Getting started with agile developement using the Atlassian Suite at DESY

Jürgen Starek and Karsten Schwank

November 25, 2014

Content

What to expect

- Brief introduction into Scrum
- Example from Summer Students' project
- Stash walk-through
- Getting started with Bamboo

What we expect

- Questions
- Requests on the Demo parts

Agile Development with Scrum

1 Agile Development with Scrum
- Goals and Motivation
- Framework
- Summer Students' project
- Questions

2 Atlassian Tools
- Stash: Repository Management
- Bamboo: Continuous Integration and Testing

Goals and Motivation

- Transparent project progress
- Be able to react to changing requirements
- Short “time to market”
- Be able to release any time
- Motivation of developers

Framework

Framework

- Fixed set of roles
- Fixed (basic) set of meetings
- Fixed set of artefacts
- Principles

Definition of work packages

- Epics > User Stories > Subtasks
- Times estimated in Story Points
- Vertical cuts → affect all layers

Actual work done in *Sprints*

- Work on fixed set of User Stories
- Usually 2-4 weeks

Roles

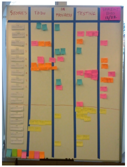
- *Product Owner*:
  - responsible for projects rentability
  - defines requirements
  - decides about priority of features
  - reports progress to stakeholders
  - accepts or rejects increments
- *Scrum Master*:
  - responsible for team effectiveness
  - coach, mentor, moderator, trainer
  - shields team from external influences
  - removes impediments
- *Developer*:
  - fixes bugs
  - implements user stories
  - refactors code
  - writes tests
  - maintains Sprint Backlog
  - reports progress

Meetings

- *Sprint Kick-Off*
  - Decide what user-stories to implement in Sprint
- *Daily Scrum*
  - *Standup:* Work done, work planned, impediments
  - More discussion as needed
- *Sprint Review*
  - Present work to Product Owner and confirm it is “done”
- *Sprint Retrospective*
  - Review internal process, suggest improvements

Artefacts

- *Product Backlog*
  - List of not yet implemented Epics and User-Stories
  - Sorted by importance and value
  - May be modified at any time
- *Sprint Backlog*
  - List of User-Stories with detailed sub-tasks
  - Fixed for the Sprint
- *Burndown Chart*
  - One chart per Sprint
  - Graph of work done over time



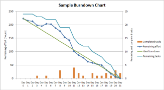


Figure: Graphics by Logan Ingalls. Licensed under CC-A 2.0 via Wikimedia Commons

Scrum Process

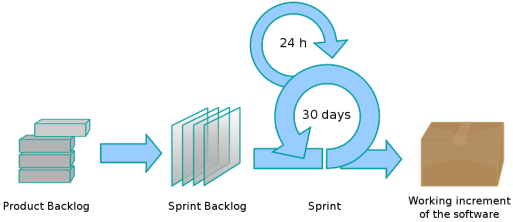


Figure: "Scrum process" by Lakeworks - Own work. Licensed under GNU Free Documentation License via Wikimedia Commons

Principles

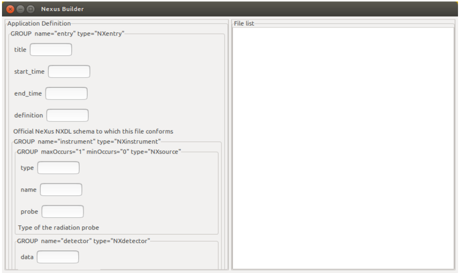
Some of the principles are

- Pair Programming
- Test Driven Developement
- Continuous Integration
- ...

Summer Students' project

Summer Students' project

- Team:
  - Product Owner: Jürgen
  - Scrum Master: Karsten
  - Developers: Lilit, Victor
- Sprints: 1 Week
- Meetings:
  - Kickoff: Friday Afternoon
  - Standup: Daily 11:00
  - Retrospective: Friday 11:30


Nexus Builder
Application Definition
GROUP name="entry" type="NXentry"
title
start_time
end_time
definition
GROUP name="instrument" type="NXinstrument"
GROUP maxOccurs="1" minOccurs="0" type="NXsource"
type
name
probe
GROUP name="detector" type="NXdetector"
data
File list

Official NeXus NXDL schema to which this file conforms

Type of the radiation probe

Figure: NexusBuilder 0.1

Questions?

Atlassian Tools

1. Agile Development with Scrum
   - Goals and Motivation
   - Framework
     - Roles
     - Meetings
     - Artefacts
   - Summer Students' project
   - Questions
2. Atlassian Tools
   - Stash: Repository Management
   - Bamboo: Continuous Integration and Testing

Stash

Simple use cases for individuals and workgroups:

- supports *git* for version control
- multiple repositories per project
- access management
- branch management
- private repositories

More advanced use cases:

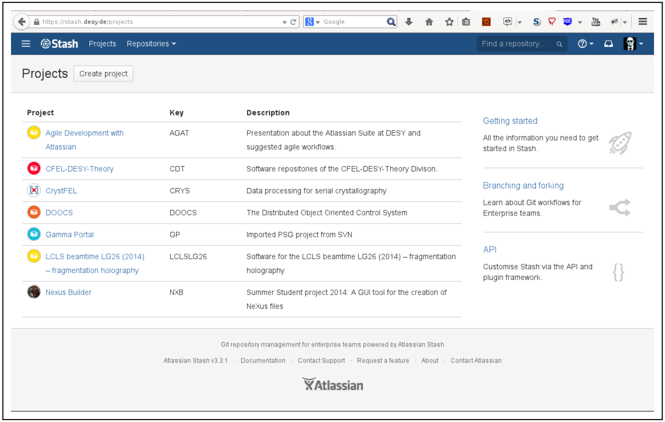
- integration in agile workflows with *Jira* and *Bamboo*

Stash and the Others

- SourceTree: Atlassian *git* and *hg* client for Win and Mac
- Mercurial: Currently not supported
  - Ad-hoc ports via fast-export or hg-git (`https://github.com/frej/fast-export` or `http://hg-git.github.io`) possible, but tricky
- Subversion:
  - Server `http://svnsrv.desy.de` from Zeuthen

Stash: Projects Overview

After logging in, stash shows us the overview of all projects we are allowed to see.



Projects

Project	Key	Description
Agile Development with Atlassian	AGAT	Presentation about the Atlassian Suite at DESY and suggested agile workflows.
CFEL-DESY-Theory	CDT	Software repositories of the CFEL-DESY-Theory Divison.
CrystFEL	CRYS	Data processing for serial crystallography
DOOCS	DOOCS	The Distributed Object Oriented Control System
Gamma Portal	GP	Imported PSG project from SVN
LCLS beamtime LG26 (2014) – fragmentation holography	LCLSLG26	Software for the LCLS beamtime LG26 (2014) – fragmentation holography
Nexus Builder	NXB	Summer Student project 2014: A GUI tool for the creation of NeXus files

Getting started

All the information you need to get started in Stash.

Branching and forking

Learn about Git workflows for Enterprise teams.

API

Customise Stash via the API and plugin framework.

Git repository management for enterprise teams powered by Atlassian Stash

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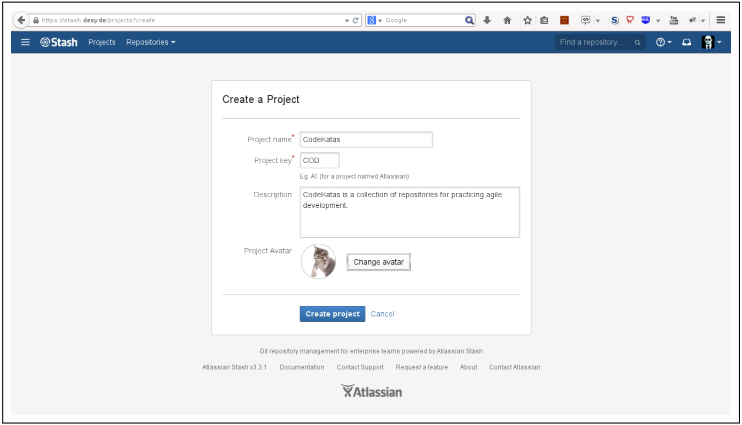
Figure: Projects Overview

Stash: Create Project

If we have sufficient rights we can create a new project by clicking on the “`Create project`“-button



Create a Project

Project name* CodeKatas

Project key* COD

Eg. AT (for a project named Atlassian)

Description CodeKatas is a collection of repositories for practicing agile development.

Project Avatar

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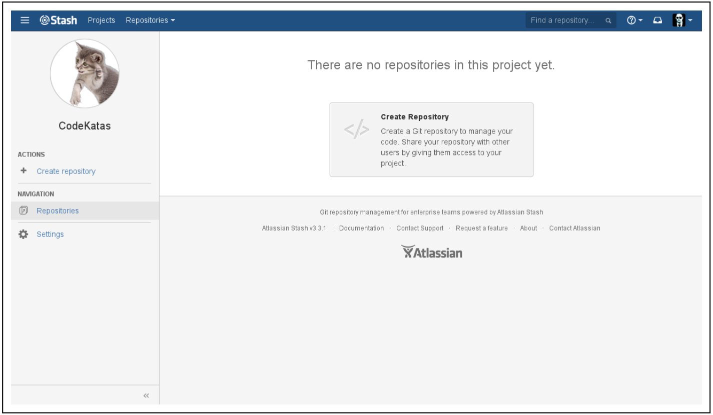
Figure: create a project

Empty Project

After creating a new project Stash shows us the empty repository page



There are no repositories in this project yet.

Create Repository

Create a Git repository to manage your code. Share your repository with other users by giving them access to your project.

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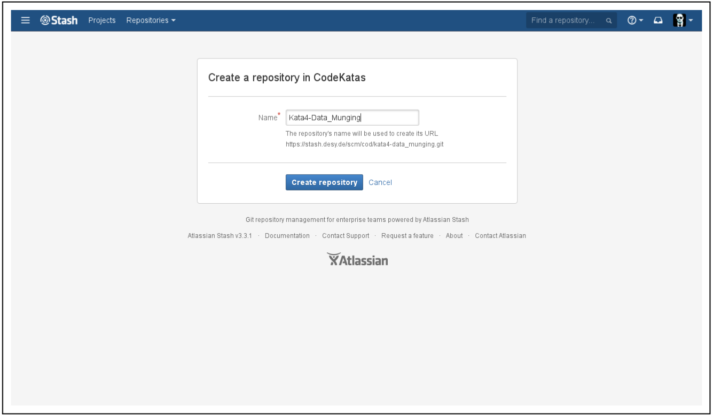
Figure: newly created project

Create a new repository



Create a repository in CodeKatas

Name* Kata4-Data_Munging

The repository's name will be used to create its URL
https://stash.desy.de/scm/cod/kata4-data_munging.git

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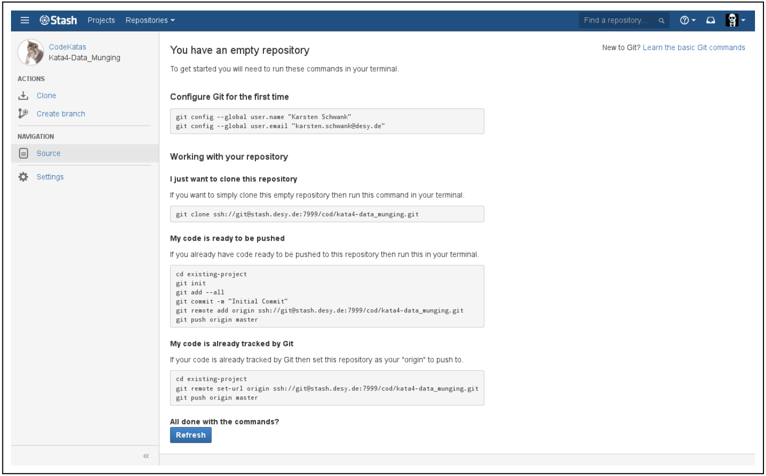
Figure: new repository



You have an empty repository

New to Git? Learn the basic Git commands

To get started you will need to run these commands in your terminal.

Configure Git for the first time

```
git config --global user.name "Karsten Schwank"
git config --global user.email "karsten.schwank@desy.de"
```

Working with your repository

I just want to clone this repository

If you want to simply clone this empty repository then run this command in your terminal.

```
git clone ssh://git@stash.desy.de:7999/cod/kata4-data_munging.git
```

My code is ready to be pushed

If you already have code ready to be pushed to this repository then run this in your terminal.

```
cd existing-project
git init
git add --all
git commit -m "Initial Commit"
git remote add origin ssh://git@stash.desy.de:7999/cod/kata4-data_munging.git
git push origin master
```

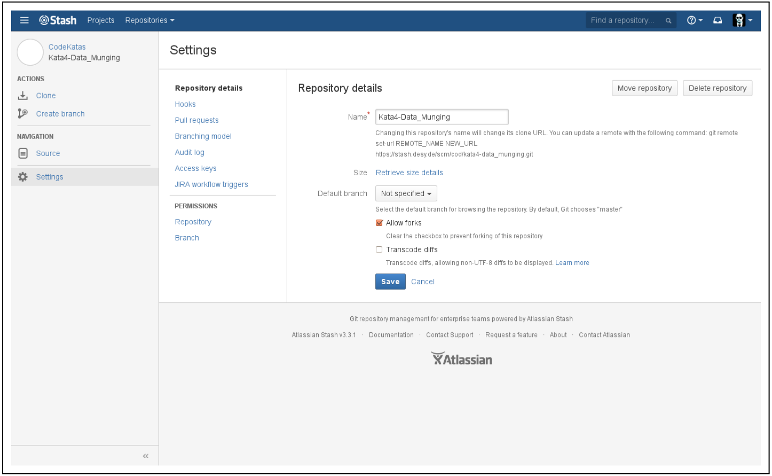
My code is already tracked by Git

If your code is already tracked by Git then set this repository as your "origin" to push to.

```
cd existing-project
git remote set-url origin ssh://git@stash.desy.de:7999/cod/kata4-data_munging.git
git push origin master
```

All done with the commands?

Figure: empty repository



Settings

Repository details

Name* Kata4-Data_Munging

Changing this repository's name will change its clone URL. You can update a remote with the following command: git remote set-url REMOTE_NAME NEW_URL
https://stash.desy.de/scm/cod/kata4-data_munging.git

Size Retrieve size details

Default branch Not specified

Select the default branch for browsing the repository. By default, Git chooses "master"

☑ Allow forks

Clear the checkbox to prevent forking of this repository

☐ Transcode diffs

Transcode diffs, allowing non-UTF-8 diffs to be displayed. Learn more

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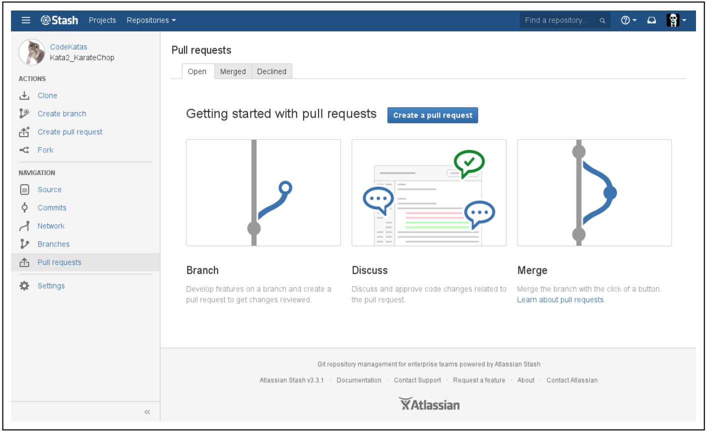
Figure: repository details



Pull requests

Getting started with pull requests

Branch

Develop features on a branch and create a pull request to get changes reviewed.

Discuss

Discuss and approve code changes related to the pull request.

Merge

Merge the branch with the click of a button. Learn about pull requests.

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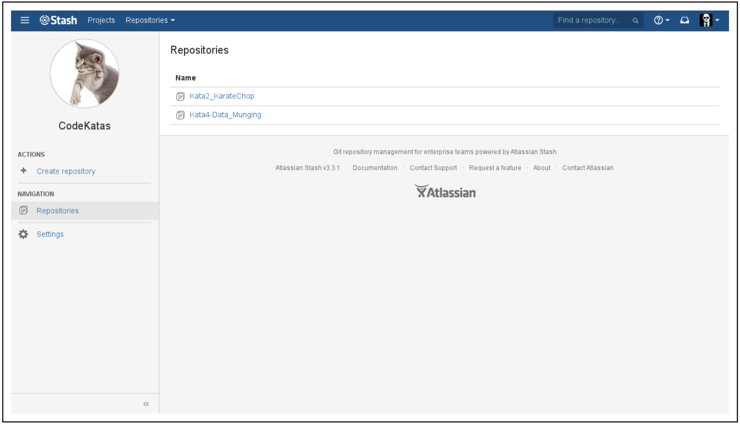
Atlassian

Figure: pull requests



CodeKatas

ACTIONS

- Create repository

NAVIGATION

- Repositories
- Settings

Repositories

Name
Kata2_KarateChop
Kata4-Data_Munging

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Figure: repositories

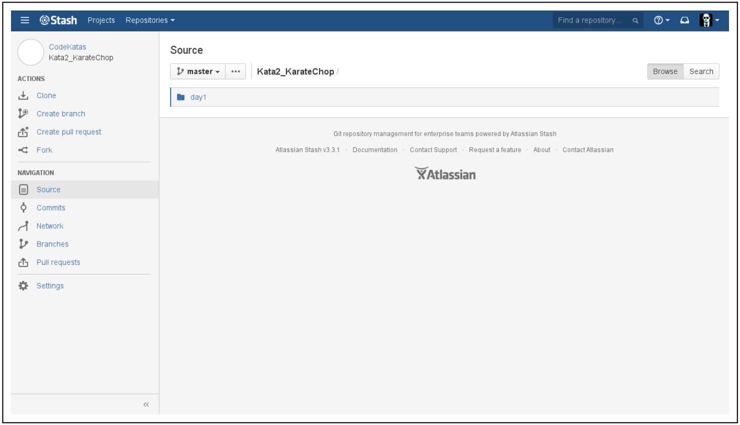
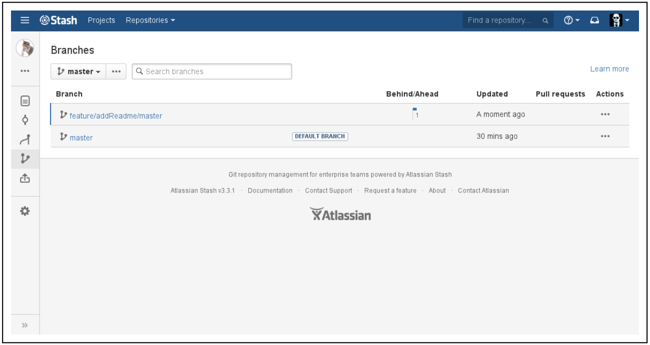


Figure: source



Branches

Branch		Behind/Ahead	Updated	Pull requests	Actions
feature/addReadme/master		1	A moment ago		•••
master	DEFAULT BRANCH		30 mins ago		•••

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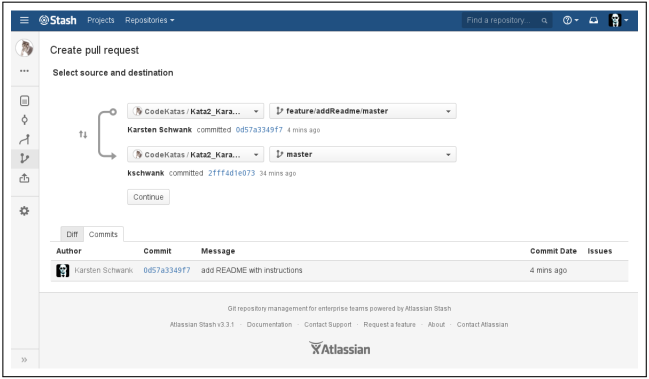
Figure: branches



Create pull request

Select source and destination

CodeKatas / Kata2_Kara... feature/addReadme/master

Karsten Schwank committed 0d57a3349f7 4 mins ago

CodeKatas / Kata2_Kara... master

kschwank committed 2fff4d1e073 34 mins ago

Author	Commit	Message	Commit Date	Issues
Karsten Schwank	0d57a3349f7	add README with instructions	4 mins ago	

Git repository management for enterprise teams powered by Atlassian Stash

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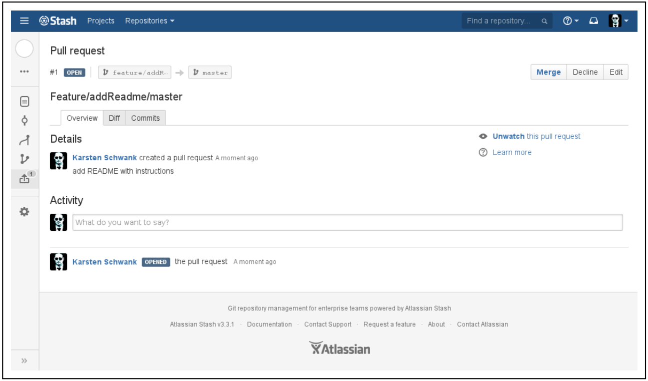
Figure: create pull request



Pull request

#1 OPEN feature/addR... → master

Feature/addReadme/master

Details

Karsten Schwank created a pull request A moment ago

add README with instructions

Activity

What do you want to say?

Karsten Schwank OPENED the pull request A moment ago

Git repository management for enterprise teams powered by Atlassian Stash

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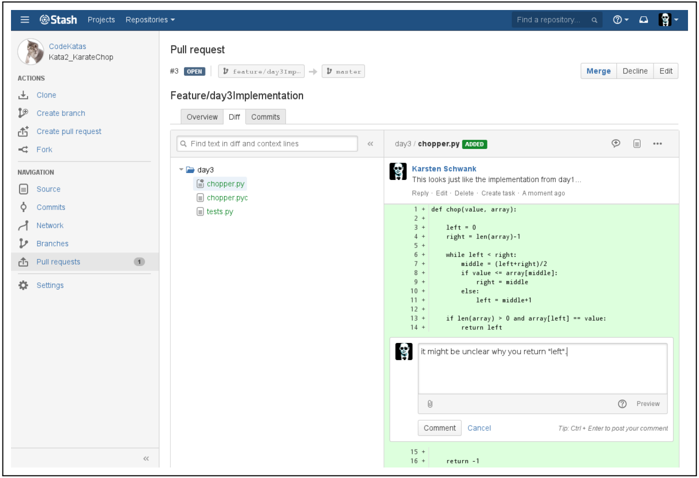
Atlassian

Figure: pull request



Pull request

#3 OPEN feature/day3Imp... → master

Feature/day3Implementation

- day3
  - chopper.py
  - chopper.pyc
  - tests.py

day3 / chopper.py ADDED

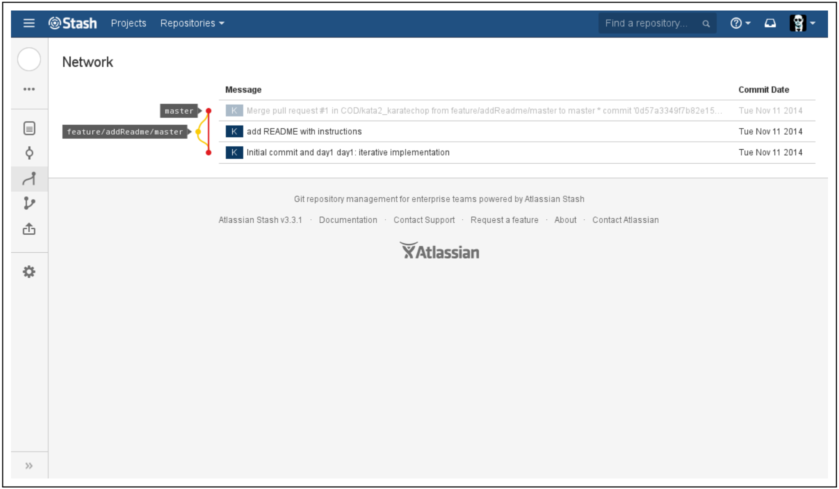
Karsten Schwank
This looks just like the implementation from day1 ...
Reply · Edit · Delete · Create task · A moment ago

```
+ def chop(value, array):
+
+     left = 0
+     right = len(array)-1
+
+     while left < right:
+         middle = (left+right)/2
+         if value <= array[middle]:
+             right = middle
+         else:
+             left = middle+1
+
+     if len(array) > 0 and array[left] == value:
+         return left
```

it might be unclear why you return "left".

```
+
+     return -1
```

Figure: review pull request



Network

Message	Commit Date
K Merge pull request #1 in COD/kata2_karatechop from feature/addReadme/master to master * commit '0d57a3349f7b82e15...	Tue Nov 11 2014
K add README with instructions	Tue Nov 11 2014
K Initial commit and day1 day1: iterative implementation	Tue Nov 11 2014

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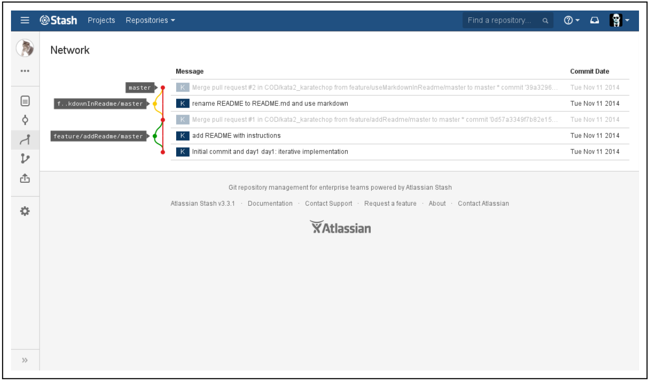
Figure: branches network



Network

Message	Commit Date
K Merge pull request #2 in COD/kata2_karatechop from feature/useMarkdownInReadme/master to master * commit '39a3296...	Tue Nov 11 2014
K rename README to README.md and use markdown	Tue Nov 11 2014
K Merge pull request #1 in COD/kata2_karatechop from feature/addReadme/master to master * commit '0d57a3349f7b82e15...	Tue Nov 11 2014
K add README with instructions	Tue Nov 11 2014
K Initial commit and day1 day1: iterative implementation	Tue Nov 11 2014

Git repository management for enterprise teams powered by Atlassian Stash

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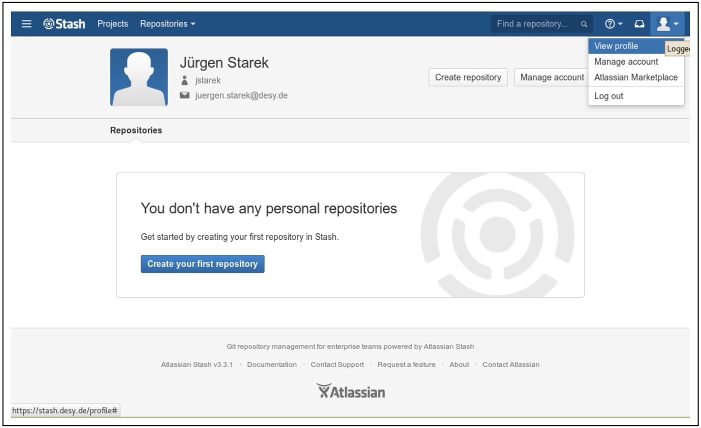
Atlassian

Figure: branches network

Private repositories

- Until now: Repositories as part of projects
  - Projects can be made private
- "Proper" private repositories are created in one's account page



Jürgen Starek
jstarek
juergen.starek@desy.de

Repositories

You don't have any personal repositories

Get started by creating your first repository in Stash.

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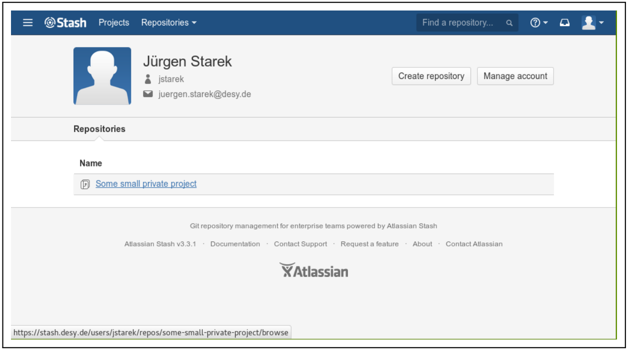
Figure: Creating private repositories



Jürgen Starek
jstarek
juergen.starek@desy.de

Repositories

Name
Some small private project

Git repository management for enterprise teams powered by Atlassian Stash

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https://stash.desy.de/users/jstarek/repos/some-small-private-project/browse

Figure: List of private repositories and access URL

How do I / we get on?

- Write to it-atlassian@desy.de, describing your use case and ask for Stash access
- After getting an account, you can create projects and repositories yourself
    - Please use responsibly (and keep the distinction between projects and repositories in mind)

Basics and concepts

Compile, test and (potentially) package and deploy your code

- at every commit to the git repository
- at given time intervals
- nightly

Advantages

...for teams:

- Overview of development status, semi-public status display
- Confidence when editing other people's code
- Overview of implemented bugfixes in releases
- simple, centralized build and deployment to several targets

...for individuals:

- Confidence when editing code left alone since last year
- Overview of implemented bugfixes in releases

A use case for multiplatform targets

- Optimize software for a heterogenuous cluster like it-hpc or NAF
    - Have Bamboo build versions for i386, i686 and all target environments
    - Let Bamboo package the results and store them centrally
    - Deploy as needed (using helper scripts or similar)
- Ask us if you need special build environments

Bamboo vs. Jenkins

- Jenkins offers most of the features Bamboo has
- For existing installations:
  - Integration with Stash and Jira possible, but more work
  - not supported by IT

Documentation

- Atlassian documentation on the web:
  `https://confluence.atlassian.com/display/ALLDOC/`
- DESY IT mailing list for further questions:
  it-atlassian@desy.de

Questions?

Content

3 Recap

4 Jira Agile
   - Product Backlog
   - Sprint Backlog
   - Burndown Chart

5 Integration

What to expect

- Short recap of last weeks presentation
- Basic Workflows with Jira Agile (Demo)
- Integrate Jira, Stash and Bamboo (Demo)

What we expect

- Questions
- Requests on the Demo parts

Recap Scrum

- Roles: Product Owner, Scrum Master, Developer

Recap Scrum

- Roles: Product Owner, Scrum Master, Developer
- Artefacts: Product Backlog, Sprint Backlog, Burndown Chart

Recap Scrum

- Roles: Product Owner, Scrum Master, Developer
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- Meetings: Sprint Kickoff, Daily Scrum, Sprint Review, Sprint Retrospective

Recap Scrum

- Roles: Product Owner, Scrum Master, Developer
- Artefacts: Product Backlog, Sprint Backlog, Burndown Chart
- Meetings: Sprint Kickoff, Daily Scrum, Sprint Review, Sprint Retrospective
- Principles: TDD, CI, Pair Programming, ...

Recap Stash

- git repository management

Recap Stash

- git repository management
- public and private repositories

Recap Stash

- git repository management
- public and private repositories
- Review and merge Pull Requests

Recap Bamboo

- Automated Builds

Recap Bamboo

- Automated Builds
- Build plan configuration
    - Triggers
    - Actions

Recap Bamboo

- Automated Builds
- Build plan configuration
  - Triggers
  - Actions
- Monitor build status

Jira Agile

3 Recap

4 Jira Agile

Product Backlog

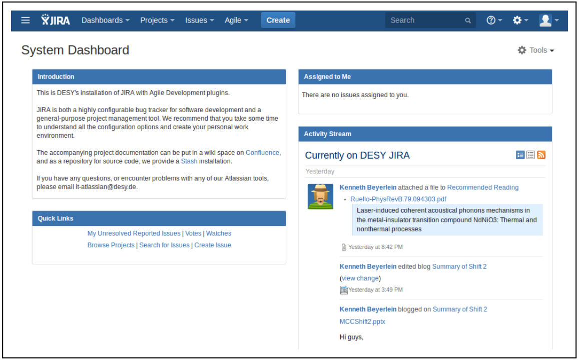
Sprint Backlog

Burndown Chart

5 Integration

Jira Agile

...the "ag" in agira.desy.de :-)



System Dashboard

Introduction

This is DESY's installation of JIRA with Agile Development plugins.

JIRA is both a highly configurable bug tracker for software development and a general-purpose project management tool. We recommend that you take some time to understand all the configuration options and create your personal work environment.

The accompanying project documentation can be put in a wiki space on Confluence, and as a repository for source code, we provide a Stash installation.

If you have any questions, or encounter problems with any of our Atlassian tools, please email it-atlassian@desy.de.

Quick Links

My Unresolved Reported Issues | Votes | Watches
Browse Projects | Search for Issues | Create Issue

Assigned to Me

There are no issues assigned to you.

Activity Stream

Currently on DESY JIRA

Yesterday

Kenneth Beyerlein attached a file to Recommended Reading

- Ruello-PhysRevB.79.094303.pdf

Laser-induced coherent acoustical phonons mechanisms in the metal-insulator transition compound NdNiO3: Thermal and nonthermal processes

Yesterday at 8:42 PM

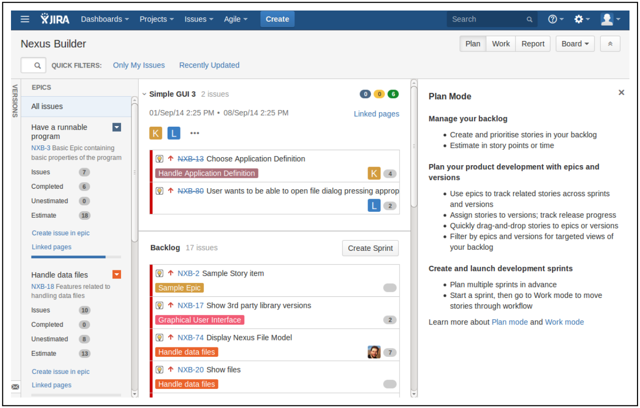
Kenneth Beyerlein edited blog Summary of Shift 2
(view change)
Yesterday at 3:49 PM

Kenneth Beyerlein blogged on Summary of Shift 2
MCCShift2.pptx

Hi guys,

Figure: Jira Startpage

Jira Agile



Nexus Builder

QUICK FILTERS: Only My Issues Recently Updated

EPICS

All issues

Have a runnable program
NXB-3 Basic Epic containing basic properties of the program

Issues	7
Completed	6
Unestimated	0
Estimate	18

Create issue in epic
Linked pages

Handle data files
NXB-18 Features related to handling data files

Issues	10
Completed	0
Unestimated	8
Estimate	13

Create issue in epic
Linked pages

Simple GUI 3 2 issues 0 0 6

01/Sep/14 2:25 PM • 08/Sep/14 2:25 PM Linked pages

K L ...

~~NXB-13~~ Choose Application Definition
Handle Application Definition K 4

~~NXB-80~~ User wants to be able to open file dialog pressing approp
L 2

Backlog 17 issues Create Sprint

NXB-2 Sample Story item
Sample Epic

NXB-17 Show 3rd party library versions
Graphical User Interface 2

NXB-74 Display Nexus File Model
Handle data files 7

NXB-20 Show files
Handle data files

Plan Mode

Manage your backlog

- Create and prioritise stories in your backlog
- Estimate in story points or time

Plan your product development with epics and versions

- Use epics to track related stories across sprints and versions
- Assign stories to versions; track release progress
- Quickly drag-and-drop stories to epics or versions
- Filter by epics and versions for targeted views of your backlog

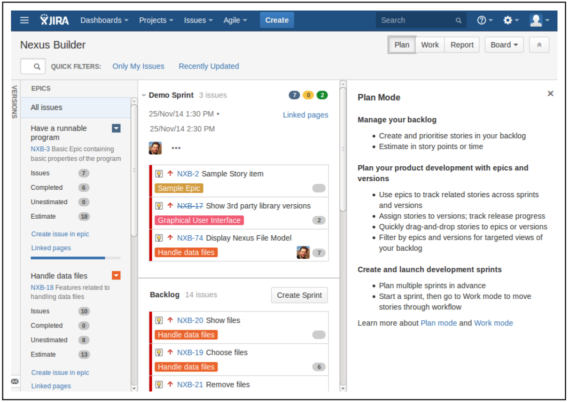
Create and launch development sprints

- Plan multiple sprints in advance
- Start a sprint, then go to Work mode to move stories through workflow

Learn more about Plan mode and Work mode

Figure: Product Backlog

Jira Agile



Nexus Builder

All issues

Have a runnable program
NXB-3 Basic Epic containing basic properties of the program

Issues	7
Completed	6
Unestimated	0
Estimate	18

Create issue in epic
Linked pages

Handle data files
NXB-18 Features related to handling data files

Issues	10
Completed	0
Unestimated	8
Estimate	13

Create issue in epic
Linked pages

Demo Sprint 3 issues 7 0 2
25/Nov/14 1:30 PM • 25/Nov/14 2:30 PM
Linked pages

- NXB-2 Sample Story item — Sample Epic
- ~~NXB-17~~ Show 3rd party library versions — Graphical User Interface — 2
- NXB-74 Display Nexus File Model — Handle data files — 7

Backlog 14 issues
Create Sprint

- NXB-20 Show files — Handle data files
- NXB-19 Choose files — Handle data files — 6
- NXB-21 Remove files

Plan Mode

Manage your backlog

- Create and prioritise stories in your backlog
- Estimate in story points or time

Plan your product development with epics and versions

- Use epics to track related stories across sprints and versions
- Assign stories to versions; track release progress
- Quickly drag-and-drop stories to epics or versions
- Filter by epics and versions for targeted views of your backlog

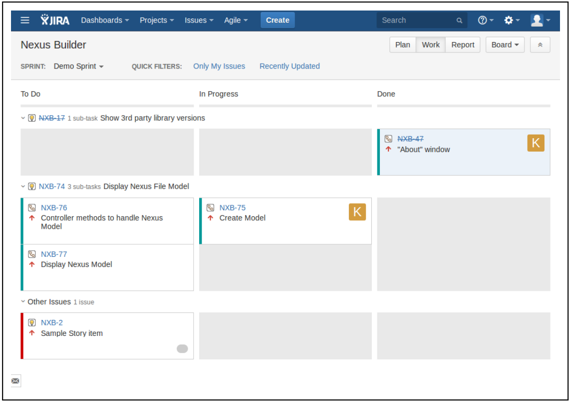
Create and launch development sprints

- Plan multiple sprints in advance
- Start a sprint, then go to Work mode to move stories through workflow

Learn more about Plan mode and Work mode

Figure: Plan Sprints

Jira Agile



Nexus Builder

SPRINT: Demo Sprint

QUICK FILTERS: Only My Issues Recently Updated

To Do | In Progress | Done

~~NXB-17~~ 1 sub-task Show 3rd party library versions

~~NXB-47~~ "About" window

NXB-74 3 sub-tasks Display Nexus File Model

NXB-76 Controller methods to handle Nexus Model

NXB-77 Display Nexus Model

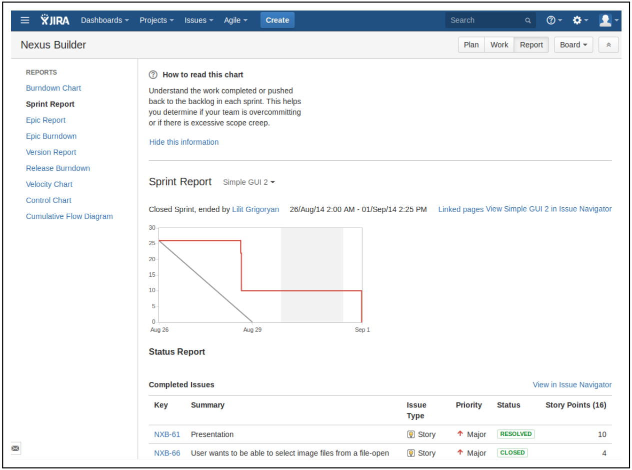
NXB-75 Create Model

Other Issues 1 issue

NXB-2 Sample Story item

Figure: Sprint Backlog

Jira Agile



How to read this chart

Understand the work completed or pushed back to the backlog in each sprint. This helps you determine if your team is overcommitting or if there is excessive scope creep.

Hide this information

Sprint Report Simple GUI 2

Closed Sprint, ended by Lilit Grigoryan 26/Aug/14 2:00 AM - 01/Sep/14 2:25 PM Linked pages View Simple GUI 2 in Issue Navigator

Status Report

Completed Issues View in Issue Navigator

Key	Summary	Issue Type	Priority	Status	Story Points (16)
NXB-61	Presentation	Story	Major	RESOLVED	10
NXB-66	User wants to be able to select image files from a file-open	Story	Major	CLOSED	4

Figure: Report with Burndown Chart

Integration

3 Recap

4 Jira Agile
- Product Backlog
- Sprint Backlog
- Burndown Chart

5 Integration

Integration

The Atlassian tools are highly integrable

- with each other
- with other development tools

Starting work from Jira

Jira Agile offers ”plan“ and ”work“ views. To start implementing a task,

- select a ticket from the work view
- click ”Development -> Create branch“
- (optionally: Check branch creation in Stash and Bamboo)
- check out your new branch in your development environment and implement the feature

An equivalent command for manual branching is

```
$ git checkout -b MYPR-42-Task-title-from-Jira
$ # do something
$ git push origin MYPR-42-Task-title-from-Jira
```

Testing and integrating your work

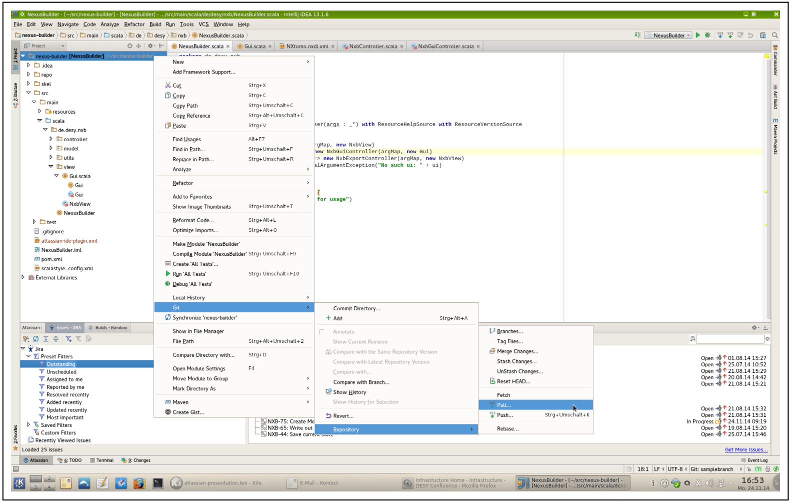
As soon as a subtask is implemented:

- Push new code to *origin*
- Bamboo should detect the commit and start building your branch

Once you are confident about your changes:

- Create pull request
- Have ticket closed

Integration with IntelliJ


NexusBuilder - [~/src/nexus-builder] - [NexusBuilder] - .../src/main/scala/de/desy/nxb/NexusBuilder.scala - IntelliJ IDEA 13.1.6
File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help
nexus-builder src main scala de desy nxb NexusBuilder.scala
NexusBuilder.scala Gui.scala NXtomo.nxdl.xml NxbController.scala NxbGuiController.scala
Project
nexus-builder [NexusBuilder] (~/src/nexus-builder)
.idea
repo
skel
src
main
resources
scala
de.desy.nxb
controller
model
utils
view
Gui.scala
Gui
Gui
NxbView
NexusBuilder
test
.gitignore
atlassian-ide-plugin.xml
NexusBuilder.iml
pom.xml
scalastyle_config.xml
External Libraries
New
Add Framework Support...
Cut Strg+X
Copy Strg+C
Copy Path Strg+Umschalt+C
Copy Reference Strg+Alt+Umschalt+C
Paste Strg+V
Find Usages Alt+F7
Find in Path... Strg+Umschalt+F
Replace in Path... Strg+Umschalt+R
Analyze
Refactor
Add to Favorites
Show Image Thumbnails Strg+Umschalt+T
Reformat Code... Strg+Alt+L
Optimize Imports... Strg+Alt+O
Make Module 'NexusBuilder'
Compile Module 'NexusBuilder' Strg+Umschalt+F9
Create 'All Tests'...
Run 'All Tests' Strg+Umschalt+F10
Debug 'All Tests'
Local History
Git
Synchronize 'nexus-builder'
Show in File Manager
File Path Strg+Alt+Umschalt+2
Compare Directory with... Strg+D
Open Module Settings F4
Move Module to Group
Mark Directory As
Maven
Create Gist...
Commit Directory...
Add Strg+Alt+A
Annotate
Show Current Revision
Compare with the Same Repository Version
Compare with Latest Repository Version
Compare with...
Compare with Branch...
Show History
Show History for Selection
Revert...
Repository
Branches...
Tag Files...
Merge Changes...
Stash Changes...
UnStash Changes...
Reset HEAD...
Fetch
Pull...
Push... Strg+Umschalt+K
Rebase...
Atlassian: Issues - JIRA Builds - Bamboo
Jira
Preset Filters
Outstanding
Unscheduled
Assigned to me
Reported by me
Resolved recently
Added recently
Updated recently
Most important
Saved Filters
Custom Filters
Recently Viewed Issues
Loaded 25 issues
Get More Issues...
Atlassian 6: TODO Terminal 9: Changes
Event Log
18:1 LF UTF-8 Git: samplebranch
atlassian-presentation.tex - Kile
E-Mail - Kontact
Infrastructure Home - Infrastructure - DESY Confluence - Mozilla Firefox
NexusBuilder - [~/src/nexus-builder] - [NexusBuilder] - .../src/main/scala/de/de
16:53
Mo, 24.11.14
Commander
Ant Build
Maven Projects
1: Project
7: Structure
2: Favorites

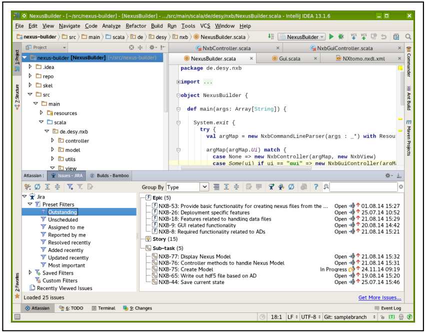
```
package de.desy.nxb

ser(args : _*) with ResourceHelpSource with ResourceVersionSource

rgMap, new NxbView)
new NxbGuiController(argMap, new Gui)
=> new NxbExportController(argMap, new NxbView)
alArgumentException("No such ui: " + ui)

{
for usage")
```

```
NXB-75: Create Mo
NXB-65: Write out
NXB-44: Save curre state
```

```
Open 01.08.14 15:27
Open 25.07.14 10:52
Open 21.08.14 15:29
Open 20.08.14 14:42
Open 21.08.14 15:21

Open 21.08.14 15:32
Open 21.08.14 15:31
In Progress 24.11.14 09:19
Open 19.08.14 15:20
Open 25.07.14 15:46
```

Figure: Stash is accessed like any git repository

Integration with IntelliJ

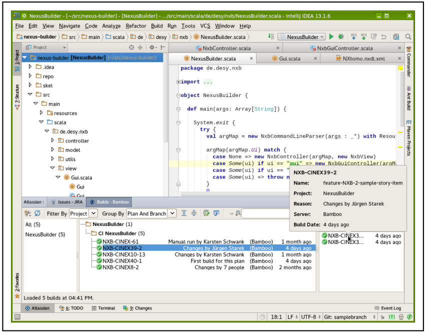


```
package de.desy.nxb

import ...

object NexusBuilder {

  def main(args: Array[String]) {

    System.exit {
      try {
        val argMap = new NxbCommandLineParser(args : _*) with Resou

        argMap(argMap.Ui) match {
          case None => new NxbController(argMap, new NxbView)
          case Some(ui) if ui == "gui" => new NxbGuiController(argM
```

```
Epic (5)
  NXB-53: Provide basic functionality for creating nexus files from the ...  Open  01.08.14 15:27
  NXB-26: Deployment specific features                                       Open  25.07.14 10:52
  NXB-18: Features related to handling data files                            Open  21.08.14 15:29
  NXB-9: GUI related functionality                                           Open  20.08.14 14:42
  NXB-8: Required functionality related to ADs                               Open  21.08.14 15:21
Story (15)
Sub-task (5)
  NXB-77: Display Nexus Model                                                Open  21.08.14 15:32
  NXB-76: Controller methods to handle Nexus Model                           Open  21.08.14 15:31
  NXB-75: Create Model                                                In Progress  24.11.14 09:19
  NXB-65: Write out hdf5 file based on AD                                    Open  19.08.14 15:20
  NXB-44: Save current state                                                 Open  25.07.14 15:46
Loaded 25 issues
```

Figure: There is a dedicated plugin to work with Jira issues...

Integration with IntelliJ



```
package de.desy.nxb

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          case None => new NxbController(argMap, new NxbView)
          case Some(ui) if ui == "gui" => new NxbGuiController(argM
          case Some(ui) if ui == "
          case Some(ui) => throw n
        }
        0
```

NXB-CINEX39-2

Name:	feature-NXB-2-sample-story-item
Project:	NexusBuilder
Reason:	Changes by Jürgen Starek
Server:	Bamboo
Build Date:	4 days ago

All (5)
NexusBuilder (5)

NexusBuilder (1)
CI NexusBuilder (5)

NXB-CINEX-61	Manual run by Karsten Schwank	(Bamboo)	1 month ago
NXB-CINEX39-2	Changes by Jürgen Starek	(Bamboo)	4 days ago
NXB-CINEX10-13	Changes by Karsten Schwank	(Bamboo)	1 month ago
NXB-CINEX40-1	First build for this plan	(Bamboo)	4 days ago
NXB-CINEX8-2	Changes by 7 people	(Bamboo)	2 months ago

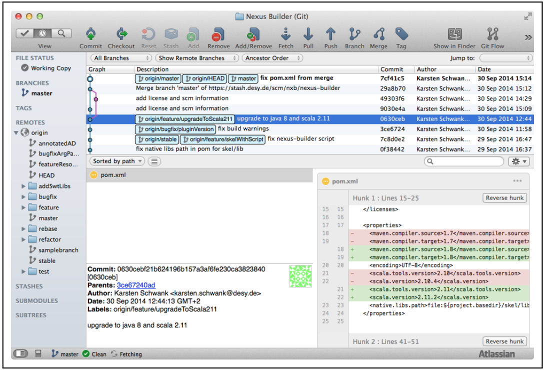
NXB-CINEX3...	4 days ago
NXB-CINEX3...	4 days ago

Loaded 5 builds at 04:41 PM.

Figure: ...and monitor Bamboo stati

SourceTree

Comfortable git environment for Mac and Windows



Graph	Description	Commit	Author	Date
	origin/master origin/HEAD master **fix pom.xml from merge**	**7cf41c5**	**Karsten Schwan...**	**30 Sep 2014 15:14**
	Merge branch 'master' of https://stash.desy.de/scm/nxb/nexus-builder	29a8b70	Karsten Schwank...	30 Sep 2014 15:12
	add license and scm information	49303f6	Karsten Schwank...	30 Sep 2014 14:29
	add license and scm information	9030e4a	Karsten Schwank...	30 Sep 2014 15:09
	origin/feature/upgradeToScala211 upgrade to java 8 and scala 2.11	0630ceb	Karsten Schwank...	30 Sep 2014 12:44
	origin/bugfix/pluginVersion fix build warnings	3ce6724	Karsten Schwank...	30 Sep 2014 11:58
	origin/stable origin/feature/skelWithScript fix nexus-builder script	7c8d0e2	Karsten Schwank...	29 Sep 2014 16:47
	fix native libs path in pom for skel/lib	0f38442	Karsten Schwank...	29 Sep 2014 16:37

Commit: 0630cebf21b624196b157a3af6fe230ca3823840 [0630ceb]
Parents: 3ce67240ad
Author: Karsten Schwank <karsten.schwank@desy.de>
Date: 30 Sep 2014 12:44:13 GMT+2
Labels: origin/feature/upgradeToScala211

upgrade to java 8 and scala 2.11

pom.xml

Hunk 1 : Lines 15-25 Reverse hunk

```
      </licenses>

      <properties>
-         <maven.compiler.source>1.7</maven.compiler.source>
-         <maven.compiler.target>1.7</maven.compiler.target>
+         <maven.compiler.source>1.8</maven.compiler.source>
+         <maven.compiler.target>1.8</maven.compiler.target>
          <encoding>UTF-8</encoding>
-         <scala.tools.version>2.10</scala.tools.version>
-         <scala.version>2.10.4</scala.version>
+         <scala.tools.version>2.11</scala.tools.version>
+         <scala.version>2.11.2</scala.version>
          <native.libs.path>file:${project.basedir}/skel/lit
      </properties>

```

Hunk 2 : Lines 41-51 Reverse hunk

Figure: Atlassian SourceTree

Questions?