

# IBM Symposium Systèmes 2014

Concevoir plus rapidement des systèmes  
de plus en plus flexibles et complexes

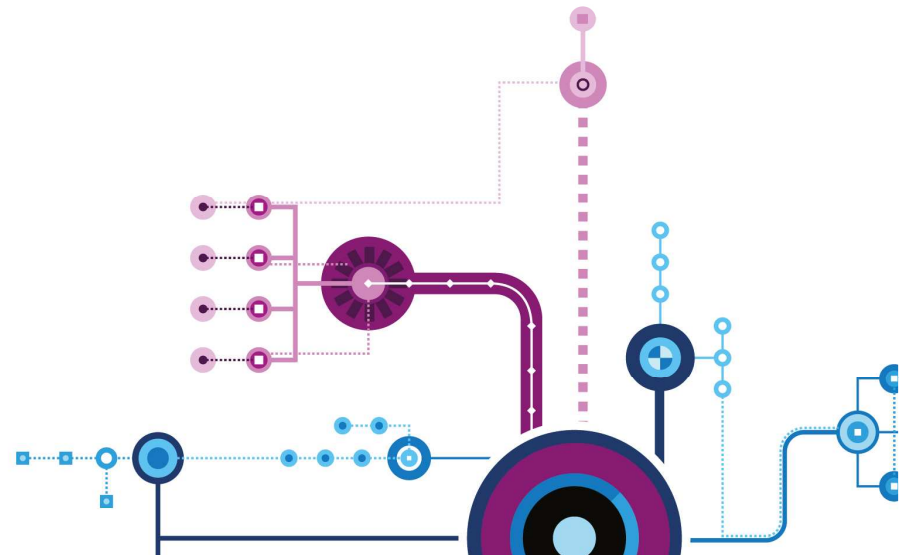


## DevOps Services for Mobile & Cloud applications with JazzHub

*DevOps Services for Codename: BlueMix*

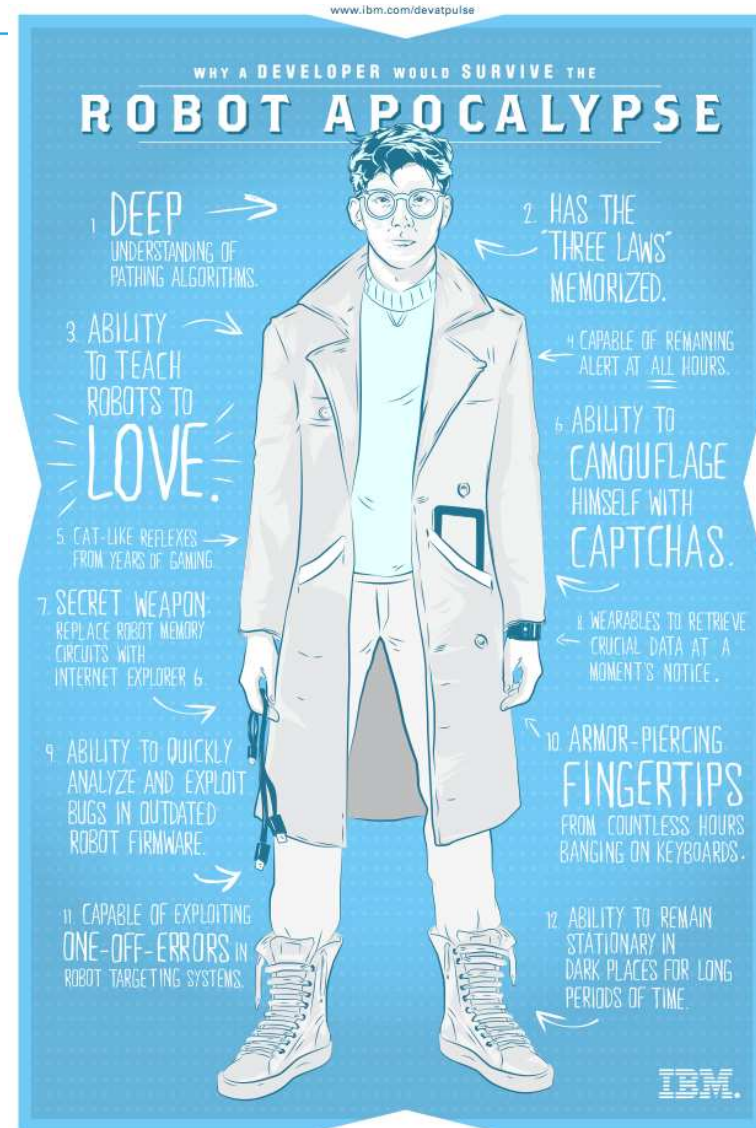
*Jean-Louis Vignaud,*  
Program Director, JazzHub, Mobile, SaaS

**Jeudi 27 mars 2014**  
**à l'IBM Client Center Paris**

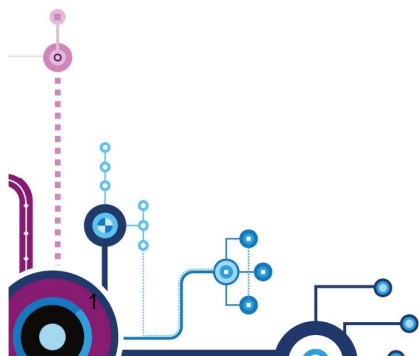


The next billion dollar idea starts with a single developer.

That developer starts with a single line of code



★ DEV@PULSE / A DEVELOPER HAPPENING / FEBRUARY 24-25 / HAKKASAN, LAS VEGAS



## Slide 2

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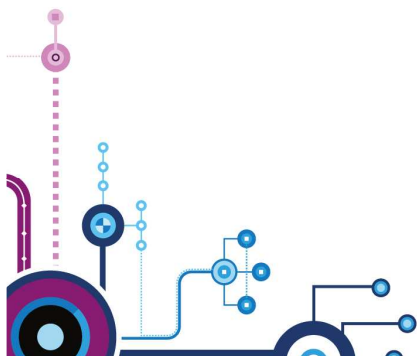
**A1**

Can we get the developer pic alone without the poster?

Author; 23/01/2014

## Why is mobile and cloud application DevOps important to Systems Enterprises?

- The Internet of Things is driving the development lifecycle from the traditional embedded space to integration of data from devices into cloud/mobile solutions and back office integrations.
- The DevOps lifecycle needs to extend and link with Continuous Engineering as the boundaries between IT and Systems continues to blur.



## New App Culture Has New Expectations

**Integrated** experience across mobile, internet, storefront and phone

**Integrated**

**Mobile** is focused on most important functions integrated with other apps

**Mobile**

**Iterative** delivery has become the norm – users want fewer functions with improvement over time

**Iterative**

Impacts **ecosystem** of employees and partners as much as customers

**Ecosystem**

**Requires New Delivery Tools**



# Challenges that we hear... ...what developers want

“It’s not that my developers lack the skills to manage infrastructure, it’s that I don’t want them to. I **need them writing code** for the business”

**ELIMINATE DRUDGERY**

“I am losing talented developers because they **don’t have access** to the tools they want to use.”

**OPEN TECHNOLOGIES**

“I am nervous we are **spending time and money integrating** things that should naturally fit together”

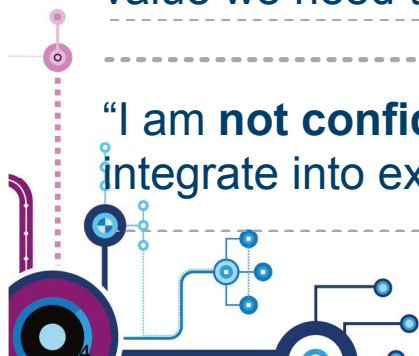
**ONE SINGLE SOLUTION**

“My average developer has **250 open change requests** from the business. That is a lot of business value we need to deliver”

**EXPERIMENT MORE**

“I am **not confident** that the platform is secure as I integrate into existing systems”

**PEACE OF MIND**



## Translates into an environment that brings

Brings the best of born-on-the-cloud development without leaving behind enterprise data and services

Combines the flexibility of a platform as a service (PaaS) with existing suites of software as a service (SaaS)

Offers freedom of choice to use any software or open technologies

Scales from a single developer to global teams

Enables a massive and open ecosystem built on open standards

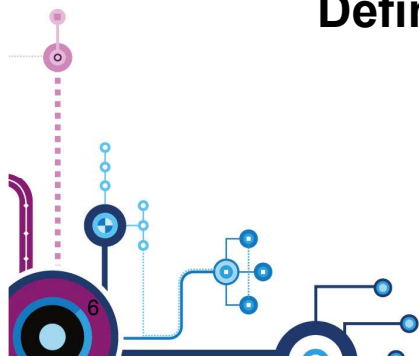
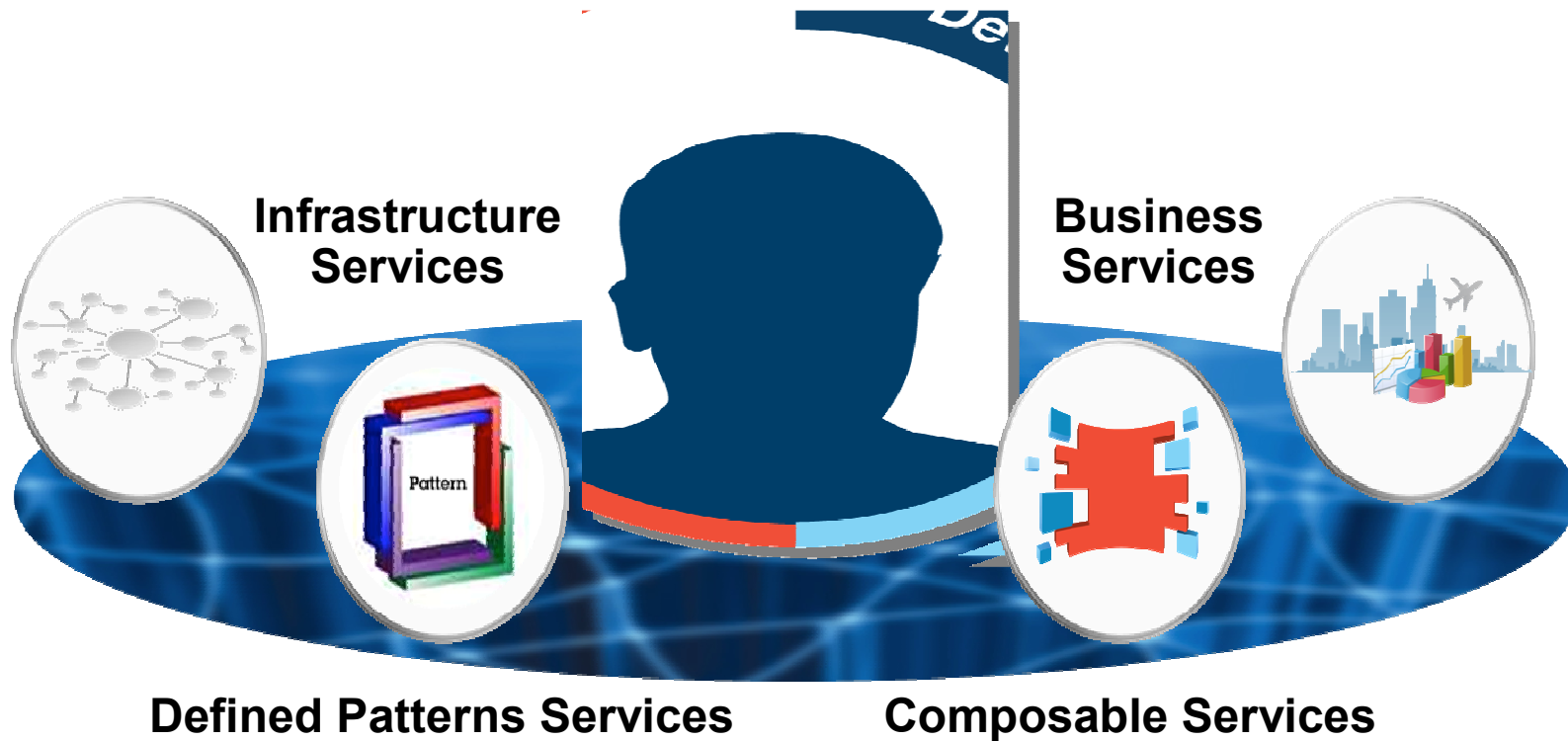


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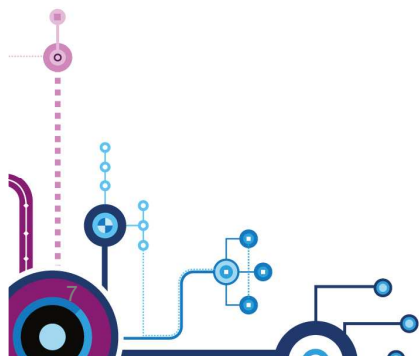
# Developers Require a Continuum of Services

Ranging from a an IaaS based virtual machine to a SaaS application





What sort of tool do your development teams need to quickly and easily create innovative solutions to market problems? And how do you balance that with the needs of the business?

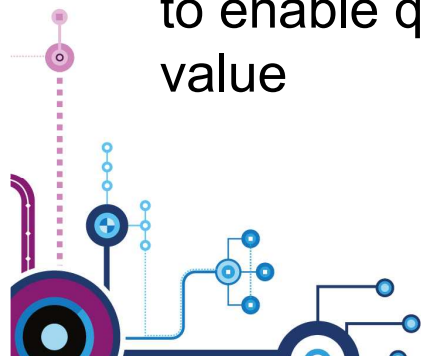
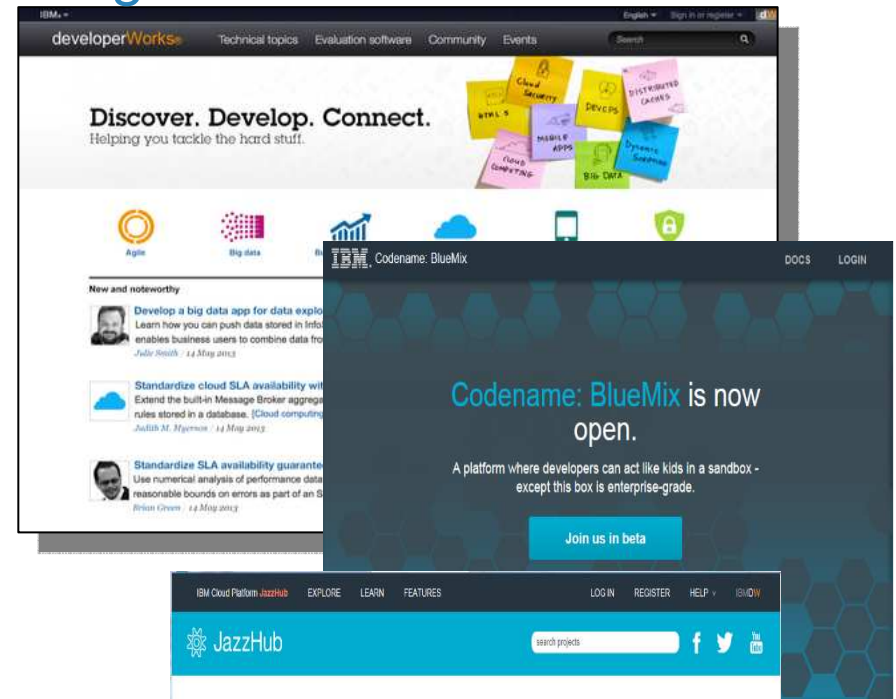


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## Leverage IBM resources, tools, and community to help developers build applications for mobile, cloud, and big data

- **New developerWorks network:** Enable developers to “connect”, “learn”, and actually develop through the developerWorks site
- **BlueMix:** PaaS technology stack and website that enables developers to rapidly build, deploy, and manage applications – in beta
- **JazzHub:** fully hosted, cloud based software development tool tailored to enable quicker startup and time to value



## Discover, learn, and try with IBM developerWorks and JazzHub

developerWorks. Technical topics Evaluation software Community Events

developerWorks > Technical topics > Web development > Technical library >

### Build a real-time polls application with Node.js, Express, AngularJS, and MongoDB

03 December 2013 PDF (309 KB)



04:53 | Transcript



**Joe Lennon**  
Head of Technology at  
Core International  
@joelennon

Recently while lecturing on HTML5 to a large group of students, I wanted to poll them and display their voting results, updating in real-time. I decided to quickly build a polling app for this purpose. I wanted a simple architecture and not too many different languages and frameworks. So I decided to use JavaScript for everything — Node.js and Express for the server-side, MongoDB for the database, and AngularJS for the front-end user interface.

*“This MEAN stack (Mongo, Express, Angular, Node) may one day surpass the simplicity of the LAMP stack (Linux, Apache, MySQL, PHP) for web application development and deployment.”*

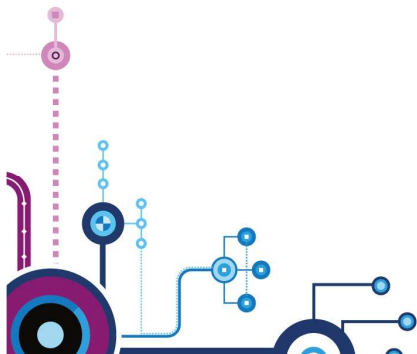
Run the app

Get the code at JazzHub

Learn more at <http://www.ibm.com/developerworks/library/wa-nodejs-polling-app/>

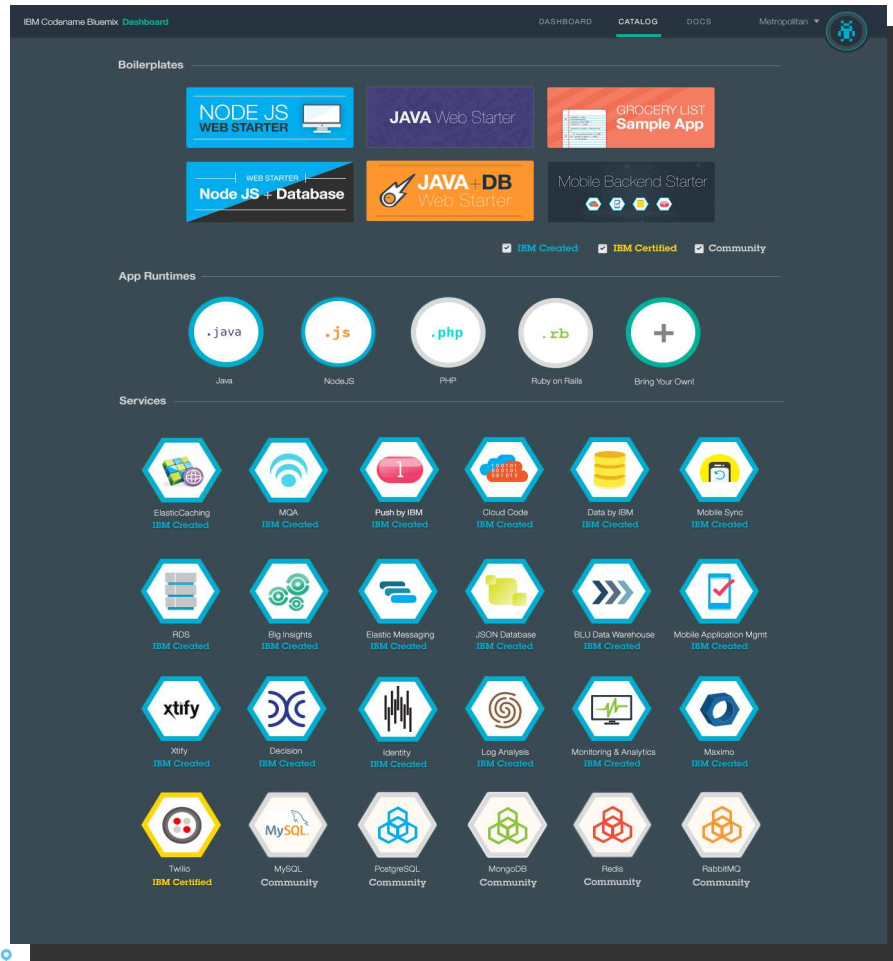
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## Codename: BlueMix

Delivering a Composable Services development environment



### Run Your Apps

The developer can choose any language runtime or bring their own. Just upload your code and go.

### DevOps

Development, monitoring, deployment and logging tools allow the developer to run the entire application

### APIs and Services

A catalog of open source, IBM and third party APIs services allow a developer to stitch together an application in minutes.

### Cloud Integration

Build hybrid environments. Connect to on-premises systems of record plus other public and private clouds. Expose your own APIs to your developers.

### Extend SaaS Apps

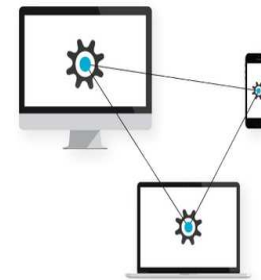
Drop in SaaS App SDKs and extend to new use cases (e.g., Mobile, Analytics, Web)



## Introducing IBM DevOps in the Cloud (JazzHub)

*An Open, Integrated Rapid Development Experience that Scales*

- **A Premier DevOps Service for IBM Cloud Platform**
  - Promotes incremental frictionless adoption of DevOps Services for BlueMix
- **An Integrated Developer Experience**
  - End-to-end DevOps Solution in the cloud for developing applications.
  - Integrated task tracking, agile planning, source control with auto deploy
  - Complementary mobile quality and application performance monitoring
  - Use your favorite tools or work from the Web IDE
  - Free public and fee-based private projects (free for now now)
- **Scalable, secure, enterprise-ready**
  - Runs on SoftLayer Infrastructure



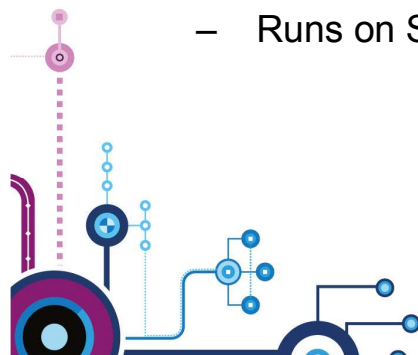
### Software development in the cloud

JazzHub is a place where you can collaborate with others to plan, track, develop, and deploy software.

Share your genius in free public projects, or keep it confidential with private projects. Get started for free!

[Register Now](#)

JazzHub brings the tools. You bring the code.



## DevOps Services for Codename: BlueMix



### GIT hosting

Store and manage the code for your applications in the hosted Git repo.



### Integrated development environment

Use built-in Web IDE, Eclipse, Visual Studio – or leverage your tool of choice.



### Agile planning & tracking, team collaboration

Easily share work and collaborate with team members.



### Mobile quality

Improve mobile app quality through crash analytics, sentiment analysis, and feedback.



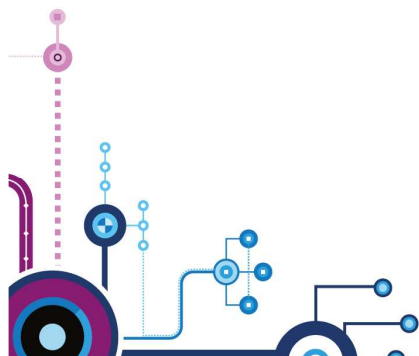
### Deployment automation

Instantly deploy your applications.



### Performance monitoring

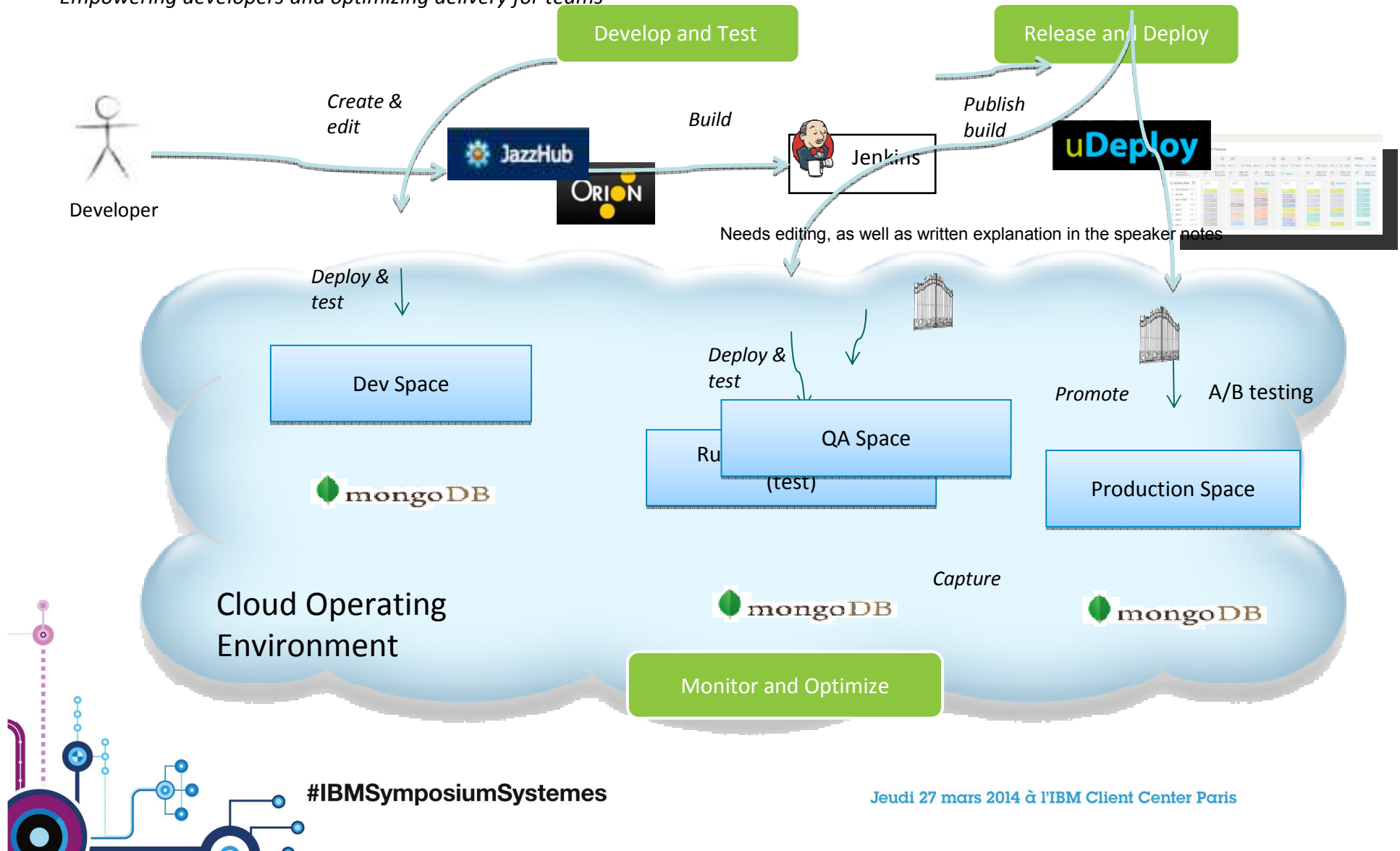
Conduct code-level diagnostics to identify early occurrence and root cause of performance issues, not just the symptoms, throughout the application lifecycle.



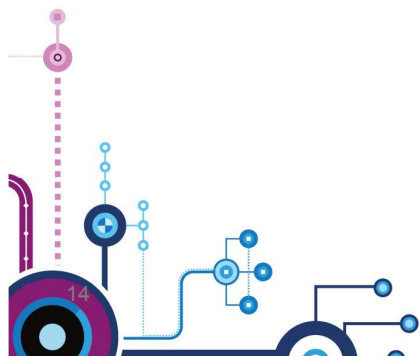


# Using DevOps Services & BlueMix for application delivery

Empowering developers and optimizing delivery for teams



What can your development teams do on JazzHub today?



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## Get productive with JazzHub in minutes

- Register at [www.jazzhub.com](http://www.jazzhub.com)
- Answer a few questions
  - Which SCM (Git, GitHub, Jazz SCM)?
  - Do you want your project to be public or private?
  - Do you want to practice agile software development?
  - Do you want to deploy on IBM BlueMix?
- Start coding




IBM JazzHub MY STUFF EXPLORE KATE HAUSER v HELP v dW

### Create a project

katehauser1234 | Sentiment Analysis Demo ✓

URL: <https://hub.jazz.net/project/katehauser1234/Sentiment%20Analysis%20Demo>

Choose where your code will be

  Or 

Use Jazz source control hosted at JazzHub    Create a Git repository hosted at JazzHub    Connect to an existing GitHub repository

A few more options

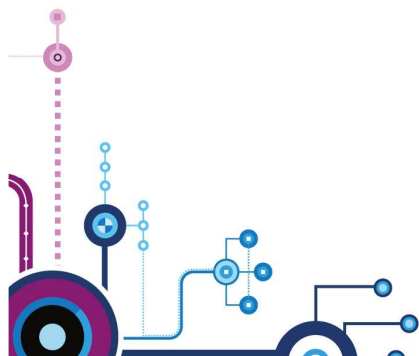
\* At present, these options can only be set at project creation time.

Private \*  
By default, projects are public. Select this to make it private so that you can share with project members only. Private projects are [free through June 2014](#).

Add features for Scrum development \*  
Select this if you're familiar with Scrum and plan to deliver software on regular sprints. ⓘ

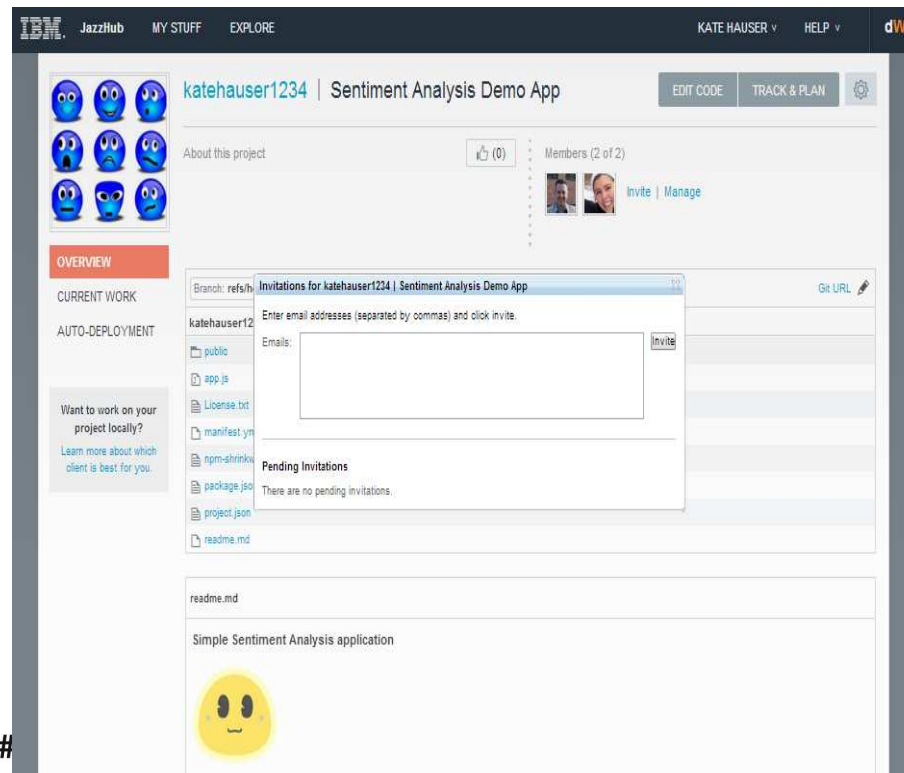
Deploy to BlueMix  
Select this if you want to deploy your application to the IBM BlueMix cloud platform. [Find out how.](#) ⓘ

CREATE CANCEL

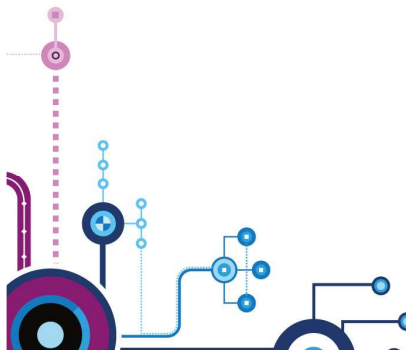


## Collaborate seamlessly on public or private projects

- **Easily invite team members**
- **Access JazzHub from anywhere**
- **JazzHub projects are built for collaboration**
- **Choose who sees your project, and how you engage with broader communities**

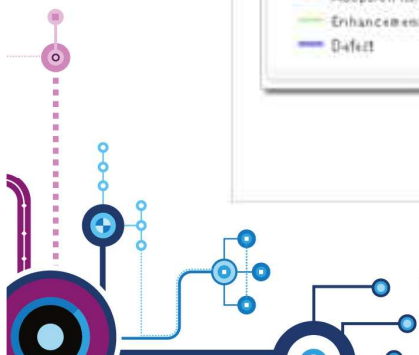
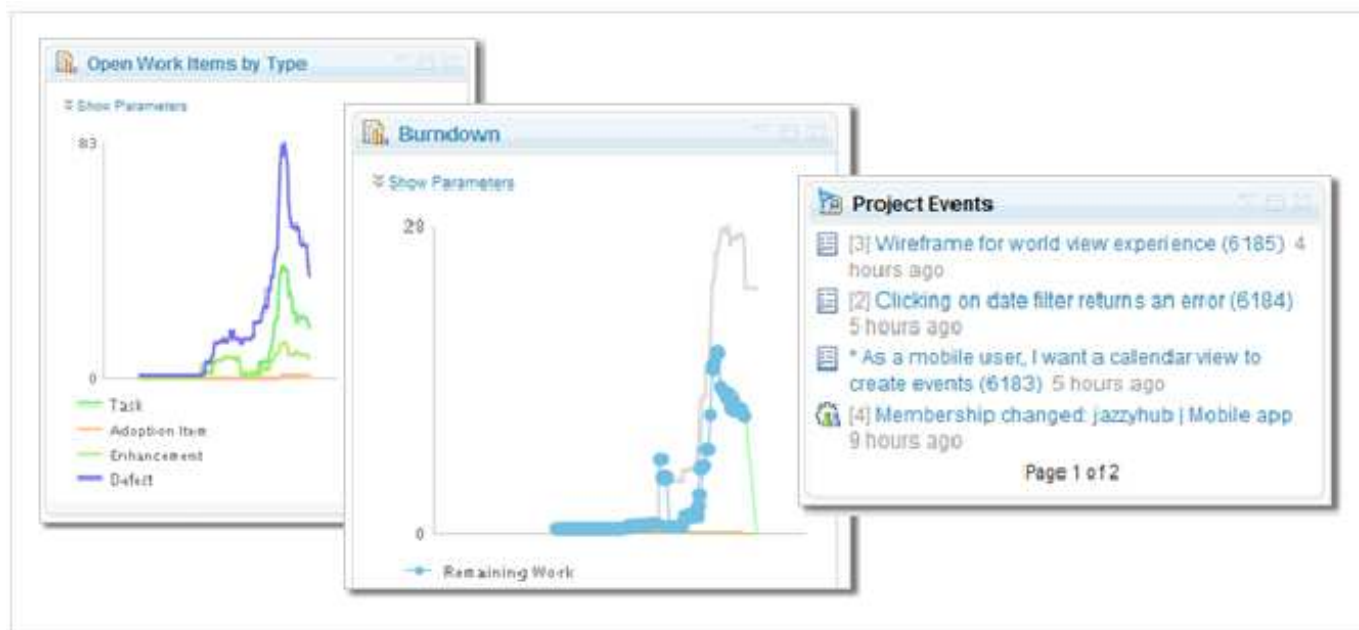


The screenshot shows the IBM JazzHub interface for a project named "Sentiment Analysis Demo App" by user "katehauser1234". The interface includes a navigation menu on the left with options like "OVERVIEW", "CURRENT WORK", and "AUTO-DEPLOYMENT". The main content area displays project details, including a "Members (2 of 2)" section with an "Invite" button. A modal window titled "Invitations for katehauser1234 | Sentiment Analysis Demo App" is open, showing a form to enter email addresses and an "Invite" button. Below the form, there is a "Pending Invitations" section that currently shows "There are no pending invitations." The bottom of the page features a "readme.md" section with a yellow smiley face emoji and the text "Simple Sentiment Analysis application".



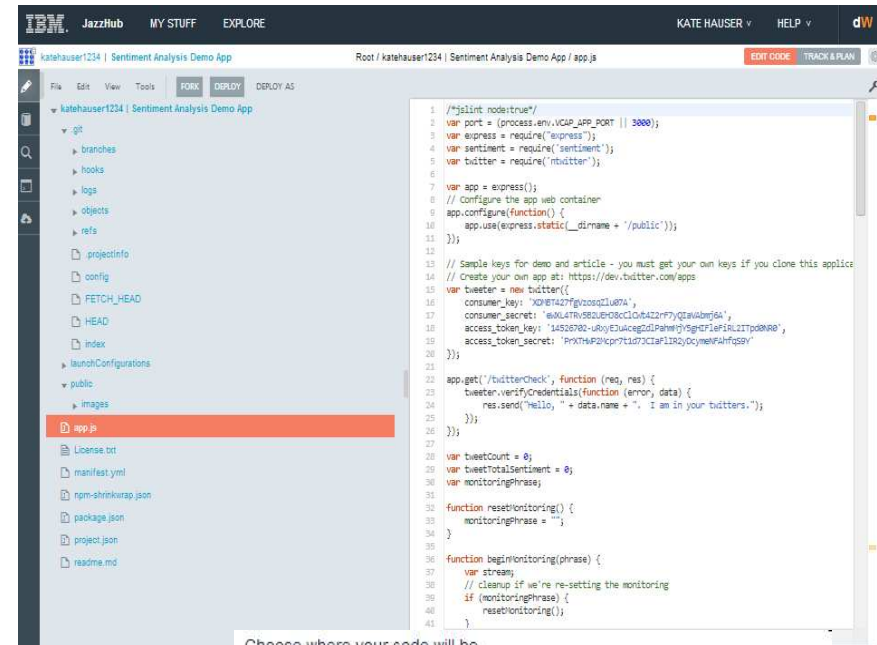
## Agile development in the Cloud is easy with JazzHub

- **Built-in agile process support**
- **Work items to track and plan project activities**
- **Agile tools for the product backlog, releases, and sprints.**
- **Dashboard charts for project status**



## Choose how you code with JazzHub

- **Browser-based development using integrated Eclipse Orion**
- **Full support for local development with Eclipse or Visual Studio**
- **Built in support for Jazz Source Control**
- **Hosted Git repository**
- **Got GitHub?**
  - With our GitHub integration you can track and plan with JazzHub using the code you've stored in your GitHub repository



Choose where your code will be



Use Jazz source control hosted at JazzHub



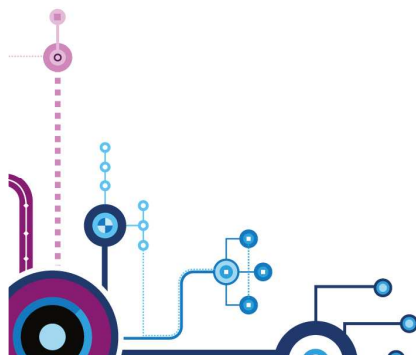
Create a Git repository hosted at JazzHub

Or

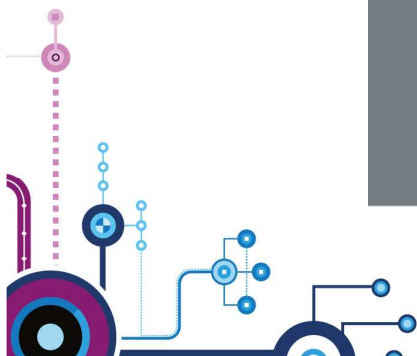
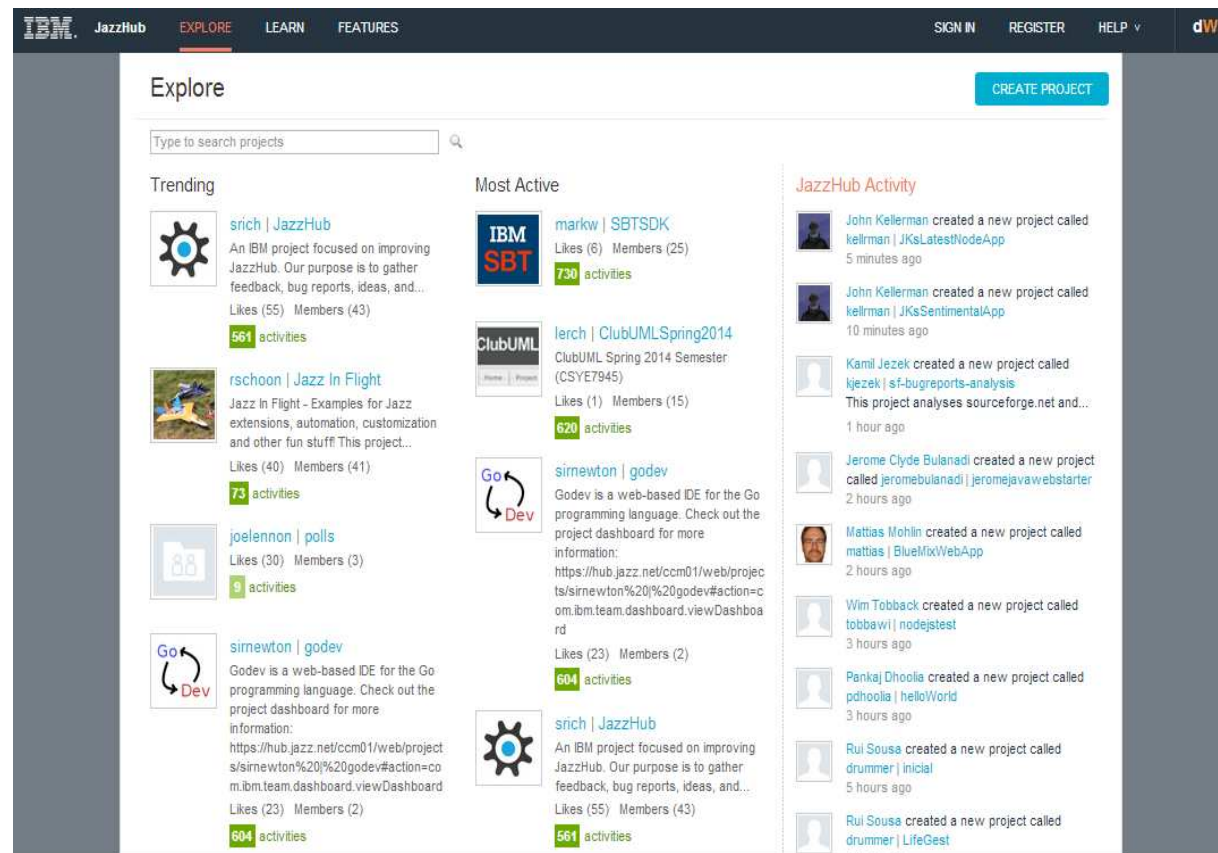


Connect to an existing GitHub repository

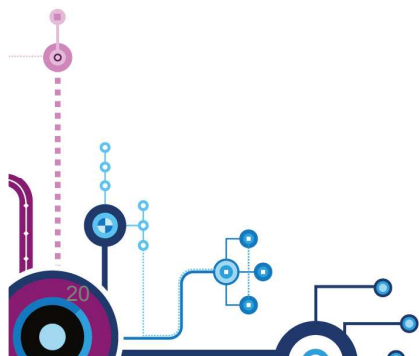
Copy and paste URL (<https://github.com/useremarie/project-name.git>)



Leverage the power of social coding. With JazzHub public projects, it's easy to learn and share work with a broader audience.



How are other companies using JazzHub today?



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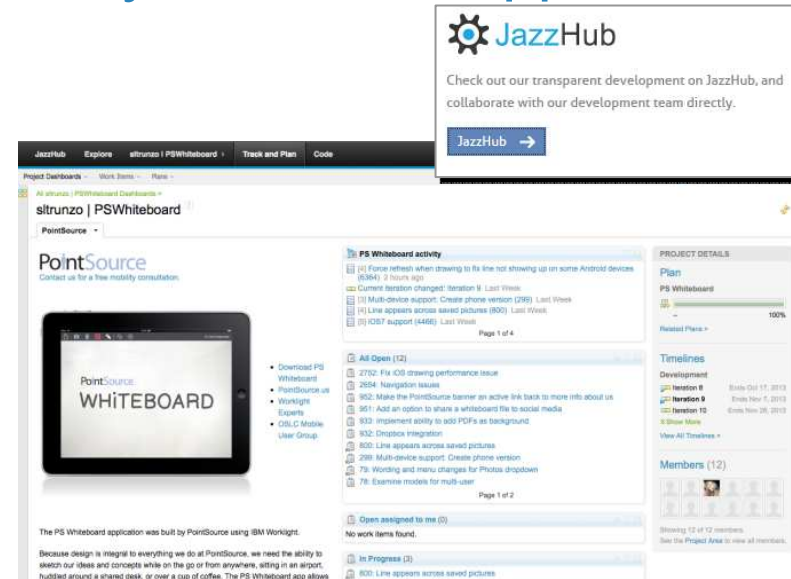
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## PointSource collaborates more efficiently on mobile app development with JazzHub

*“Our client’s CEO was so impressed at how quickly we could set up a dashboard for him allowing us to have additional conversations about how they should set up their development environment for other projects.”*

**- Stephanie Trunzo, CCO, PointSource**



IBM Premier Business Partner



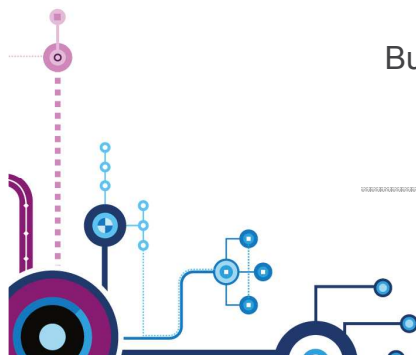
OSLC Mobile User Group co-sponsor

[www.OSLC.mobi](http://www.OSLC.mobi)



JazzHub partner for mobile development lifecycle

[www.PSWhiteboard.com](http://www.PSWhiteboard.com)



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## JazzHub Project: PS Whiteboard



### Capabilities:

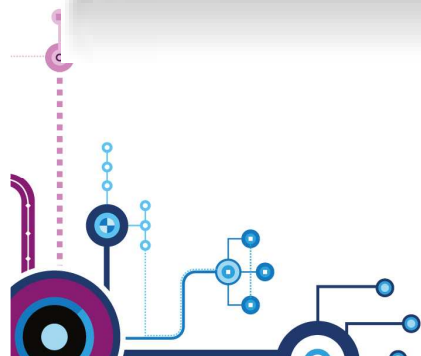
- Capture your ideas **elegantly in a free solution**
- Import or capture a photo or document and sketch on top of that to mockup drawings or wireframes and designs
- Save and share for continued collaboration

### 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:

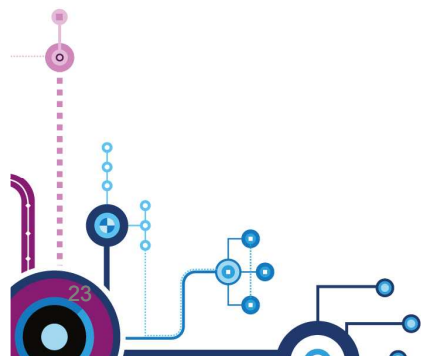
- Created to aid in our own creative processes by a **small team of our talent using IBM Worklight**
- **Within 2 weeks from PoC we had a production-ready, cross device solution**
- Built in Worklight using jQuery, Backbone, and Bootstrap. Apache Cordova was used to integrate with the native device camera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





## A live tour of JazzHub & BlueMix

[www.jazzhub.com](http://www.jazzhub.com)  
[ace.ng.bluemix.net](http://ace.ng.bluemix.net)

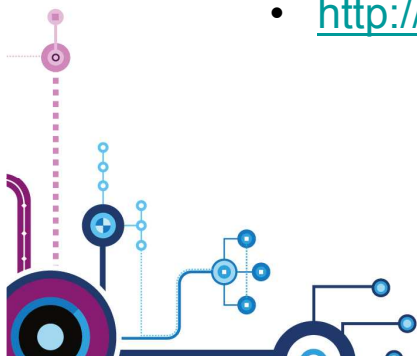


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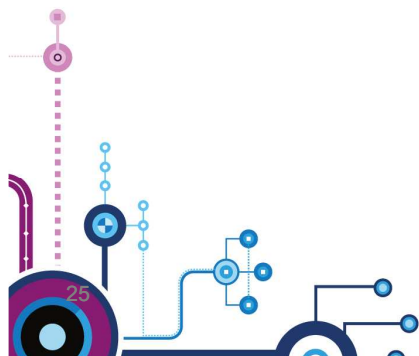
## Want to learn more?

- **Attend follow-up session by JazzHub developer Lauren Schaefer on March 11<sup>th</sup> to learn more in-depth details about auto-deploy**
  - More details about her session can be found on the events page of the Rational User Community site
  - <http://rational-ug.org/events/webcasts/c/e/539.aspx>
  
- **Register for JazzHub and BlueMix today**
  - [www.jazzhub.com](http://www.jazzhub.com)
  - <https://ace.ng.bluemix.net/>
  
- **Try deploying your own sample application or create your own!**
  - You can find tutorials on the JazzHub site, here are a couple pointers:
    - <https://hub.jazz.net/tutorials/jazzeditor>
    - <http://www.ibm.com/developerworks/library/wa-nodejs-polling-app/>



# Thank You!

Your feedback is important!



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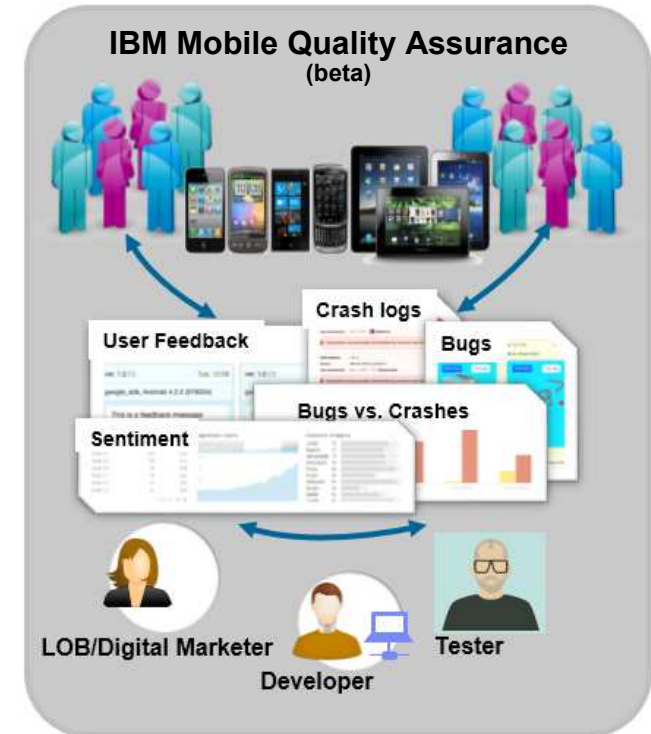


## IBM Mobile Quality Assurance (beta)

*Continuously deliver high quality mobile applications*

- **What's New**
  - End user feedback and quality metrics available at every stage of development
  - App quality assurance in a fragmented and complex environment
- **Features/Business Value**
  - **Evidence-based prioritization** – enable business and IT to collaborate on mobile strategy and user experience
  - **Over the air app distribution** – get the latest in the hands of testers as soon as it is available
  - **Frictionless bug reporting** – spend every minute on testing latest and greatest builds, not the hassles
  - **In-app crash reporting** – rapid understanding of why an app fails
  - **Sentiment analysis** – mine app ratings and reviews to extract actionable feedback before they go viral(coming soon)
- **Client Benefits**
  - **Improve mobile app quality** with holistic visibility into user experience, including bugs, crashes, feedback, and user sentiment
  - **Proactively manage quality risks** through rapid assessment of issues and reduced cycle time

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*"What you are talking about doing is fantastic. You have a very powerful approach here and it will drive a lot of what people will want to do in the market"*

## Customer pain points



“When someone leaves a negative review in the app store, it scares your app for life, you can’t respond to it, and you can’t learn more about the problem in order to fix it quickly.”

- Mobile Orchard

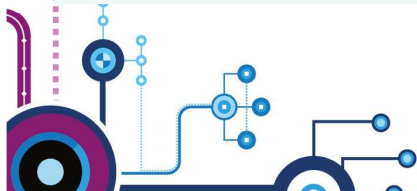


- How effective our mobile app is at engaging customers?
- How can I proactively listen to user feedback, analyze user sentiments and turn them into an actionable strategy?

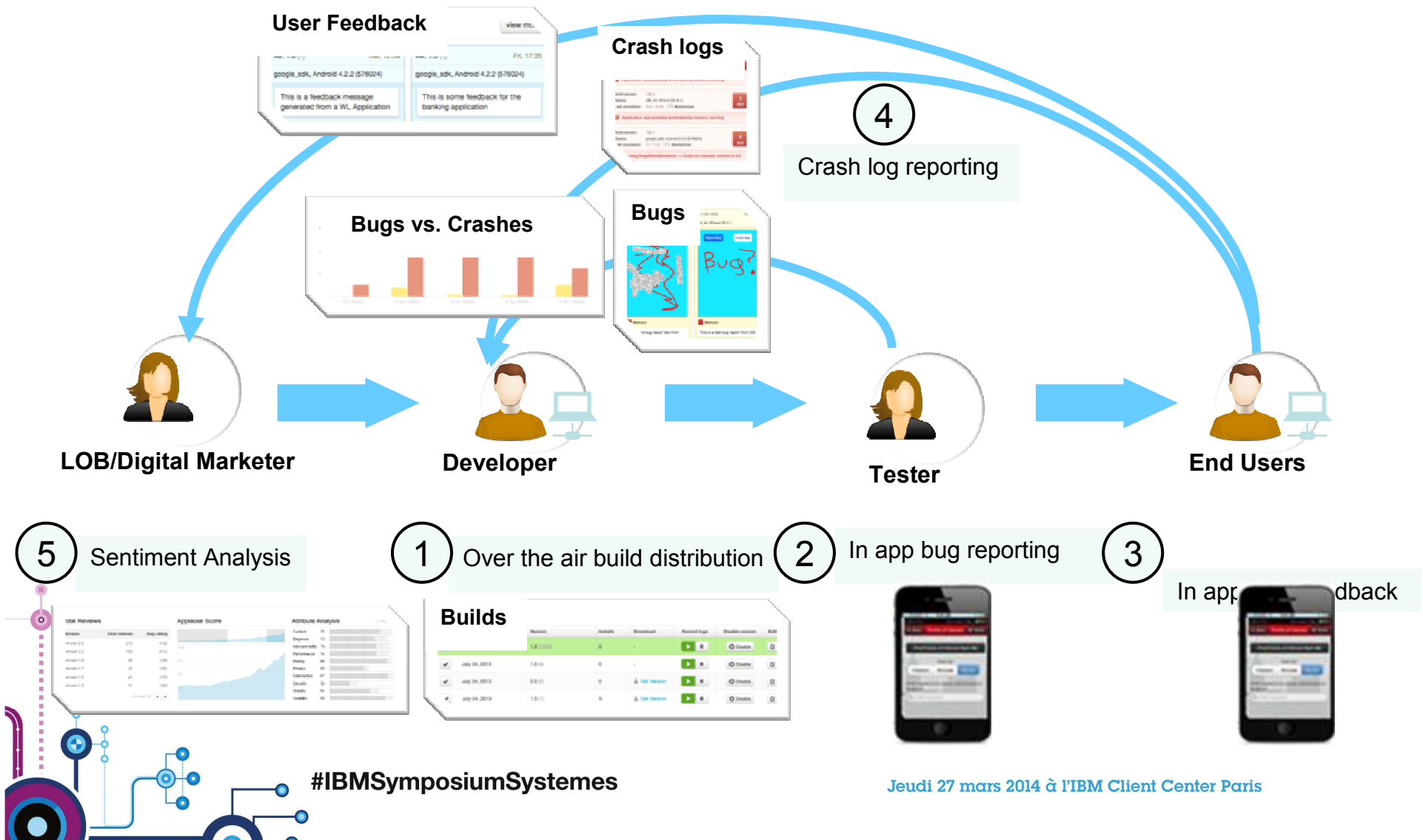
- How can I get early quality feedback?
- How can I tell if the apps will work with different devices, network carriers, and OS versions?
- How can I get visibility to issues that customers experience in production?

- How can I get the latest and greatest build without wasting my time to track that down?
- How can I quickly submit bug reports with screenshots and device details right from the application?

- How can I provide direct and constructive feedback?
- When will the issues that I have with the app be resolved?



## MQA: Continuously deliver high quality mobile apps



# Agile Mobile Development – Integration Scenario with JazzHub (using RTC Eclipse Client)

