



# JIRA 5.0

A killer platform for applications

**Matt Quail (Spuddy)**  
**JIRA Architect, Atlassian**



# The Expanding JIRASphere



7,900



17,000



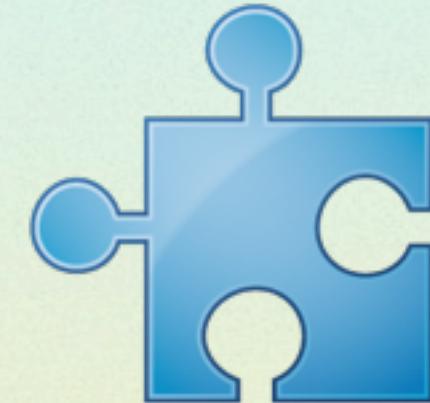
x 3



120

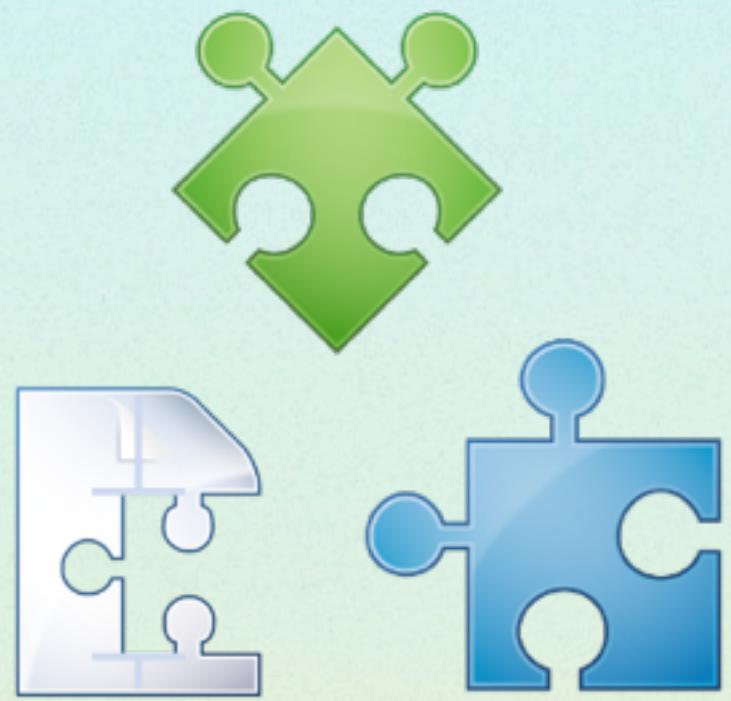


330,000



140

# Developing & Integrating JIRA



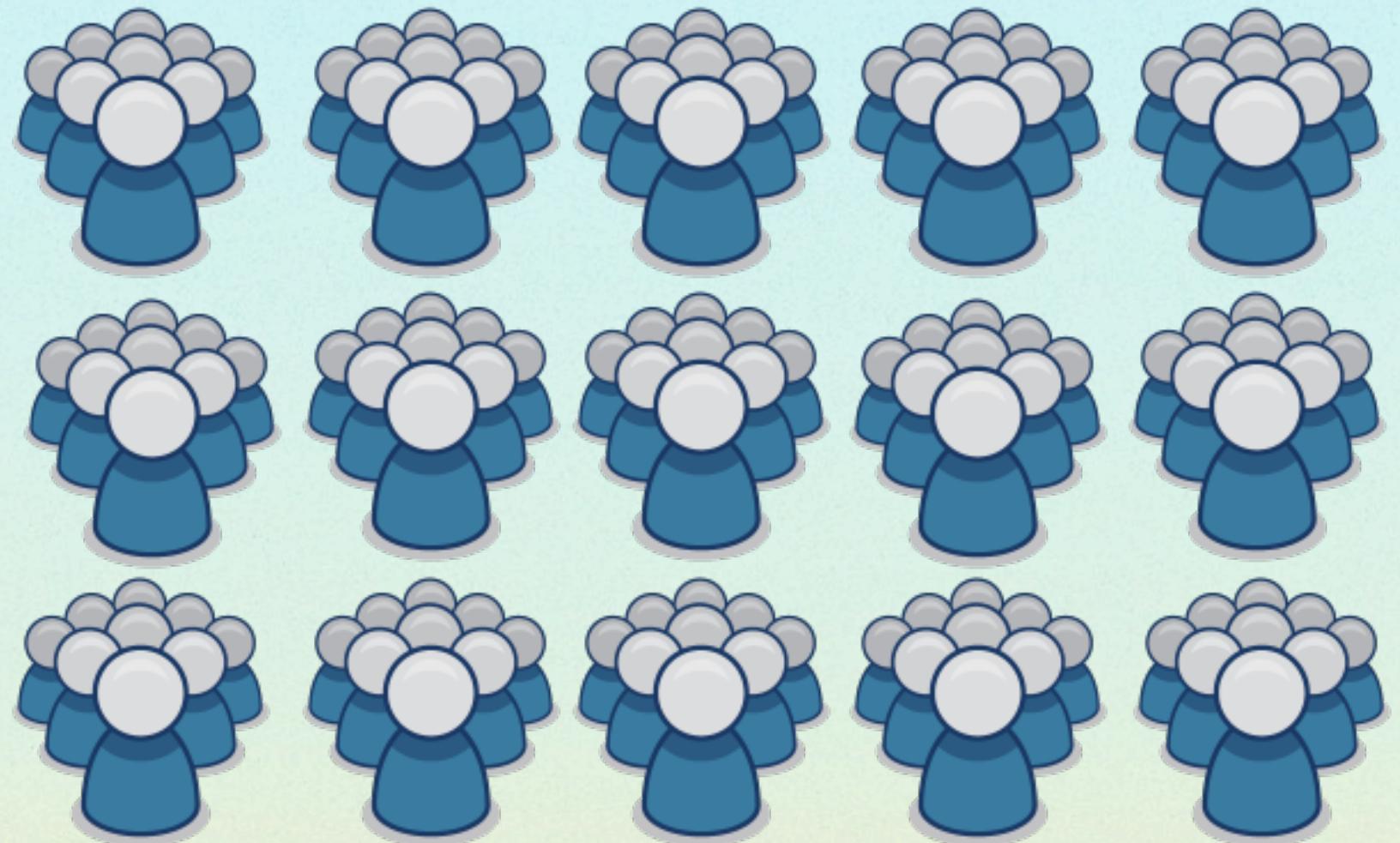
Plugins



Remote



# JIRA Plugins



Easier to Consume



Easier to Develop



# Easier to Consume: Adoption



Find



Install

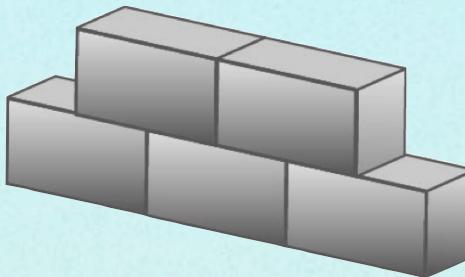
UPM + PAC

# Easier to Consume: Upgrades



No Restart Required

# Introducing the JIRA Stable API



JIRA Stable API

**jira-api.jar**

Stable within one  
major release to  
the next

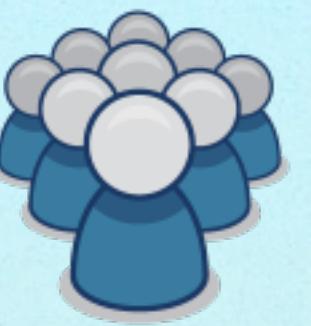
**atlassian-jira.jar**

“Public classes used by  
plugin developers at their  
own risk”

Implementation  
Classes

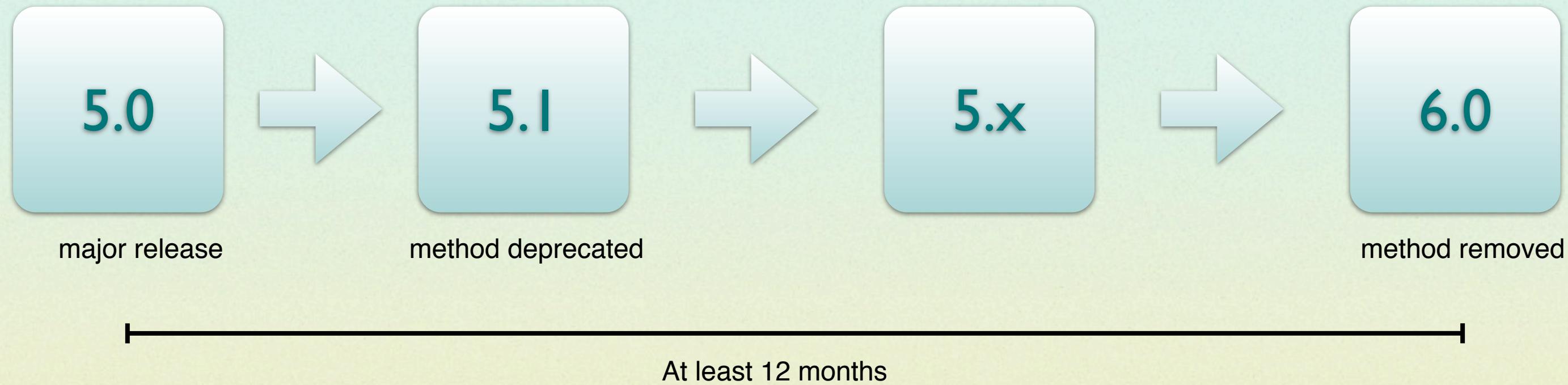
**jira-core.jar**

No promises of  
stability



# Stability

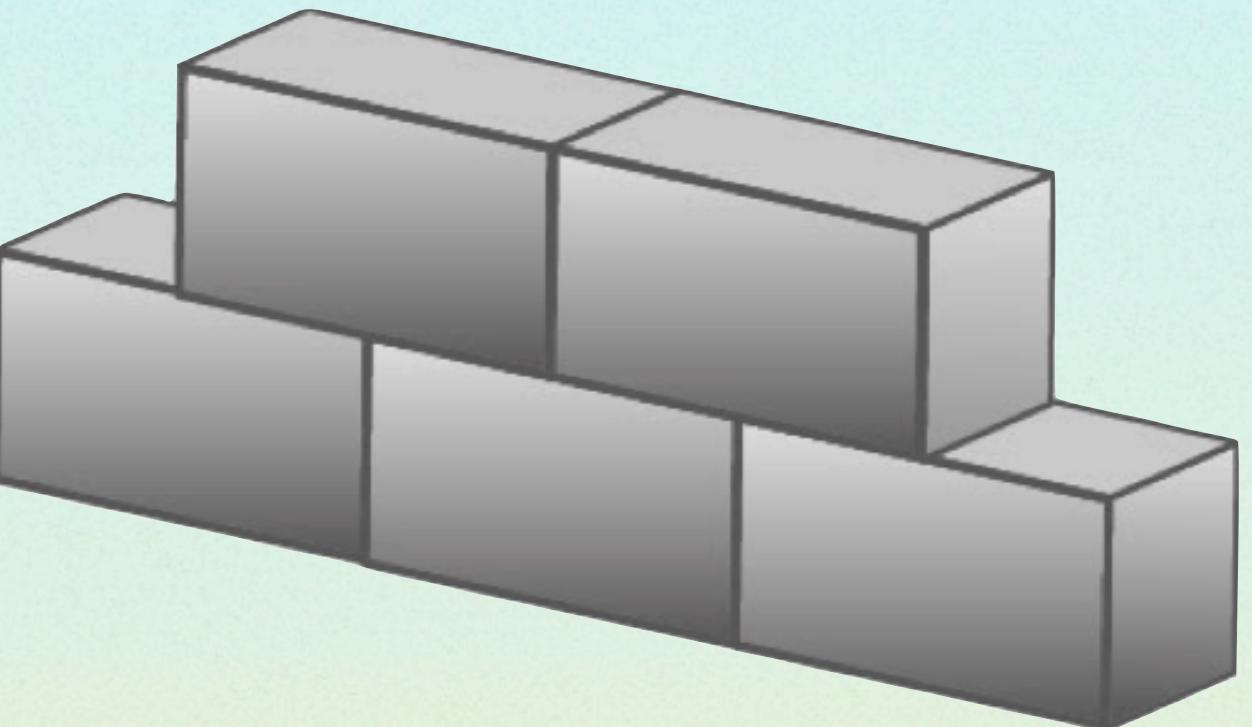
- Forwards binary compatibility for minor releases
- Deprecated methods removed at next major release



# How to make your plugin as stable as possible



1. Use jira-api.jar
2. Avoid jira-core.jar
3. Give us feedback.



# Easier to Develop: Get Started



- See Jonathan and Zach's talk from yesterday:  
**"The Atlassian SDK goes to 11"**
- Don's talk up next:  
**"Five Strategies to Accelerate Plugin Dev"**

**Atlassian Plugin SDK**

---

Download Latest Version (Windows)

 **DOWNLOAD**  
latest version

Download Latest Version (Mac OS X, UNIX, Linux)

 **DOWNLOAD**  
latest version

**Note:** You'll be asked to log in to <http://my.atlassian.com> before you download the SDK. If you don't have an Atlassian account, you can create one for free.  
See how to [install it](#).

# New Plugin Points



The image displays three screenshots of the JIRA interface, each highlighting a new plugin point:

- Screenshot 1 (Left):** Shows the JIRA dashboard with a circled "Details" section and a circled "Description" section.
- Screenshot 2 (Middle):** Shows the JIRA Administration screen for the "JIRA Development" project. A circled "Issue Types" section is shown, which includes a description and a list of issue types under a "Scheme: Agile Issue Type Scheme".
- Screenshot 3 (Right):** Shows the JIRA project details page for "JIRA Development". A circled "Workflows" section is shown, which includes a description and a list of workflow steps under a "Scheme: Use JIRA Agile Workflow V3 for everything (except ...)".

# In Action



```

<!-- Details panel -->
<web-panel key="details-module" location="atl.jira.view.issue.left.context" weight="100">
  <context-provider class="com.atlassian.jira.plugin.viewissue.DetailsBlockContextProvider"/>
  <resource name="view" type="velocity" location="viewissue/detailsblock.vm"/>
  <label key="viewissue.subheading.issuedetails"/>
</web-panel>

<!-- Description panel -->
<web-panel key="descriptionmodule" location="atl.jira.view.issue.left.context" weight="200">
  <context-provider class="com.atlassian.jira.plugin.viewissue.DescriptionBlockContextProvider"/>
  <resource name="view" type="velocity" location="viewissue/descriptionblock.vm"/>
  <label key="common.concepts.description"/>
  <condition class="com.atlassian.jira.plugin.webfragment.conditions.IsFieldHiddenCondition"
invert="true">
    <param name="field">description</param>
  </condition>
</web-panel>

<!-- Peopleweb panel -->
<web-panel key="peoplemodule" location="atl.jira.view.issue.right.context" weight="10">
  <context-provider
class="com.atlassian.jira.plugin.webfragment.contextproviders.MultiContextProvider">
    <param name="pluginKey">${project.groupId}.${project.artifactId}</param>
    <param
name="ctxProvider-1">com.atlassian.jira.plugin.webfragment.contextproviders.I18nContextProvider</param>
    <param name="ctxProvider-2">com.atlassian.jira.plugin.viewissue.PeopleBlockContextProvider</param>
    <param
name="ctxProvider-3">com.atlassian.jira.plugin.webfragment.contextproviders.DefaultVelocityContextProvider</param>
  </context-provider>
  <resource name="view" type="velocity" location="viewissue/peopleblock.vm"/>
  <label key="common.concepts.people" />
</web-panel>

<!-- Dates web panel -->
<web-panel key="datesmodule" location="atl.jira.view.issue.right.context" weight="40">
  <context-provider class="com.atlassian.jira.plugin.viewissue.DateBlockContextProvider"/>
  <resource name="view" type="velocity" location="viewissue/datesblock.vm"/>

```

JIRA  
Dashboards | Projects | Issues | [Create Issue](#) [Quick Search](#)

JIRA Development / JRADEV-6878  
**Shared Dashboards missing error message when it fails to assign to a Confluence Collaborator**

[Edit](#) [Assign](#) [Assign To Me](#) [Comment](#) [More Actions ▾](#) [This Issue Is Done](#) [Triage](#) [Workflow ▾](#) [Views ▾](#)

**Details** **People** **Dates**

Type: Bug	Status: ToDo (View Workflow)	Assigned:
Priority: Major	Resolution: Unresolved	Reporter: Bryan Rollins
Affects Version/s: 5.0 Iteration 3, 5.0	Fix Version/s: None	Watch (0)
Component/s: None	Labels: admin_dash	
Team: Dream Team		

**Description**

- Find an existing dashboard restricted to developers on jsoti
- Try to assign that dashboard to Collaborator 10977712279
- Screen refreshes, nothing changes.

No error message displayed.

**Activity**

All [Comments](#) [Work Log](#) [History](#) [Activity](#) [Source](#) [Builds](#)

There are no comments yet on this issue.

[Comment](#)

# ActiveObjects in JIRA



- Storage for Plugins
  - Jason's talk yesterday: "Using AO for Rapid Plugin Dev"
- Supported in JIRA 5.0!
- Schema management, SQL support
- Integrated into JIRA Backup/Restore
- Already used by GreenHopper, Activity Streams

A screenshot of the JIRA interface. On the left, the "Activity Stream" shows various user interactions: Andrew Prentice attached a file to issue ANGRY-73; Mike Cannon-Brookes commented on ANGRY-27; Edwin Wong linked three issues and updated two fields on ANGRY-67; and Edwin Wong attached a file to ANGRY-70. On the right, the "Remote Issue Links" board is visible, divided into columns for "To Do", "In Progress", "Technical Review", and "Waiting for QA". Issues listed include JRADEV-6781 through JRADEV-7021, each with a brief description and a link icon.

# JIRA UI

- Single Decorator

Consistent markup/CSS across JIRA pages

Better performance for client & server

More stability surrounding the markup/CSS

Improved markup structure/semantics

Default styles reflect Look & Feel

- AUI

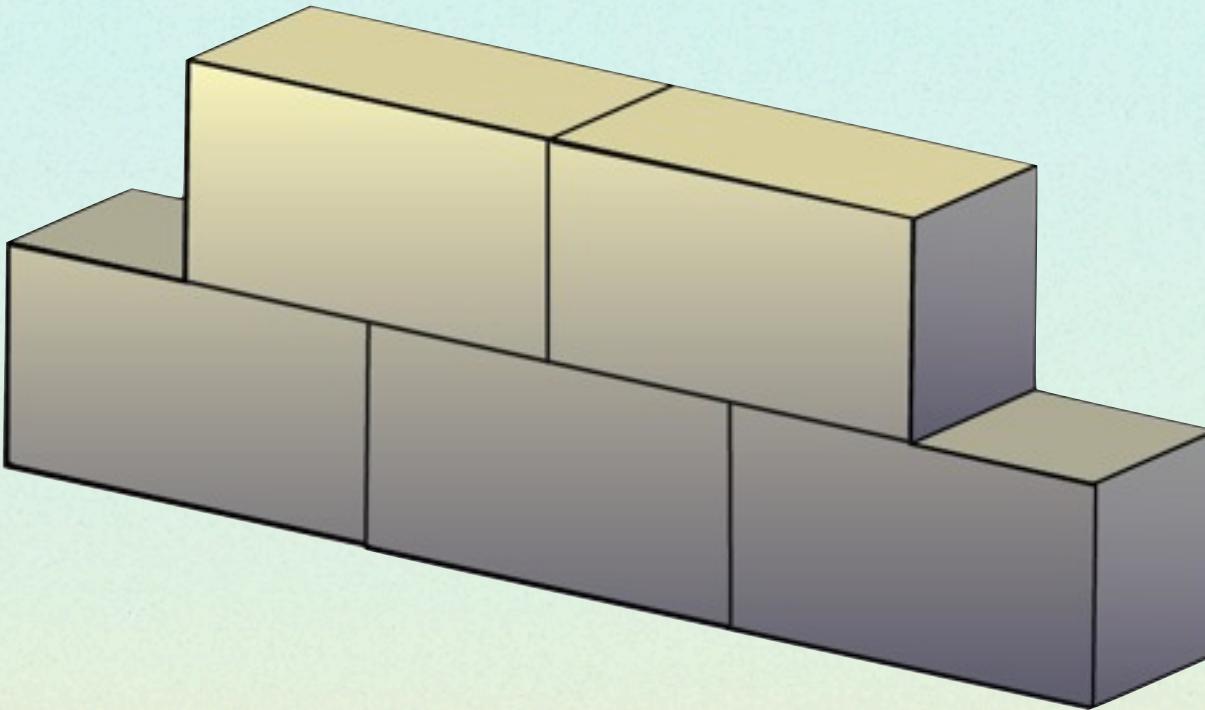
Yesterday's *What's New in AUI* talk



# Internalizing plugins



JIRA STUDIO



Studio plugins migrating to stable APIs

A screenshot of the JIRA interface titled "Remote Issue Links". It shows a list of issues linked to the current one: "DIG-33 Permissions &amp; Notifications", "A123456 Welcome Mat Test Case", and "Getting started with JIRA".



JIRA now develops more in plugins

A screenshot of the JIRA Project Configuration interface for the "Angry Nerds" project. It shows sections for Summary, Issue Types, Workflows, Screens, Fields, People, Permissions, Issue Security, Notifications, Versions, and Composer.

Project Configuration

A screenshot of the JIRA Quick Edit interface for an issue. It includes fields for "Description", "Affects Version/s", "Assignee" (set to "Administrator"), and "Due Date".

Quick Edit

# Getting 5.0 Compatible!

The screenshot shows the Atlassian Plugin Exchange homepage. It features a search bar labeled "Search for plugins". Below it, there's a section titled "Featured" with a thumbnail for the "JIRA Calendar" plugin, which displays a screenshot of a calendar interface. To the left of the featured plugin, there's a circular badge for "ATLASCAMP" with the text "Atlassian's Developer Camp Sept 28-30 Half Moon Bay, California". On the right, there's a sidebar titled "Plugins by Product" listing "JIRA", "Confluence", "FishEye", "Bamboo", "Crowd", and "Crucible", each with a small icon. At the bottom, there's a section titled "Builder Theme".

The screenshot shows the JIRA Early Access Program (EAP) Downloads page. The header includes the Atlassian logo and links for JIRA, Confluence, Studio, Dev Tools, and Our Company. A banner at the top says "EAP Downloads". Below it, a note says "Do not use in production! Beta releases should not be used in production environments as they are not officially supported. Please use this at your own risk." A table lists various EAP download options:

Version	Size	Added	Format
5.0-m4 Standalone (Linux 64 Bit Installer) (Release notes   Upgrade notes)	134.4 MB	06-Sep-2011	BIN
5.0-m4 Standalone (Windows 64 Bit Installer) (Release notes   Upgrade notes)	141.3 MB	06-Sep-2011	EXE
5.0-m4 Standalone (Windows 32 Bit Installer) (Release notes   Upgrade notes)	142.0 MB	06-Sep-2011	EXE
5.0-m4 Standalone (Linux 32 Bit Installer) (Release notes   Upgrade notes)	140.1 MB	06-Sep-2011	BIN
5.0-m4 Standalone (ZIP Archive) (Release notes   Upgrade notes)	102.8 MB	06-Sep-2011	ZIP
5.0-m4 Standalone (TAR.GZ Archive) (Release notes   Upgrade notes)	98.1 MB	06-Sep-2011	TAR.GZ
5.0-m4 WAR (ZIP Archive) (Release notes   Upgrade notes)	99.7 MB	06-Sep-2011	ZIP
5.0-m4 WAR (TAR.GZ Archive) (Release notes   Upgrade notes)	93.8 MB	06-Sep-2011	TAR.GZ

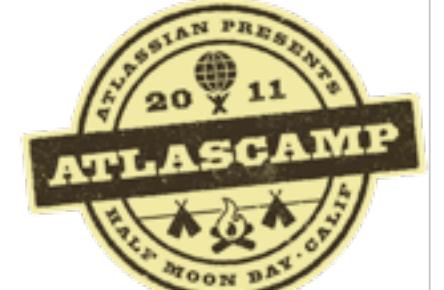
Solutions for bug tracking, project tracking, subversion hosting and wiki software | Subscribe to our newsletter: Email  
Copyright © 2011 Atlassian Pty Ltd. All rights reserved. | Privacy | Trademarks

## JIRA API Guru Sessions @ AtlasCamp

Wednesday Noon-2 PM

Thursday 3-5 PM

Friday 3-5 PM



The screenshot shows a white box containing text about JIRA API Guru sessions at AtlasCamp. It lists three session times: Wednesday Noon-2 PM, Thursday 3-5 PM, and Friday 3-5 PM. To the right of the text is the official AtlasCamp 2011 logo, which is a circular badge with the text "ATLASSIAN PRESENTS 20 X 11 ATLASCAMP HALF MOON BAY, CALIF."

# Remote Integration to JIRA



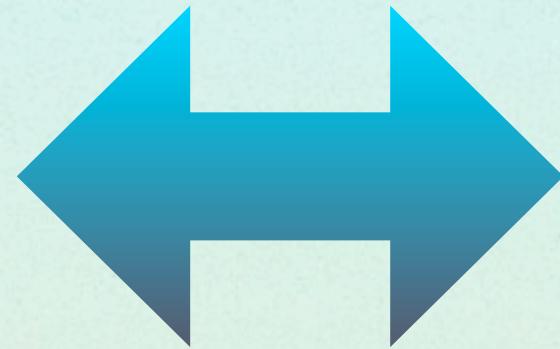
- Why Remote?



Zero Customer Install



Integrates with JIRA Studio



Lightweight Web Standards

And some new features specifically designed for remote integration!



# What's up with JIRA REST?



- Moved from Alpha to Stable
- Now our primary Remote protocol
- Easy to use with JS/HTML, Ruby, Python, PHP, etc.

# REST in 5.0 - full banquet



- See Rich's talk tomorrow afternoon:  
[“JIRA 5.0 REST API”](#)



# REST in 5.0 - quick taste

- Get an issue:

GET http://localhost:8080/rest/api/2/issue/TST-1

- Update Summary:

PUT http://localhost:8080/rest/api/2/issue/TST-1

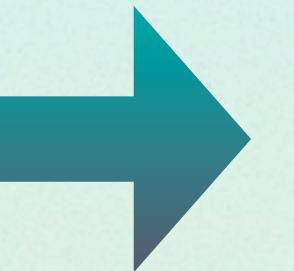
```
{  
  "fields":{  
    "summary":"new summary",  
  }  
}
```

```
{  
  "id":"10000",  
  "key":"TST-1",  
  "fields":{  
    "summary":"Issue under test",  
    "created":"2011-06-29T18:40:56.287+1000",  
    "updated":"2011-09-26T14:30:06.871+1000",  
    "description":"This is the issue under test.",  
    "status":{  
      "iconUrl":"http://localhost:8080/images/icons/...",  
      "name":"Open",  
      "id":1  
    },  
    "labels":["abc"],  
    "assignee":{  
      "name":"admin",  
      "emailAddress":"admin@example.com",  
      "avatarUrls":{  
        "16x16":"http://localhost:8080/secure/  
useravatar?size=small&avatarId=10062",  
      }  
    }  
  }  
}
```



# From SOAP to REST

```
<?xml version="1.0" encoding="UTF-8"?>
<wsdl:definitions targetNamespace="http://jira.atlassian.com/rpc/soap/
jirasoapservice-v2" xmlns:apachesoap="http://xml.apache.org/xml-soap"
xmlns:impl="http://jira.atlassian.com/rpc/soap/jirasoapservice-v2"
xmlns:intf="http://jira.atlassian.com/rpc/soap/jirasoapservice-v2"
xmlns:soapenc="http://schemas.xmlsoap.org/soap/encoding/" xmlns:tns1="http://
exception.rpc.jira.atlassian.com" xmlns:tns2="http://
beans.soap.rpc.jira.atlassian.com" xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/"
xmlns:wsdlsoap="http://schemas.xmlsoap.org/wsdl/soap/" xmlns:xsd="http://www.w3.org/
2001/XMLSchema">
<!--WSDL created by Apache Axis version: 1.3
Built on Oct 05, 2005 (05:23:37 EDT)--&gt;
&lt;wsdl:types&gt;
&lt;schema targetNamespace="http://exception.rpc.jira.atlassian.com" xmlns="http://
www.w3.org/2001/XMLSchema"&gt;
&lt;import namespace="http://beans.soap.rpc.jira.atlassian.com"/&gt;
&lt;import namespace="http://jira.atlassian.com/rpc/soap/jirasoapservice-v2"/&gt;
&lt;import namespace="http://schemas.xmlsoap.org/soap/encoding"/&gt;
&lt;complexType name="RemoteException"&gt;
&lt;sequence/&gt;
&lt;/complexType&gt;
&lt;complexType name="RemoteValidationException"&gt;
&lt;complexContent&gt;
&lt;extension base="tns1:RemoteException"&gt;
&lt;sequence/&gt;
&lt;/extension&gt;
&lt;/complexContent&gt;
&lt;/complexType&gt;
&lt;complexType name="RemotePermissionException"&gt;
&lt;complexContent&gt;
&lt;extension base="tns1:RemoteException"&gt;
&lt;sequence/&gt;
&lt;/extension&gt;
&lt;/complexContent&gt;
&lt;/complexType&gt;
&lt;complexType name="RemoteAuthenticationException"&gt;
&lt;complexContent&gt;
&lt;extension base="tns1:RemoteException"&gt;</pre>
```



```
{
  "fields": {
    "summary": "new summary",
  }
}
```

# Tell me more about REST!

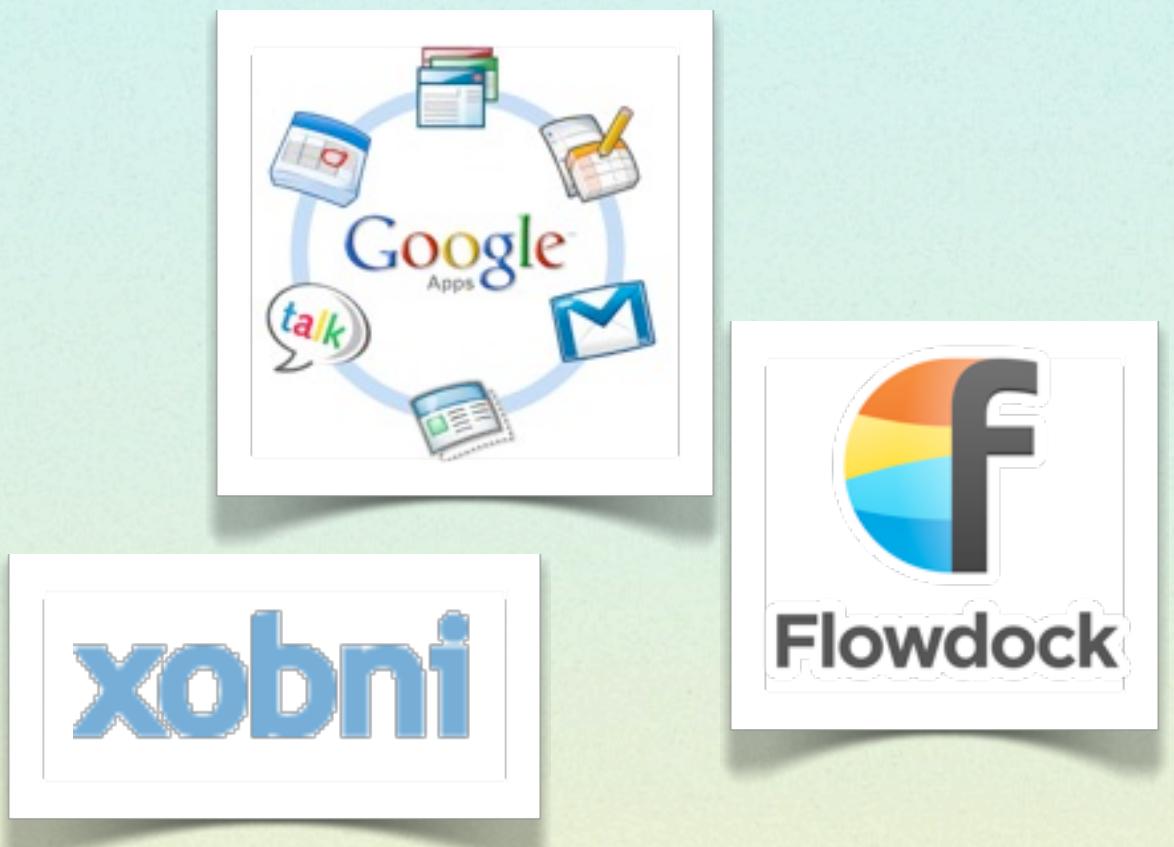


## REST in JIRA 5.0

- Search Issues
- Get Issue Details
- A few project APIs
- +Better Search
- +All Issue Details
- +Create Issue
- +Edit Issue
- +Full Metadata
- =Full Issue Support

## In REST, not in SOAP

- Custom Fields (inc names), Labels, Attachments, Avatars, Icons, Move, Watch, Voting Issue, Screen Info, Rendered HTML, Autocomplete, “Non-chatty” Metadata, Query a subset of the fields, Set Security Level, Manage Issue Links, Change Log





# Remote Issue Links

JIRA

Dashboards Projects Issues Agile

Ross Chaldecott

Design / DIG-26

## Welcome Mat

Edit Assign Comment

Type: Story Priority: Major Affects Version/s: None Component/s: None Labels: None

Details

relates to

- DIG-33 Permissions & Notifications
- DIG-32 Quick Edit/Create
- DIG-31 Welcome Mat

links to

- Table of Use Cases for Remote Issue Linking
- Ticket #70 Difficulty getting started with JIRA
- A123456 Welcome Mat Test Case
- Getting started with JIRA

Activity

All Comments Work Log History Activity Builds

There are no comments yet on this issue.

Comment



# Add a Link easily via REST

POST to <http://<JIRA Server>/rest/api/2/issue/<IssueKey>/remotelink>

```
{  
    "globalId": "system=http://www.mycompany.com/support&id=1",  
    "application": {  
        "type": "com.acme.tracker",  
        "name": "My Acme Tracker"  
    },  
    "relationship": "causes",  
    "object": {  
        "url": "http://www.mycompany.com/support?id=1",  
        "title": "TSTSUP-111",  
        "summary": "Crazy customer support issue",  
        "icon": {  
            "url16x16": "http://www.mycompany.com/support/ticket.png",  
            "title": "Support Ticket"  
        },  
        "status": {  
            "resolved": true,  
            "icon": {  
                "url16x16": "http://www.mycompany.com/support/resolved.png",  
                "title": "Case Closed",  
                "link": "http://www.mycompany.com/support?id=1&details=closed"  
            }  
        }  
    }  
}
```



# Custom Remote Link Plugins

- **Render**

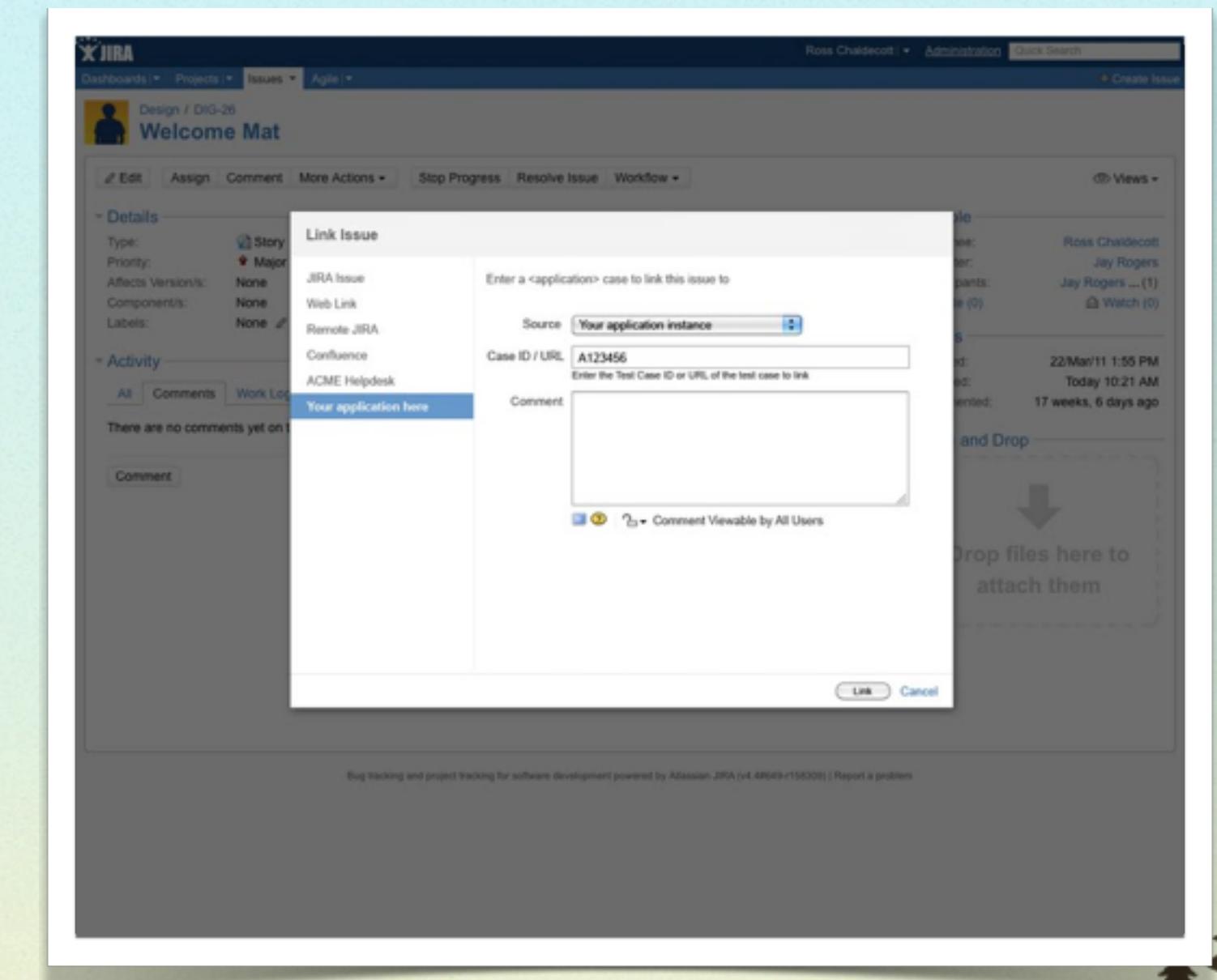
- Render the link differently

- Update the link data from the remote source

- **Custom “Add Link” Dialogs**

- Add link via key vs URL

- Add remote search



# Activity Streams via REST



- Simple Add Activity API via REST (or Java)
- “Get in the Flow with Atlassian Streams”
  - Ben Woskow, 1:30 PM Thursday (today!)

Activity Stream

Activity Stream

Wednesday, August 24, 2011 at 4:10 PM

 **Lior Peso** created [JRA-25487 - Deleting a user](#)  
Would like to see a new feature for deleting a user.  
When deleting a user, the jira will let you move the issues where the user is the reporter/assignee  
to another user, so they won't be deleted.  
Right now this task is cumbersome and not easy to

[Read more »](#)

 Wednesday, August 24, 2011 at 4:10 PM [Comment](#) [Vote](#) [Watch](#)

Wednesday, August 24, 2011 at 4:00 PM

 **Trevor Campbell [Atlassian]** changed the status to Awaiting Deployment on [JRA-25350 - Calling AbstractIssueSelectAction.getIssue\(\) only performs permission checks the 1st time it's called](#)  
 Wednesday, August 24, 2011 at 4:00 PM [Comment](#) [Vote](#) [Watch](#)

Wednesday, August 24, 2011 at 3:50 PM

 **Roy Krishna [Atlassian]** resolved [JRA-23950 - Activity Stream comment's security level as 'Tracked Elsewhere'](#)  
Hello,  
As the activity stream is now a plugin please raise your requests in the corresponding project:

# A couple of extra goodies....

# JIRA Issue Collector

*With a small snippet of JS,  
get this widget on your  
website:*



*And the user's feedback  
becomes a JIRA Issue*

[https://plugins.atlassian.com/  
plugin/details/583856](https://plugins.atlassian.com/plugin/details/583856)

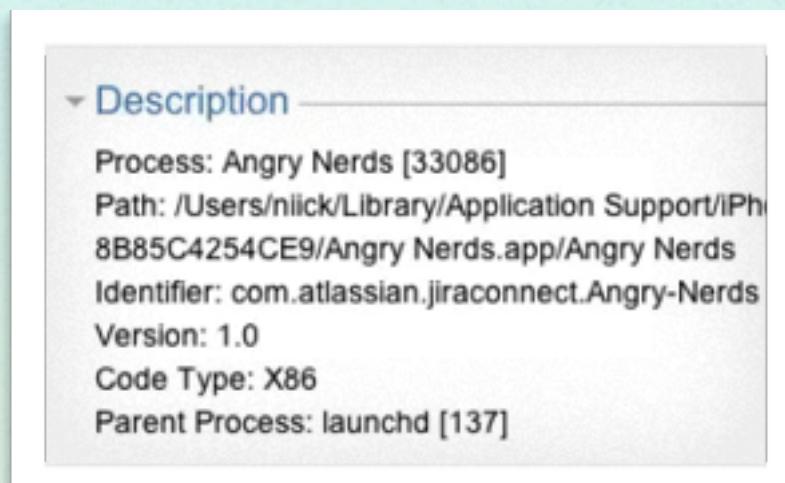
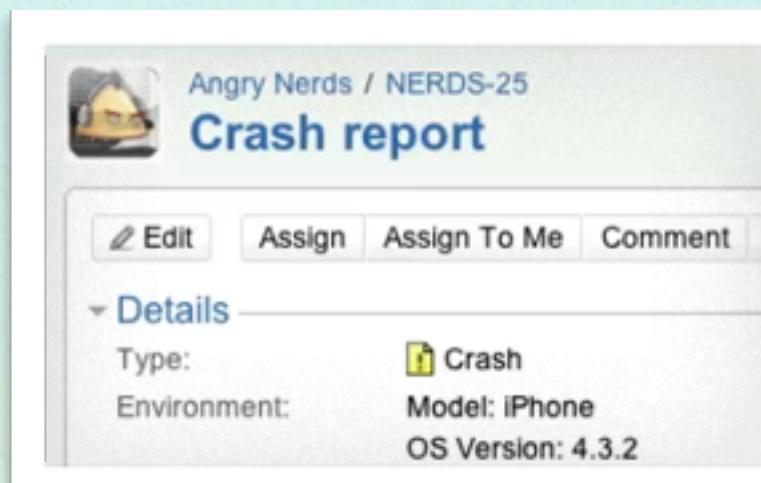
The screenshot shows a JIRA interface with a modal window titled "Raise Bug". The modal contains a text area labeled "What went wrong?\*" and a "Choose File" button for uploading a screenshot. Below the modal, there is a list of JIRA issues. One issue is highlighted with a purple arrow pointing to it. The highlighted issue has the number "#1" and the status "2 weeks ago". The modal has a close button in the top right corner.

Issue	Created	Status	Details
#1	2 weeks ago	124 passed	Initial clean build
#66	2 weeks ago	246 of 15570 failed	Updated by Brenden Bain
#58	3 weeks ago	No tests found	Dependant of JIRASTUD-CI-65

# JIRA Mobile Connect

## User Feedback and Issue Tracking for Mobile App Developers

Contextual, Automated Crash Reporting. Interactive Feedback. Data Reporting Done Right.



JIRA Issue Collector

JIRA Mobile Connect

Gadgets

Decorators

AUI

Activity Streams

Remote Issue Links

JIRA REST APIs

Active Objects

JIRA Stable API

Plugins 2.0

SAL

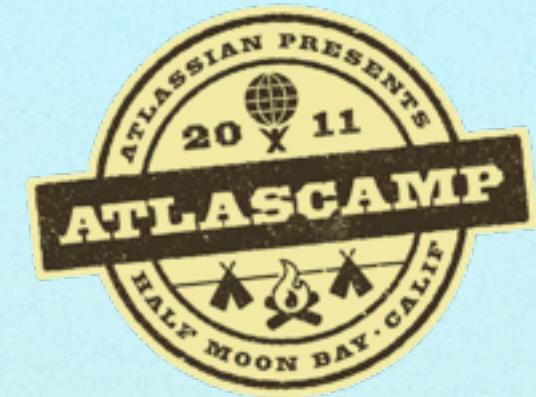
Application Links

Remote  
Integration

Vertical  
Applications  
on JIRA

Stable  
Development

Rapid  
Development



SEP

NOVEMBER

30

RC1

A  
final/launch

*If you are 5.0 Compatible in time for JIRA's launch:*

*then you launch with JIRA.*

Contact Kyle Miller  
([kmiller@atlassian.com](mailto:kmiller@atlassian.com)) for details!



*Thank you!*



# Active Objects - Resources



## Project

<https://studio.atlassian.com/browse/AO>



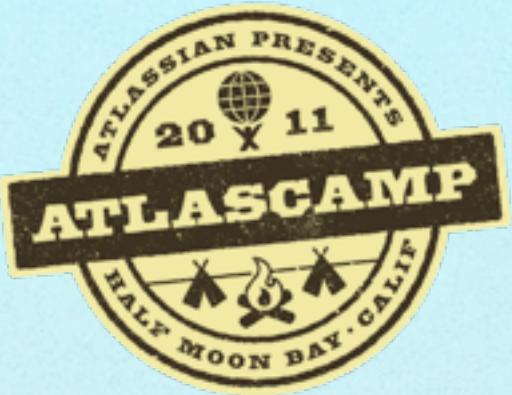
## Documentation

<https://developer.atlassian.com/display/AO/Active+Objects>

## Tutorials

<https://developer.atlassian.com/display/AO/Getting+Started+with+Active+Objects>

# JIRA UX - Resources



## Documentation

AUI

<https://developer.atlassian.com/display/AUI/Atlassian+User+Interface+%28AUI%29+Developer+Documentation>

Changes to markup in JIRA 5.0

<https://developer.atlassian.com/display/JIRADEV/Changes+to+markup%2C+CSS+and+Decorators+in+JIRA+5.0>

# Plugin Dev - More Resources



## Documentation

<https://developer.atlassian.com/display/JIRADEV/Preparing+for+JIRA+5.0>

<https://developer.atlassian.com/display/JIRADEV/How+to+migrate+a+plugin+from+JIRA+4.x+to+JIRA+5.0>



## JIRA 5.0 Tutorials

<https://developer.atlassian.com/display/JIRADEV/JIRA+REST+API+Tutorials>

# REST API - Resources



## Java REST Client for JIRA:



Plugin: <https://plugins.atlassian.com/plugin/details/39474>

Doc: <https://studio.atlassian.com/wiki/display/JRJC/Home>

Tutorial: <https://studio.atlassian.com/wiki/display/JRJC/Tutorial>

## Documentation

### Overview

<https://developer.atlassian.com/display/JIRADEV/JIRA+REST+API+in+JIRA+5.0>

### REST API Docs

<http://docs.atlassian.com/jira/REST/latest/>

## Tutorials

<https://developer.atlassian.com/display/JIRADEV/JIRA+REST+API+Tutorials>

# Remote Issue Links - Resources



## Documentation

<https://developer.atlassian.com/display/JIRADEV/JIRA+Remote+Issue+Links>



## Tutorial

<https://developer.atlassian.com/display/JIRADEV/JIRA+REST+API+for+Remote+Issue+Links>

# New Plugin Points - Resources



## Documentation



All JIRA plugin modules

<https://developer.atlassian.com/display/JIRADEV/JIRA+Developer+Documentation>

Web panels

<https://developer.atlassian.com/display/JIRADEV/Web+Panel+Plugin+Module>

Java API Documentation

<http://docs.atlassian.com/software/jira/docs/api/>

## Tutorials

<https://developer.atlassian.com/display/JIRADEV/How+to+create+a+new+Custom+Field+Type>

<https://developer.atlassian.com/display/DOCS/Plugin+Tutorial++Adding+your+own+Menu+Items+to+JIRA>

<https://developer.atlassian.com/display/DOCS/Plugin+Tutorial++Creating+a+JIRA+Report>

<https://developer.atlassian.com/display/DOCS/Plugin+Tutorial++Writing+Integration+Tests+for+your+JIRA+plugin>

<https://developer.atlassian.com/display/DOCS/Plugin+Tutorial++Adding+a+JQL+Function+to+JIRA>

# Goodies Resources



## JIRA Mobile Connect

### **Info:**

<http://www.atlassian.com/en/jiramobileconnect>

<https://plugins.atlassian.com/plugin/details/322837>



### **Code:**

<https://bitbucket.org/atlassian/jiraconnect-jiraplugin>

## JIRA Issue Collector:

<https://plugins.atlassian.com/plugin/details/583856>



*Thank you!*

