



IBM Rational Day

Jeudi 25 octobre 2012 - 8h30 à 17h00,
Pullman Bercy

Témoignages. Débats. Rencontres...
Venez échanger et faire le point
sur les nouveautés Rational



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Réinventer le développement *Mainframe* grâce au cloud

Jean-Yves B. Rigolet

Tech Lead, Rational Tools Cloud

rigolet.j@fr.ibm.com



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Agenda

- Enterprise developer tools
- Enterprise team challenges

QUIZ

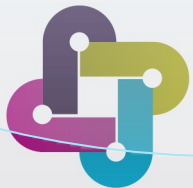
- Maximize efficiency using Rational cloud solutions
- Exploring cloud for Enterprise development

DEMO

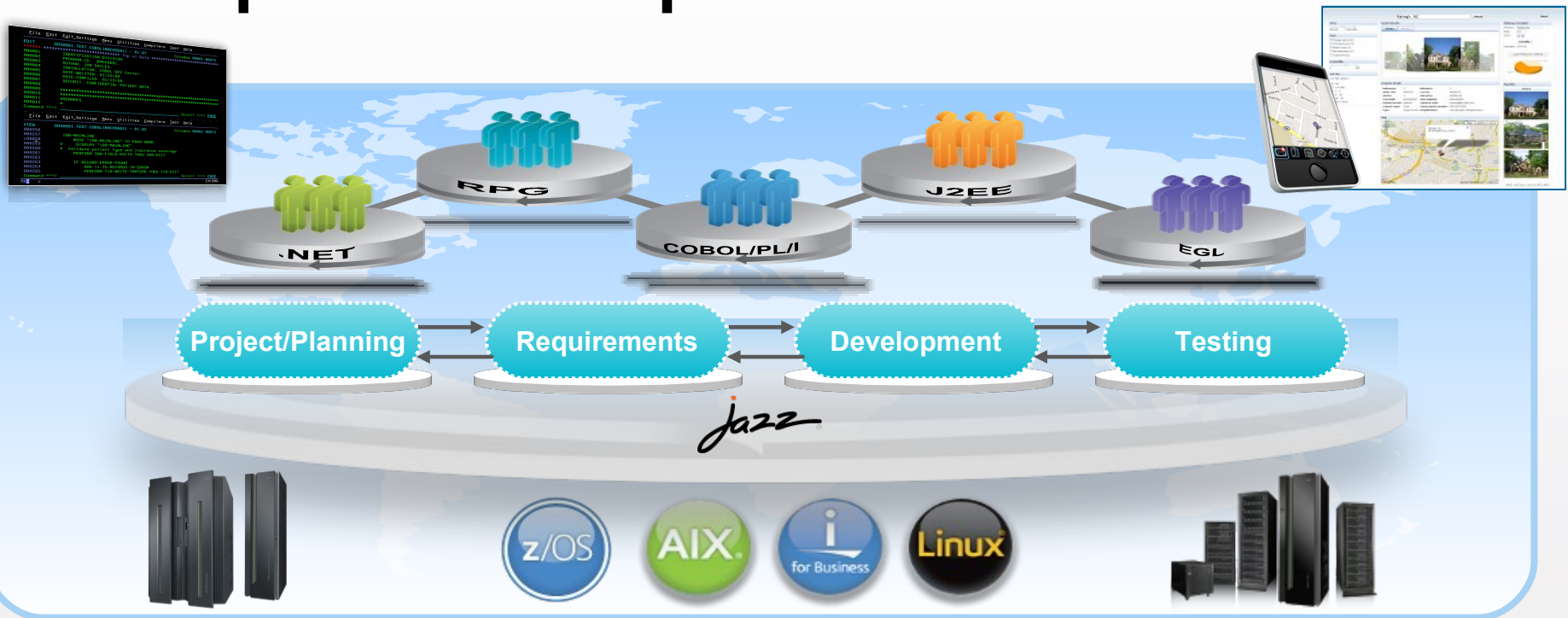
- Summary & conclusion
- Q&As



Transforming our Software Delivery



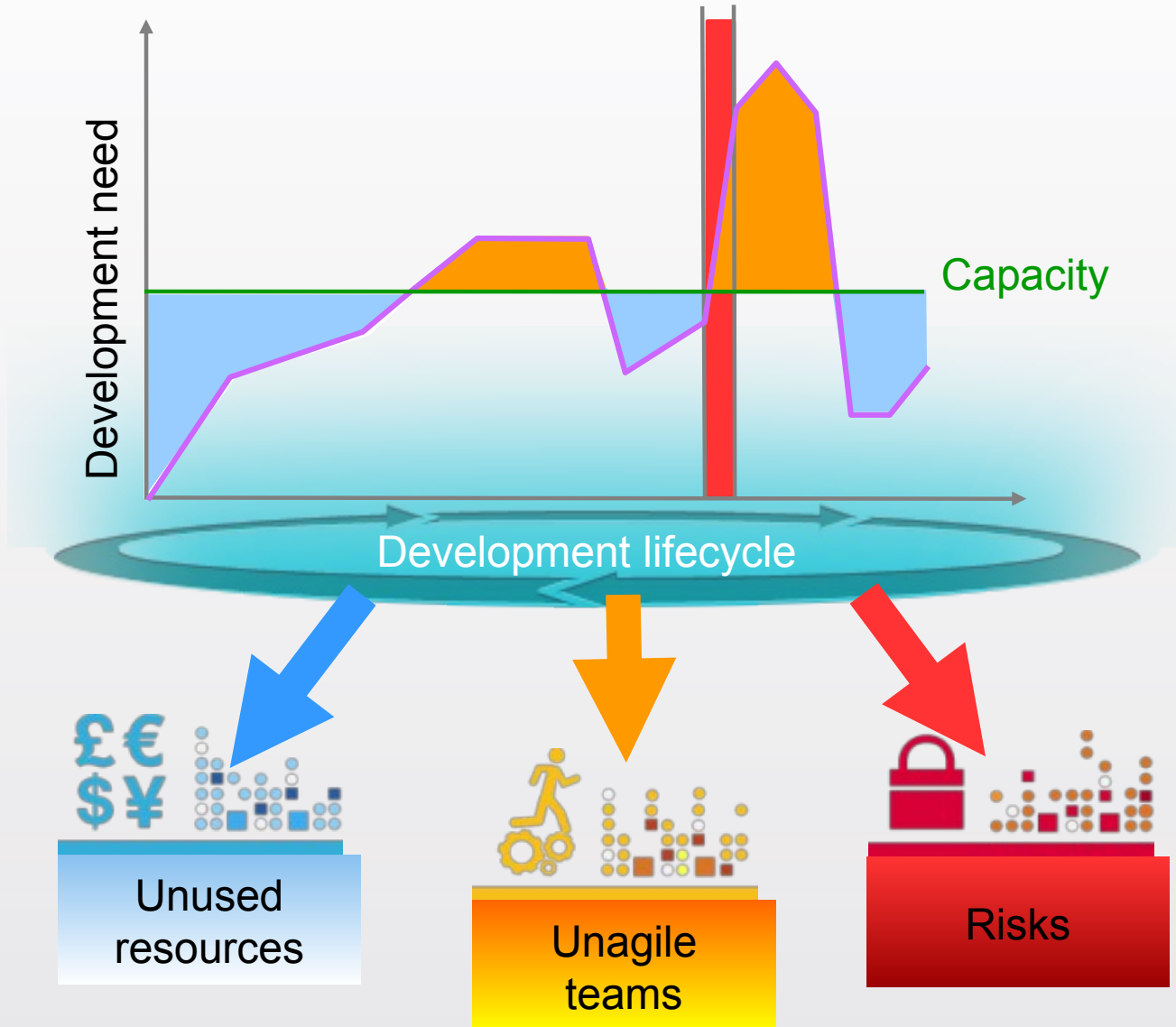
Enterprise developer tools



- Rational Enterprise Modernization (EM): solutions dedicated to multi-platform application delivery
 - Business-critical applications running on distributed, mainframe & midrange systems
 - Offers tooling for all the languages & runtimes on/for enterprise systems
- Rational EM offers solutions to optimize the value of your applications, people, teams and infrastructure investments



Enterprise teams challenges



A day in Enterprise development

Quiz!

1	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
2	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
3	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
4	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>



Quiz – Question #1

As project manager, I need to have built a complete development environment

- Various target platforms and languages: z/OS – COBOL ; Linux – JEE
- Various development tooling: RDz ; RAD ; RTC
- Various contributor profiles: developer, analyst, tester

1	How long does it take to deploy a complex development environment infrastructure?	> 1 mth	< 1 wk	< 1 d
2				
3				
4				



Quiz – Question #2

As a delivery team, I need to certify my products

- 3 versions development in parallel
- Targeting System z, System p and x86
- For 2 levels of DB2 and CICS, and 3 OS levels

1	How long does it take to deploy a complex development environment infrastructure?	> 1 mth	< 1 wk	< 1 d
2	How long does it take to set-up and feed a multi-platform test environment?	> 1 mth	< 1 wk	< 1 d
3				
4				



Quiz – Question #3

As a release manager, I need to address major changes for the next release

- An upgrade of RDz and RTC is required,
- Part of the team is relocated to another site, and another one is outsourced.

1	How long does it take to deploy a complex development environment infrastructure?	> 1 mth	< 1 wk	< 1 d
2	How long does it take to set-up and feed a multi-platform test environment?	> 1 mth	< 1 wk	< 1 d
3	How long does it take to upgrade and move the whole development environment?	> 1 mth	< 1 wk	< 1 d
4				



Quiz – Question #4

As an IT resource manager, I need to control z/OS test environment allocations

- I have only 20 LPARs
- 80 projects are currently running, targeting 2 versions / year
- I need to handle new test environment requests, and for that I need to know who is using which resources, and for how long ...

1	How long does it take to deploy a complex development environment infrastructure?	> 1 mth	< 1 wk	< 1 d
2	How long does it take to set-up and feed a multi-platform test environment?	> 1 mth	< 1 wk	< 1 d
3	How long does it take to upgrade and move the whole development environment?	> 1 mth	< 1 wk	< 1 d
4	Which part of my test resources are not currently used by a project?	> 20%	< 10%	< 5%



What is Cloud Computing?

NIST* Definition

"Cloud computing is a model for enabling ubiquitous, convenient, on-demand network access to a shared pool of configurable computing resources (e.g., networks, servers, storage, applications and services) that can be rapidly provisioned and released with minimal management effort or service provider interaction."

Characteristics

- On demand self-service
- Broad network access
- Resource pooling
- Rapid elasticity
- Measured service

Deployment models

- Public cloud
- Private cloud
- Hybrid cloud

Service layers

- Business Process as a Service
- Software as a Service
- Platform as a Service
- Infrastructure as a Service

VIRTUALIZATION



STANDARDIZATION



AUTOMATION



Cost

Agility



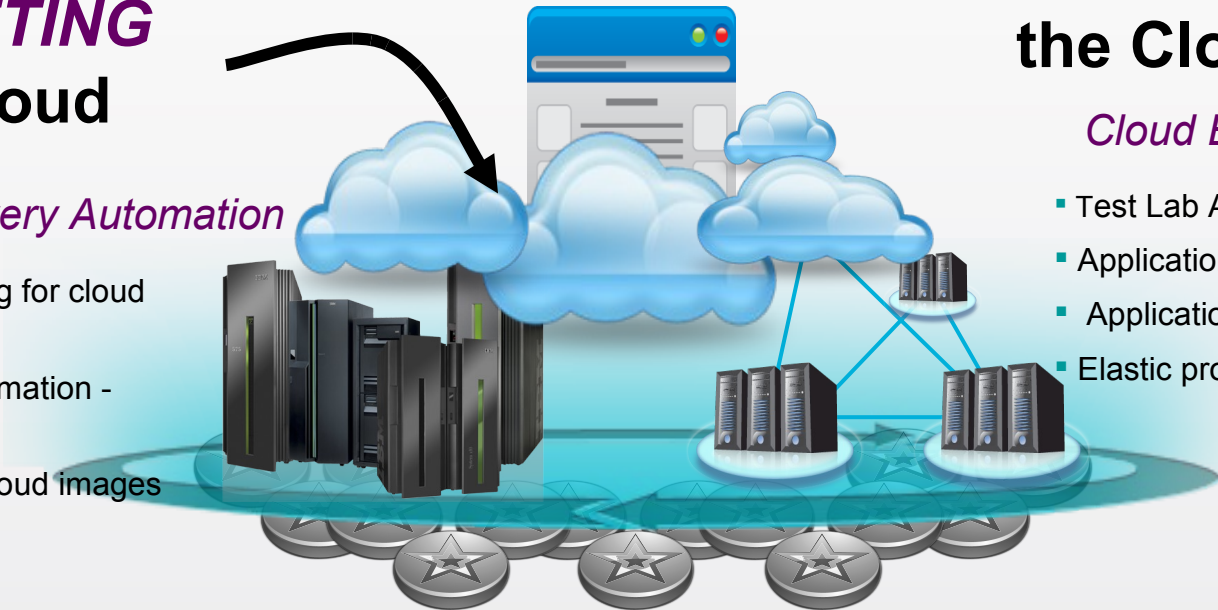
*NIST - National Institute of Standards and Technology (US govt agency)

Rational cloud solutions to maximize efficiency

Capabilities *TARGETING* the Cloud

Software Delivery Automation

- Topology planning for cloud deployment
- Deployment automation - DevOps
- Governance of cloud images



Capabilities *LEVERAGING* the Cloud

Cloud Exploitation

- Test Lab Automation
- Application security testing
- Application component unit testing
- Elastic provisioning/deprovisioning

Capabilities *ON* the Cloud

Standardized Development

- Run developer or test tools on a cloud infrastructure
- Pre-built & setup development solutions



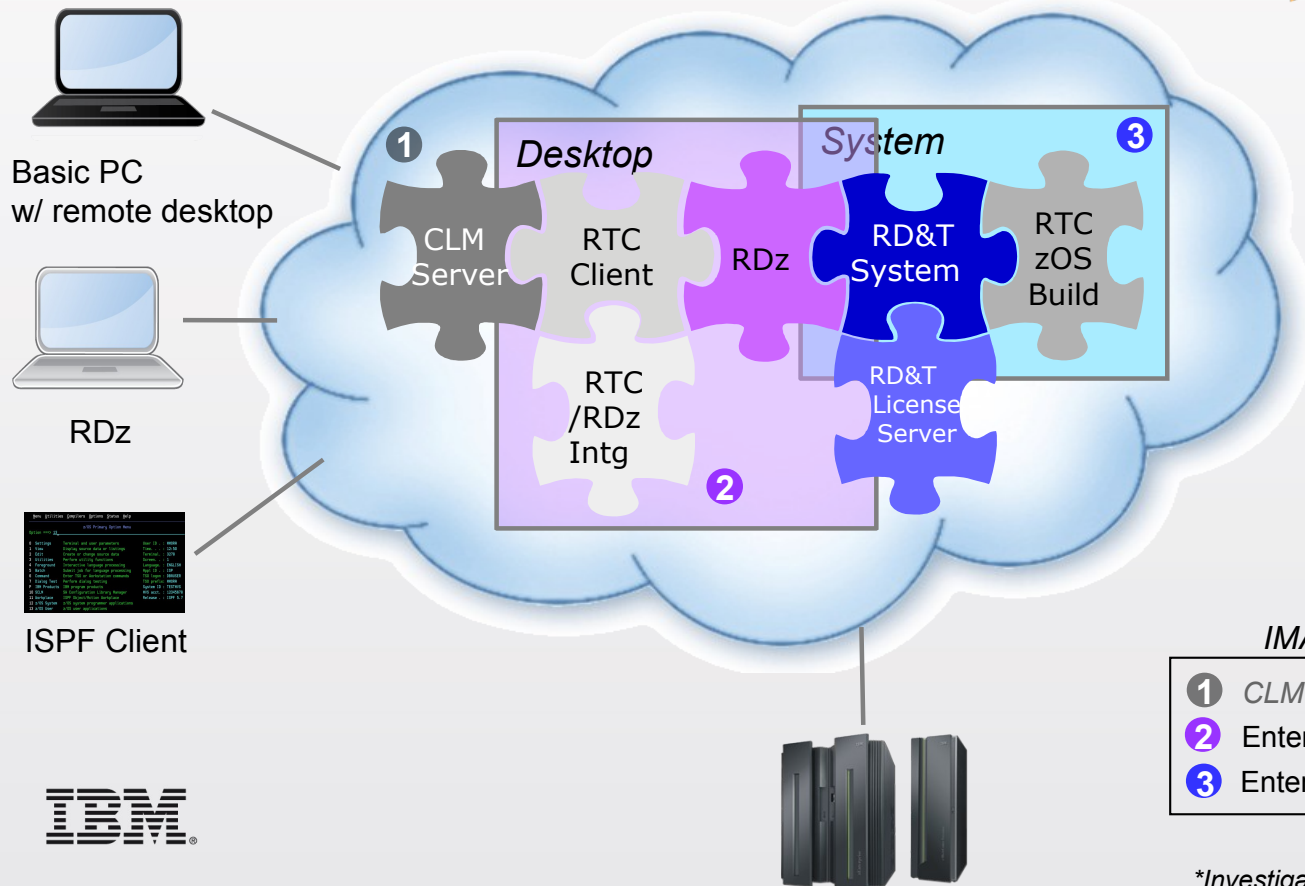
Optimize the Enterprise infrastructures, empower teams and reduce costs



Exploring cloud for enterprise development

Characteristics

- Pre-built & setup coordinated dev & test images
- Traditional & modern access (3270, ISPF & IDEs, automated build & test tools)



★ Goal: Easy to use

- Create from catalog (ON)
- Easy OFF & RESET
- Day-1 productivity
- Personalization through wizards
- Flexible enterprise test capabilities
- Integrate within existing IT
- Access development environment from anywhere, anytime

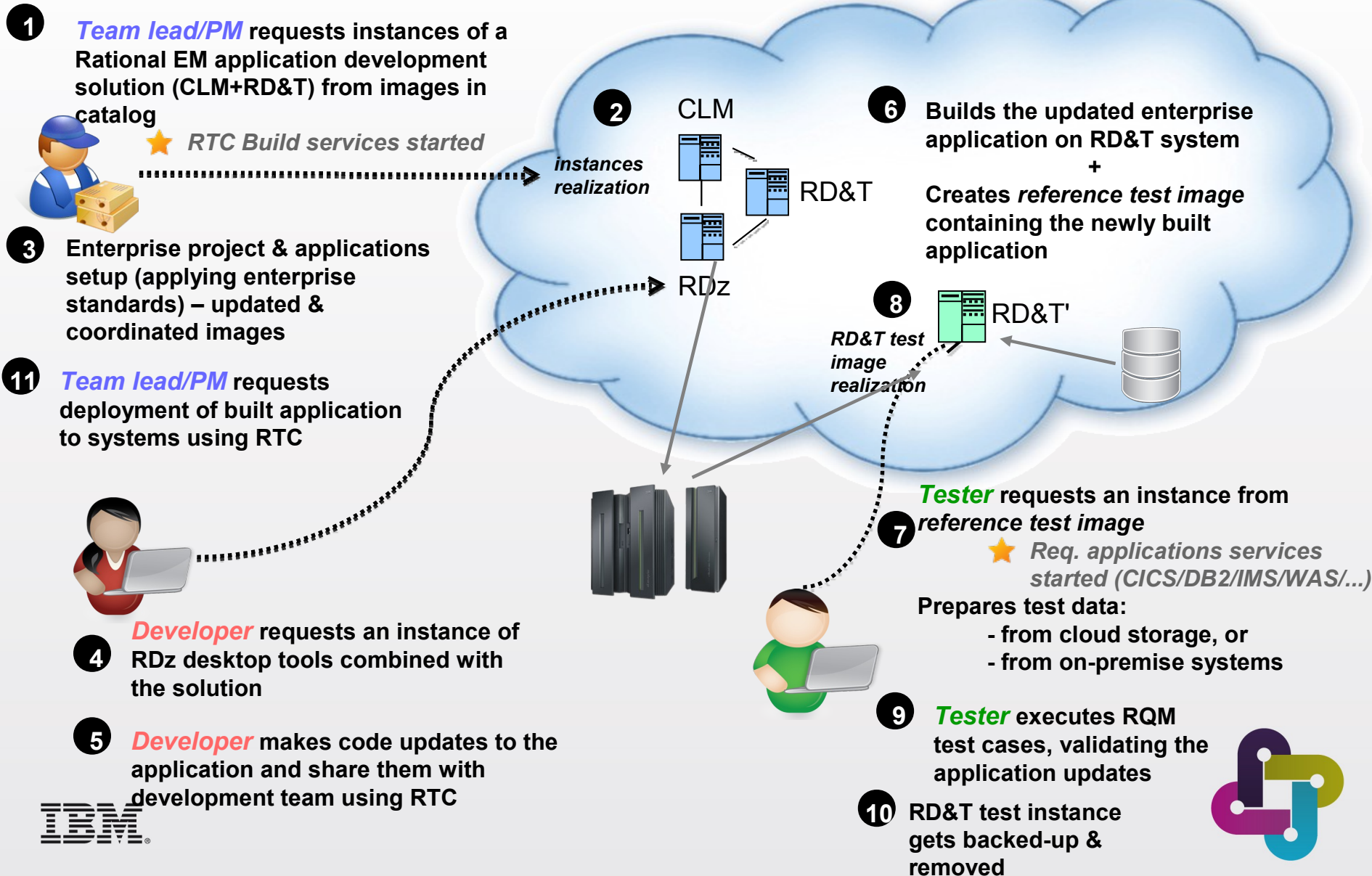
IMAGES

- 1 CLM 2012 Server image
- 2 Enterprise **Desktop** image
- 3 Enterprise **System** image*

*Investigation in progress



Envisioned Mainframe dev. scenario



User story #1: *'As an enterprise developer, I want to access my mainframe development environment from anywhere'*

- Enterprise Desktop
- Image content
 - Rational Developer for System z
 - Rational Team Concert
 - Eclipse client & RDz Integration feature
 - Installation Manager
 - Remote desktop
- Instance configuration
 - vCPU 1, RAM 2G, Disk up to 60G
 - Setup & personalization through creation wizard
- Preconfigured connections to z/OS and RTC server

IBM

Add instance

Step 2b of 4: Configure additional parameters

Complete the fields below to configure your instance. Required fields are indicated with an asterisk (*).

Enterprise Desktop User Password:* [masked] Customize password for the Rational Enterprise Desktop user (userid: dsktp)

Re-enter Password:* [masked]

z/OS System:* 170.224.34.67 Customize your Enterprise Desktop with a connection to your z/OS system

Enable Collaboration:* yes no Configure your Enterprise Desktop to enable the collaborative features of Rational Team Concert

RTC Server:* 170.224.43.76 Customize your Enterprise Desktop with a connection to your Rational Team Concert server

Previous Next Cancel



User story #2: *'As an enterprise developer, I want to build & test mainframe applications in a frictionless environment'*

■ Enterprise System

■ Image content

- Rational Development & Test
- Rational Team Concert
 - z/OS Build Engine for running dependency builds
- JZOS, DB2, WAS
- CICS or IMS application services

■ Instance configuration

- VCPU 4, RAM 8G, Disk 150 G, up to 1060G
- Setup & personalization through creation wizard
 - Preconfigured connections to RD&T licence server and RTC server
 - Started services (RTC build engine, CICS, IMS,...)

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Add instance

Step 2b of 4: Configure additional parameters

Complete the fields below to configure your instance. Required fields are indicated with an asterisk (*).

Enterprise Desktop User Password:* [masked] Customize password for the Rational Enterprise Desktop user (userid: dsktop)

Re-enter Password:* [masked]

z/OS System:* 170.224.34.67 Customize your Enterprise Desktop with a connection to your z/OS system

Enable Collaboration:* yes no Configure your Enterprise Desktop to enable the collaborative features of Rational Team Concert

RTC Server:* 170.224.43.76 Customize your Enterprise Desktop with a connection to your Rational Team Concert server

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Summary & Conclusion



- Main Benefits for the Enterprise development teams
 - Targets various cloud contexts : public, private, hybrid
 - Integrates within existing systems
 - **Solution-oriented**, integrated and optimized product packages
 - Flexible & sized Enterprise test capabilities
 - Dedicated solutions for **Day-1 productivity**
 - Ease deployment, maintenance and upgrade of solutions
 - Ease development / operations interactions in Enterprise context through provisioning capabilities
 - Address various customer contexts by providing componentized and extensible topologies



QUESTIONS

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References



■ Websites

- [IBM Cloud University](#)
- [Join the IBM Cloud Computing community](#)
- [IBM SmartCloud](#)
- [IBM SmartCloud Continuous Delivery](#)
- [IBM SmartCloud Applications Services](#)
- [Rational solutions for cloud computing](#)
- [Rational software for enterprise modernization](#)

■ Articles & papers

- *“Development and operations on a cloud, keeping your feet on the ground”*, JY. Rigolet, IBM
- *“Collaborative DevOps with Rational and Tivoli”*, IBM developerWorks whitepaper
- *“Transforming software delivery with cloud”*, IBM Software whitepaper





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