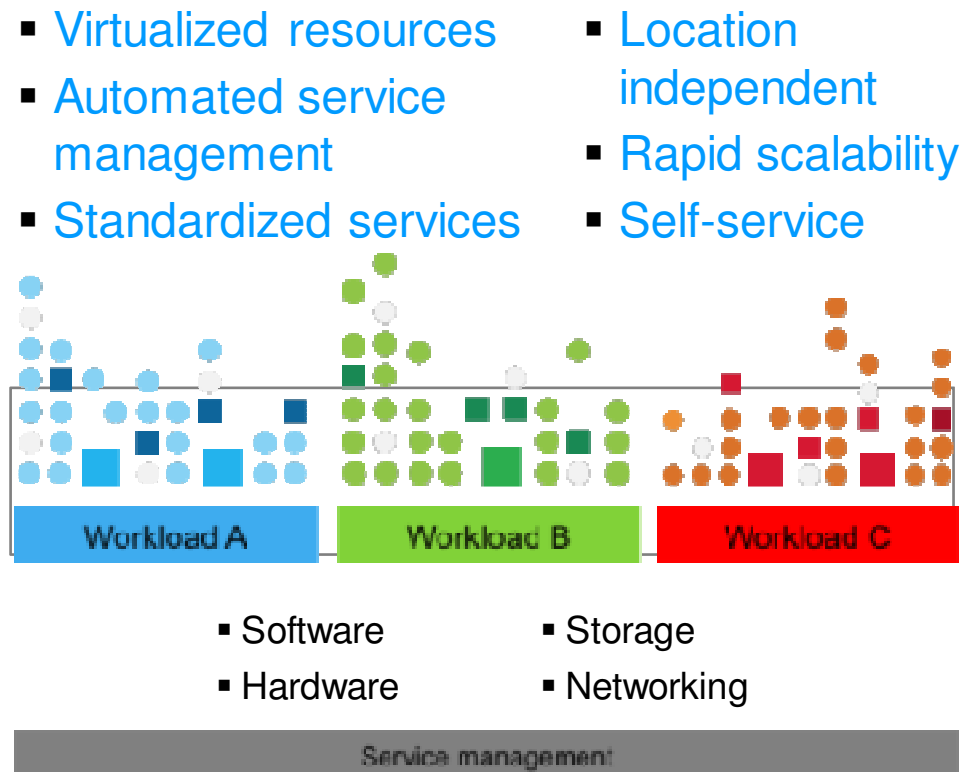
- Cost of maintenance and support

How Cloud can solve?

What is different about cloud computing?

Without cloud computing

With cloud computing

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

Workload A
- Software
- Hardware
- Storage
- Networking

Service management

Workload B
- Software
- Hardware
- Storage
- Networking

Service management

Workload A   Workload B   Workload C

- Software
- Hardware
- Storage
- Networking

Service management

Note: Elements of cloud computing taken from NIST, Gartner, Forrester and IDC cloud computing definitions

Dev/Test Challenges: A Global Hospitality Client Case Study

- **Problem:** A large hospitality company needs to enable global development and test teams to be more effective and efficient at more than 100 locations worldwide.

  - ▶ Every new project rollout is one-of-a-kind. Teams who install, configure and maintain ALM integrations often do so without knowledge of previous implementations

  - ▶ Practitioners moving from project to project need to relearn processes that differ

  - ▶ Issues providing global access to project resources

  - ▶ Difficult to react quickly to changes and ramp up new projects due to customization time, procurement issues and provisioning

IT/LOB Challenges: A Global Hospitality Client Case Study

- **IT Challenges:**

  ▶ Costly and complex to install, configure and maintain integrated ALM environments for multiple projects

  ▶ Difficult to manage patches and licenses for globally distributed teams and projects

- **Line of Business Challenges:**

  ▶ Inability of IT to react quickly to changing business needs
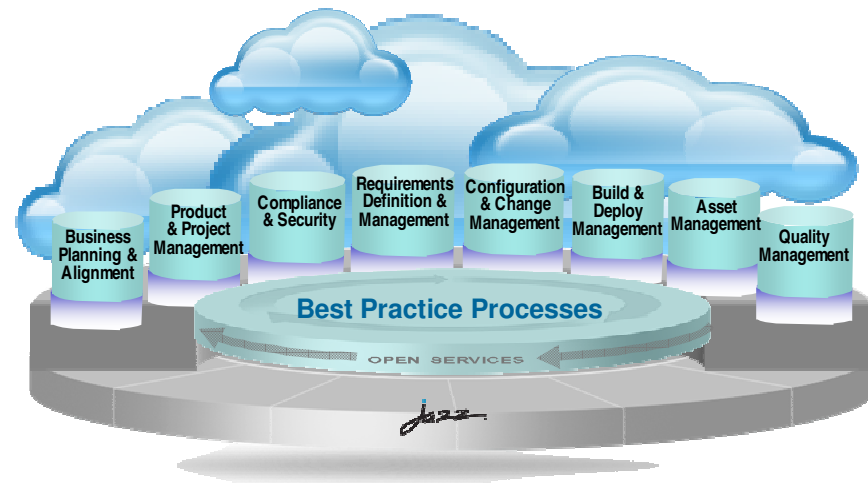
How can Cloud address these challenges?

- Pre-fabricated and integrated images allows instant-on and consistent deployment

- Standardized and automated solution delivery with a self-service access

- Centralized delivery of standardized services enables ease of maintenance and support

VIRTUALIZATION + STANDARDIZATION + AUTOMATION = Cost Agility
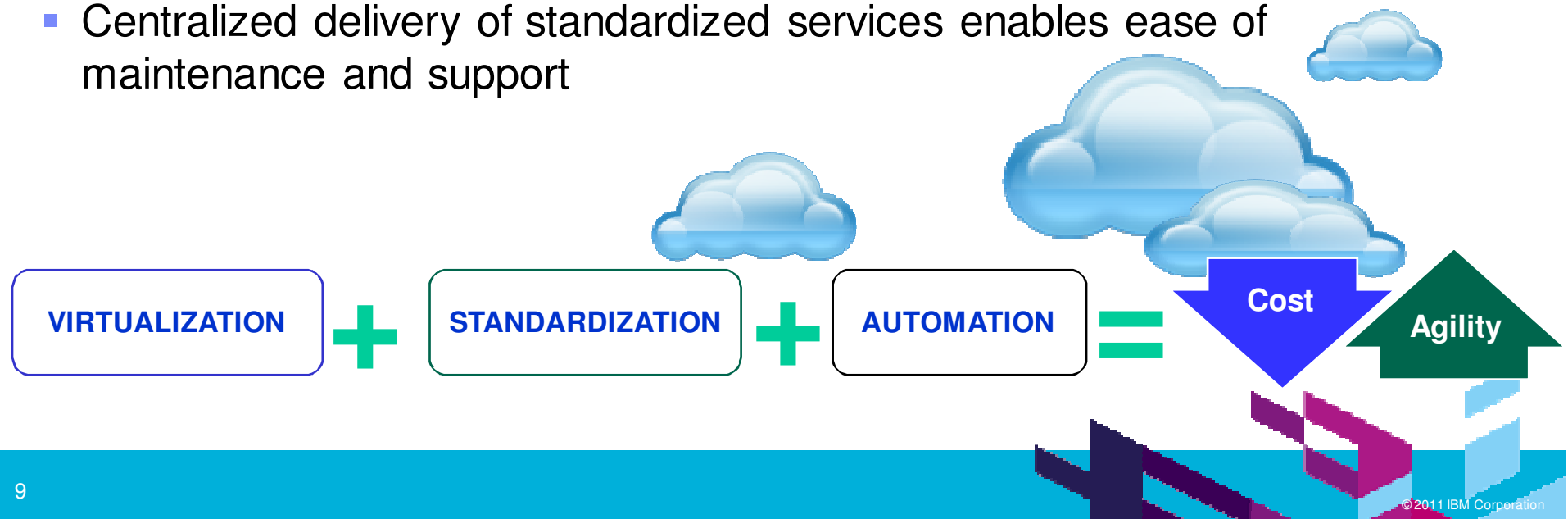
Solution: IBM Rational cloud-based capabilities
Available across IBM cloud infrastructures and beyond

- **All Rational Solutions are available on cloud infrastructures** – in your own private cloud environment or hosted by IBM

- **Pre-configured images are available today**
  - Rational Collaborative Lifecycle Management Solutions (RTC, RQM, RRC)
  - Rational Asset Manager
  - Rational Build Forge

- **Images available for IBM Infrastructures**
  - IBM SmartCloud Enterprise
  - IBM Smart Business Development and Test Cloud
  - IBM Service Delivery Manager
  - IBM CloudBurst Appliance

- **Maximize existing Rational investments** with Bring-Your-Own-License to the cloud

Business Planning & Alignment

Product & Project Management

Compliance & Security

Requirements Definition & Management

Configuration & Change Management

Build & Deploy Management

Asset Management

Quality Management

Best Practice Processes

OPEN SERVICES

Jazz

IBMSmart**Cloud** Enterprise

Example: Globally Distributed Development teams

RTC *

2 Customized preinstalled templates
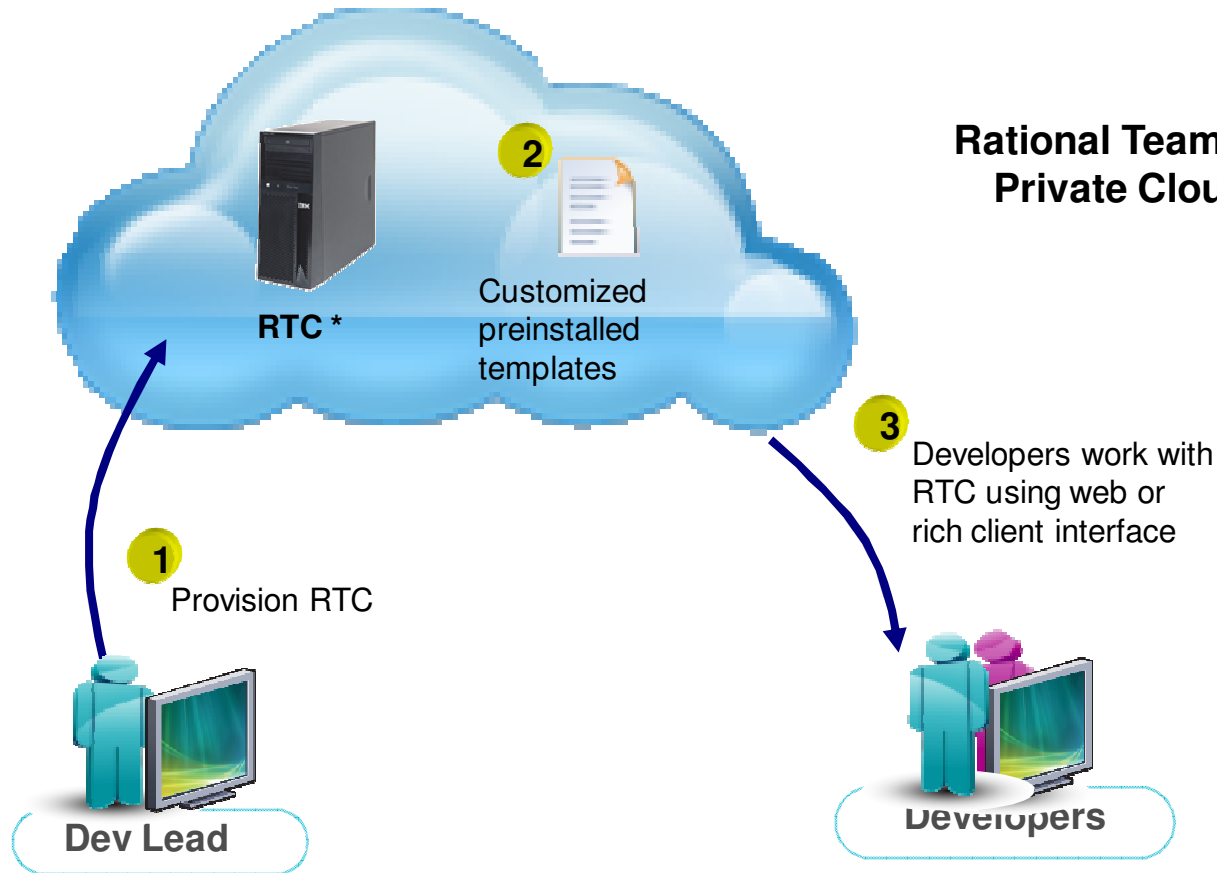
Rational Team Concert (RTC) on Private Cloud Infrastructure

3 Developers work with RTC using web or rich client interface

1 Provision RTC

Dev Lead

Developers

* RTC can be replaced with RRC, RQM or RAM in this scenario for requirements or asset management, respectively

IBM Smart Business Desktop on the IBM Cloud

- Answers the infrastructure challenges of traditional desktops…

Security Control of PCs
- Patch compliance
- Security risks in data and infrastructure
- Regulations

Rising Cost of PC Management
- Deployment
- Support
- Controlling and tracking IT Assets
- Unpredictable IT costs

IT Infrastructure Management Complexity
- Many makes and models
- Refresh cycles
- Standardization and availability

Distributed Workforce
- Outsourcing and off-shoring
- Mobile and remote workers

Putting it all together – Development on and with the Cloud
Optimize your development team by leveraging the cloud
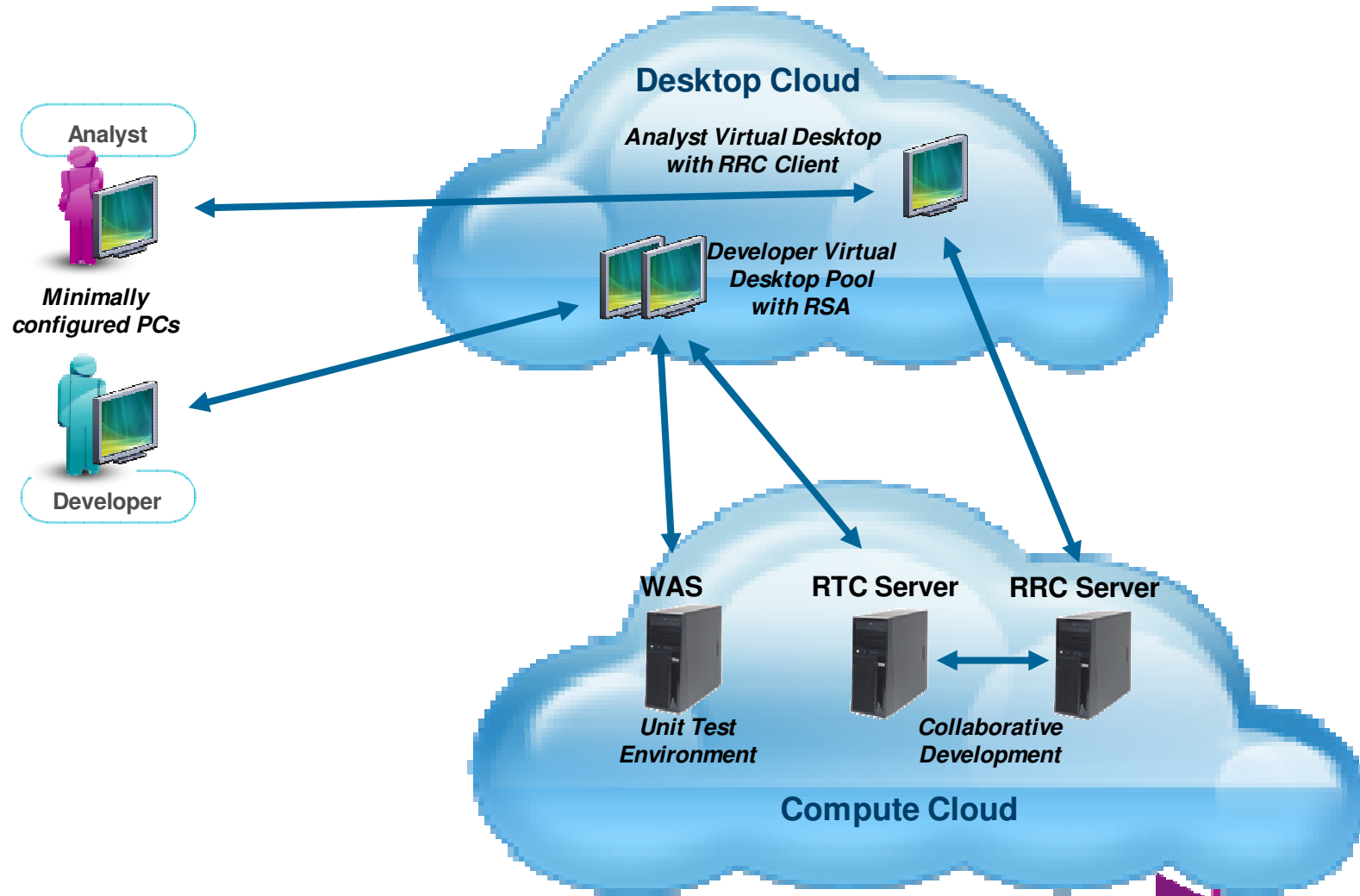
Benefits of Rational ALM solutions on the cloud
Rapidly share, communicate and report - globally

- **Reduced deployment Cost**
  - ▶ Hardware infrastructure savings
  - ▶ Cost savings from automated deployment
  - ▶ Reduced maintenance cost from centralized delivery
- **Control & Governance**
  - ▶ Improved visibility, consistency, and control of existing deployments
  - ▶ Easy to administer patches / bug fixes
  - ▶ Easy to manage licenses and improved use of existing licenses
- **Time to value**
  - ▶ Self-service model for instant-on productivity
  - ▶ Easy access to fully pre-configured solution, around the world
- **Agility @ Scale**
  - ▶ Scale up and down with project needs
  - ▶ Flexibility in sourcing solution based on needs

IBM Office of the CIO cuts development environment provisioning time by 97% with new Development-Test Cloud

Weeks
Hardware
Deployment

Days
Virtualized
Deployment

1 Hour
Cloud
Deployment
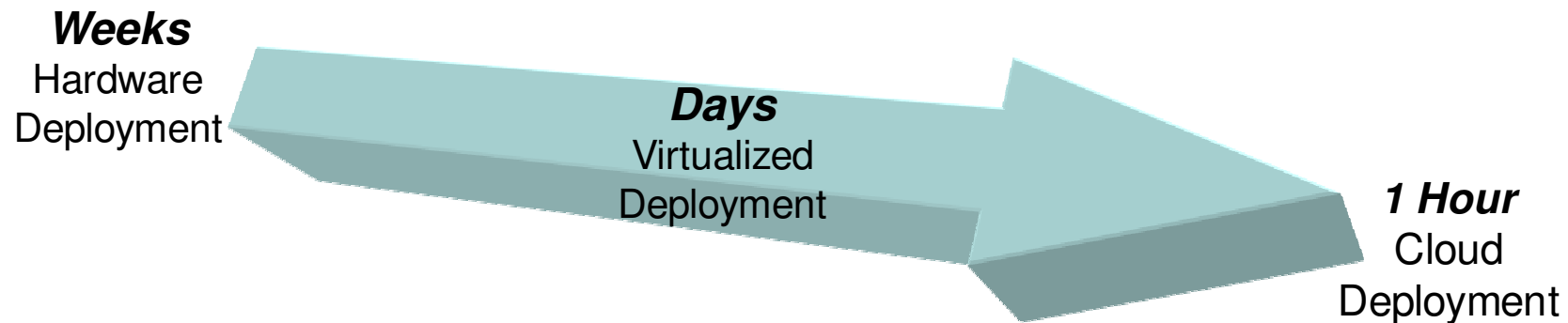
- Pre-configured environments of Rational tools, IBM process practices and security standards

- Reduced turnaround time of new requests from 5 days to 1 hour

- Reduced capital costs through shared infrastructure services – and deprovisioning of idle systems

- Decreased project costs by removing setup fee and billing only for services consumed

- Same team can support up to 20 additional new projects each month

Additional Patterns of usage for ALM images in the Cloud

- **Sandbox**
  - ▶ Lower barrier and lower effort means to experiment with ALM tool setup, configuration and administration options, to assist in planning and accelerating the client's actual production deployment

- **Enablement**
  - ▶ Quickly access and establish ALM environments for training administrators and users

- **New projects**
  - ▶ Fast time to deploy for new projects
    - No impact on previously deployed tools and associated teams
    - Lower impact on the IT department
    - No need to plan migrations for existing projects

Internal Case Study: Rational Demonstration Cloud
Our sellers get server environments provisioned and running in minutes

What is it?

▶ An account on the IBM SmartCloud Enterprise for use by Rational Field teams

▶ Includes more than 19 image assets, comprised of both standard and shared community-built images

What is it for?

▶ Customer demonstrations, PoTs and PoCs

▶ Seller and Technical Professional enablement, value-added asset development

▶ Event Support (e.g. Innovate, symposiums)

What results have we seen?

▶ Performed complex, multi-product ALM demonstration for hotel chain in days instead of weeks.

▶ Provisioned RAM instance for demo for UK financial institution, then gave customer immediate access to demo image for a 30 day trial.

▶ Demonstrated integrated RTC, RQM, RRC and Insight solution to global technology firm. Avoided potential delays around installing on client's infrastructure.
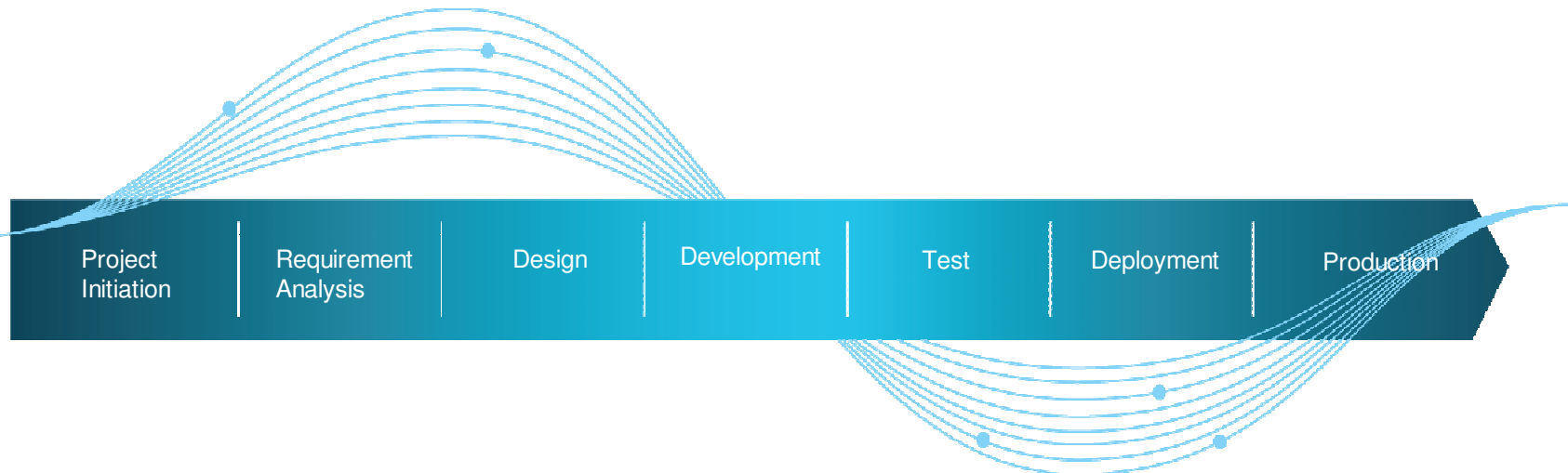
More at: ibm.com/cloud/solutions/enterprise

Agile Infrastructure for Myriad of Workloads for the Enterprise

- Enterprise Governance
- Enterprise Communities
- Global offering with support for multiple currencies, languages and time zone aligned services
- Choice of nine virtual (Intel) server configurations
- Choice of pre-configured IBM and third party software images from which to build private image libraries
- Virtual Private Network (VPN/VLAN) services
- Multiple VLANS for Single Virtual Machine
- Enterprise level Support Options.
- Choice of world-wide centers: Raleigh (US),
  Boulder(US) & Ehningen (Germany), Toronto (Canada),
  Makuhar (Japan), Singapore and many more

Payment options: Simple Usage based options

- Pay-as-you-go, Bring-Your-Own-License, Developer-Use-Only, Pre-Release
- Reserved Capacity Options

The benefits of cloud can be realized across the entire application lifecycle…

| Project Initiation | Requirement Analysis | Design | Development | Test | Deployment | Production |

Value Delivered:

	From traditional	To cloud
Setting up a development environment	Days	30 minutes
Test provisioning	Weeks	Minutes
Release management	Weeks	Minutes
Change management	Months	Days or hours
Application delivery management	1 operator for 10 apps	1 operator for 100 apps

Summary

- The cloud is an enabler for achieving efficient software delivery

- Extend the value of your Jazz investments through a virtualized, standardized and automated Cloud deployment
  - Reduce costs of infrastructure and labor
  - Improve control, governance and consistency of deployments
  - Shrink time to value through self-service and instant-on productivity
  - Provide a secure and robust development resources for globally-distributed teams

- Use your cloud or ours – your Rational investment can be used on public or private clouds

www.ibm.com/software/rational/cloud

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