



BDD for plugin writers



... and giving your tests to Atlassian to run?!

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@delitescere

Plugins are awesome



Plugins are challenging



Plugins are rewarding



Easier

Safer

BDD



Behavior Driven Development





Scenario: Log Work button with Tempo Enabled

Given I enable Tempo

And I log out

And I am logged in as "dev" viewing issue "BDD-1"

Then I should see the "Add Hours On Issue" section

When I follow "Log Work"

Then I should see "Period" in the "Tempo Add Hours Issue Dialog" section

Overheard

“

BDD

=

TDD

+

natural domain language

”

#atlascamp @delitescere



Overheard

“

BDD

=

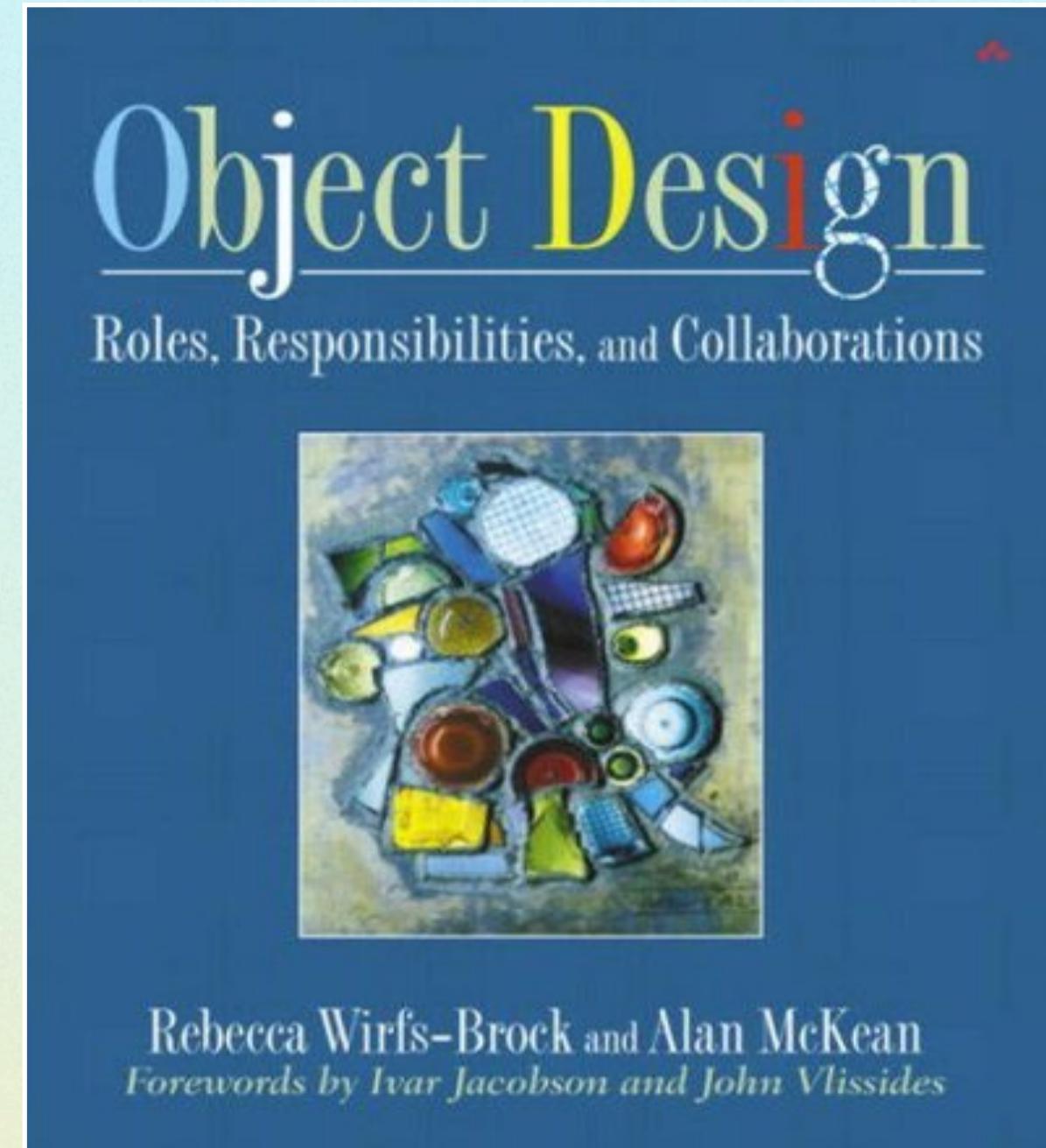
*Conversations that
create software*

”

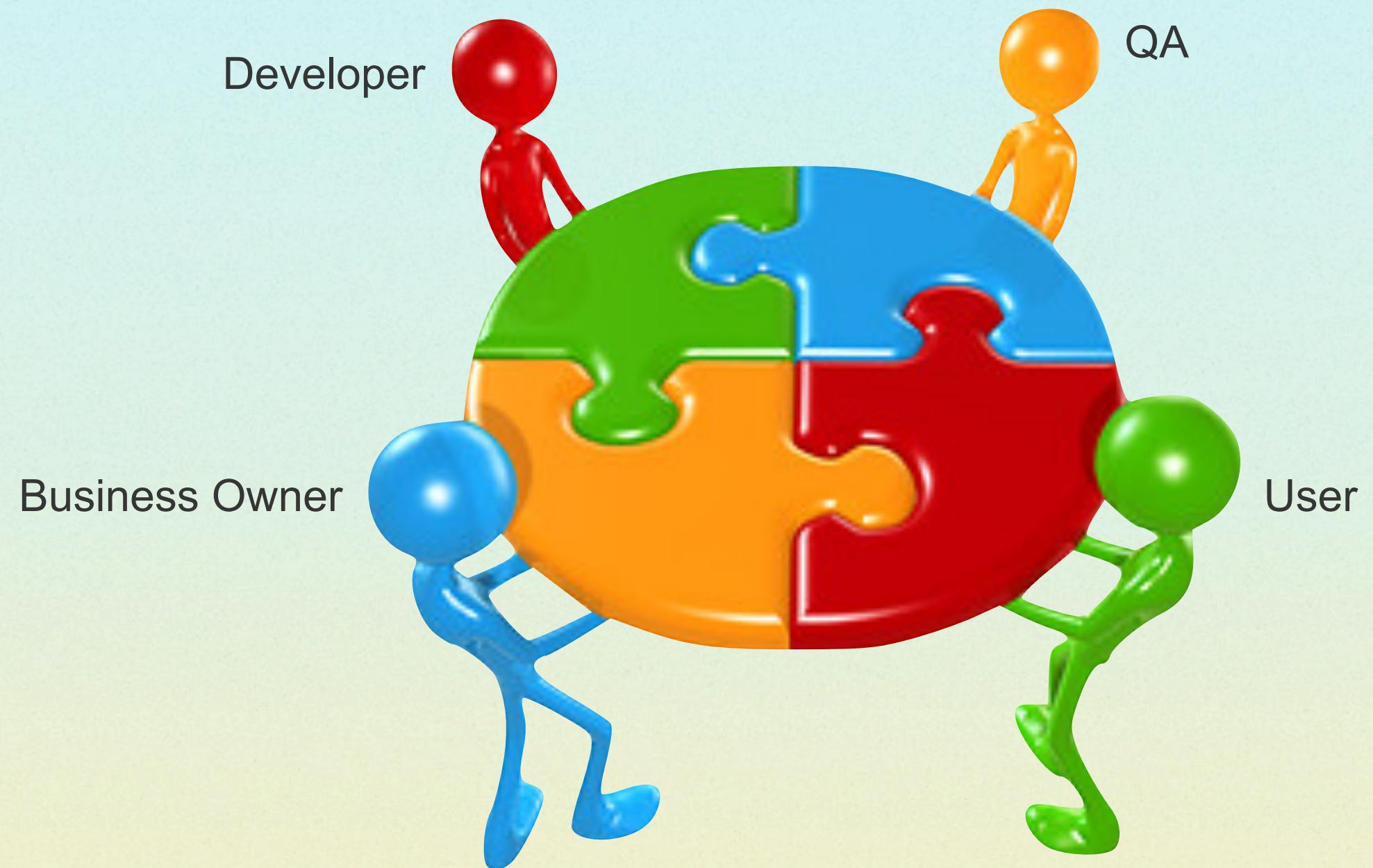
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Outside-in



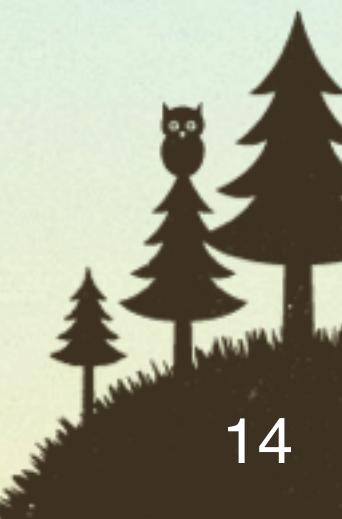
Collaboration



Stakeholders



- Devs
- BAs
- QAs
- Business Sponsors
- Tech Writers
- Users
- Support
- other systems, units of code...



“

BDD is as much about the interactions between the various people in the project as it is about the outputs of the development process

”

Dan North, BDDiddy

“

If you're not having conversations, you're not doing BDD.

”

Liz Keogh, BDDiva

Traceability



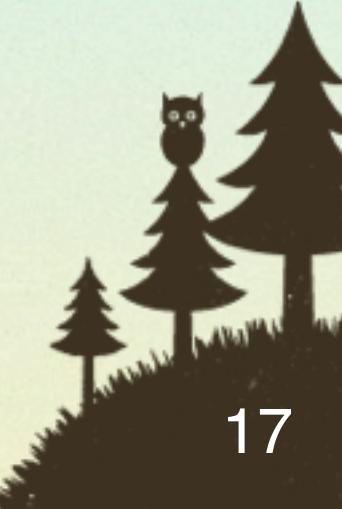
Given an issue exists
And that issue is in the Open state

When I perform the Close action on that issue

Then that issue is in the Closed state



```
class Issue {  
    public Issue transition(Action action) {  
        currentState = workflow.transition(this, action);  
    }  
}
```



Business Outcomes

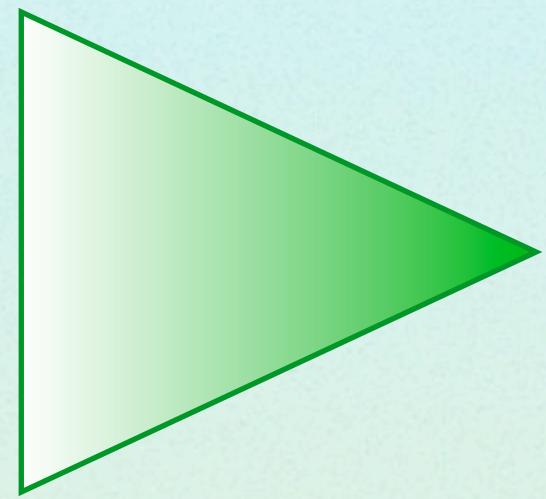


Plugin Developers



- Executable specification of system behavior
- Easily find regressions
- Test forward / backward compatibility
- Atlassian can run your tests?!





BDD

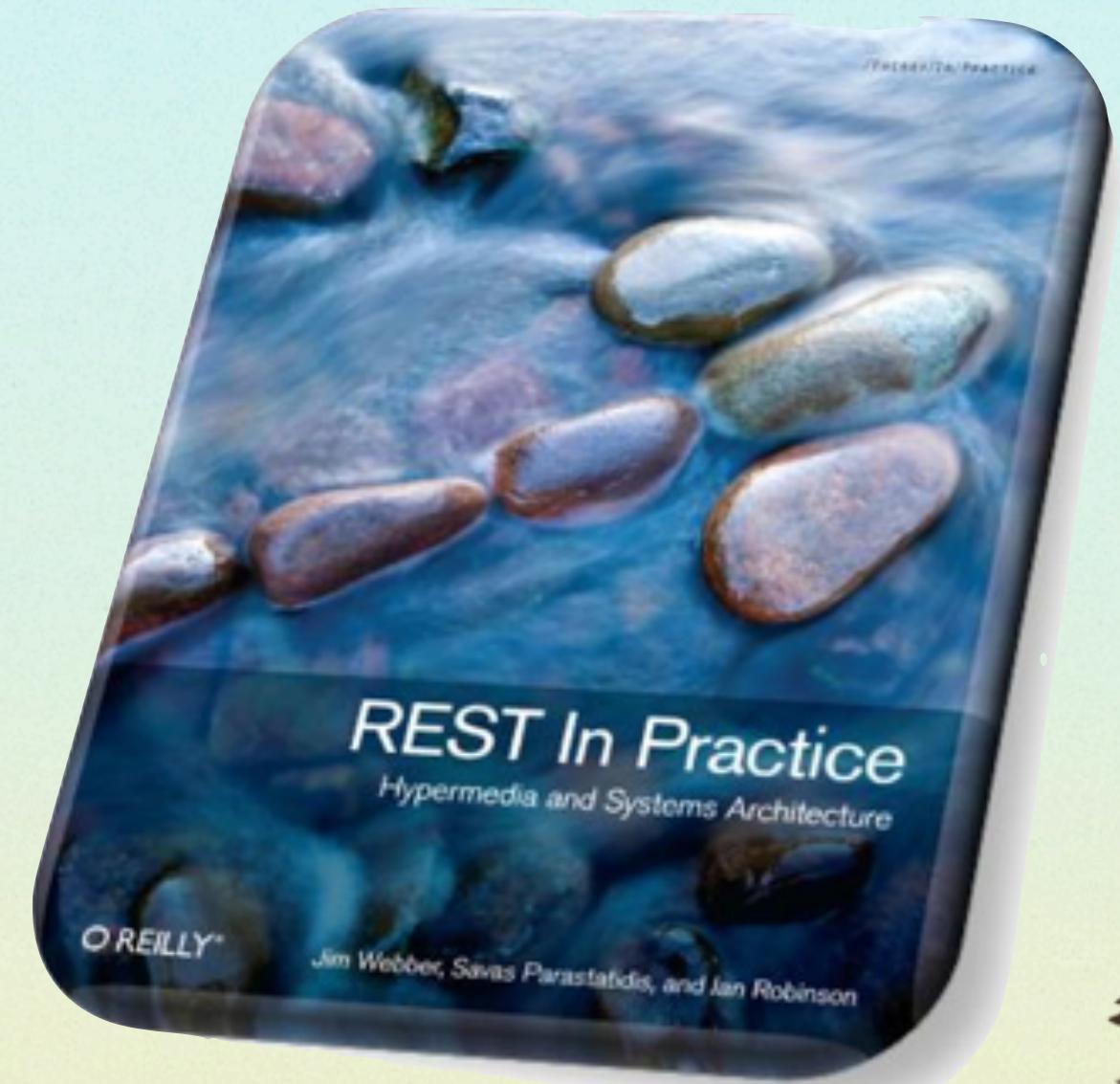


- Given / When / Then
- Abstract
 - Domain's ubiquitous language
 - Page Objects (if available)
 - HTML
- A result of conversations



Consumers rule!

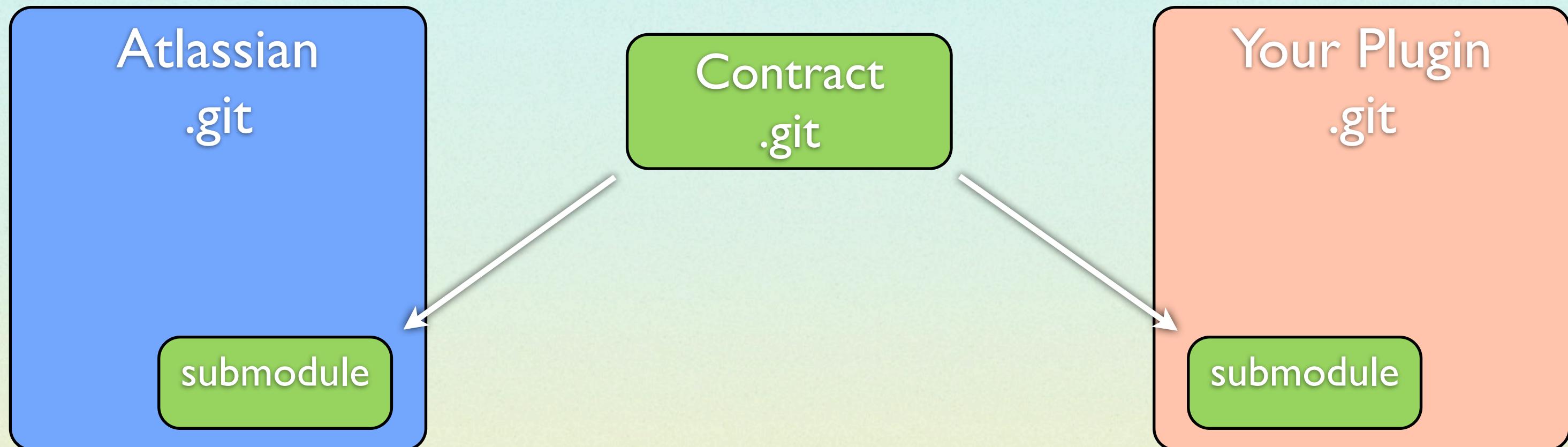
- Consumer-Driven Contracts – Ian S. Robinson
- A new approach to integration
- Apply to plugins
- Atlassian runs your tests?!



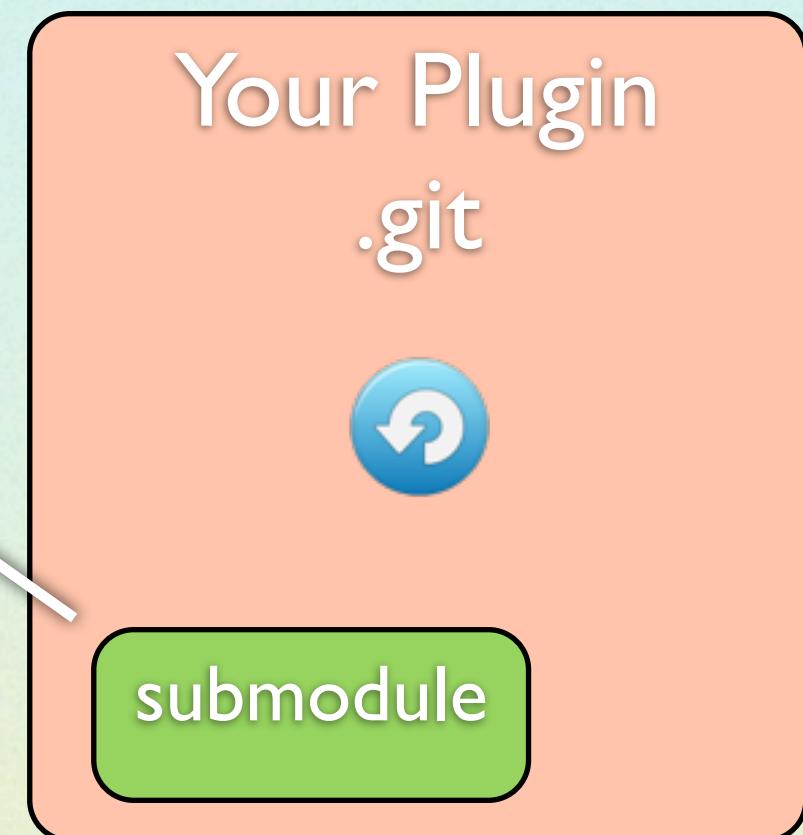
The Contract



Sharing a contract repo



Commit tests



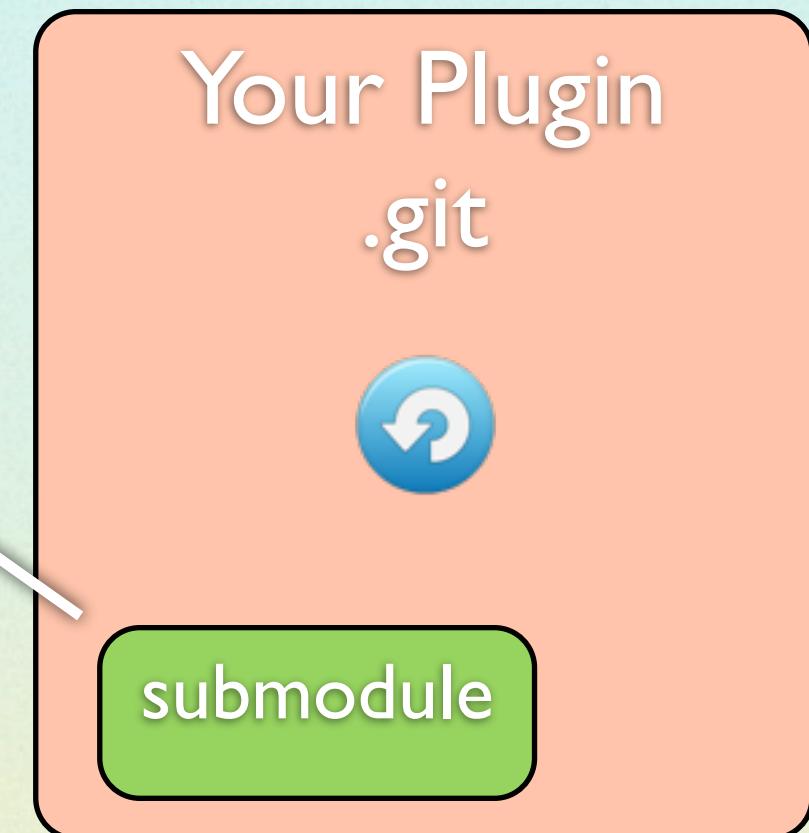
Negotiate contract



Check contract violation



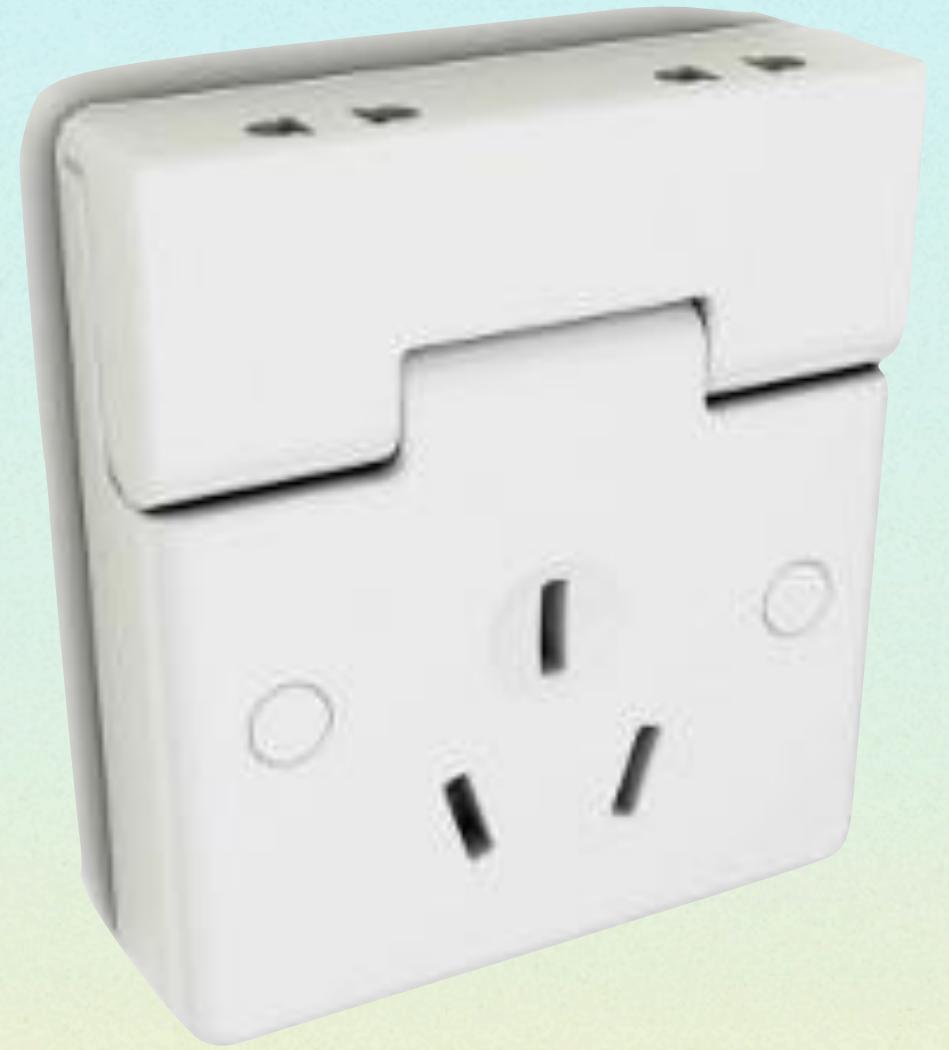
Commit changed tests



Renegotiate contract



Custom plugins?



Overheard

“

- 1) *Have a conversation with your users about how the plugin should behave*
- 2) *Write it as a spec*
- 3) *Give it to us*

”

#atlascamp @delitescere



Overheard

“

*Consumer-Driven Contracts are some
crazy awesome!*

jgraham@atlassian.com

”

#atlascamp @delitescere



- * Object Design book
<http://www.amazon.com/Object-Design-Roles-Responsibilities-Collaborations/dp/0201379430>
- * Domain Driven Design site
<http://www.domaindrivendesign.org>
- * Using Mocks and Tests To Design Role-Based Objects article
<http://static.mockobjects.com/files/usingmocksandtests.pdf>
- * Introducing BDD blog
<http://dannorth.net/introducing-bdd/>
- * Consumer-Driven Contracts article
<http://martinfowler.com/articles/consumerDrivenContracts.html> and
<http://iansrobinson.com/category/consumer-driven-contracts/>
- * Rest In Practice site
<http://restinpractice.com/>





Cheers, big ears



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