

 Stay ahead.

# Innovate2013

The IBM Technical Summit

# 開發者大會





# IBM CLM協作平台趨勢 與未來

IBM 軟體事業處 Rational 資深技術顧問  
Tommy Wu

## Innovate2013

The IBM Technical Summit

## 開發者大會



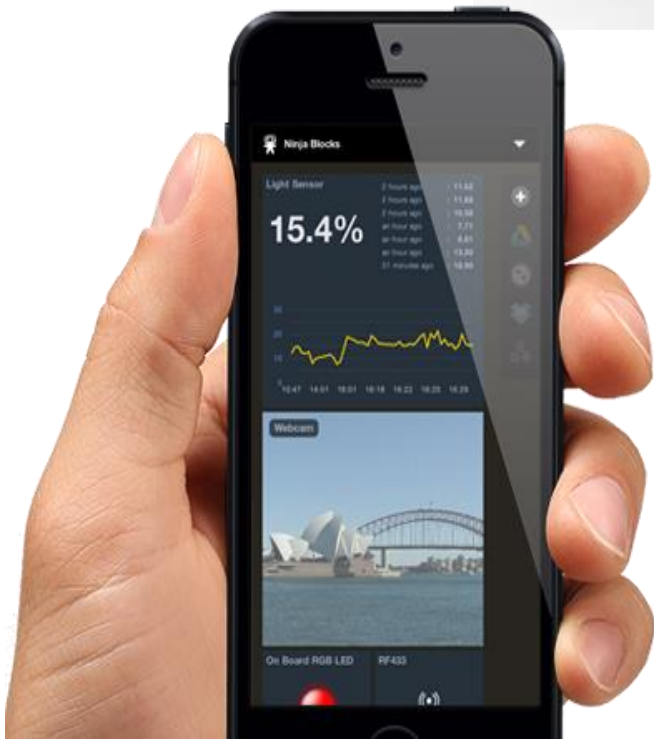


# Agenda

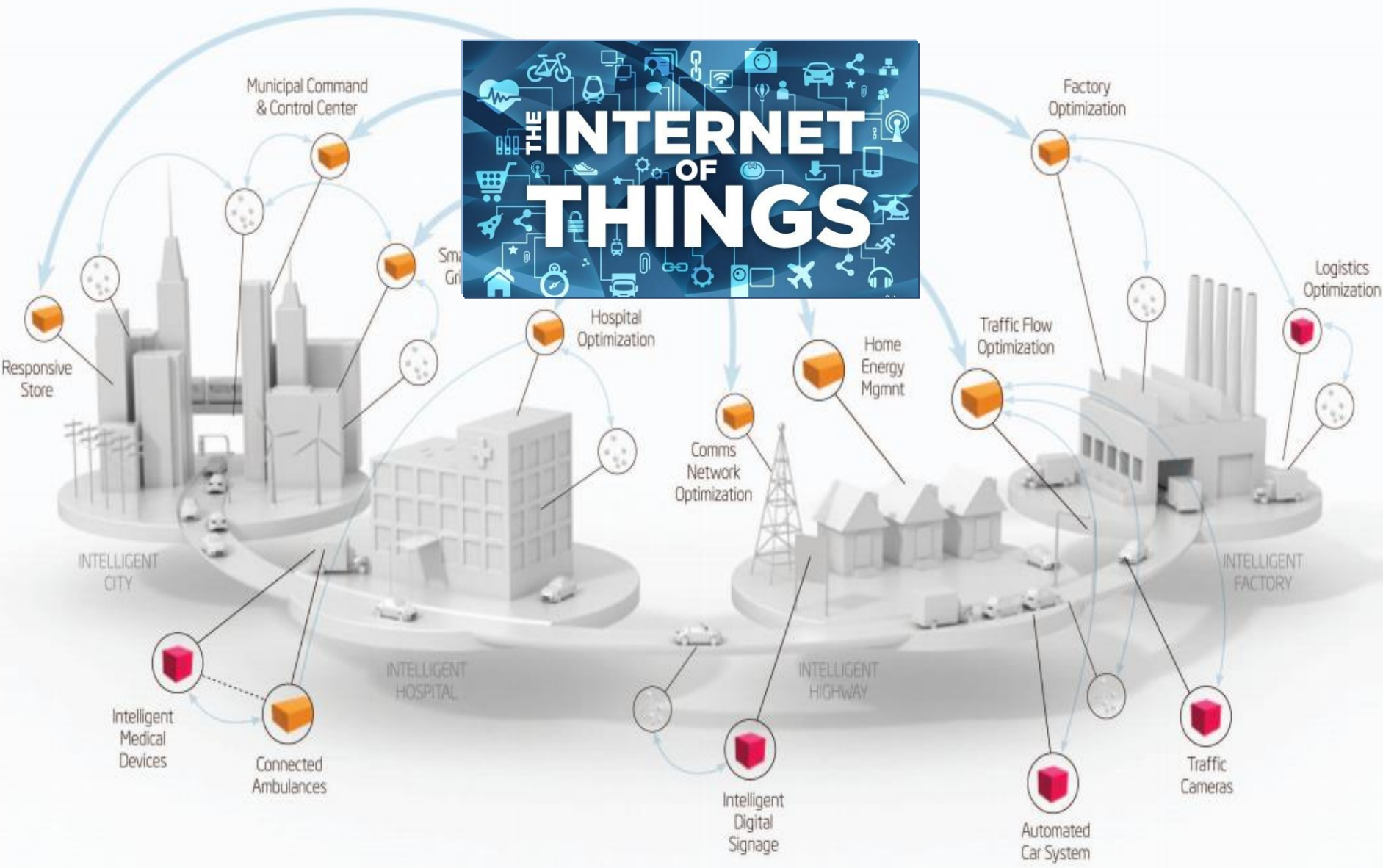


- CLM協作平台探討
- CLM協作平台趨勢
- What' s New for CLM協作平台





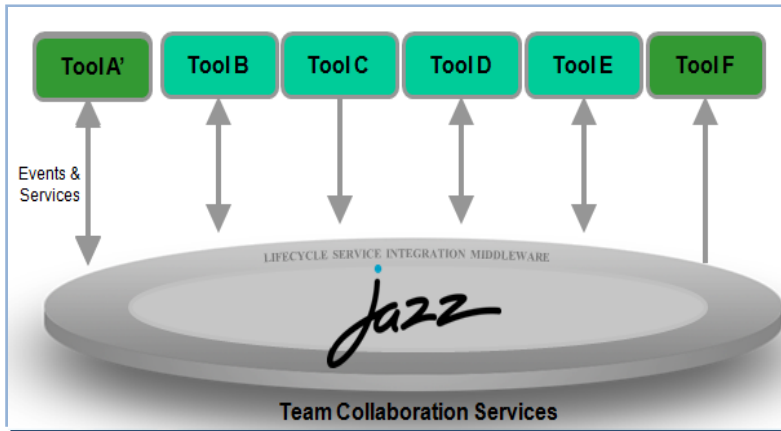
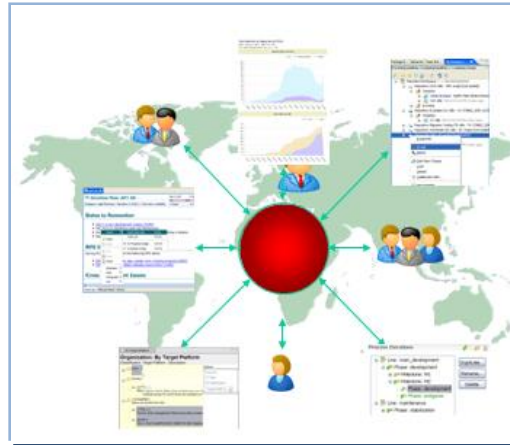
# THE INTERNET OF THINGS



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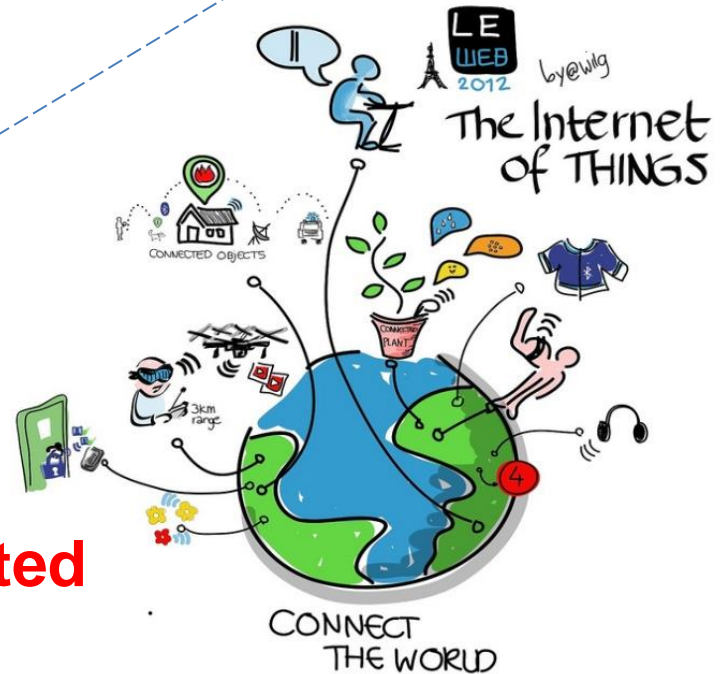


# IBM Jazz 協作平台與物聯網概念



**Connected**

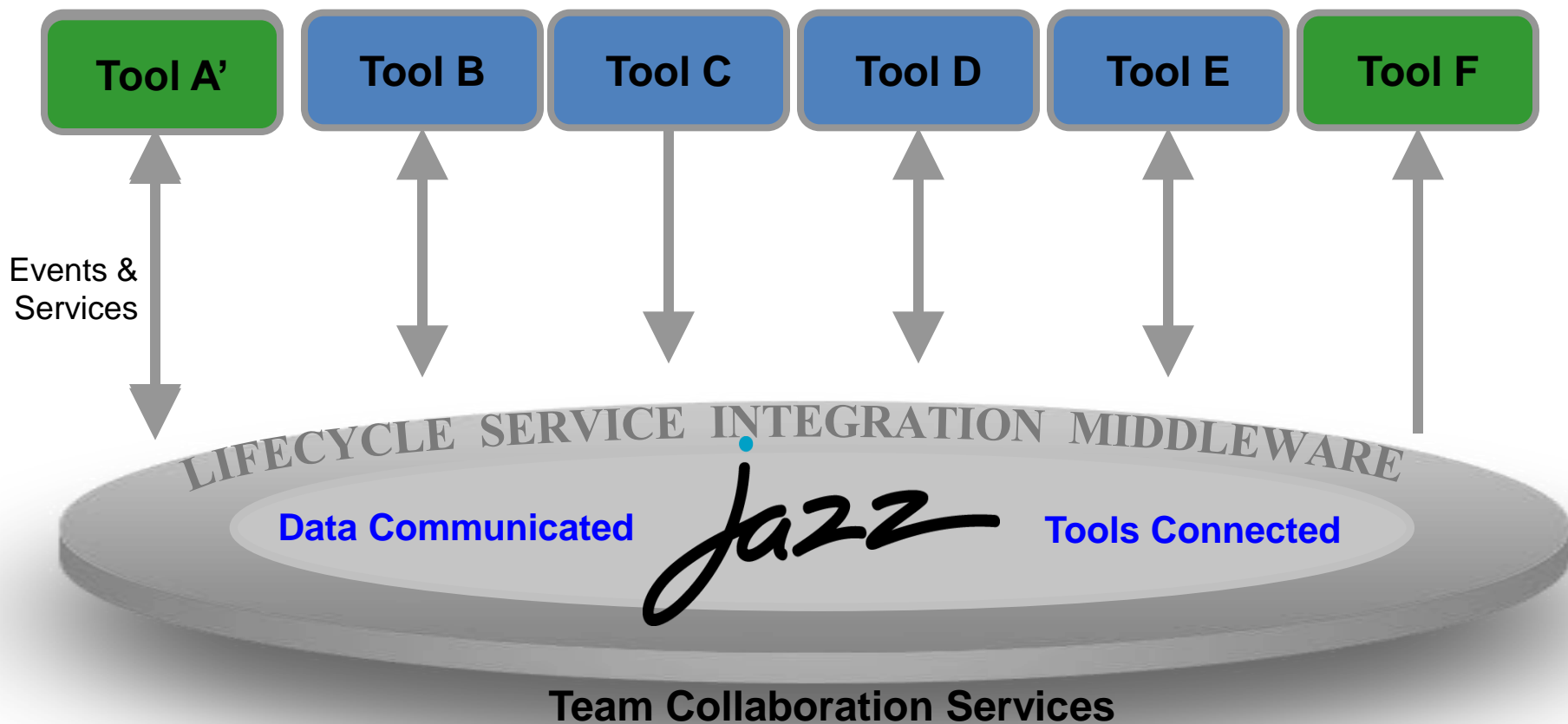
**Communicated**



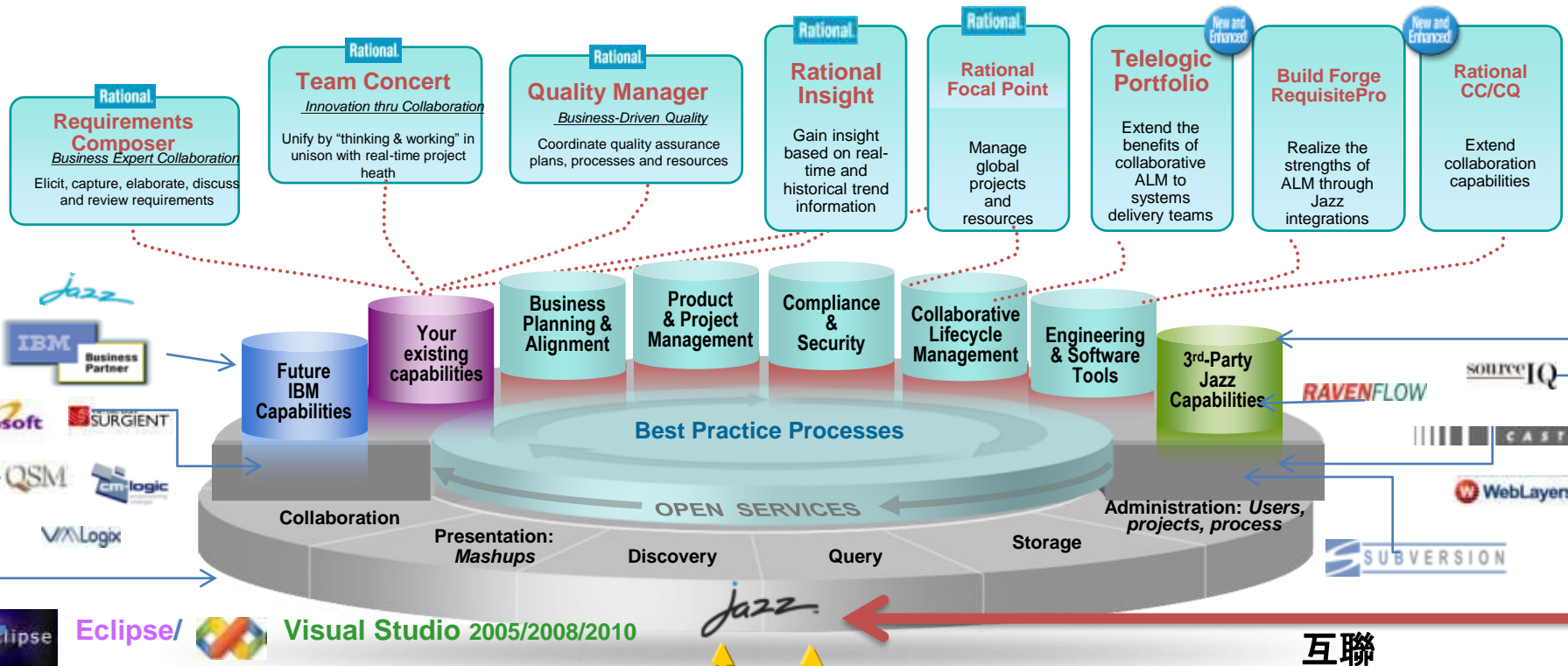


# 通過軟體整合服務，實現工具間的協同合作

- 通過Jazz平臺，工具只需與平臺進行通信：
  - 監聽來自平臺的標準化事件
  - 向平台發送標準化的事件



# IBM Jazz Collaboration IOT-共存與互聯



Client Integrations

Server Integrations

- Existing Rational offerings
- Business partner offerings
- Open source offerings
  - Others to come...

自行開發系統？

Rational Software Architect / Rational Application Developer  
 Rational Developer for z / Rational Developer for i  
 Rational Functional/Performance Tester

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# Agenda



- CLM協作平台探討
- CLM協作平台趨勢
- What' s New for CLM協作平台





# 市場的轉變正在挑戰企業對於軟體開發的創新

## Macro Business Environment

Increasing regulatory environments drive the need to reduce risk

## Empowered Users

Consumerization of IT drives the need for apps with high quality customer experience

## Multi-sourcing

Increasing outsourcing drive the need for governance

行動

社交

雲端

智慧  
互聯系統

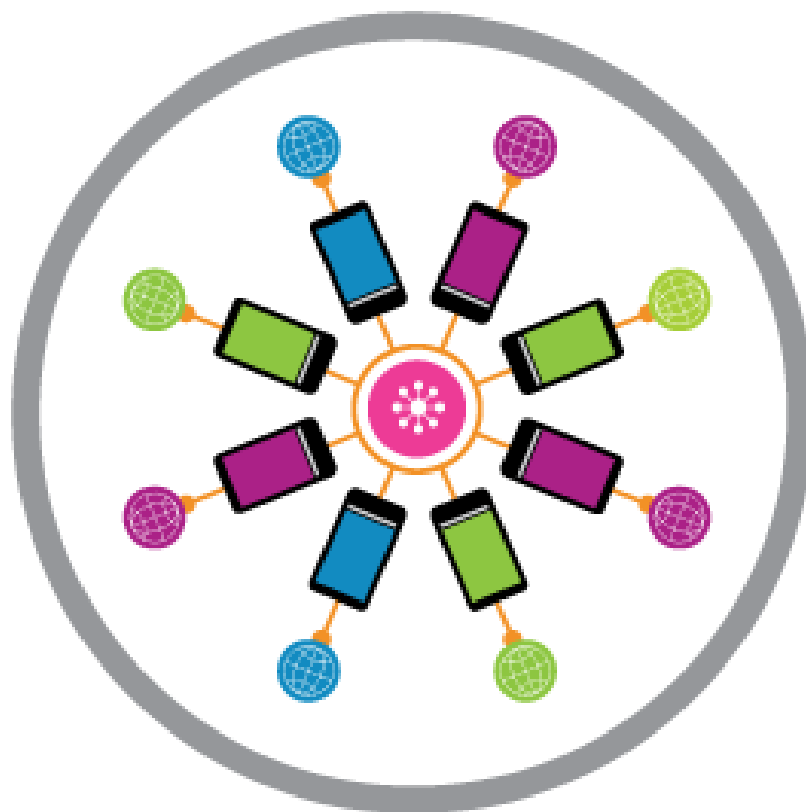
Big Data

## CLM 平台趨勢-提昇企業敏捷力

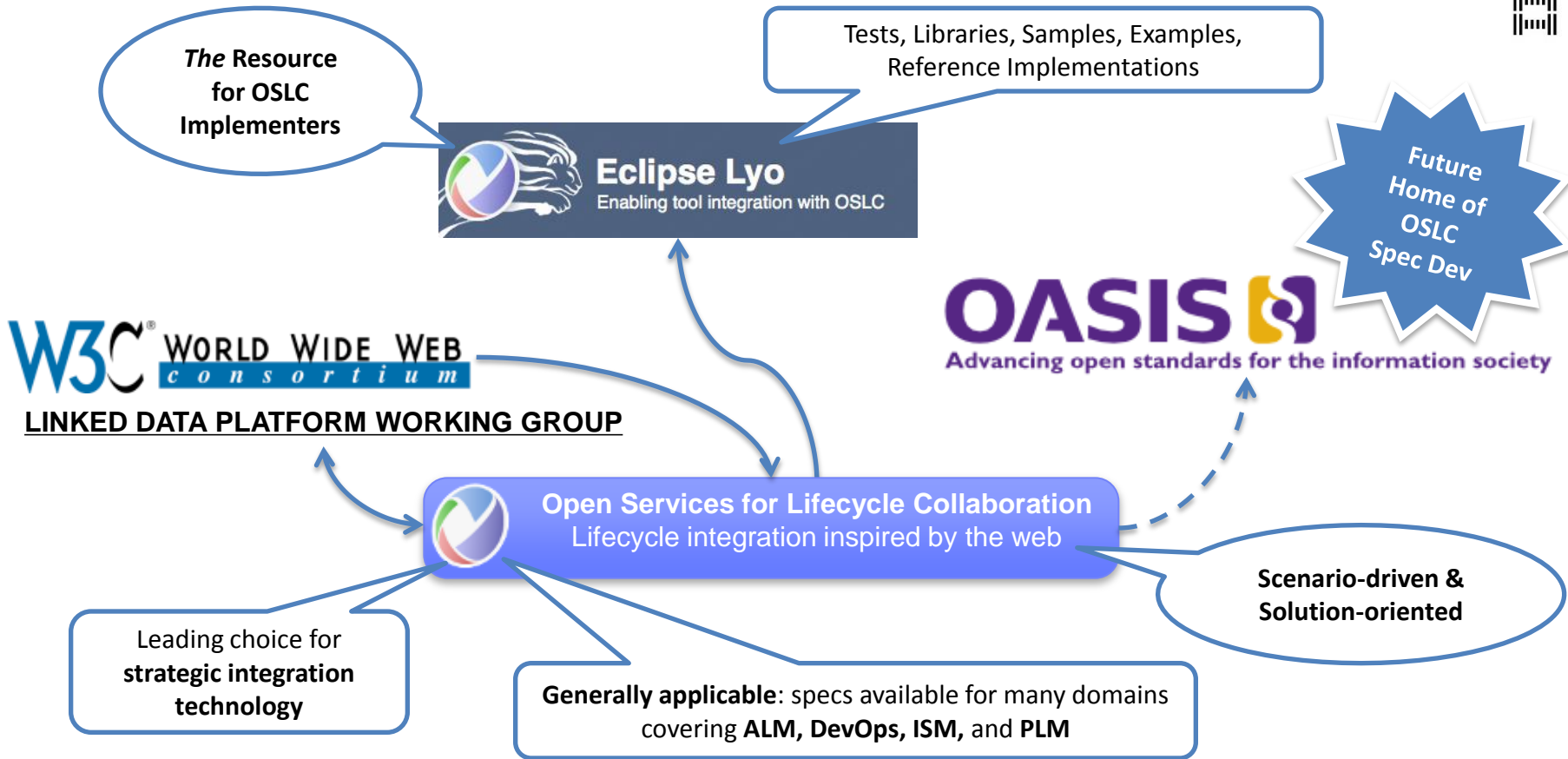
Mobile, social, big data, cloud, intelligent/connected systems drive the need for agility






# 智慧互聯系統



# 協同平台互聯骨幹-OSLC



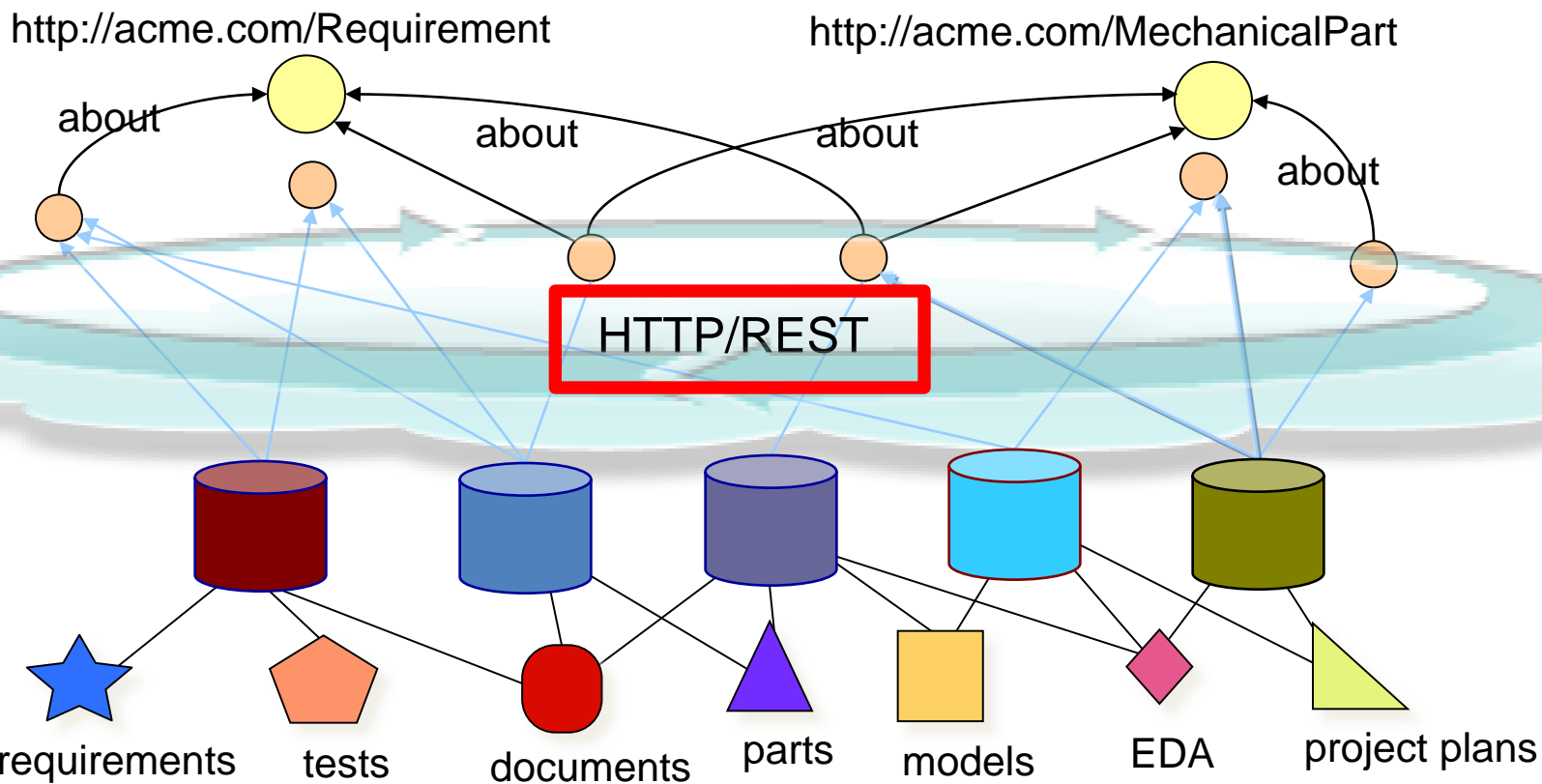
**OSLC:**

		
Inspired by the web <b>Proven</b>	Free to use and share <b>Open</b>	Changing the industry <b>Innovative</b>

# OSLC重要核心理念- Linked Lifecycle Data



The Web has proven to be the most **scalable, open, and flexible** integration technology







# OSLC 發展及優勢

針對使用者而言：

- 資料永遠是即時且最新的 – no staleness due to sync schedules/issues
- 在單一視窗內即時顯示其他工具之關連資料 – using preview panes (“rich hovers”)

針對整合開發人員而言

- Loosely coupled – don’t need to know other tools’ business logic
- Shared specifications – multiple tools implement same APIs
- Not tied to a programming language – use your favorite language
- REST-based – self-describing data, etc.
- Practical on corporate networks or Internet – uses http/https transport





# 範例：What can I do with OSLC?

**Create Link**

Linking from artifact: 11963: Comments with VVC

Link type: Implemented By

Artifact Container: Rational Requirements Composer

Choose Existing  Create New

Project Area: Requirements Management

Search by Keyword or Work Item Number  Search by Query

Type: Story

Work Item Number or Words Contained in the Text. Use quotes for a phrase search:

comments

Matching Work Items: 1 result(s)

5522: Commenting and Review

OK Cancel

Delegated UI

Rich Hover

Project Dashboard Artifacts Collections Modules Reports

General

Recent Changes in RM Product Definitions (RM) (100)

- RM - DNG FVT Test Requirements (19130) 5 minutes ago
- Verify that an artifact can be created based on a user created artifact template. (19402) RM - DNG FVT Test Requirements) 5 minutes ago
- Verify that an artifact can be created based on a user created artifact template. (19402) 5 minutes ago
- Verify that a module created using a template has its own distinct ID. (19401) RM - DNG FVT Test Requirement) 5 minutes ago
- Verify that a module created using a template has its own distinct ID. (19401) 5 minutes ago
- Verify that a module created using a template correctly contains the artifacts according to the module template creation properties (duplicates, copies, etc.). (19400) RM - DNG FVT Test Requirements) 5 minutes ago
- Verify that a module created using a template correctly contains the artifacts according to the module template creation properties (duplicates, copies, etc.). (19400) 5 minutes ago

19400: Verify that a module created using a template correctly contains the artifacts according to the module template creation properties (duplicates, copies, etc.)

Verify that a module created using a template correctly contains the artifacts according to the module template creation properties (duplicates, copies, etc.).

**Location**

RM Product Definitions (RM) RM - DNG FVT Test Requirements artifacts

**Attributes**

Type:	Test Requirement	ArtifactFormat:	Text
Automated:	false	Client?:	
Description:		TR Feature(s):	
TR Iteration:		TR Priority:	
TR Status:	Not Started		

**In Modules**

Test Requirement Module: 19130

Rational Publishing Engine (359) Name:

Rational Quality Manager (370)





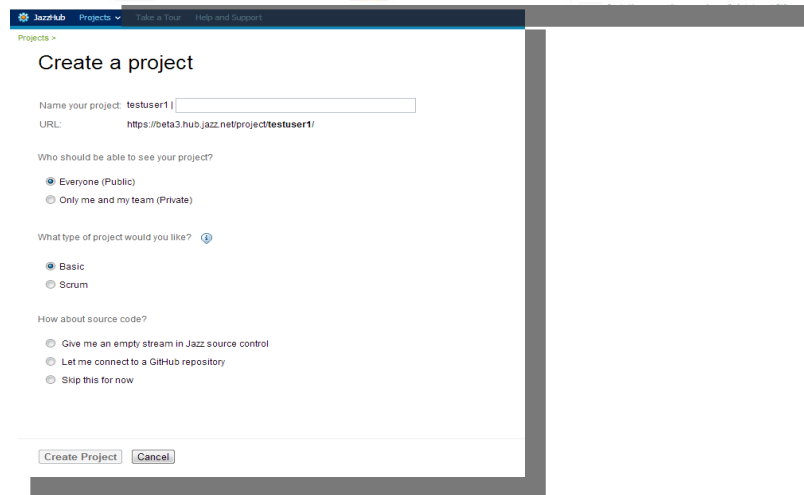
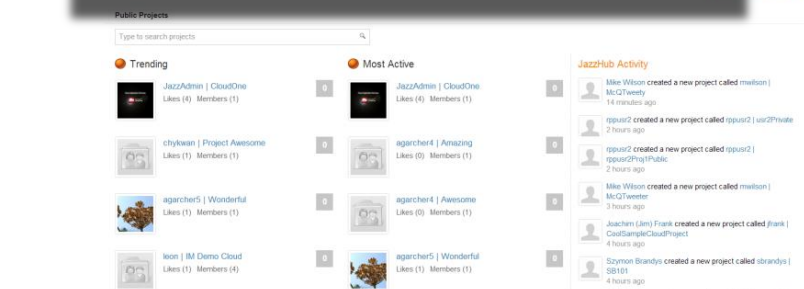
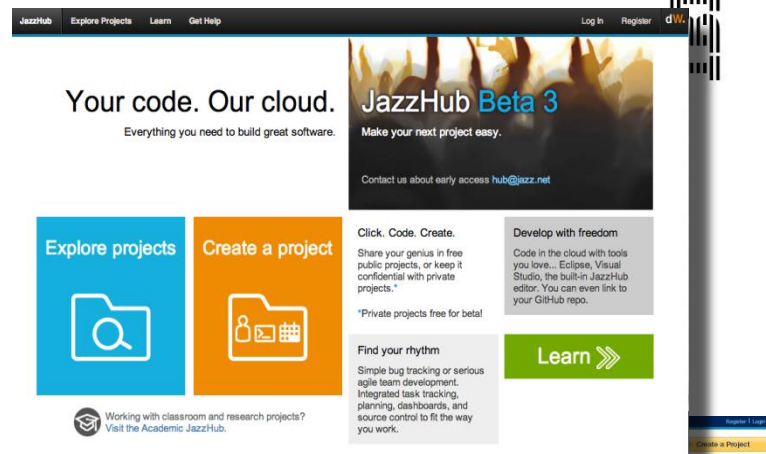
# 雲端



# JazzHub簡介



- What is JazzHub?
  - JazzHub allows you to develop and collaborate on software projects in the **cloud**.
  - Fully hosted task tracking, agile planning, and integrated source control so you have everything you need to develop your next app, feature or product.
  - IBM's premiere hosted environment for Cloud application development
  - Explore and join existing projects
- Start quickly. Simply.
  - No downloads required!
  - Create your first project in minutes
- Work the way you want to work
  - Browser-based development using integrated Eclipse or **Orion** technology provided by JazzHub
  - Full support for local development with Eclipse or Visual Studio
  - Built in support for Jazz Source Control
  - Connect to your existing **GitHub** projects



# What is Orion?



- Eclipse “platform” project initiated 2 years ago -- **Tools for the web, on the web**
- An evolution in tooling leveraging the impressive recent improvements in browser capabilities and availability of cloud services
- Embracing the shift to web-based application delivery and enabling cross site collaboration of “pluggable” services





# Two sources of an Orion Server

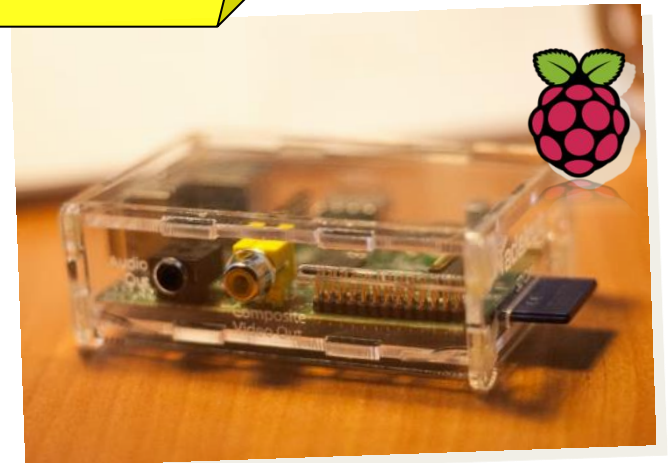
- Multi-user Equinox based Java Server
- Great for reusing existing Eclipse plug-ins and exposing them REST-fully to an Orion client
- Node.js based single user NPM install
- Very portable and great performance
- Deploy anywhere Node is installed

Is there an example of re-using an existing Eclipse plug-in?



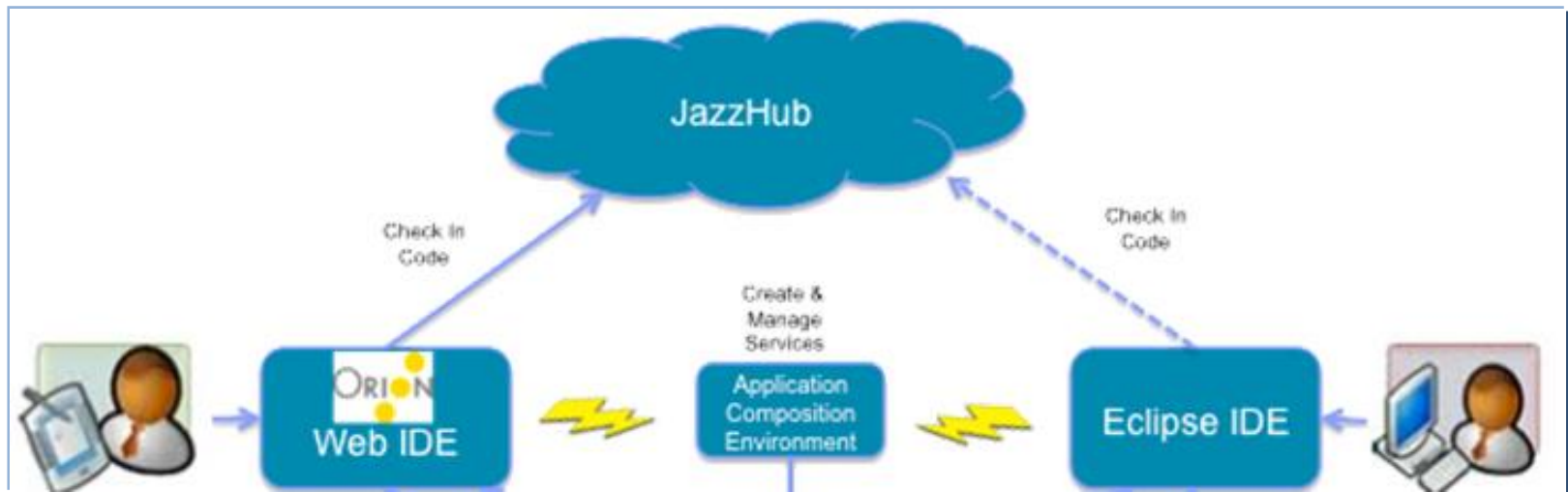
YouTube demo

Also works on embedded boards like the Raspberry Pi



# Developing in the Cloud, for the Cloud

- So now I can edit my code in the Cloud, in the context of a hosted RTC project



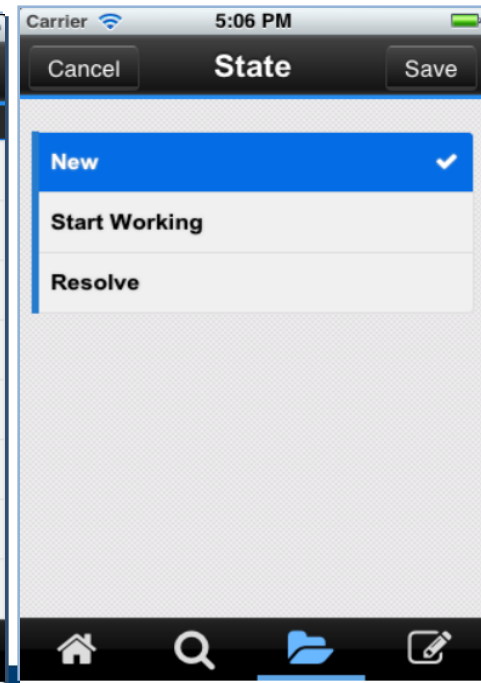
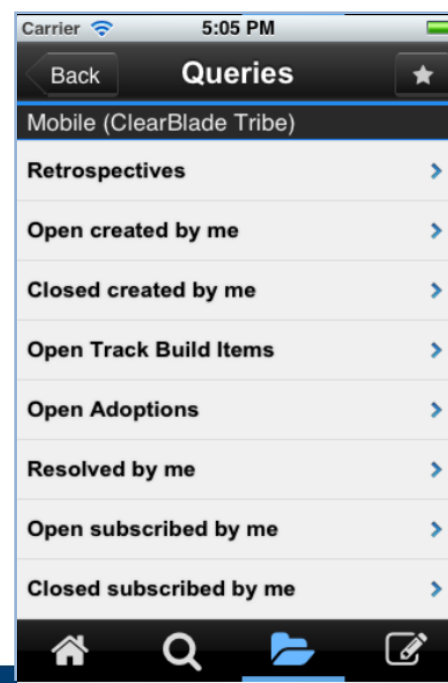
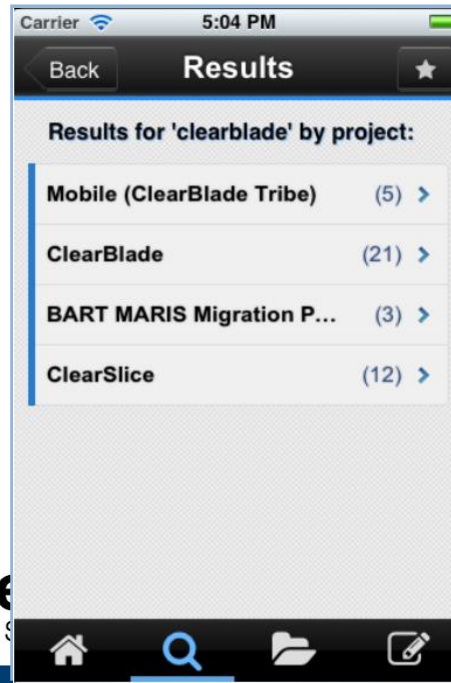
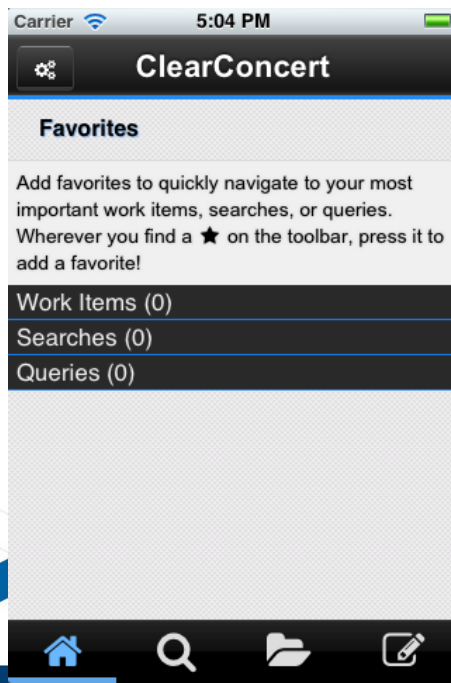
# 行動發展



# CLM協同平台行動化應用



- RTC 行動化 App Released !
  - Use ClearConcert to check and update your work items from your droid or apple device
  - Keep your process moving by updating ownership, state, target release and adding comments





# Mobile IDE Support

- Tablets such as the iPad, iPad mini and Android based platforms are fully supported by Orion
- Add a bluetooth keyboard for a mini workstation



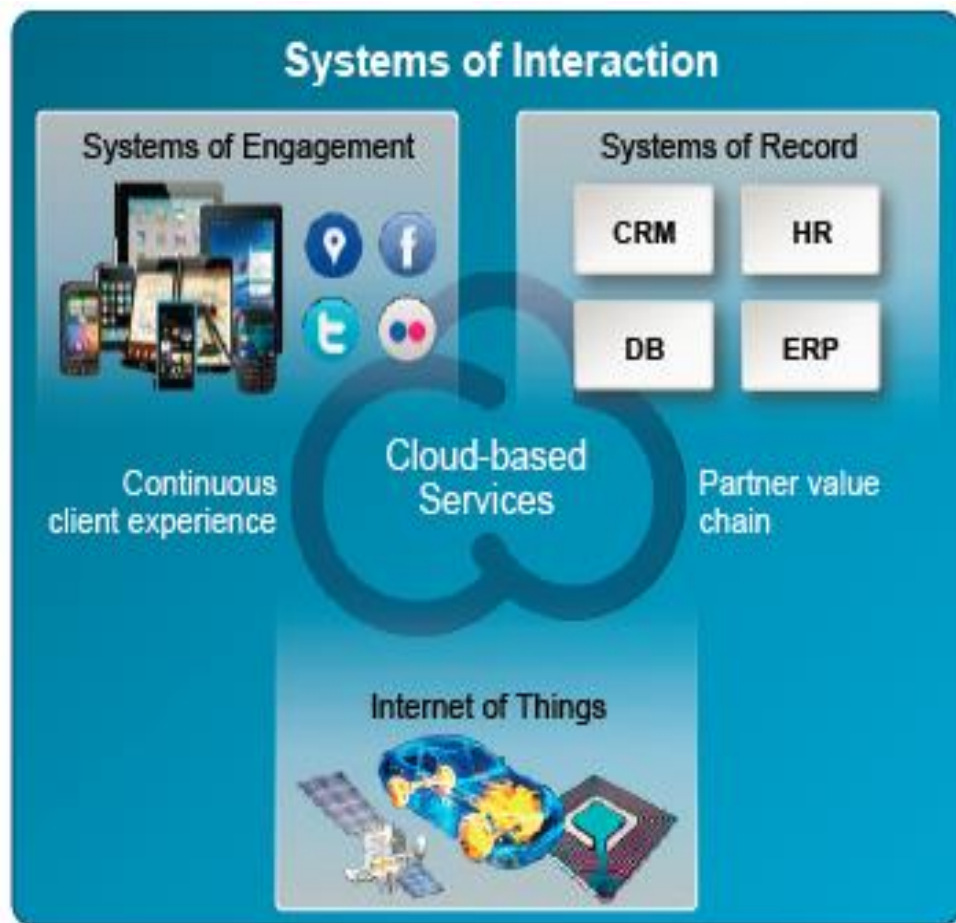




# 其他



# 創新技術的發展所引發軟體持續交付(Continuous Delivery)的重要性

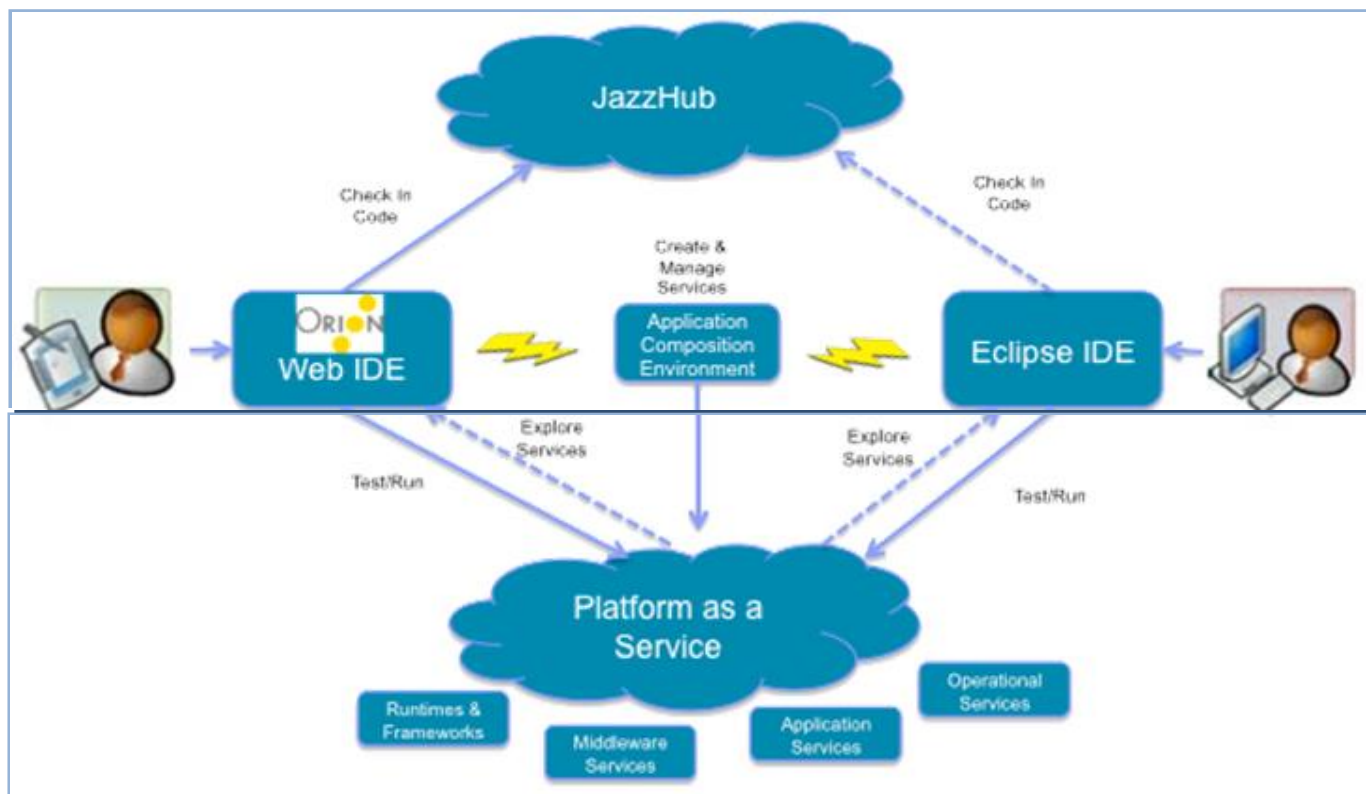


創新技術如行動應用、雲端、IOT等等的發展導致了企業對於產品或軟體Release的生命週期縮短，但卻要求更高的品質



# Developing in the Cloud, for the Cloud

- So now I can edit my code in the Cloud, in the context of a hosted RTC project
  - Wouldn't it be cool if I could deploy my code right from there to a Cloud runtime?!?!?





# IBM DevOps: 通過軟體驅動創新的產品和軟體持續交付方法

Enterprise capability for continuous software delivery that enables clients to seize market opportunities and reduce time to customer feedback.

企業通過持續的軟體交付抓住市場機會，縮短獲得客戶回饋的時間。

## DevOps Lifecycle(基於DevOps的產品和軟體生命週期管理)

最終客戶



業務部門&產品經理



軟體&產品開發



維運&製造 &售後



持續創新，回饋和改進

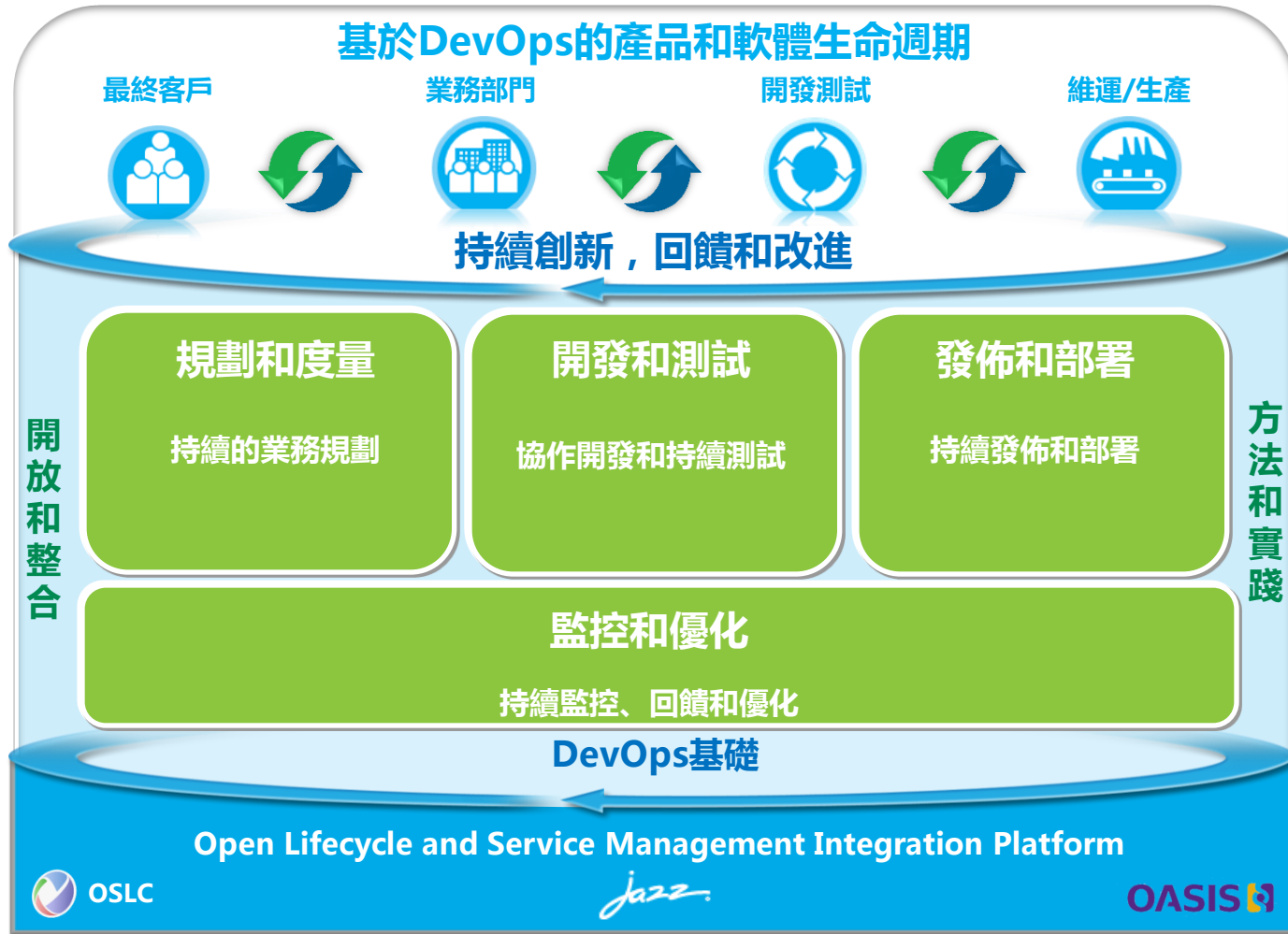
快速獲得和回應客戶  
回饋

加速軟體交付

平衡速度、成本、品  
質和風險



# 基於DevOps的產品和軟體生命週期管理能力模型





# Agenda

- CLM協作平台探討
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# What's New for CLM 2013



2011

2012

2013

## Consumability: Improved productivity for practitioners

- Many usability improvements across the CLM products, such as:
  - Simplified agile ranking in RTC
  - Customizable main menu organization in RQM
  - Simplified artifact locking in RRC
- JazzHub Beta @ Innovate 2013!



## Enterprise scalability, quality, reliability and serviceability

- Performance
  - 40% faster plan loading in RTC
  - ETL performance improvements for reporting
  - Performance improvements in 3 node clustered environments
- Serviceability improvements



## Boost for Software and Systems Engineering customers

- Versioning, configuration management and change management, starting with RM and targeting 2H 2013 for initial delivery





Be agile. Be lean. Work Together



- **Agile your way** – Scrum, waterfall or hybrid; adapt planning to meet your team needs and rhythm.
- **Friction free communication** by smart linking of tasks, code changes, builds and releases as you work
- **Live dashboards** - write code not status reports – live web based dashboards tell everyone the story
- **Empower developers** – Fix bugs, juggle tasks, patch in seconds, easily add or remove features
- **Runs anywhere – open platform** Works with your existing tools and data for incremental adoption



## IBM Rational Team Concert v4.0.3 Highlights

- **Simple and fast agile ranking** – Rank plans quickly and easily with drag and drop or explicit ranking
- **New Jenkins plug-in with traceability to RTC SCM and work items** - Adopt RTC into Jenkins/Hudson teams faster, leverage hundreds of other Jenkins/Hudson OSS plug-ins, such as Sonar etc..
- **Visual Studio developers see all their work in one place** - See work across projects, customize views
- **Performance improvements** – Load plans 40% faster in the web UI, Improved CLI performance
- **Regulatory reporting** – Report on time spent, approval descriptors and Modified by custom attributes



# IBM Rational Quality Manager v4.0.3 Q2 2013

## Quality and test management for value-driven software delivery



- **Comprehensive test plans** - All plans in one place. Agree on goals and keep things on track.
- **Reporting with a purpose** - Dashboard and reports give you timely and accurate test metrics and defect counts. Trend charts let you take action before things go wrong.
- **Quicker manual testing** - Straightforward test scripts guide you through test execution and capture results.
- **Simplified lab management** - Schedule resource allocation and test execution using predefined resource configurations
- **Requirements driven testing** - Link requirements to test cases and defects. Associate test script steps to achieve fine-grained traceability.



### IBM Rational Quality Manager v4.0.3 highlights

- **Improved consumability** - customization of RQM main menu; advanced customization support of artifact template; easier to organize and use keywords
- **Improved Rational Test Workbench integrations** - keyword driven testing & multi-channel support
- **Rational Test Virtualization Server integration** - enable continuous integration testing through test virtualization
- **Duplicate and link artifact** - a way to support the need for parallel development and configuration management

# IBM Rational Requirements Composer v4.0.3 Q2 2013

## Requirements Definition and Management across the lifecycle



- **Empower teams of all sizes and complexity** to define, analyze, manage, report with project requirements
- Improve **visibility and understanding** of requirements across the development lifecycle
- **Realize project impact and downstream visibility** using traceability across requirements, test, and development
- **Drive development forward** with agile-at-scale and iterative processes in fast paced markets
- **Customer and stakeholder collaboration** for improved agility and informed decisions



### IBM Rational Requirements Composer v4.0.3 highlights

- **Simplified Artifact Locking and artifact management**
  - Introducing permanent locking
- **Improved HPQC Sync integration** - provided with the Rational Lifecycle Integration Adaptor
- **Performance acceleration** - server and client 15%



# Questions

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# Thank You

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