

An abstract graphic on the left side of the slide, composed of overlapping, semi-transparent geometric shapes in shades of blue, green, and yellow, creating a dynamic, layered effect.

Developing in the Cloud, for the Cloud at JazzHub

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IBM Developer Experience and Rational CLM Cloud Architect

Innovate2013
The IBM Technical Summit

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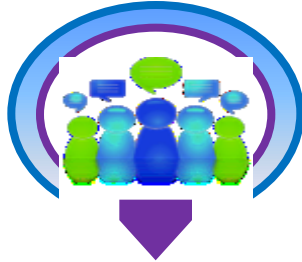
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The new development reality:

**Consumerization
of technology**



*Developers making more
decisions*

**Cloud & Mobile
Revolution**



*Changing the types of
software that gets built*

Systems of engagement



*Line of Business and
marketing driving*

New Development Reality

The Case for Developing in the Cloud

- More and more applications have moved to the Web, to mobile devices, and are being run in Cloud environments
- Rational's Application lifecycle tools offer lifecycle capabilities in the Web
- But Development tasks are largely still done on the desktop in environment like Eclipse or Visual Studio
- Could we offer this experience in the Web, and integrate it into the software lifecycle?
- This is what we're delivering with JazzHub, using the Eclipse Orion technology

JazzHub: your place to Developer for the Cloud, in the Cloud

- 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, with built-in DevOps capabilities
 - Free public and fee-based private projects (free during Beta)
 - Explore and join existing projects

The screenshot shows the JazzHub website homepage. At the top is a navigation bar with links for 'JazzHub', 'Explore Projects', 'Learn', 'Get Help', 'Log In', 'Register', and the 'dW' logo. The main content area features a large banner with the text 'Click. Code. Create.' and 'Everything you need to build great software.' Below this are two large buttons: 'Explore projects' (blue) and 'Create a project' (orange). To the right of the buttons is a section for 'JazzHub Beta 3' with the tagline 'Make your next project easy.' and contact information 'hub@jazz.net'. Further down, there are three columns of text: 'Public or private' (sharing genius in free public projects or confidential private projects), 'Find your rhythm' (simple bug tracking, agile team development, etc.), and 'Develop with freedom' (code in the cloud with tools like Eclipse and Visual Studio). A green 'Learn' button with a right-pointing arrow is at the bottom right. At the bottom left, there is a small icon of a graduation cap and the text 'Working with classroom and research projects? Visit the Academic JazzHub.'

Do developers really want to move to the Cloud?

- Progression of desktop to cloud-based tools



- Shift in developer knowledge sharing



- Deploying to Cloud-based PaaS, IaaS, etc.



- How enjoyable was your last IDE setup experience ???

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
- A community that benefits from compatibility between a common set of components and services to create richer cloud based tools than they might otherwise by themselves

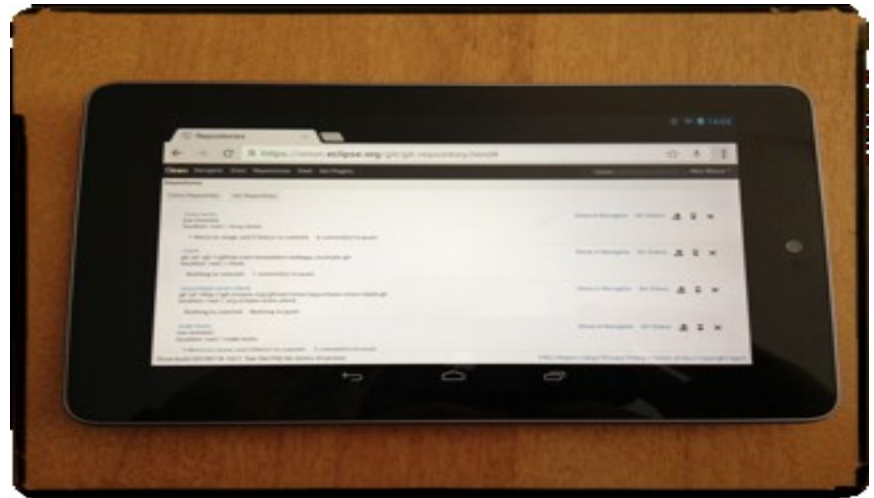
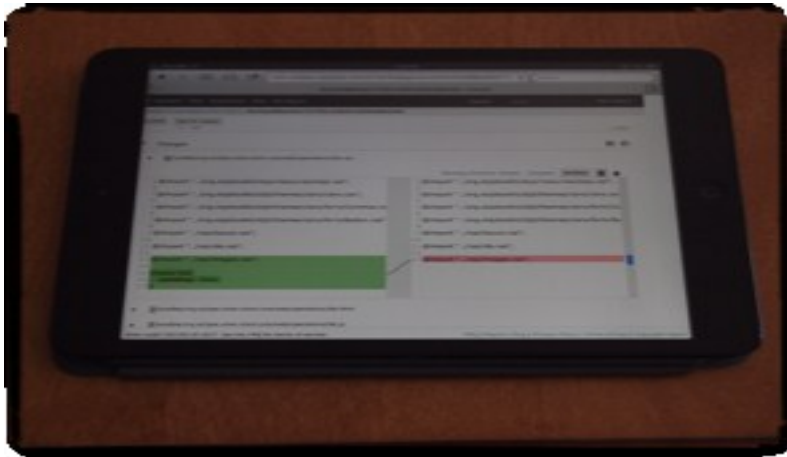
Orion Key Features



- Replaces need for a desktop IDE
 - Initially targeting needs of web developers (HTML, JavaScript, CSS, Ruby, Python)
- Enable “Core” Coding Activities in a Browser
 - Code editing, navigating source, search, integration with Source Control Management
- Speed / Responsive UI Design
- Extensibility and Community are what sets Orion apart

Mobile 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



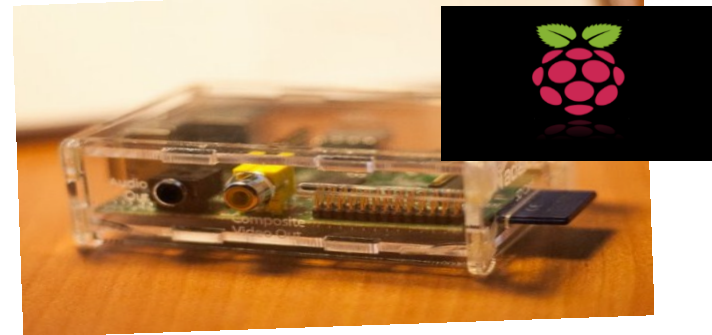
Two sources of an Orion Server

- 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 and used anywhere Node is installed



YouTube demo

Also works on
embedded
boards like the
Raspberry Pi



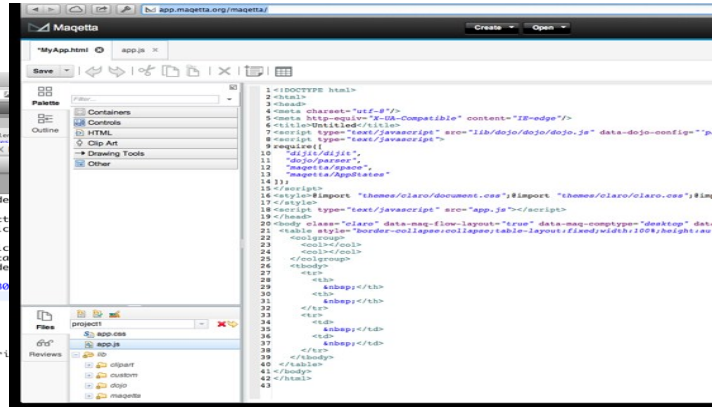
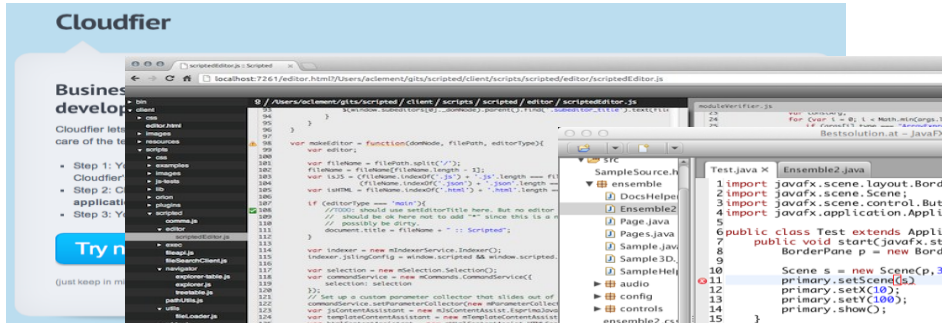
Demo

2013



What about the Community?

- VMWare JavaScript tooling editor named “Scripted”
- Firefox embeds Orion for the Scratchpad and Debug tools
- e(fx)clipse leveraging JavaFX, OSGi, Eclipse and Orion
- Maqetta leverages the Orion core and file system
- Pivotal, HP and SAP have demoed Orion-based Web tooling

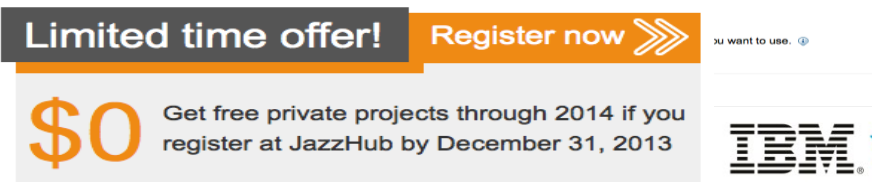
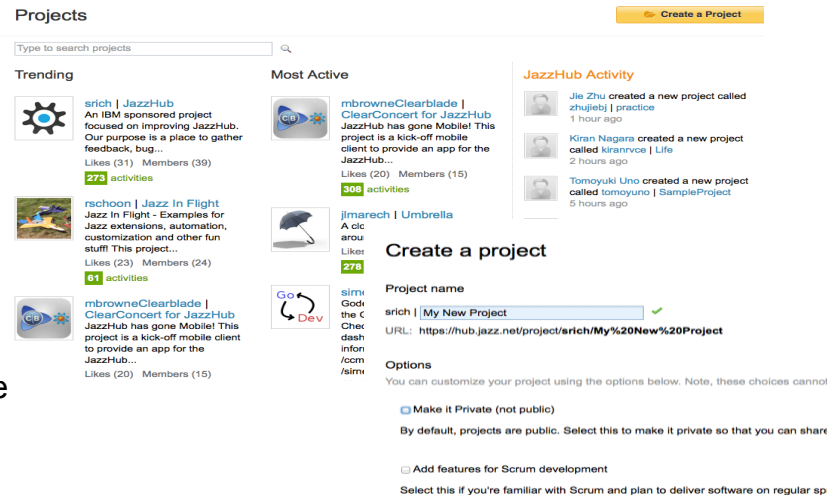
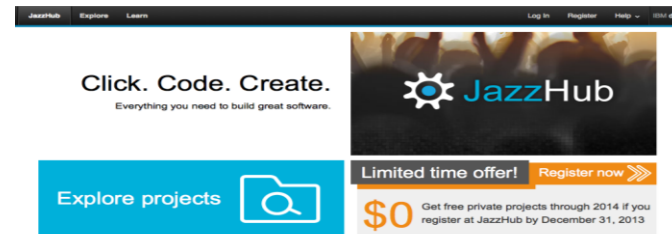


So we've got a browser-based IDE, now what?

- Seems a little silly to run a Web server on my desktop to edit files
- Wouldn't it be ideal if there was a Cloud for Development where I could use Orion?
 - Integrated with hosted Software Configuration Management
 - Continuous Integration and Deployment
 - Tracking and Planning
 - Integration with Cloud runtimes...
- Introducing JazzHub for everyone
 - Expanding our Academic experiment from 2011 to welcome all public and private projects

Introducing JazzHub

- 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.
 - Free public and fee-based private projects (see below)
 - 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 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



Projects

Create a Project

Type to search projects



Trending



[srich](#) | [JazzHub](#)

An IBM sponsored project focused on improving JazzHub. Our purpose is a place to gather feedback, bug...

Likes (31) Members (39)

273 activities



[rschoon](#)

Jazz In F
Jazz exte
customiz
stuff! This

Likes (23)

61 activities



[mbrowneClearblade](#) | [ClearConcert for JazzHub](#)

JazzHub has gone Mobile! This project is a kick-off mobile client to provide an app for the JazzHub...

Likes (20) Members (15)

Most Active



[mbrowneClearblade](#) | [ClearConcert for JazzHub](#)

JazzHub has gone Mobile! This project is a kick-off mobile client to provide an app for the JazzHub...

Likes (20) Members (15)



[simewton](#) | [godev](#)

Godev is a web-based IDE for the Go programming language. Check out the project dashboard for more information: <https://hub.jazz.net/ccm01/web/projects/simewton%20%20godev#acti>

JazzHub Activity



[Jie Zhu](#) created a new project called [zhujiebj](#) | [practice](#)
1 hour ago



[Kiran Nagara](#) created a new project called [kiranrvce](#) | [Life](#)
2 hours ago



created a new project | [SampleProject](#)



ed a new project | [My RTC Exploration](#)



[srich](#) | [JazzHub](#)
8 hours ago



[sathiskumar m](#) created a new project called [sathis14](#) | [billing](#)
8 hours ago

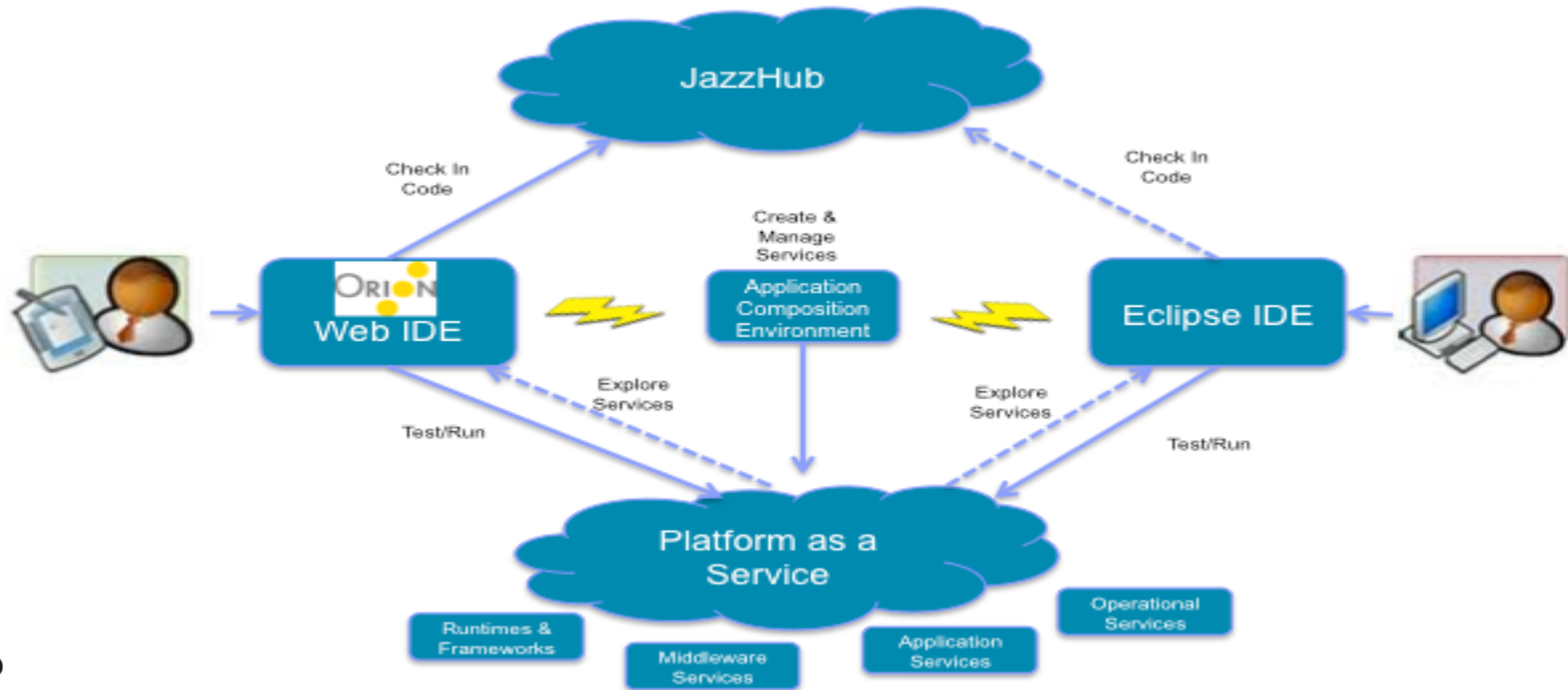


[Marcelo Rocha](#) liked [simewton](#) | [godev](#)
10 hours ago

DEMO

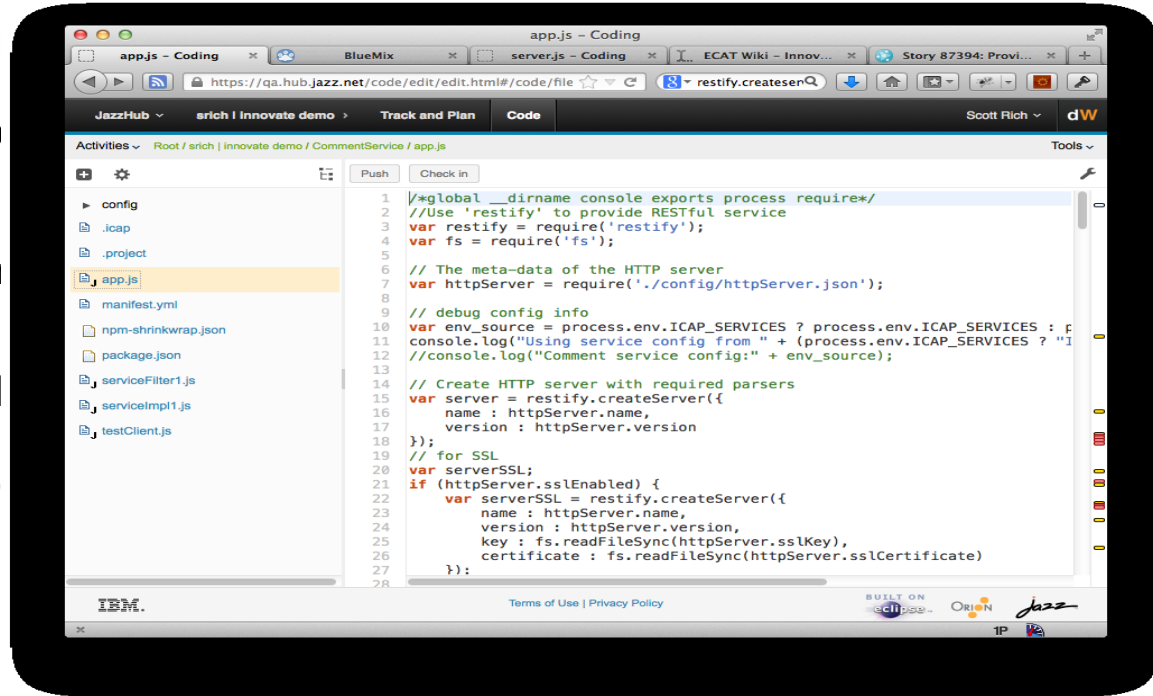
Developing in the Cloud, for the Cloud

- 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 from there to a Cloud PaaS?



Developing Your Cloud Application in the Browser

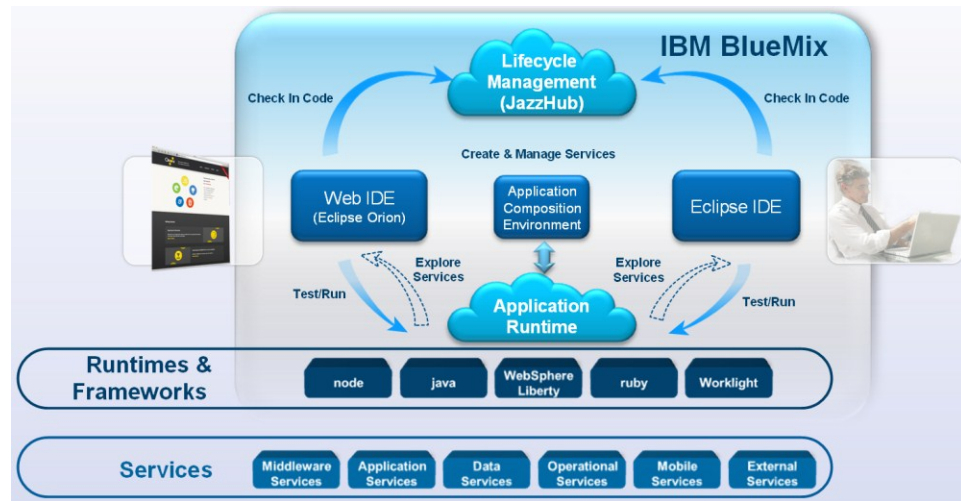
- JazzHub developers can work on their code right in the browser
- Powerful Orion-based source code editor
- Integrated with JazzHub SCM
 - organize changes and accept and deliver with your team from the browser
- One click away from your JazzHub project's tracking and planning
- Integrated with the runtime Cloud
 - Push an update right from the editor
 - Or drop into the shell for more control



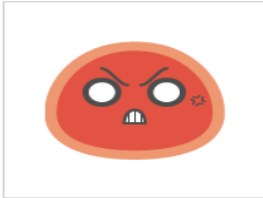
Introducing IBM BlueMix

Early Access Program*

- An IBM initiative to develop an open cloud operating environment that encompasses runtimes, services, and tooling for "next gen" cloud application development
- Applications can be quickly composed from an extensible set of services from IBM and others
- Built-in support for Liberty and Worklight runtimes
- Streamlined rapid development and integrated DevOps with both Browser-based and Eclipse-based tools, backed by IBM's cloud-based developer offering, JazzHub
- We are inviting developers to join us and experiment with the Beta technology at BlueMix.net
- Cloud and on-premise offerings based on BlueMix are planned for 2014



* Contact jstart@us.ibm.com for more information about the BlueMix.net early access program. For more info on IBM's open cloud architecture see <http://www.ibm.com/developerworks/cloud/library/cl-open-architecture/>



srich | Sentiment Analysis App

👍 Liked (4)

This is a sample application which analyzes the sentiment of a Twitter stream, written in Node.js.

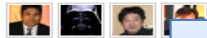
Timeline

🌱 | ✏ Edit Timeline



Members (4)

👤 Invite People



Showing 4 of 4 members

Delete Project

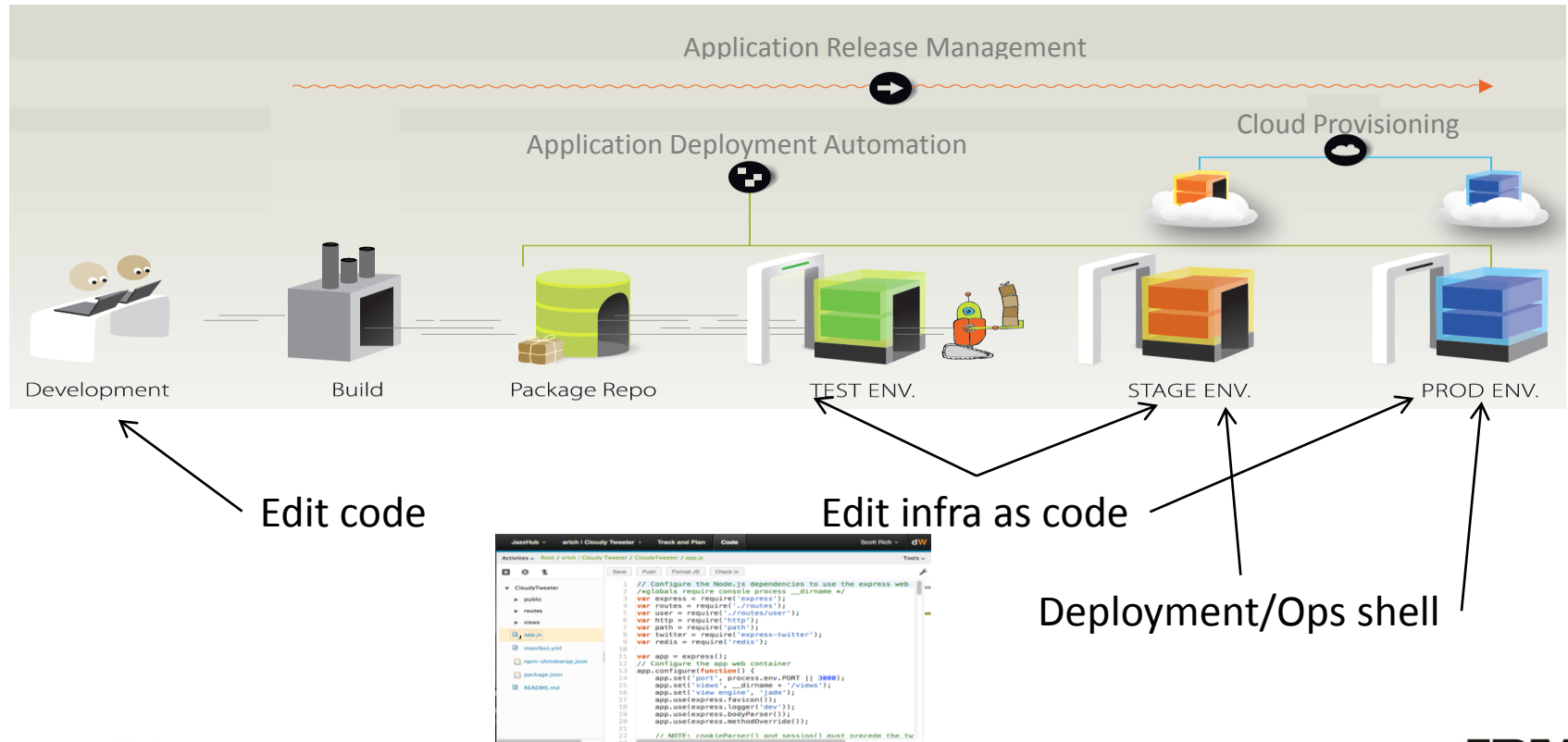
Create Work Item
Assigned to me only

DEMO

of this project to upload or access code.

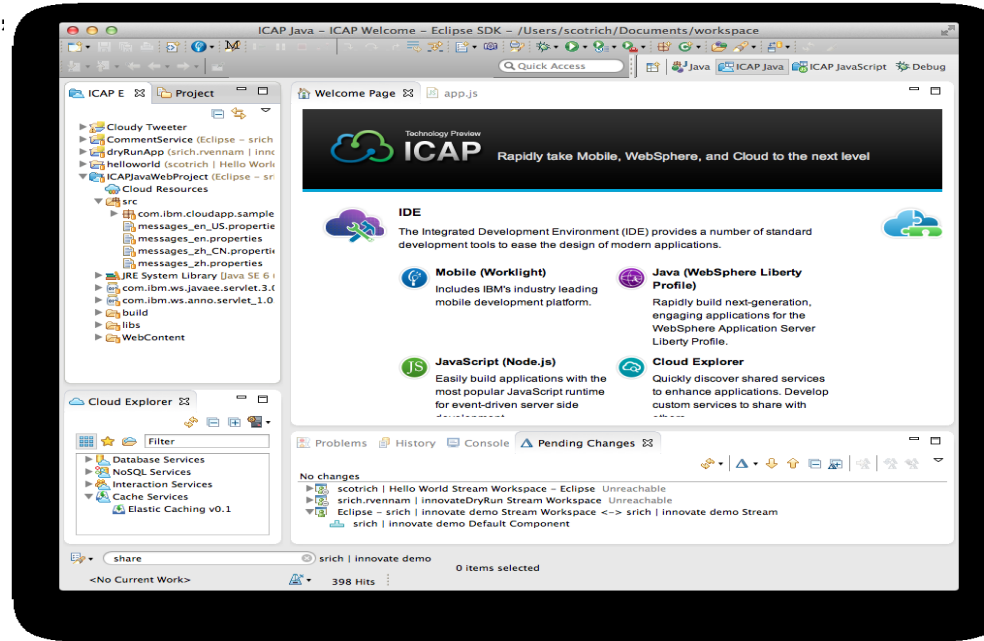
Rational Team Concert. [Here's how to get setup.](#)

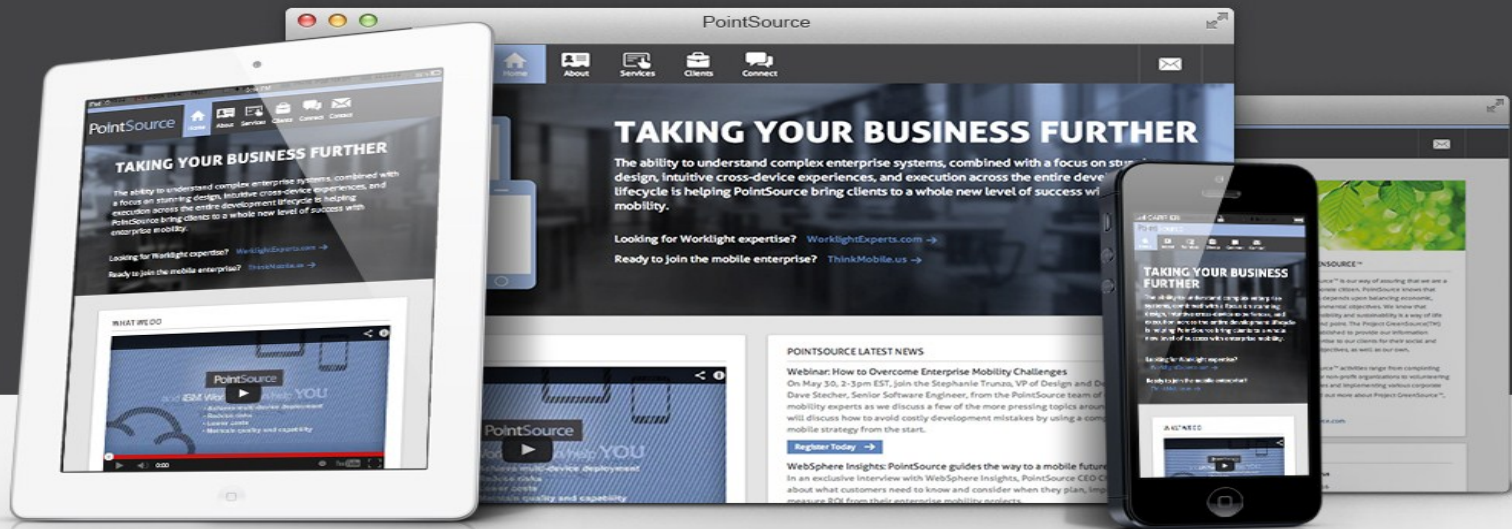
Orion in a Future DevOps Tool Chain for the Cloud



Developing Your Cloud Application in Eclipse

- Eclipse developers can connect to JazzHub and develop using IBM Icap tooling
- Cloud Explorer for application composition
 - Drag/drop service composition
- Local sandbox for debug and testing
- Local sample services
- (in progress) Deploy from local Development env to BlueMix cloud





Stephanie Trunzo, Chief Creative Officer
sltrunzo@pointsourcellc.com

WHY Develop in the Cloud?

- **Speed of time to market critical in mobility**
 - Get projects running in hours, not weeks
- **IT budgets often overspent, or mobile strategy owned by non-IT org (CMO office for example)**
 - Direct cost savings over traditional local systems
 - Indirect cost savings to us and client through better project management, lifecycle support
- **Supporting the full development lifecycle often not a priority... until it is**
 - SaaS tools enable us to deliver higher quality, and better ongoing support environments
- **Consulting/services with clients requires collaboration and hand-offs**
 - Collaboration improves when technology is frictionless
 - Solve distributed connectivity issues
 - Runs efficiently multi-tenant for different businesses or business units
 - Onboarding and handing off solutions far more efficient

Why we Love JazzHub

- Transparent development and planning
 - Up and running in 5 minutes
 - Immediate collaboration
 - Enable example code; point customers to see value
 - Simple on-ramp to get clients started with development tool
- PointSource projects in JazzHub:
 - PS Whiteboard
 - Major retail B2C storefront
 - Major insurance sales center B2B
 - Internal development and design work
 - PS.SDK



JazzHub partner for mobile
development lifecycle

www.PSWhiteboard.com

PS Whiteboard



Capabilities:

- Capture your ideas **elegantly in a free solution**
- Import or capture a photo or document and sketch on top of that to mockup drawings or wireframes and designs
- Save and share for continued collaboration

Industry applications:

- Insurance claims adjusters may take photos of damage and take notes about the damage
- Doctors can make notes on x-rays
- Product engineers can quickly sketch on existing schematics
- Kids can even draw funny faces on their pets, or they can let their imagination go wild with freeform drawing

Worklight:

- Created to aid in our own creative processes by a **small team of our talent using IBM Worklight**
- **Within 2 weeks from PoC we had a production-ready, cross device solution**
- Built in Worklight using jQuery, Backbone, and Bootstrap. Apache Cordova was used to integrate with the native device camera and photo album



JazzHub

@JazzHub

#JazzHub is a place where you can collaborate with others to seamlessly plan, track, and develop software in the cloud.

Worldwide · hub.jazz.net



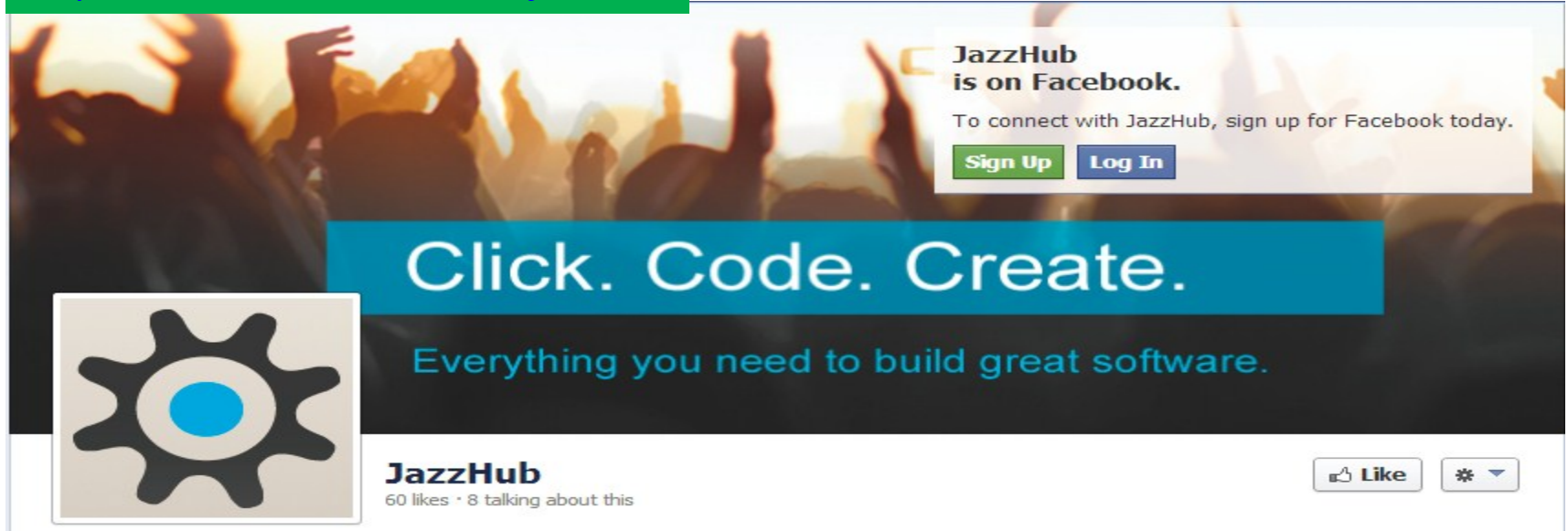
Scott Rich

@ScottRich

IBMer, evangelist for the Jazz platform
Zurich, Switzerland · zuriches.shutterfly.com



<https://www.facebook.com/jazzhub>

A Facebook cover photo for the JazzHub page. The background is a blurred image of a crowd at a concert with their hands raised. A white text box in the upper right corner contains the text "JazzHub is on Facebook." and "To connect with JazzHub, sign up for Facebook today." with "Sign Up" and "Log In" buttons. A large blue banner across the middle contains the text "Click. Code. Create." and "Everything you need to build great software." in white. In the bottom left corner, there is a square icon with a gear and a blue circle. In the bottom right corner, there are "Like" and "Share" buttons.

JazzHub
60 likes · 8 talking about this

Like Share

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