

IBM Innovate 2010 Automate for Agility:

Software Delivery Automation using
Rational Build Forge and Rational
Automation Framework for
WebSphere (RAFW)

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Innovate2010

The Rational Software Conference

Let's **build** a smarter planet.

The premiere software and product delivery event.



Agenda

“Smart questions” for a smarter planet

What is “DevOps” and software delivery automation?

How can DevOps and software delivery automation help you?
Rational offerings

IBM & Rational Cloud offerings

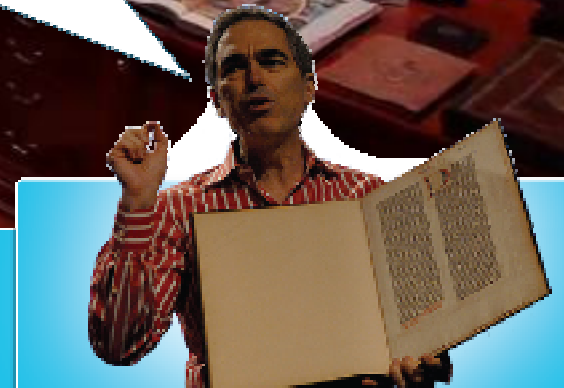
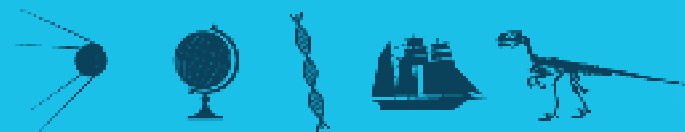
Find out even more
Where to go for more information





What is the largest ocean in the world?

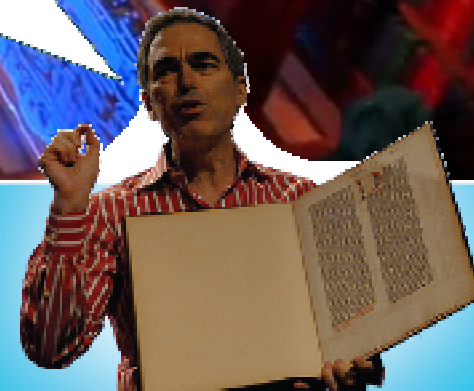
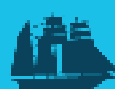
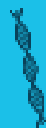
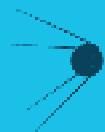
- A** Pacific
- B** South China Seas
- C** Indian
- D** Atlantic





Annually, Americans consume 8.6 billion gallons of bottled water. 53 billion are consumed globally. How much of that comes from municipal water sources (tap water)?

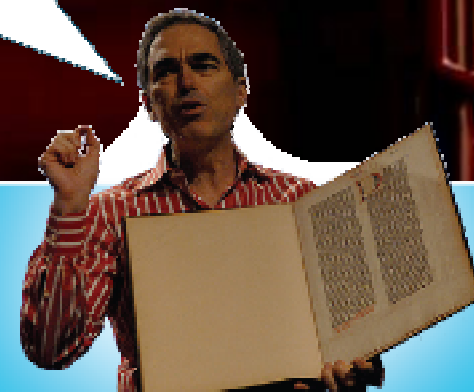
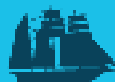
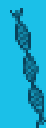
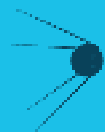
- A 2%
- B 9%
- C 25%
- D 40%





For an average day on the internet, how many emails are sent?

- A 100 million
- B 700 million
- C 75 billion
- D 210 billion



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



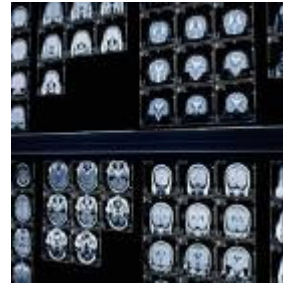
Smart traffic systems



Intelligent oil field technologies



Smart food systems



Smart healthcare



Smart energy grids



Smart retail



Smart water mgmt



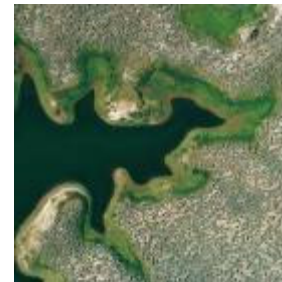
Smart supply chains



Smart countries



Smart weather



Smart regions



Smart cities



As the planet gets smarter the information explosion and rapid change create new challenges

10x

Digital data is projected to grow tenfold from 2007 to 2011

500,000GB

Global Internet traffic volume expected by 2013

1 trillion

Number of devices will be connected to the Internet by 2011

83%

Percentage of CIOs who expect to face substantial change over the next three years



Yet today's IT infrastructure is under tremendous pressure and is finding it difficult to keep up...

It will reach a breaking point

85% idle

In distributed computing environments, up to 85 percent of computing capacity sits idle

82%

Percentage of executives who report a security breach and aren't confident they can prevent future breaches

70¢ per US\$1

70 percent is spent on maintaining current IT infrastructures versus adding new capabilities

83%

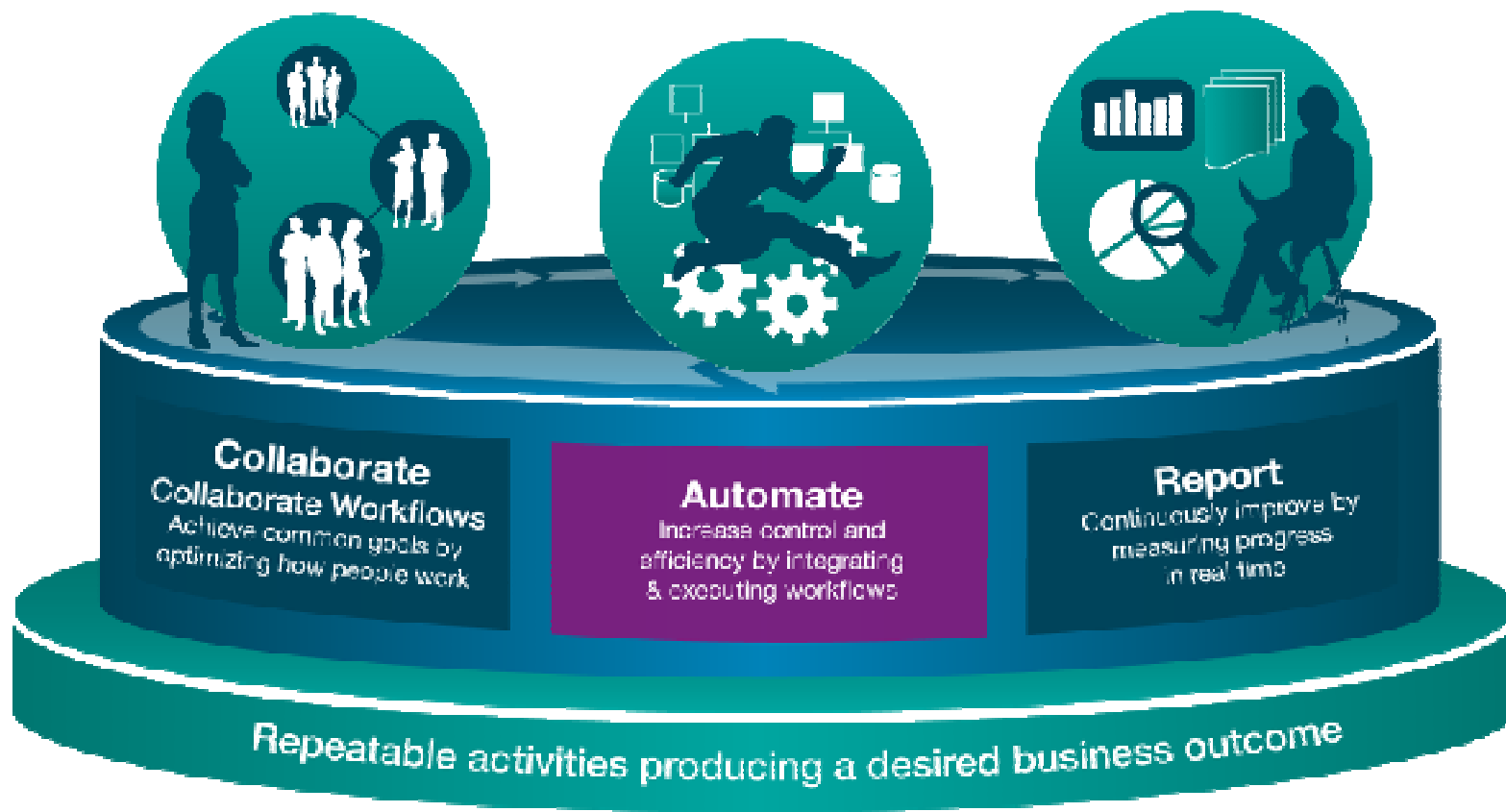
Percentage of CIOs who want to improve the way they use and manage their data



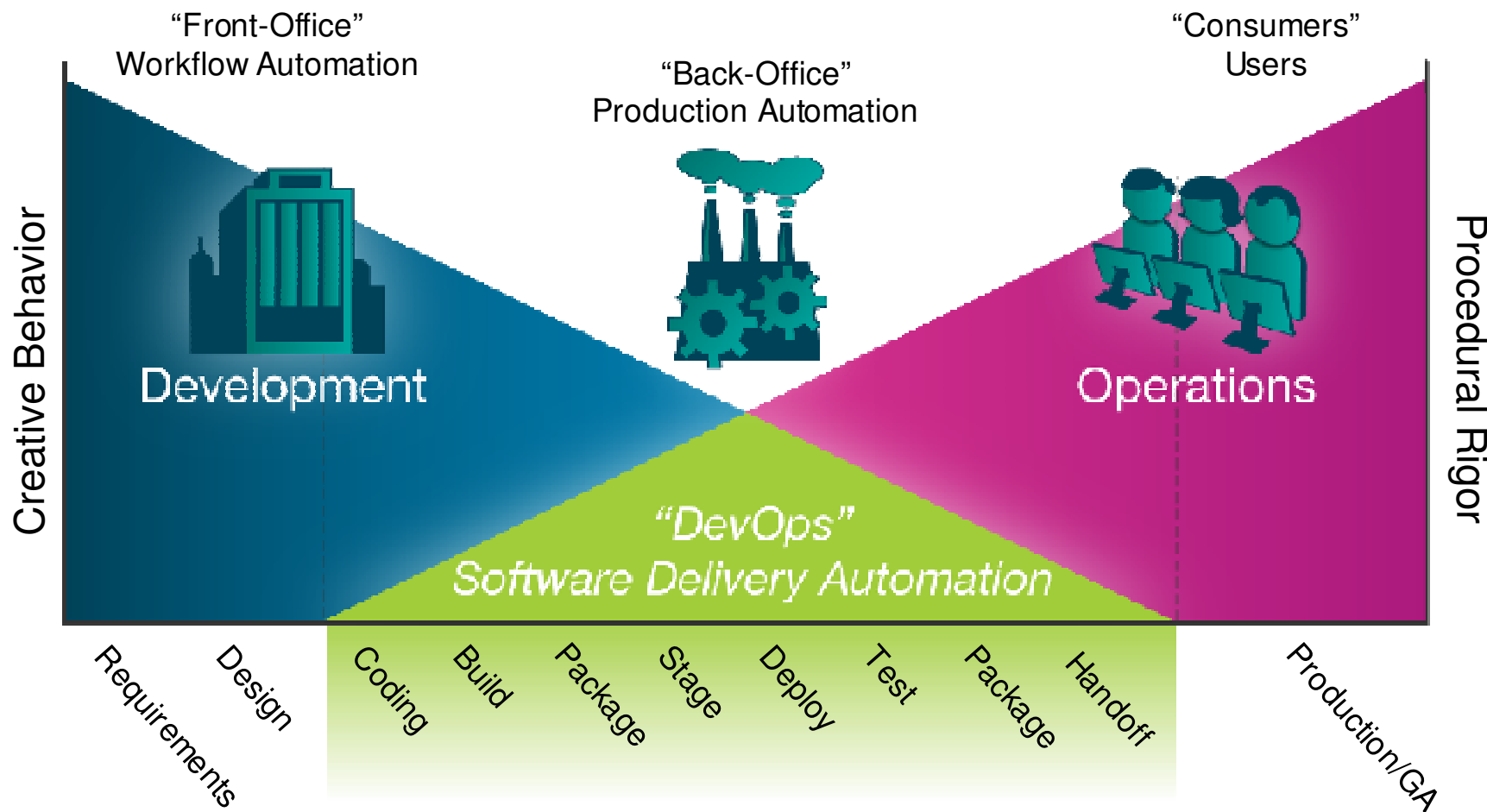
Successful businesses approach systems and software delivery as a core business process



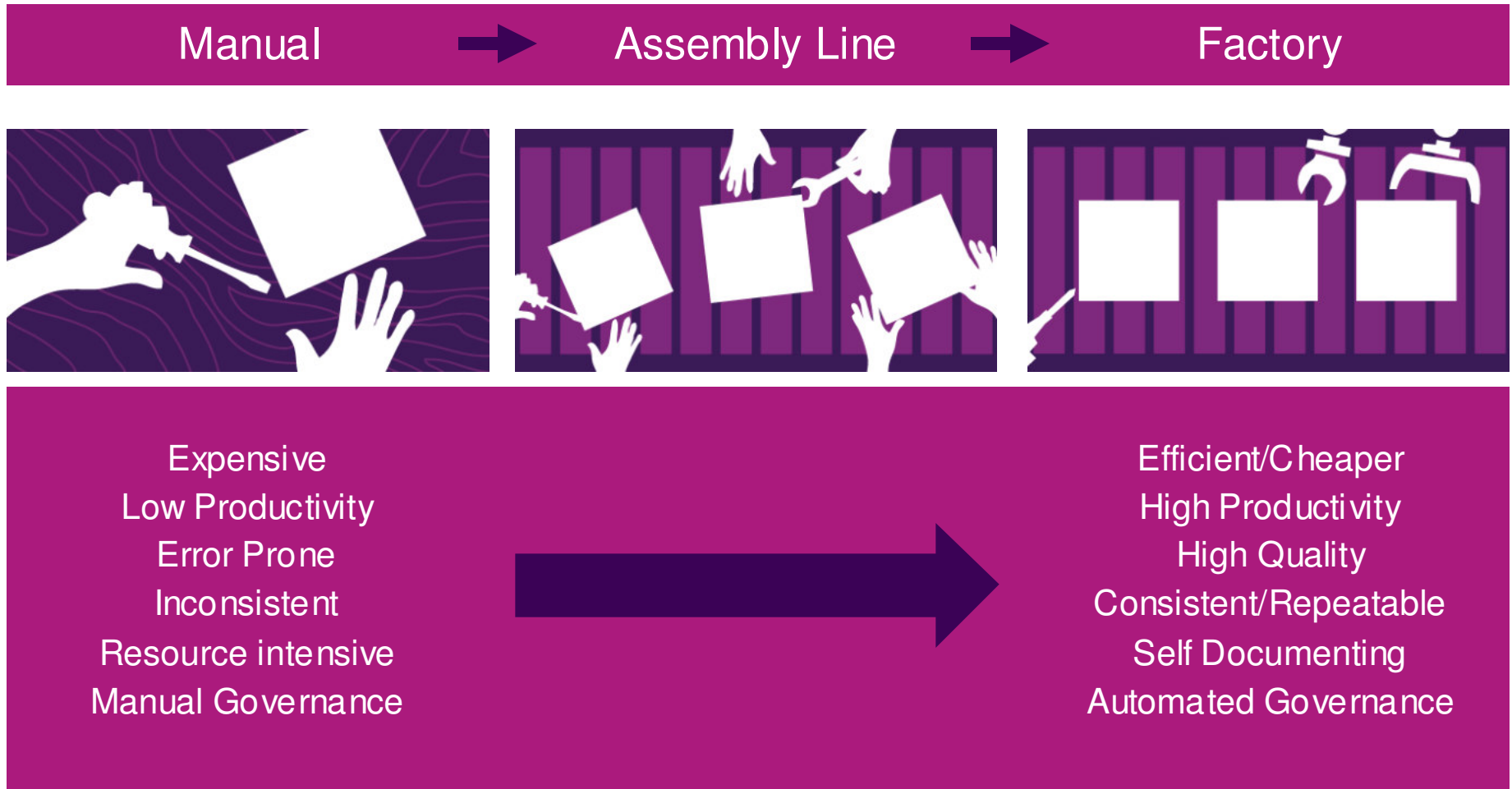
Successful businesses will manage software and systems delivery as a robust business process



Software Delivery Automation: Bridging the Gap



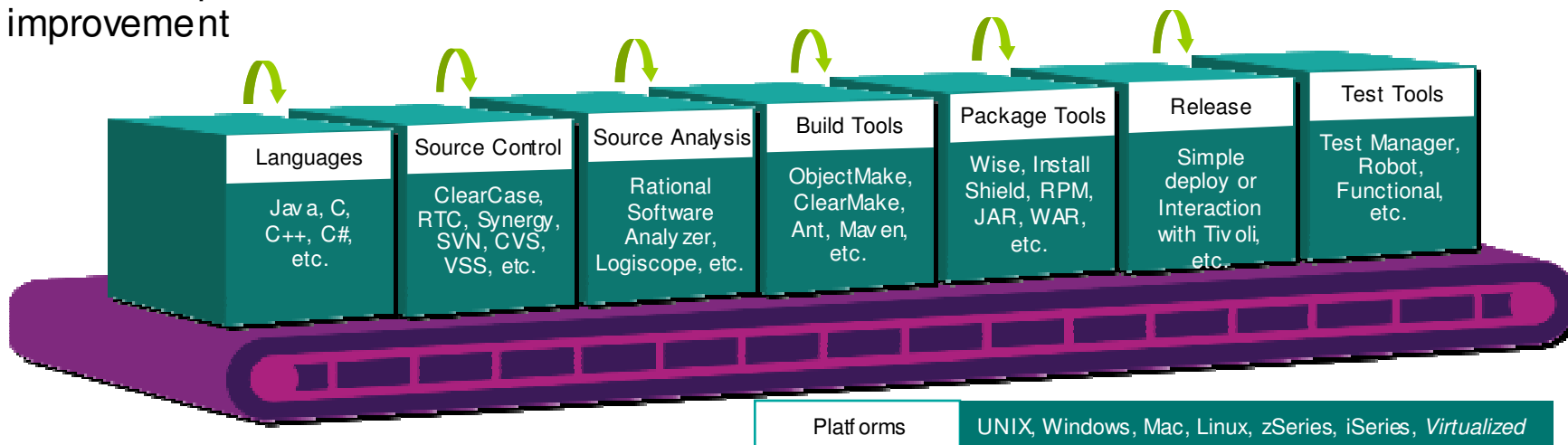
Evolution of the Software Delivery Approach



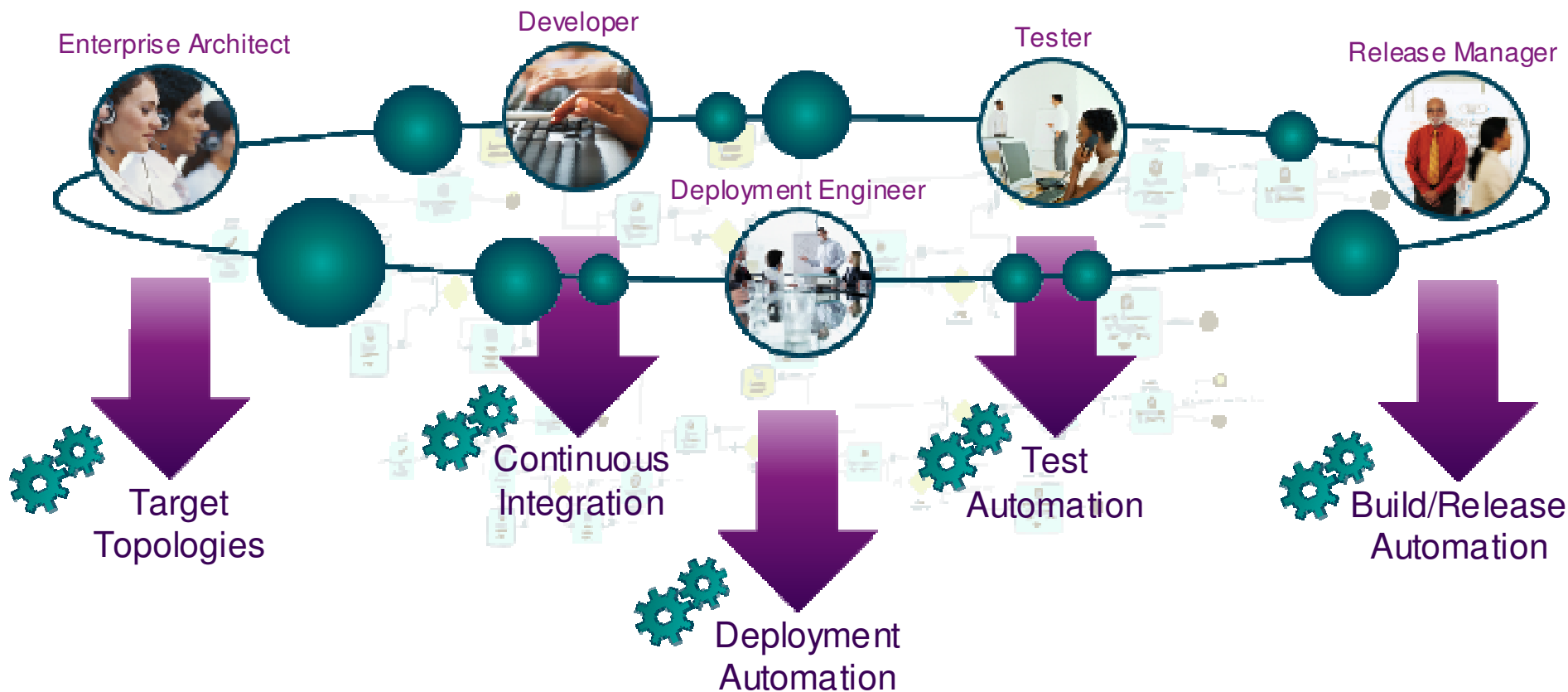
Definition: Toolchain Automation

A toolchain is simply a set of tools used in a serial manner to accomplish a task

- Applicable to various phases of the software delivery
- Important in reaching handoff points and 'agreed state' milestones
- Automating toolchains eliminates manual activity and handoff delays
- Automation also ensures consistency of process
- Consistent process flow enables better measurement and continuous improvement



Lifecycle workflows driven by humans leveraging automation to speed delivery and improve quality



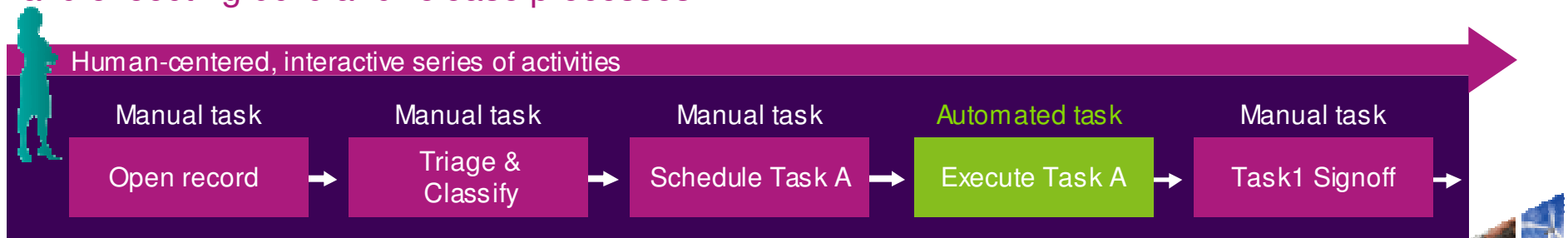
What is Rational Build Forge

A process execution framework that manages the assembly of software applications

Allowing you to *automate* software production

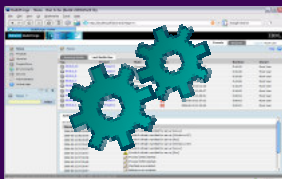
- Eliminating manual, error prone tasks
- Reducing maintenance of proprietary homegrown scripts
- Utilizing existing tools, scripts and hardware
- Providing repeatable and consistent processes for improved efficiency
- Capturing self-documenting data/audit trail
- Connecting team members with self-service access to pre-configured processes

Streamlines software delivery by automating, accelerating and executing build and release processes



And we continue to evolve today's Build Forge

Rational Build Forge



IBM Rational Team Concert

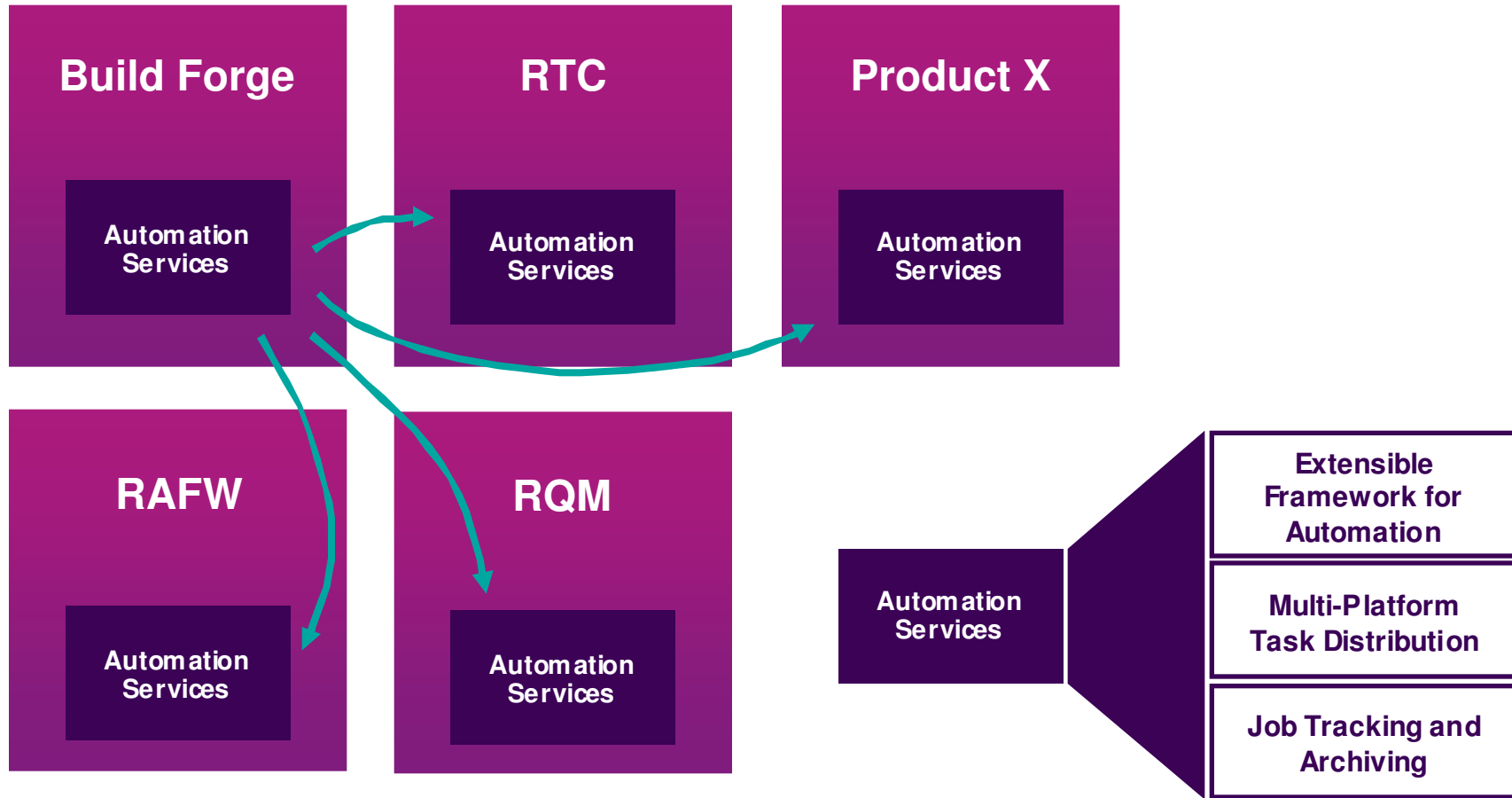


BF & RTC integration scenarios – and what's coming in 2010

- Dynamic build server selection
- Orchestration of multiple Jazz Team Builds
- Cloud build farm
- Automated deployment of build results
- Automated trigger of testing (BVT)
- Automated source code scanning and analysis
- Build Acceleration



Build Forge evolving into Jazz Automation Services



Automating Delivery and Connecting with Operations

Bridging the handoffs is critical

Deployment managers are caught between two perfect worlds – delivery & operations

Successful & fast deployments are critical to everyone



What is the Rational Automation Framework for WebSphere?

Customizable Framework for the WebSphere **Family** of products that delivers

- Automated WebSphere configuration change management
- Application deployment automation
- WebSphere product installation & patching automation

The framework's strengths are...

Accuracy

“Data Abstraction” - RAFW maintains normalized configuration data

Speed

Eliminate manual administration with pre-built automation

Consistency

Apply data in a repeatable manner to WebSphere CloudBurst patterns

IBM Software Group and Global Services

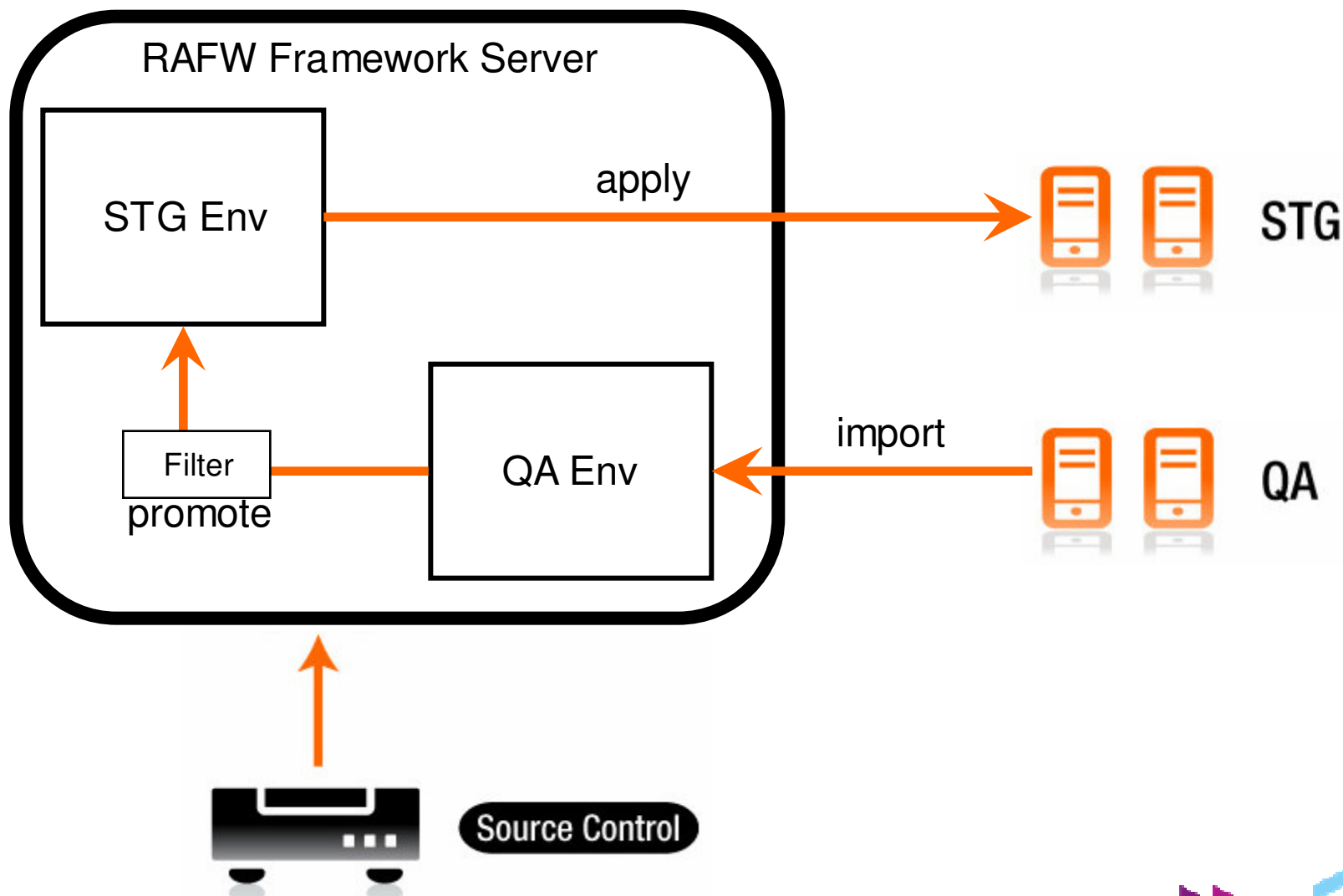


RAFW 7.1.1.4 - eGA April 30, 2010 !

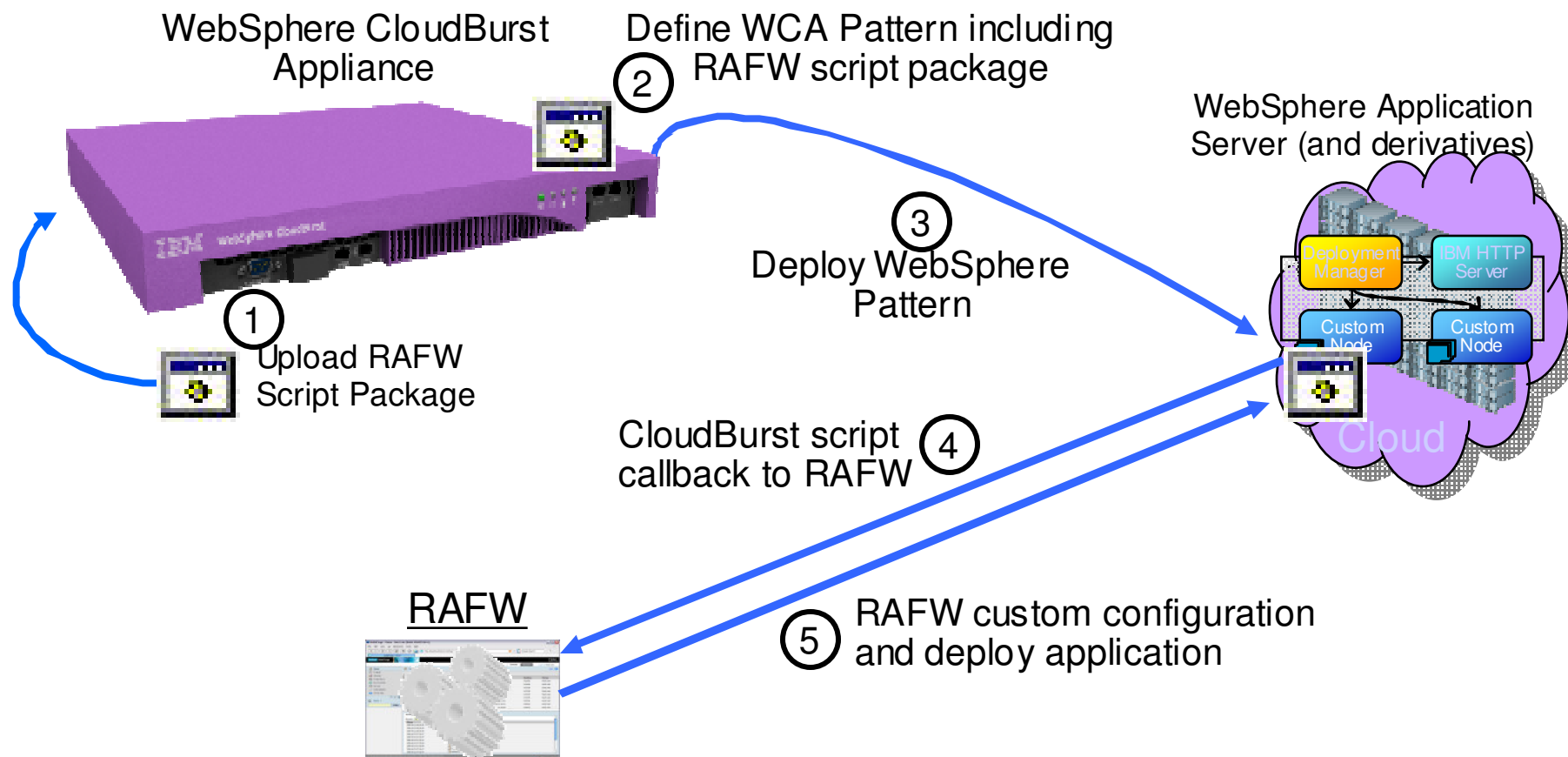
- WebSphere CloudBurst Appliance integration
- Additional Target System Support
 - WebSphere Application Server Fixpacks
 - WebSphere Portal Fixpacks
 - WebSphere Portal Enable on z/OS
- Consumability Improvements
 - Enhancements for Existing WebSphere Cells
 - Augment Mode
 - Promote Mode
 - Super-Composite Actions
 - Long Arguments & Custom Properties Support on Command Line
 - Enhanced Automation Libraries



RAFW Promote Mode



RAFW and WebSphere CloudBurst Appliance



Note: This scenario can be extended to include additional Rational components including Rational Asset Manager, Rational AppScan, and Rational Software Architect



RAFW Extensions in Incubation

- WebSphere BPM Suite
 - ▶ WPS, WESB, WSRR, WBM
 - ▶ Releases 6.2 & 7.0

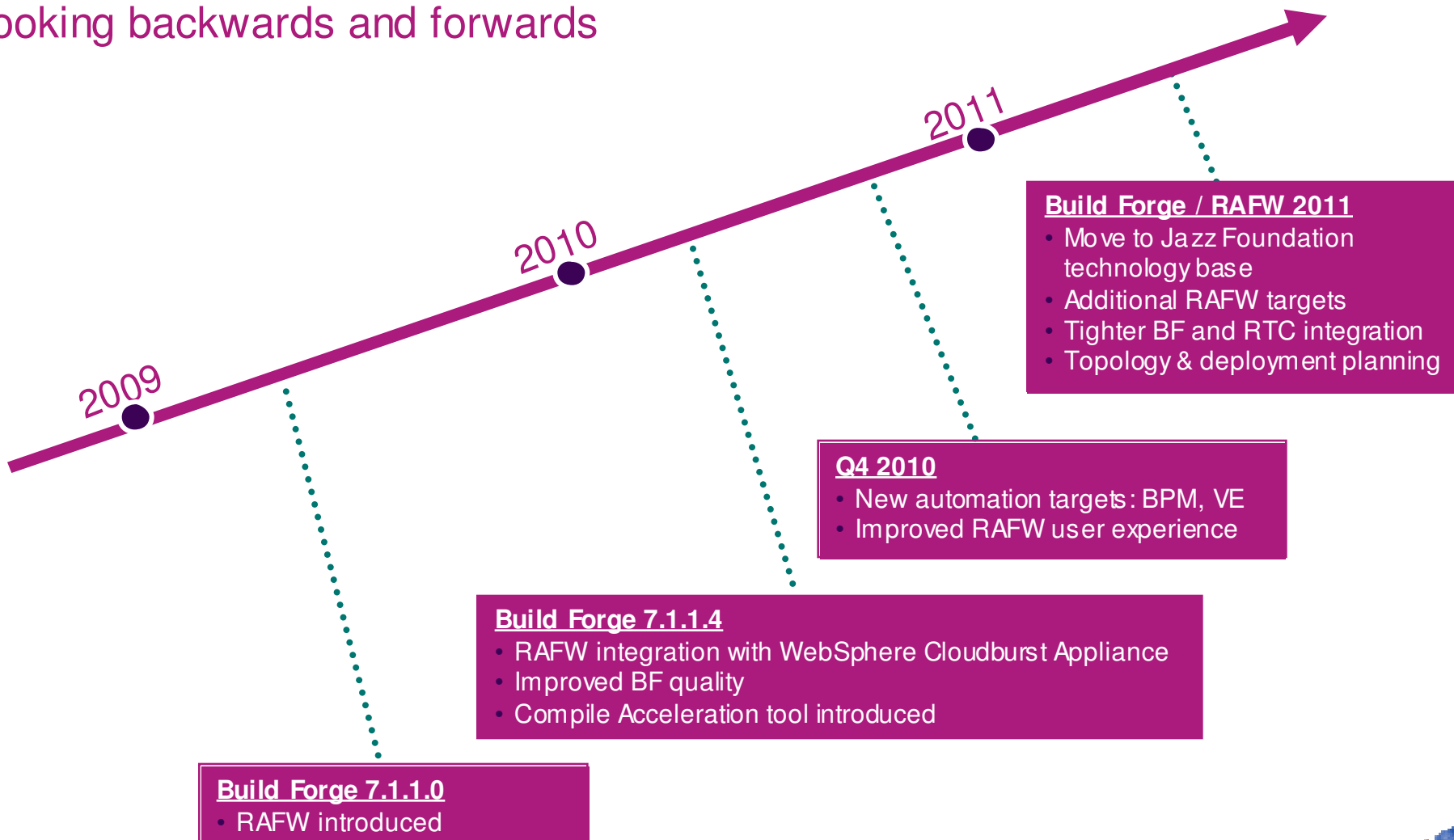
- WebSphere XD / VE

- WebSphere Feature Packs
 - ▶ WAS 6 Web 2.0
 - ▶ WAS 6.1 Web 2.0, EJB, Web Services
 - ▶ WAS 7.0 Web 2.0, SCA, CEA, XML, OSGi

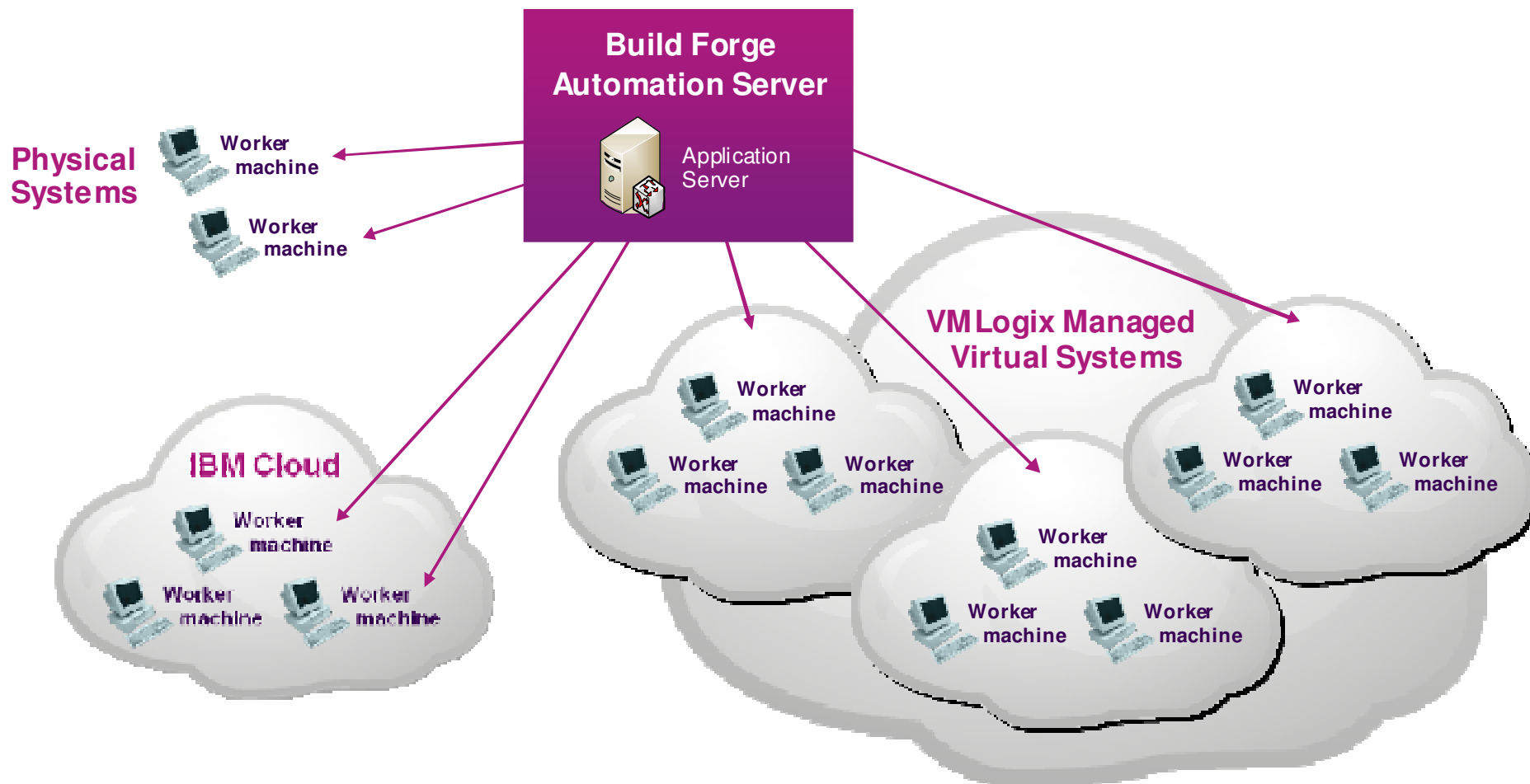


Timeline

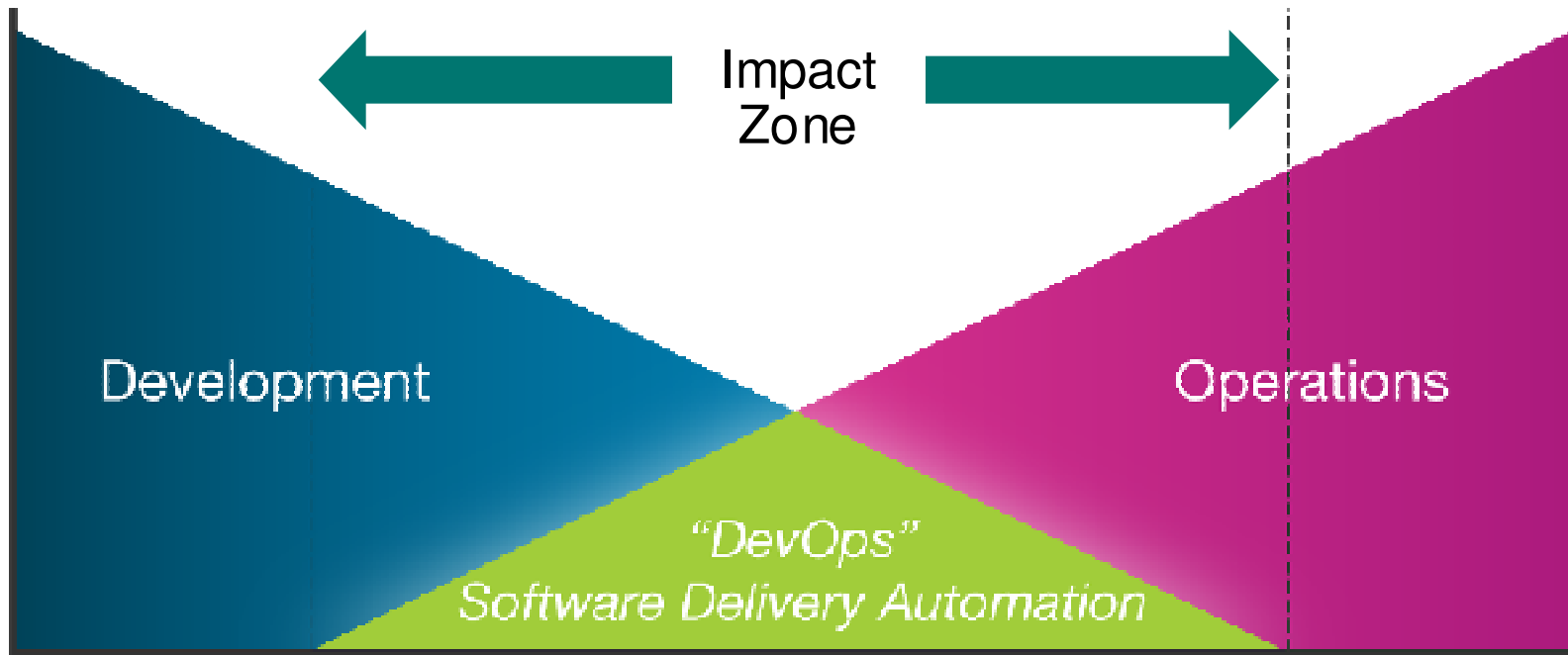
Looking backwards and forwards



Exploit the Benefits of Build Forge and Cloud



What are your DevOp challenges in your impact zone? How can we help?



questions





www.ibm/software/rational

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