CTIP를 위한 환경 구축

REDMINE, GIT, JUNIT

Subject : Software Modeling

Professor : 유준범

T1 | 201111341 김성민

201111379 이한빈

201111397 황정아

OUTLINE

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Bug Tracker | Redmine | Installation

II. GIT

Revision Control | GIT | Installation | GitHub

III. JUnit

Junit? | How to use? | Junit Assert Class | Junit Annotation

IV. CTIP

CTIP? | Setting

I. Redmine

Bugtracker | Redmine | Installation

I. Redmine

Bugtracker?

- ✓ 프로젝트 단위로 Issue 관리
- ✓ 사용자 관리 (설정, 권한 등)
- ✓ E-mail 알림 기능
- ✓ Issue 번호로 소스 버전 관리 시스템과 연동

I. Redmine

Bugtracker?

- ✓ Mantis (2000)
- ✓ Jira (2002)
- ✓ Redmine (2006)

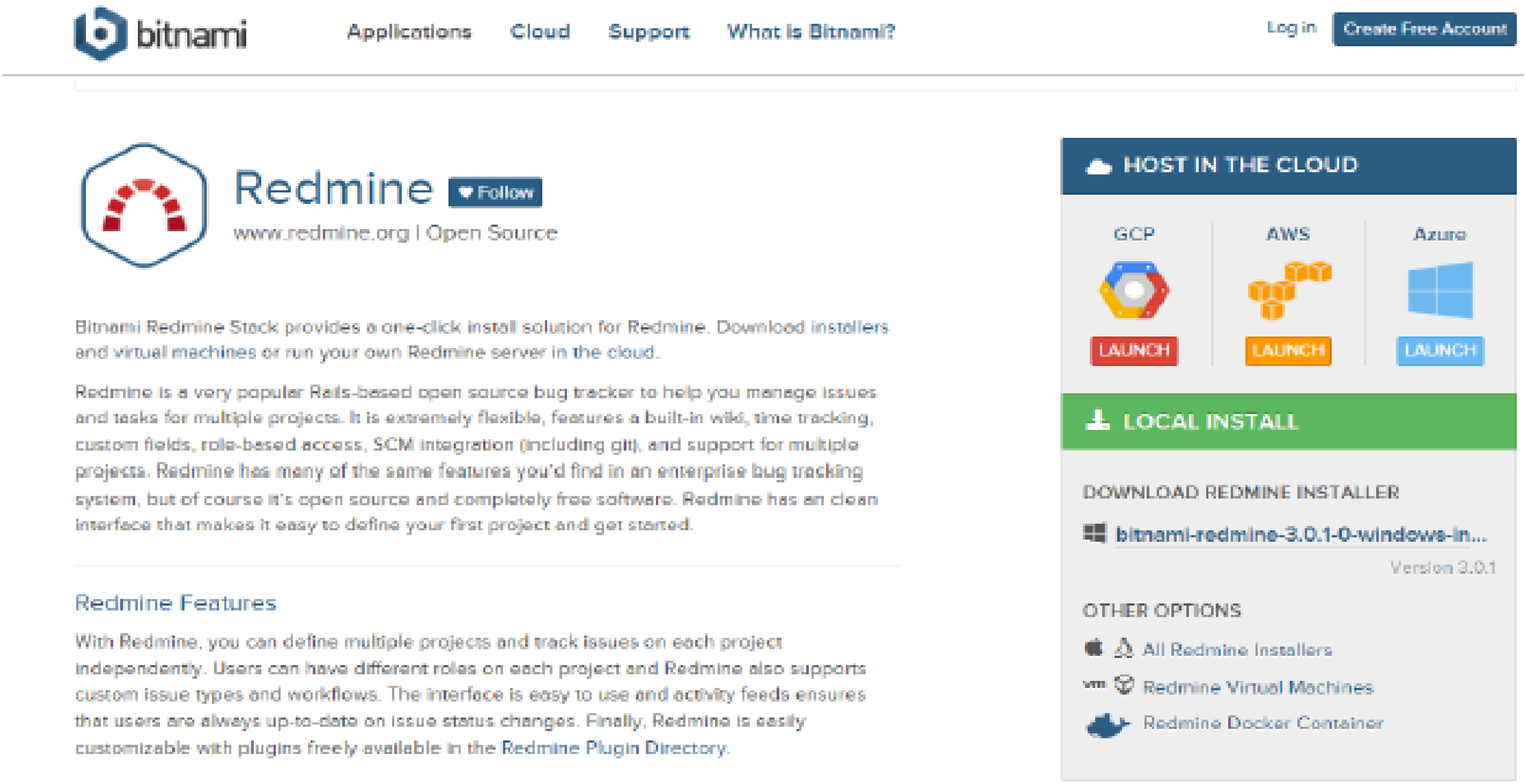
I. Redmine

Redmine?

- ✓ 많은 프로젝트를 관리
- ✓ Time tracking
- ✓ 웹 기반
- ✓ Git와 연동
- ✓ Role-based access 제어

I. Redmine

How to Install?


bitnami
Applications
Cloud
Support
What is Bitnami?
Log in
Create Free Account
Follow
HOST IN THE CLOUD
GCP
AWS
Azure
LAUNCH
LAUNCH
LAUNCH
LOCAL INSTALL

Redmine

www.redmine.org | Open Source

Bitnami Redmine Stack provides a one-click install solution for Redmine. Download installers and virtual machines or run your own Redmine server in the cloud.

Redmine is a very popular Rails-based open source bug tracker to help you manage issues and tasks for multiple projects. It is extremely flexible, features a built-in wiki, time tracking, custom fields, role-based access, SCM integration (including git), and support for multiple projects. Redmine has many of the same features you'd find in an enterprise bug tracking system, but of course it's open source and completely free software. Redmine has an clean interface that makes it easy to define your first project and get started.

Redmine Features

With Redmine, you can define multiple projects and track issues on each project independently. Users can have different roles on each project and Redmine also supports custom issue types and workflows. The interface is easy to use and activity feeds ensures that users are always up-to-date on issue status changes. Finally, Redmine is easily customizable with plugins freely available in the Redmine Plugin Directory.

DOWNLOAD REDMINE INSTALLER

bitnami-redmine-3.0.1-0-windows-in...

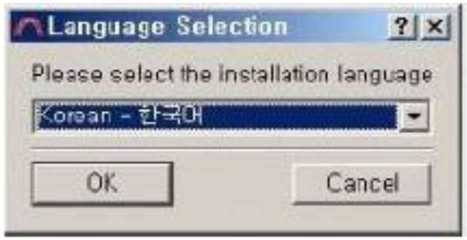
Version 3.0.1

OTHER OPTIONS

- All Redmine Installers
- Redmine Virtual Machines
- Redmine Docker Container

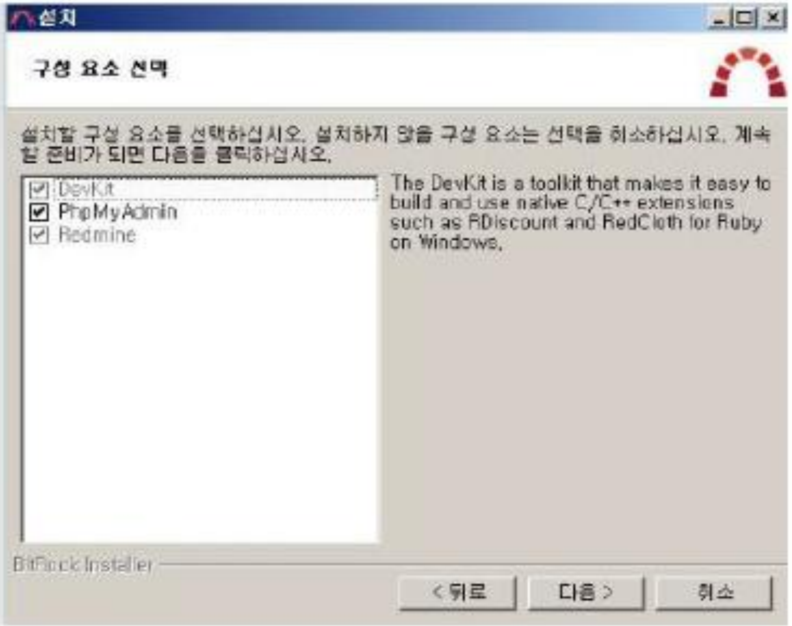
I. Redmine

How to Install?


Language Selection
OK
Cancel

Please select the installation language

Korean - 한국어

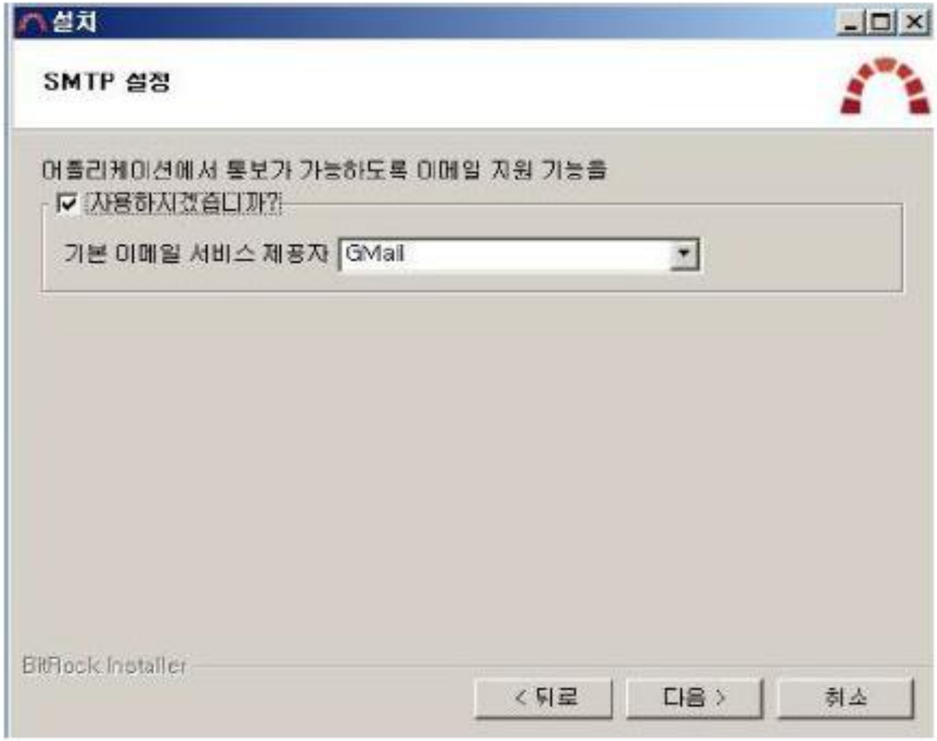

설치
BitRock Installer
< 뒤로
다음 >
취소

구성 요소 선택

설치할 구성 요소를 선택하십시오. 설치하지 않을 구성 요소는 선택을 취소하십시오. 계속할 준비가 되면 다음을 클릭하십시오.

- ☑ DevKit
- ☑ PhpMyAdmin
- ☑ Redmine

The DevKit is a toolkit that makes it easy to build and use native C/C++ extensions such as RDiscount and RedCloth for Ruby on Windows.


설치
BitRock Installer
< 뒤로
다음 >
취소

SMTP 설정

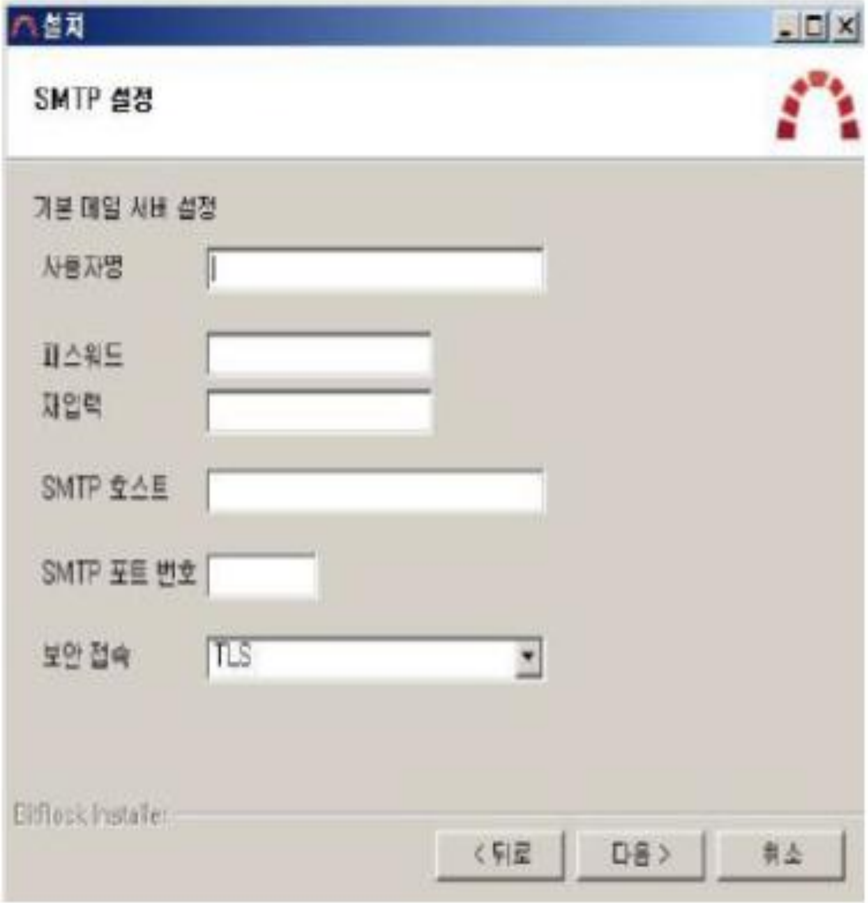
어플리케이션에서 통보가 가능하도록 이메일 지원 기능을

☑ 사용하시겠습니까?

기본 이메일 서비스 제공자: GMail

I. Redmine

How to Install?



설치

SMTP 설정

기본 메일 서버 설정

사용자명

패스워드

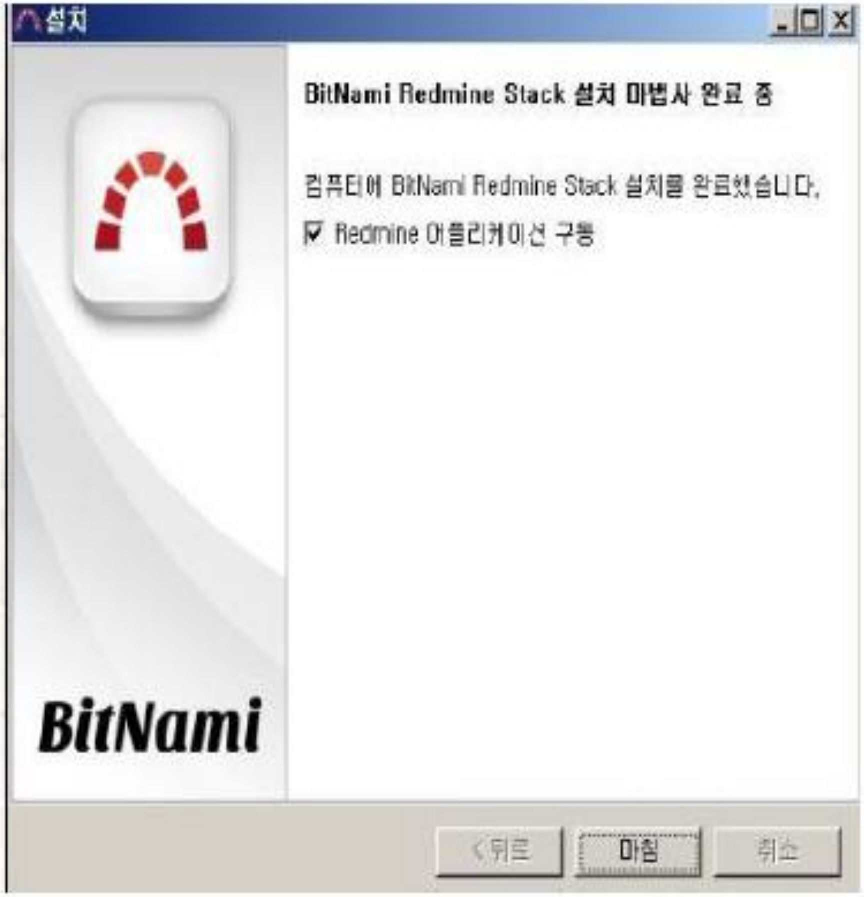
재입력

SMTP 호스트

SMTP 포트 번호

보안 접속: TLS

BitRock Installer



설치

BitNami Redmine Stack 설치 마법사 완료 중

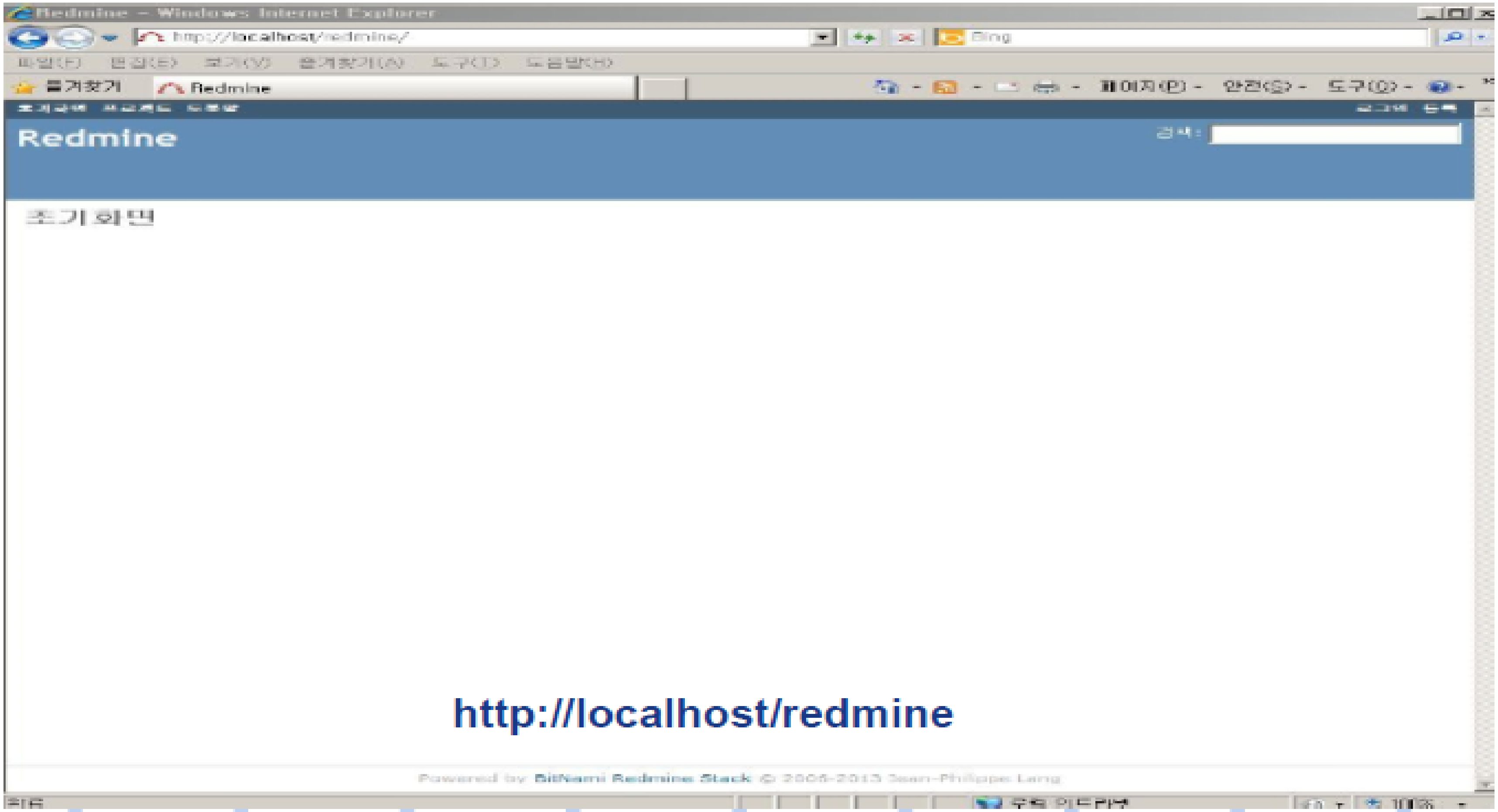
컴퓨터에 BitNami Redmine Stack 설치를 완료했습니다.

☑ Redmine 어플리케이션 구동

BitNami
< 뒤로
마침
취소

I. Redmine

How to Install?


Redmine - Windows Internet Explorer
http://localhost/redmine/
Bing
즐겨찾기
Redmine
페이지(P)
안전(S)
도구(O)

Redmine

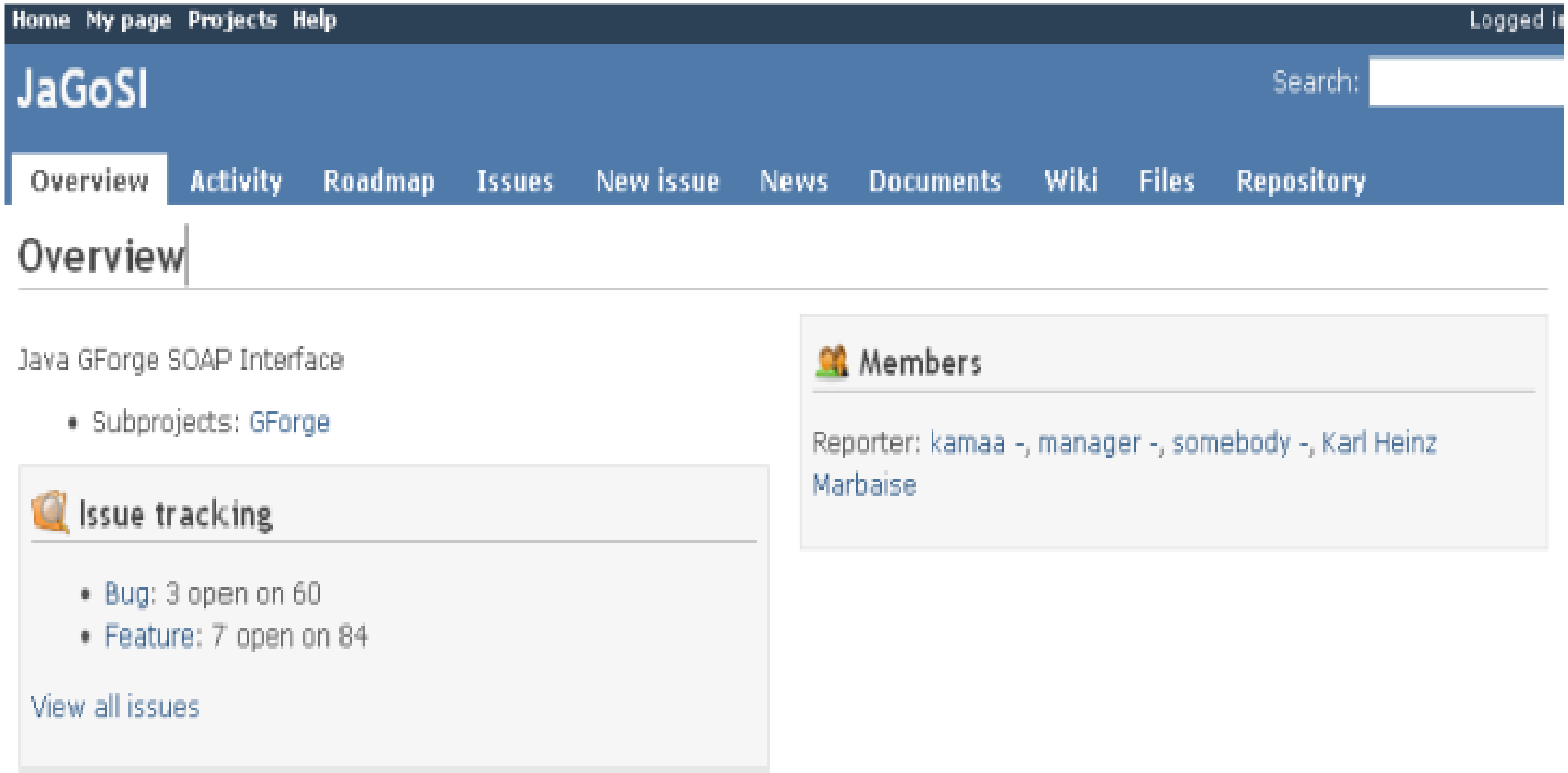
초기화면

Powered by BitNami Redmine Stack © 2006-2013 Jean-Philippe Lang

http://localhost/redmine

I. Redmine

How to Install?



Home My page Projects Help
Logged i
JaGoSI
Search:
Overview Activity Roadmap Issues New issue News Documents Wiki Files Repository

Overview

Java GForge SOAP Interface

- Subprojects: GForge

Issue tracking

- Bug: 3 open on 60
- Feature: 7 open on 84

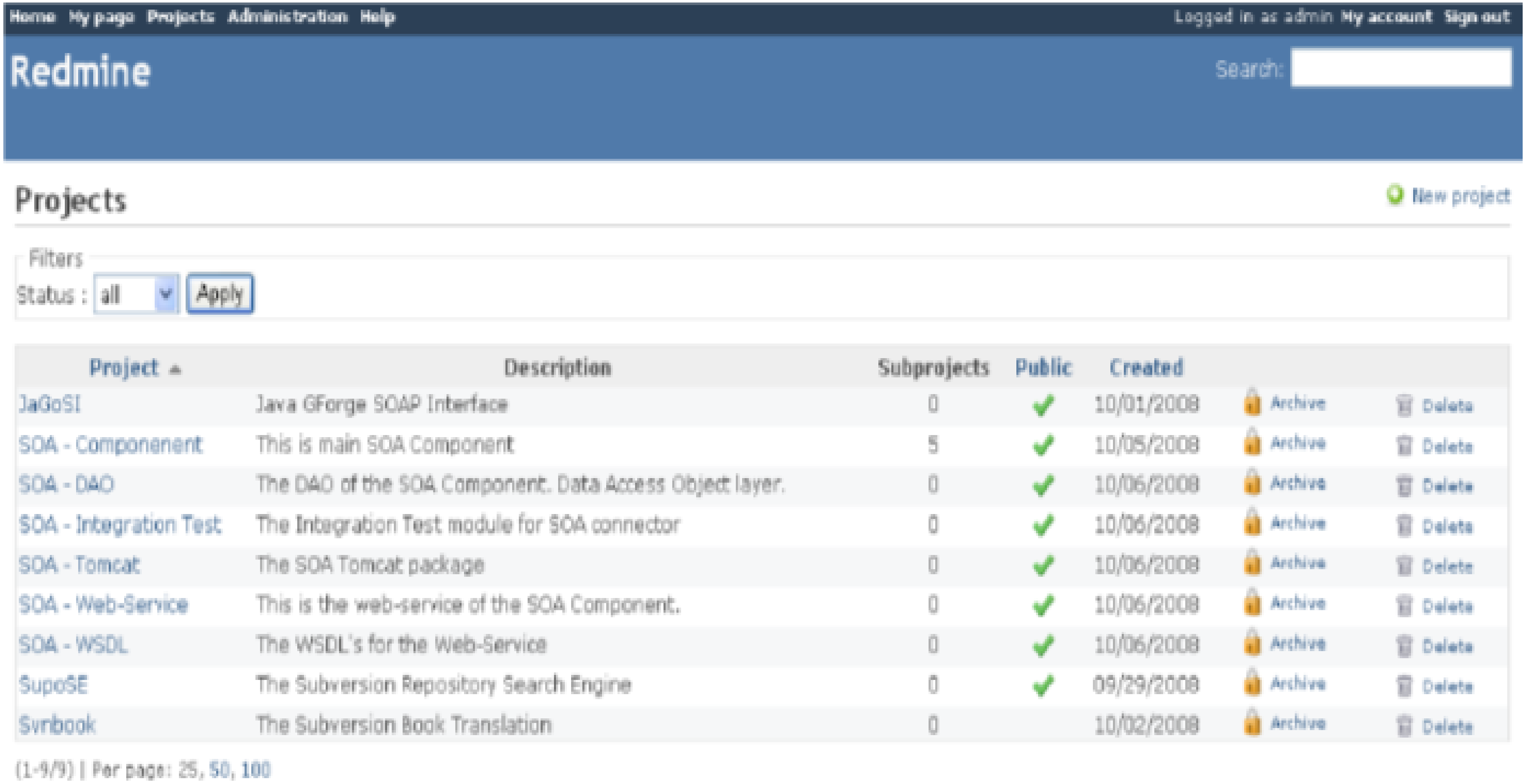
View all issues

Members

Reporter: kamaa -, manager -, somebody -, Karl Heinz Marbaise

I. Redmine

How to Install?


Home My page Projects Administration Help
Logged in as admin My account Sign out
Redmine
Search:
New project
Filters
Status : all
Apply

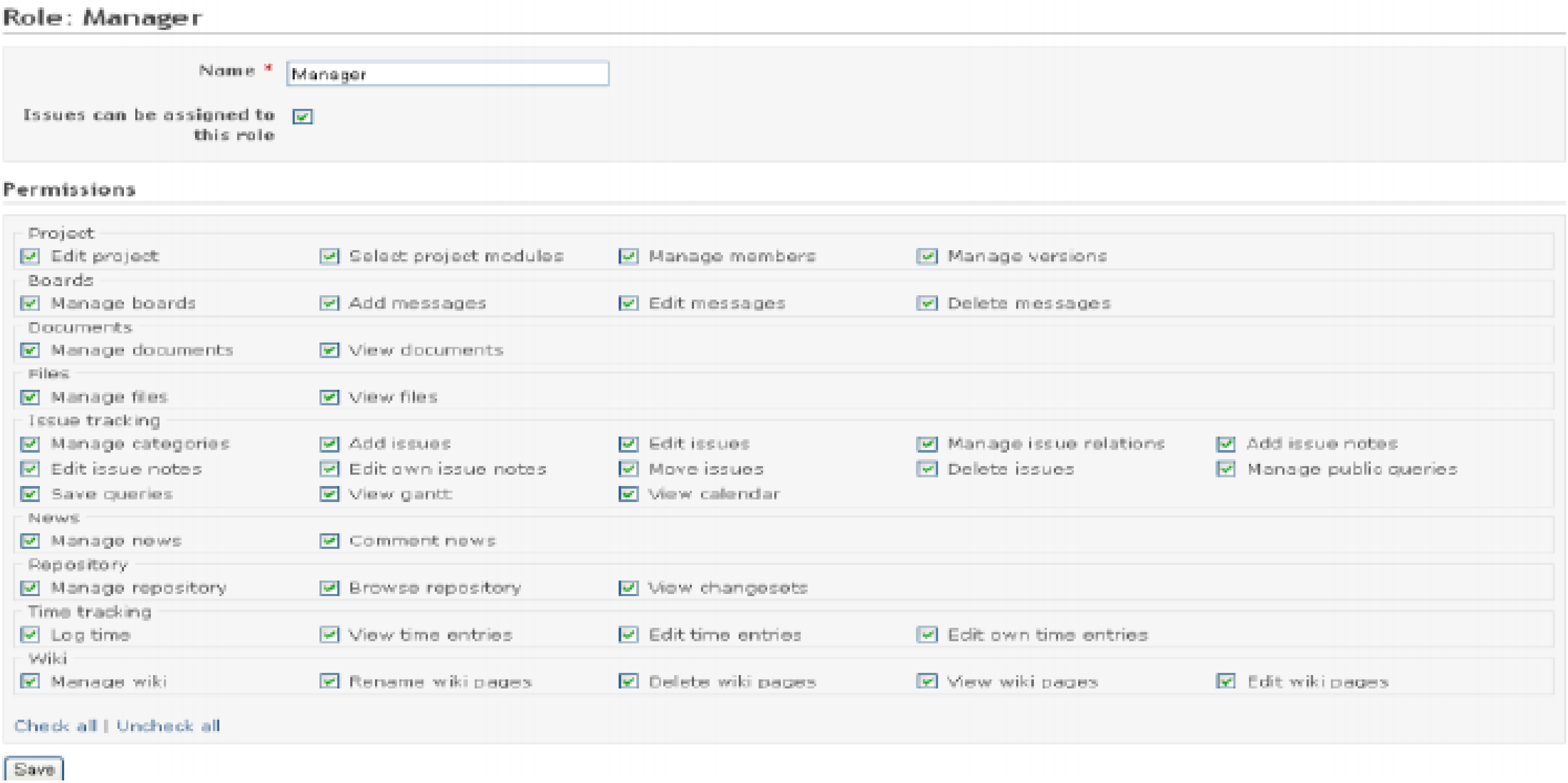
Projects

Project ▲	Description	Subprojects	Public	Created		
JaGoSI	Java GForge SOAP Interface	0	✓	10/01/2008	Archive	Delete
SOA - Componenent	This is main SOA Component	5	✓	10/05/2008	Archive	Delete
SOA - DAO	The DAO of the SOA Component. Data Access Object layer.	0	✓	10/06/2008	Archive	Delete
SOA - Integration Test	The Integration Test module for SOA connector	0	✓	10/06/2008	Archive	Delete
SOA - Tomcat	The SOA Tomcat package	0	✓	10/06/2008	Archive	Delete
SOA - Web-Service	This is the web-service of the SOA Component.	0	✓	10/06/2008	Archive	Delete
SOA - WSDL	The WSDL's for the Web-Service	0	✓	10/06/2008	Archive	Delete
SupoSE	The Subversion Repository Search Engine	0	✓	09/29/2008	Archive	Delete
Svnbook	The Subversion Book Translation	0		10/02/2008	Archive	Delete

(1-9/9) | Per page: 25, 50, 100

I. Redmine

How to Install?



Role: Manager

Name * Manager

Issues can be assigned to this role ☑

Permissions

Project
☑ Edit project
☑ Select project modules
☑ Manage members
☑ Manage versions

Boards
☑ Manage boards
☑ Add messages
☑ Edit messages
☑ Delete messages

Documents
☑ Manage documents
☑ View documents

Files
☑ Manage files
☑ View files

Issue tracking
☑ Manage categories
☑ Add issues
☑ Edit issues
☑ Manage issue relations
☑ Add issue notes
☑ Edit issue notes
☑ Edit own issue notes
☑ Move issues
☑ Delete issues
☑ Manage public queries
☑ Save queries
☑ View gantt
☑ View calendar

News
☑ Manage news
☑ Comment news

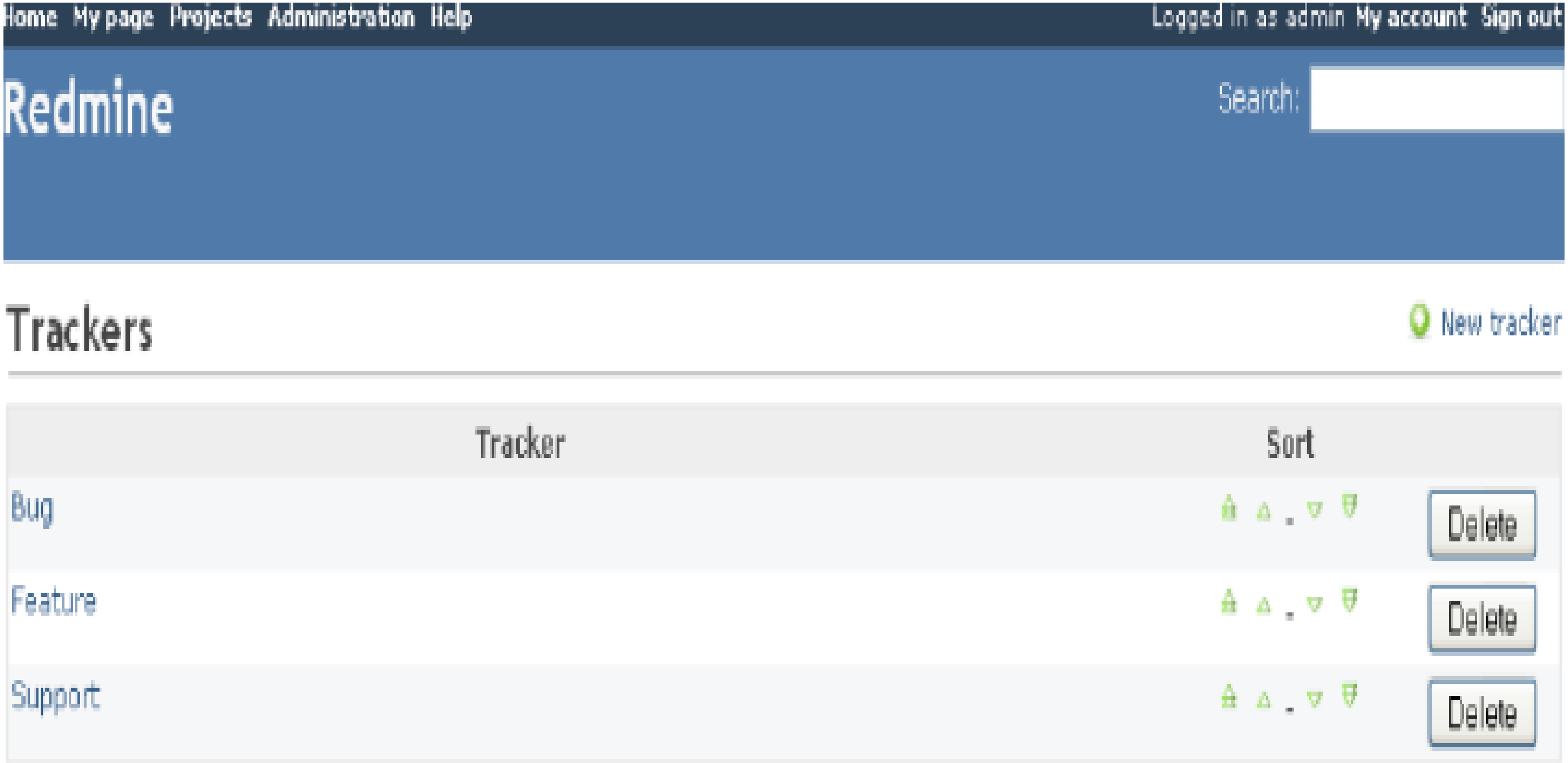
Repository
☑ Manage repository
☑ Browse repository
☑ View changesets

Time tracking
☑ Log time
☑ View time entries
☑ Edit time entries
☑ Edit own time entries

Wiki
☑ Manage wiki
☑ Rename wiki pages
☑ Delete wiki pages
☑ View wiki pages
☑ Edit wiki pages

I. Redmine

How to Install?

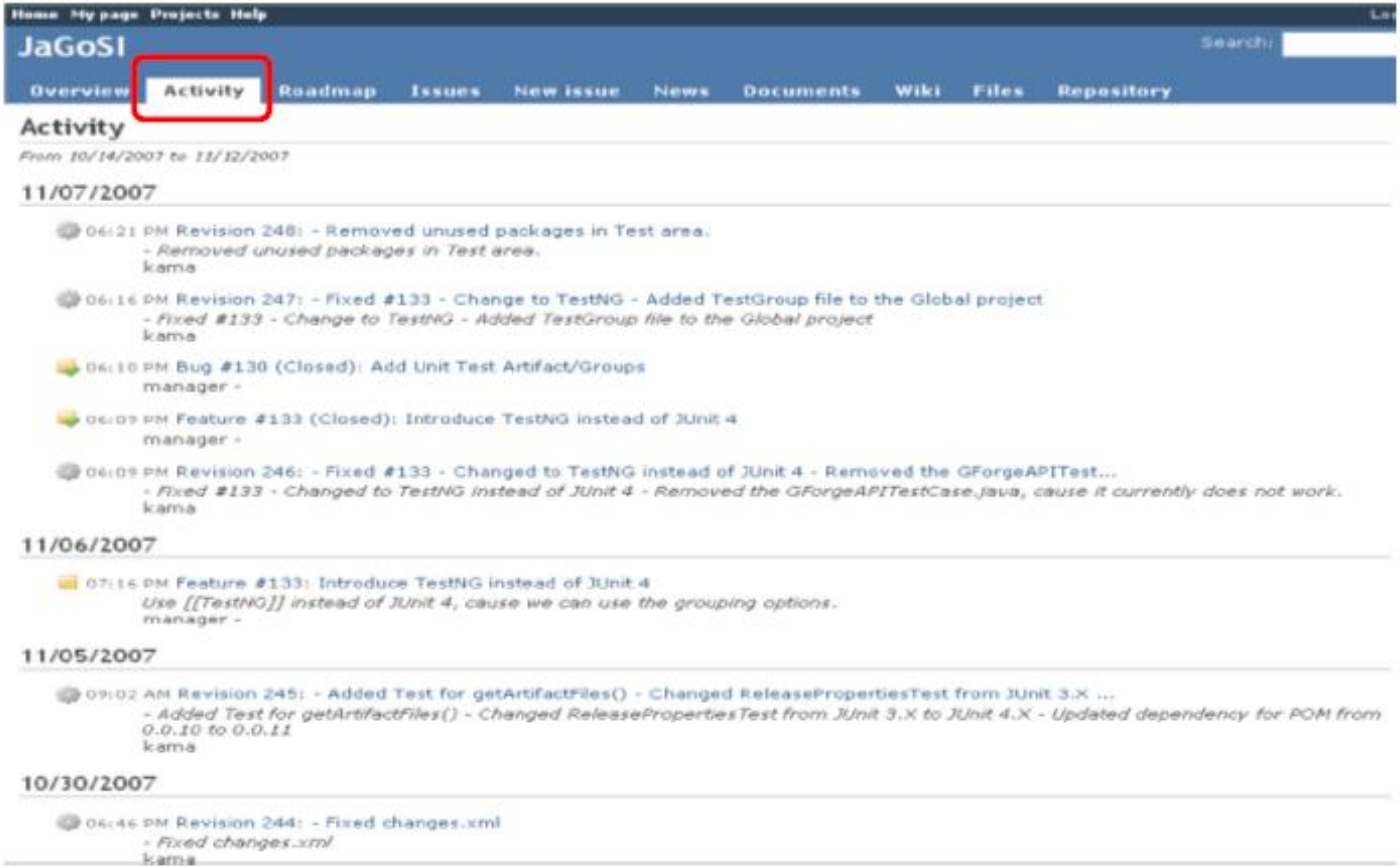

Home My page Projects Administration Help
Logged in as admin My account Sign out
Redmine
Search:
New tracker

Trackers

Tracker	Sort	
Bug	⤒ ▲ ▼ ⤓	Delete
Feature	⤒ ▲ ▼ ⤓	Delete
Support	⤒ ▲ ▼ ⤓	Delete

I. Redmine

How to Install?



Activity

From 10/14/2007 to 11/12/2007

11/07/2007

06:21 PM Revision 248: - Removed unused packages in Test area.
- Removed unused packages in Test area.
kama

06:16 PM Revision 247: - Fixed #133 - Change to TestNG - Added TestGroup file to the Global project
- Fixed #133 - Change to TestNG - Added TestGroup file to the Global project
kama

06:10 PM Bug #130 (Closed): Add Unit Test Artifact/Groups
manager -

06:09 PM Feature #133 (Closed): Introduce TestNG instead of JUnit 4
manager -

06:09 PM Revision 246: - Fixed #133 - Changed to TestNG instead of JUnit 4 - Removed the GForgeAPITest...
- Fixed #133 - Changed to TestNG instead of JUnit 4 - Removed the GForgeAPITestCase.java, cause it currently does not work.
kama

11/06/2007

07:16 PM Feature #133: Introduce TestNG instead of JUnit 4
Use [[TestNG]] instead of JUnit 4, cause we can use the grouping options.
manager -

11/05/2007

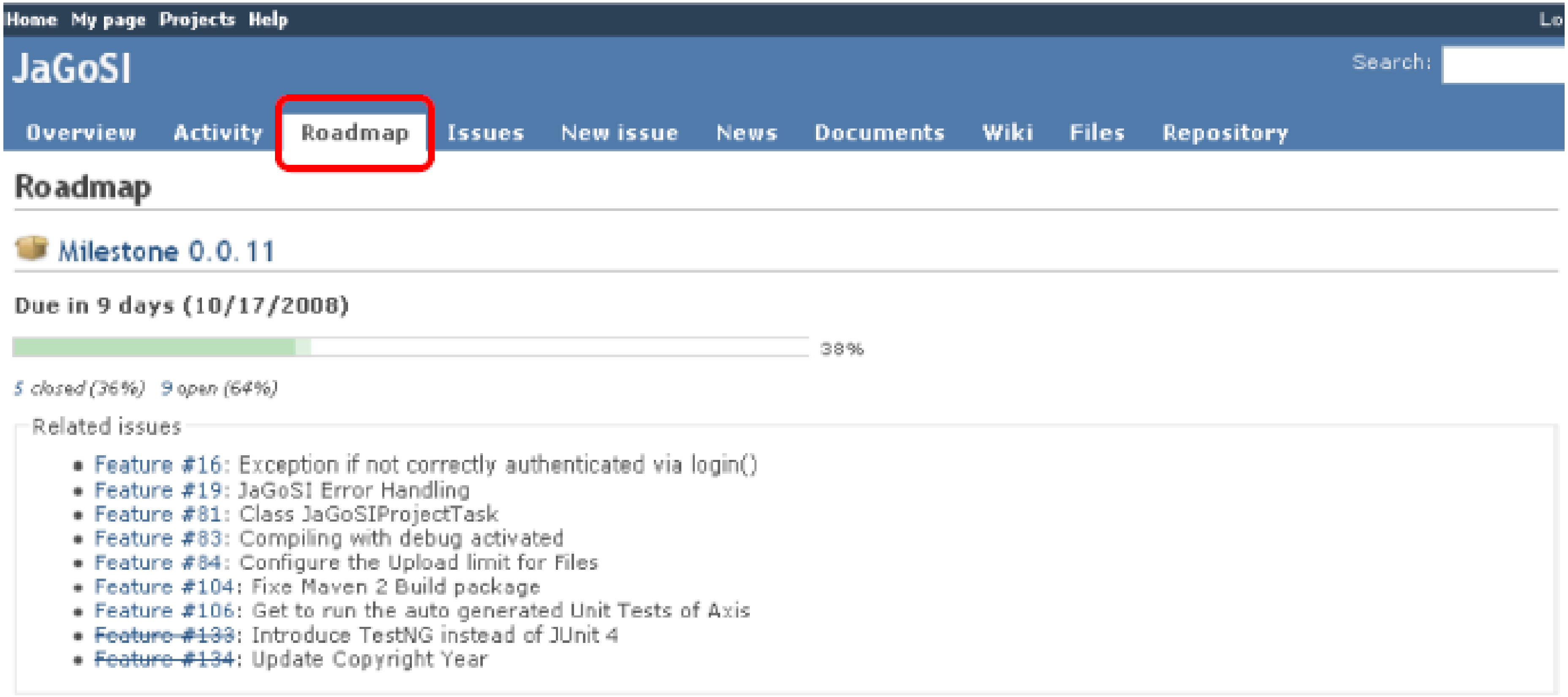
09:02 AM Revision 245: - Added Test for getArtifactFiles() - Changed ReleasePropertiesTest from JUnit 3.X ...
- Added Test for getArtifactFiles() - Changed ReleasePropertiesTest from JUnit 3.X to JUnit 4.X - Updated dependency for POM from 0.0.10 to 0.0.11
kama

10/30/2007

06:46 PM Revision 244: - Fixed changes.xml
- Fixed changes.xml
kama

I. Redmine

How to Install?



Home My page Projects Help
JaGoSI
Search:
Overview
Activity
Roadmap
Issues
New issue
News
Documents
Wiki
Files
Repository

Roadmap

Milestone 0.0.11

Due in 9 days (10/17/2008)

38%

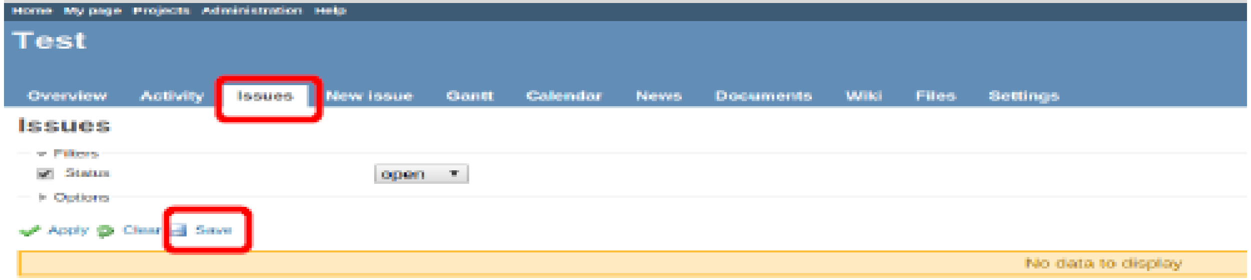
5 closed (36%) 9 open (64%)

Related issues

- Feature #16: Exception if not correctly authenticated via login()
- Feature #19: JaGoSI Error Handling
- Feature #81: Class JaGoSIProjectTask
- Feature #83: Compiling with debug activated
- Feature #84: Configure the Upload limit for Files
- Feature #104: Fixe Maven 2 Build package
- Feature #106: Get to run the auto generated Unit Tests of Axis
- ~~Feature #133~~: Introduce TestNG instead of JUnit 4
- ~~Feature #134~~: Update Copyright Year

I. Redmine

How to Install?

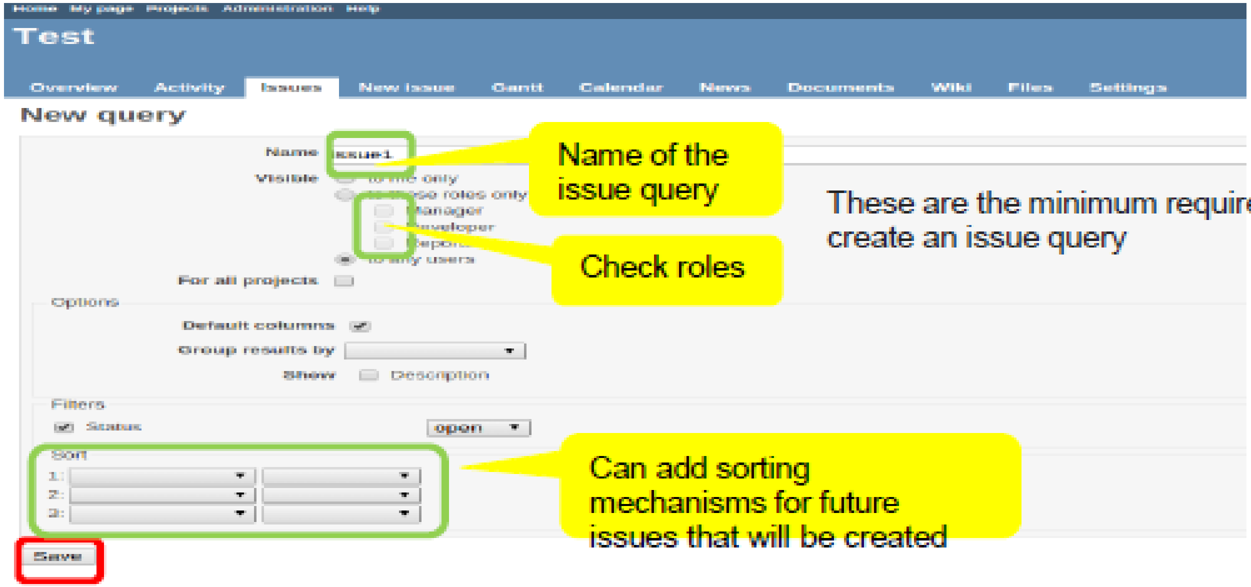

Home My page Projects Administration Help
Test
Overview
Activity
Issues
New issue
Gantt
Calendar
News
Documents
Wiki
Files
Settings
Issues
Filters
Options
Apply
Clear
Save

☑ Status: open

No data to display

What is issue query?
It is like an bulletin board for future issues that will be created.
A background for the **'ticketing system'**

What is ticketing system?
computer software package that manages and maintains lists of issues, as needed by an organization (Wikipedia)


Home My page Projects Administration Help
Test
Overview
Activity
Issues
New issue
Gantt
Calendar
News
Documents
Wiki
Files
Settings
New query
Options
Filters
Sort
Save

Name: issue1

Visible: ○ to me only ○ to these roles only (☐ Manager ☐ Developer ☐ Reporter) ● to any users

For all projects ☐

Default columns ☑

Group results by

Show ☐ Description

☑ Status: open

Name of the issue query

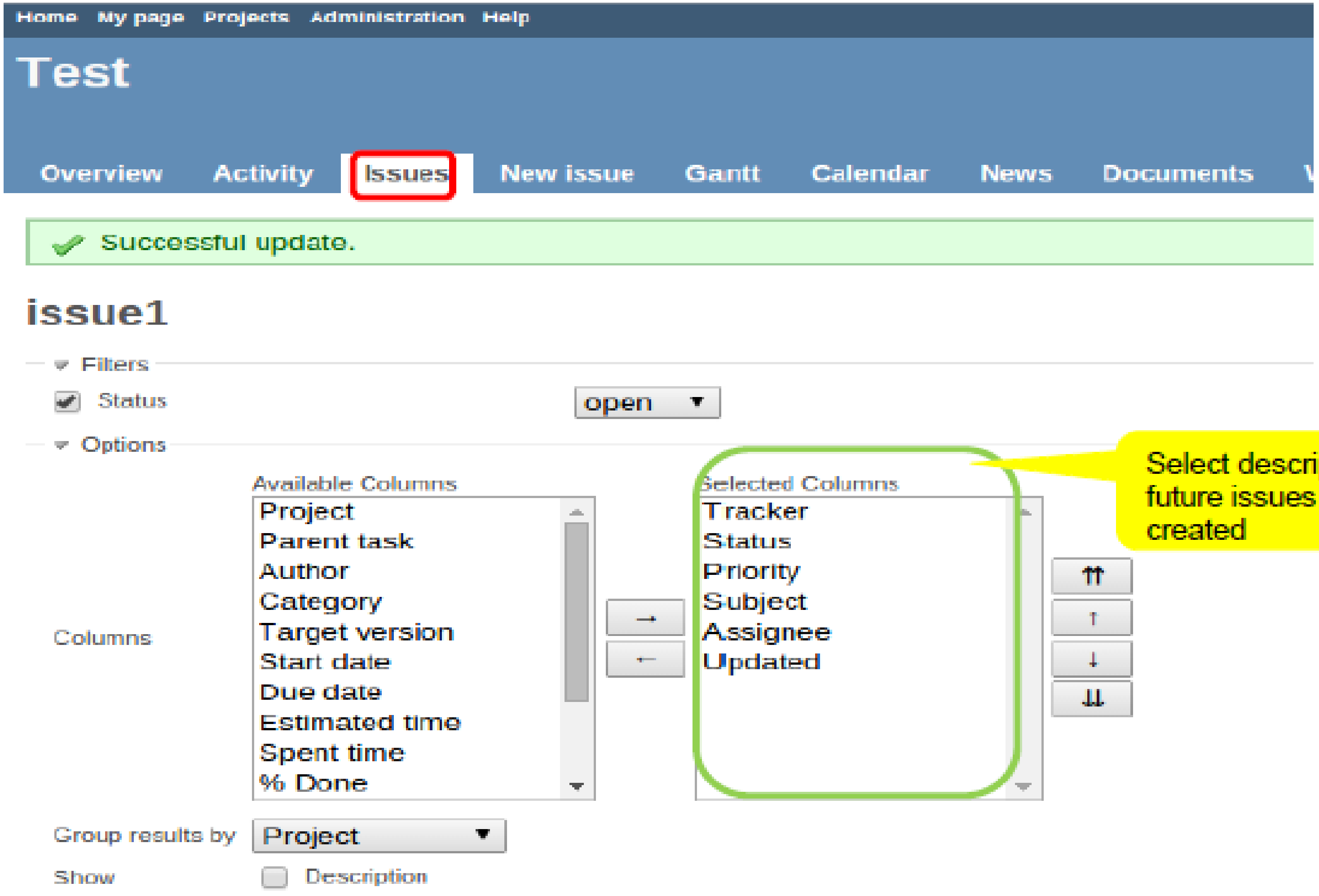
Check roles

Can add sorting mechanisms for future issues that will be created

These are the minimum requirements to create an issue query

I. Redmine

How to Install?



Home My page Projects Administration Help
Test
Overview Activity Issues New issue Gantt Calendar News Documents

✓ Successful update.

issue1

Filters

☑ Status: open

Options

Columns

Available Columns: Project, Parent task, Author, Category, Target version, Start date, Due date, Estimated time, Spent time, % Done

Selected Columns: Tracker, Status, Priority, Subject, Assignee, Updated

→
←
⇈
↑
↓
⇊

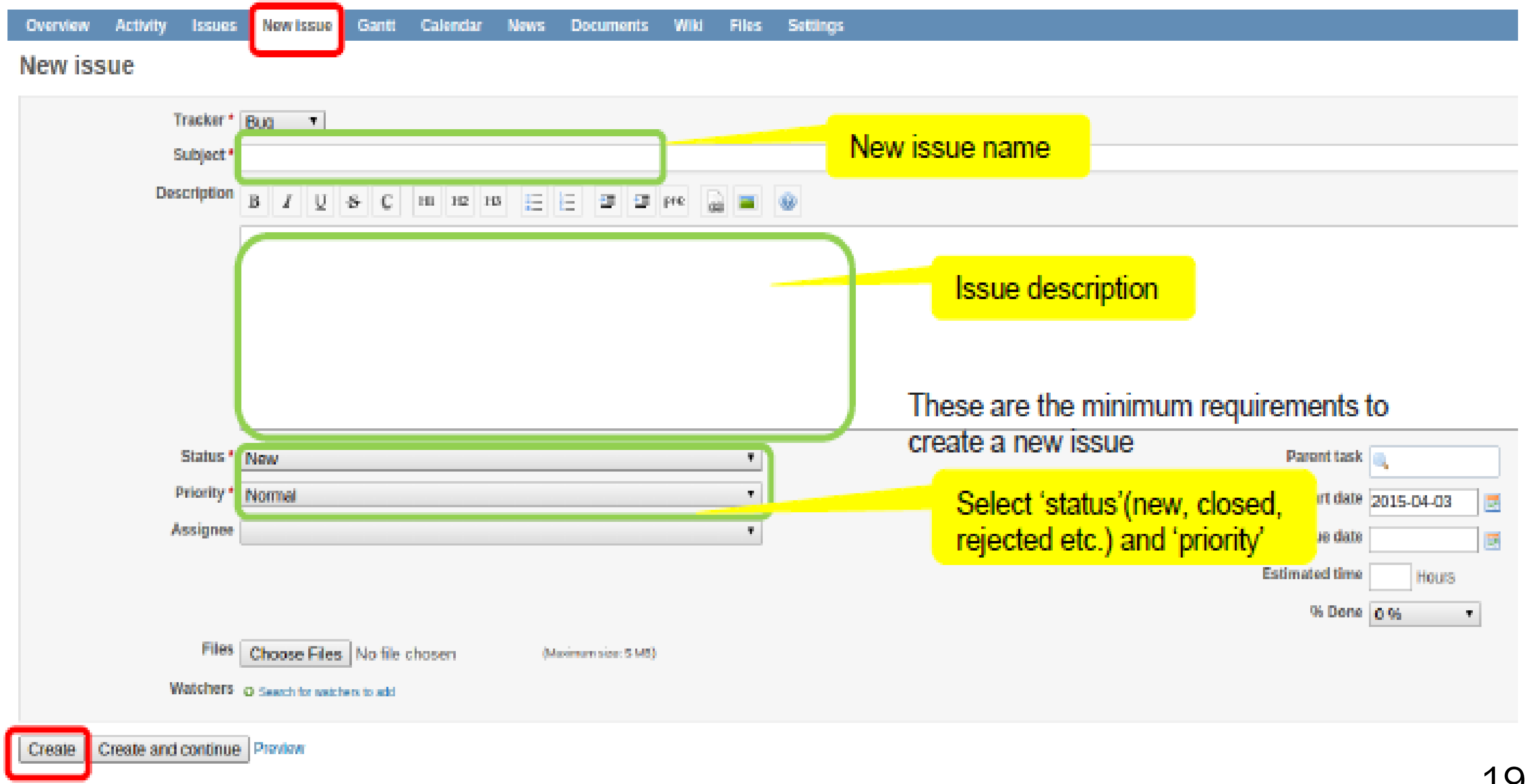
Group results by: Project

Show ☐ Description

Select descriptions of future issues that will be created

I. Redmine

How to Install?


Overview
Activity
Issues
New issue
Gantt
Calendar
News
Documents
Wiki
Files
Settings

New issue

Tracker *: Bug

Subject *:

Description:

Status *: New

Priority *: Normal

Assignee:

Parent task:

Start date: 2015-04-03

Due date:

Estimated time: Hours

% Done: 0 %

Files: Choose Files No file chosen (Maximum size: 5 MB)

Watchers: Search for watchers to add

Create
Create and continue
Preview

New issue name

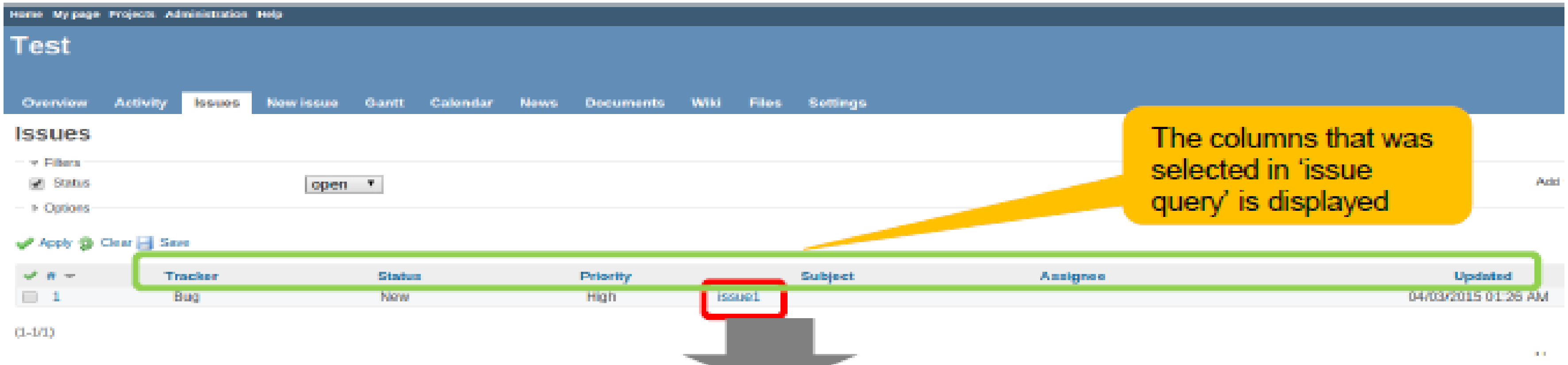
Issue description

These are the minimum requirements to create a new issue

Select ‘status’(new, closed, rejected etc.) and ‘priority’

I. Redmine

How to Install?



Home My page Projects Administration Help
Test
Overview Activity Issues New issue Gantt Calendar News Documents Wiki Files Settings
Apply Clear Save
Add

Issues

Filters

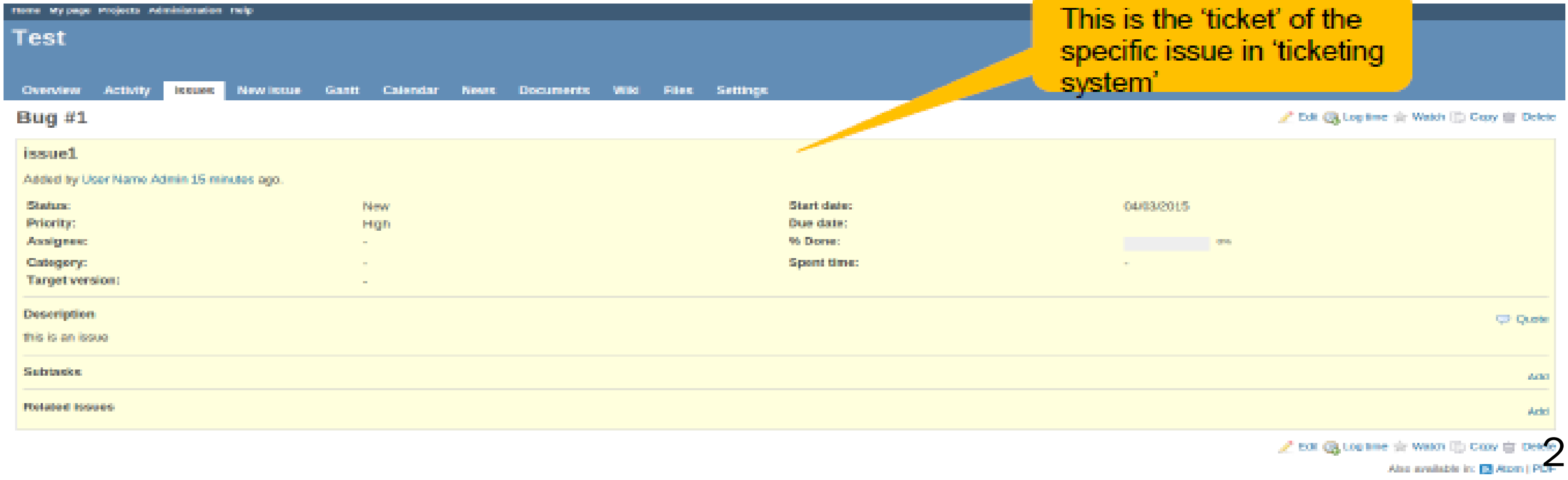
☑ Status open

Options

#	Tracker	Status	Priority	Subject	Assignee	Updated
1	Bug	New	High	issue1		04/03/2015 01:36 AM

(1-1/1)

The columns that was selected in 'issue query' is displayed



Home My page Projects Administration Help
Test
Overview Activity Issues New issue Gantt Calendar News Documents Wiki Files Settings
Edit Log time Watch Copy Delete
Quote
Add
Add
Also available in: Atom | PDF

Bug #1

issue1

Added by User Name Admin 15 minutes ago.

Status:	New	Start date:	04/03/2015
Priority:	High	Due date:	
Assignee:	-	% Done:	0%
Category:	-	Spent time:	-
Target version:	-		

Description

this is an issue

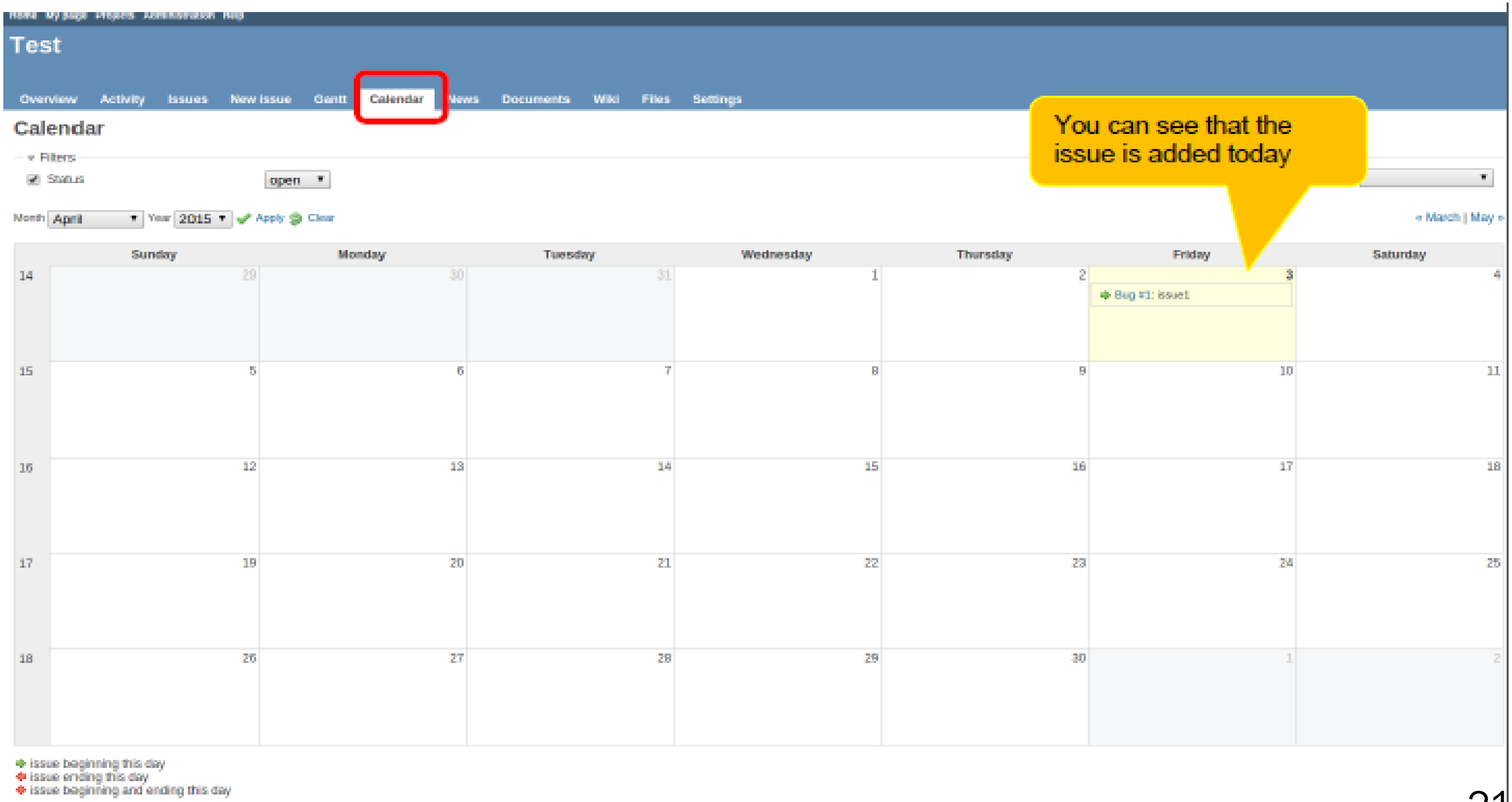
Subtasks

Related issues

This is the 'ticket' of the specific issue in 'ticketing system'

I. Redmine

How to Install?


Overview
Activity
Issues
New issue
Gantt
Calendar
News
Documents
Wiki
Files
Settings

Test

Calendar

Filters

☑ Status open

Month April Year 2015 ✓ Apply Clear

« March | May »

	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
14	29	30	31	1	2	3 Bug #1: issue1	4
15	5	6	7	8	9	10	11
16	12	13	14	15	16	17	18
17	19	20	21	22	23	24	25
18	26	27	28	29	30	1	2

- issue beginning this day
- issue ending this day
- issue beginning and ending this day

You can see that the issue is added today

II. GIT

Revision Control | GIT | Installation | GitHub

II. GIT

Revision Control

- ✓ 버전 관리 시스템
- ✓ 소스코드 관리 시스템
- ✓ 문서 관리 시스템

II. GIT

Revision Control

- ✓ CVS (1990)
- ✓ Apache SVS (2000)
- ✓ Mercurial (2005)
- ✓ Git(2005)

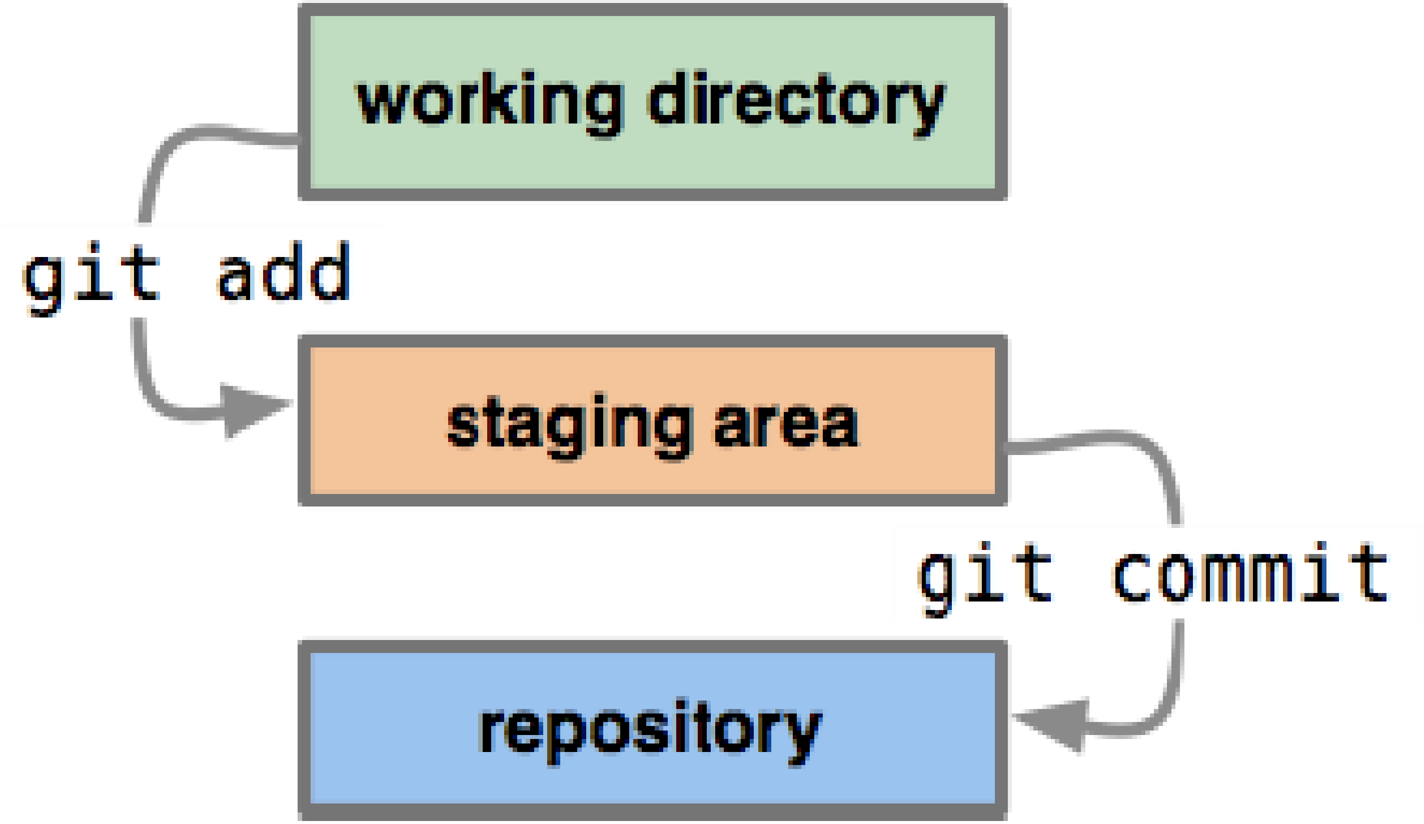
II. GIT

GIT?

- ✓ 버전의 분산 관리
- ✓ 효율성
- ✓ Github
- ✓ Online
- ✓ Branching

II. GIT

Git Staging



working directory

`git add`

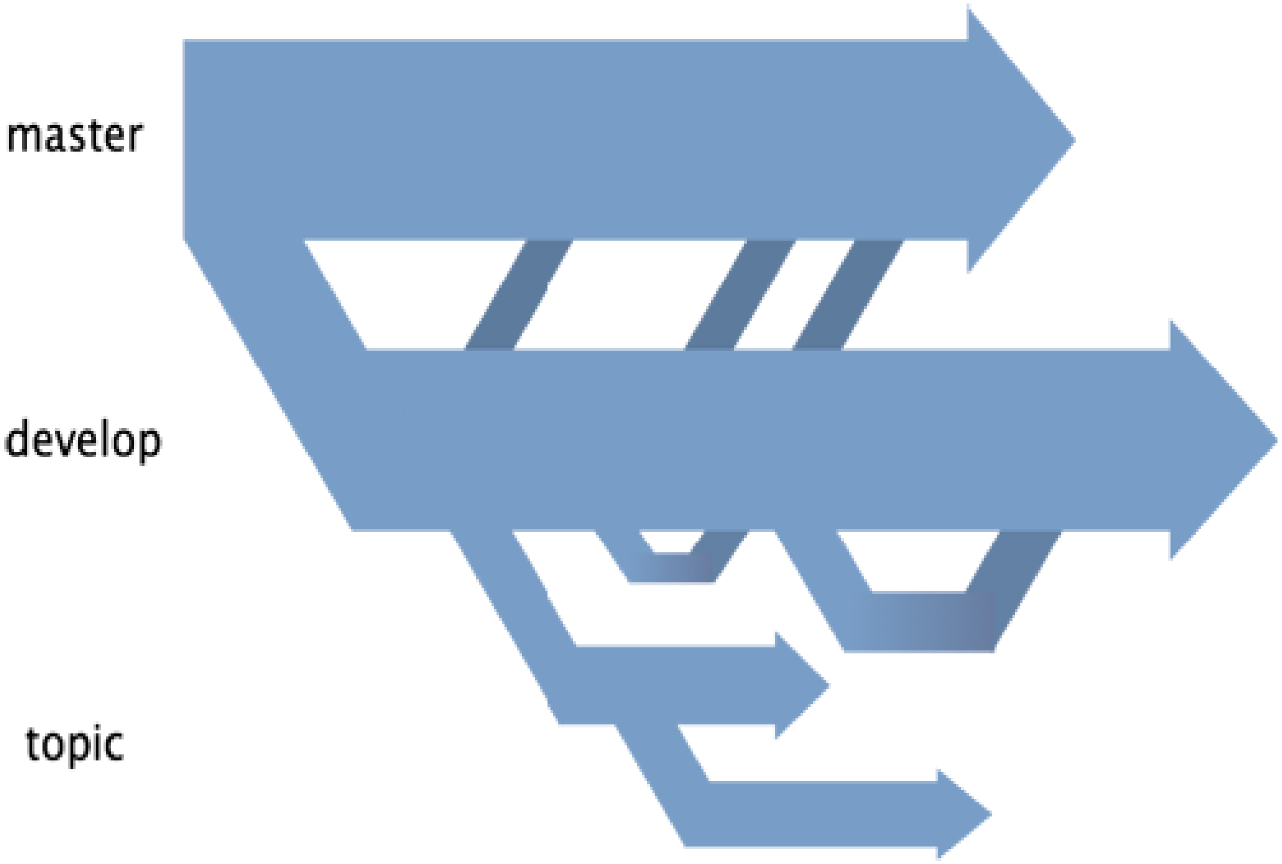
staging area

`git commit`

repository

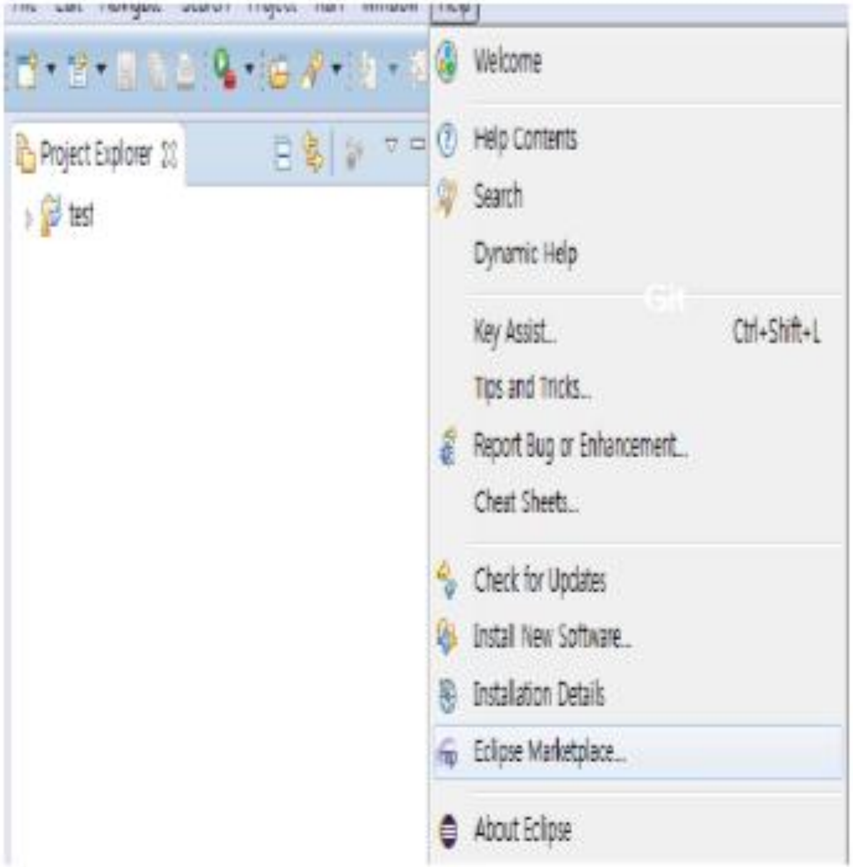
II. GIT

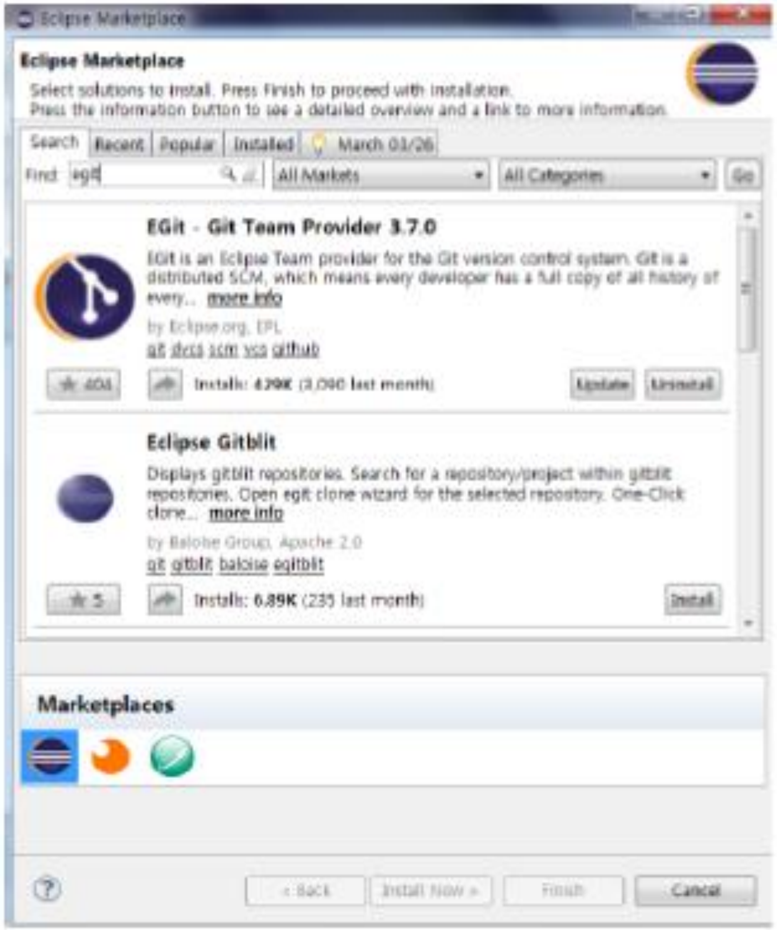
Git Branching


master
develop
topic

II. GIT

How to Install?


Help
Project Explorer
test
Welcome
Help Contents
Search
Dynamic Help
Key Assist... Ctrl+Shift+L
Tips and Tricks...
Report Bug or Enhancement...
Cheat Sheets...
Check for Updates
Install New Software...
Installation Details
Eclipse Marketplace...
About Eclipse


Eclipse Marketplace

Eclipse Marketplace

Select solutions to install. Press Finish to proceed with installation.
Press the information button to see a detailed overview and a link to more information.

Search
Recent
Popular
Installed
March 03/26

Find: egit

All Markets
All Categories
Go

EGit - Git Team Provider 3.7.0

EGit is an Eclipse Team provider for the Git version control system. Git is a distributed SCM, which means every developer has a full copy of all history of every... more info

by Eclipse.org, EPL
git dvcs scm vcs github

Installs: 4.29K (3,090 last month)

404
Update
Uninstall

Eclipse Gitblit

Displays gitblit repositories. Search for a repository/project within gitblit repositories. Open egit clone wizard for the selected repository. One-Click clone... more info

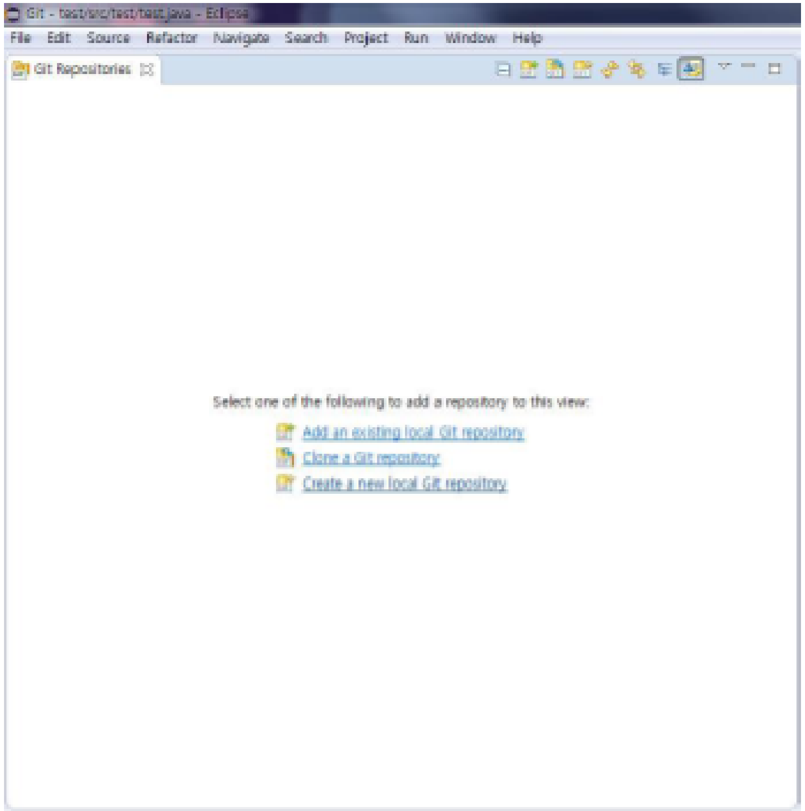
by Baloise Group, Apache 2.0
git gitblit baloise egitblit

Installs: 6.89K (235 last month)

5
Install
Marketplaces
< Back
Install Now >
Finish
Cancel

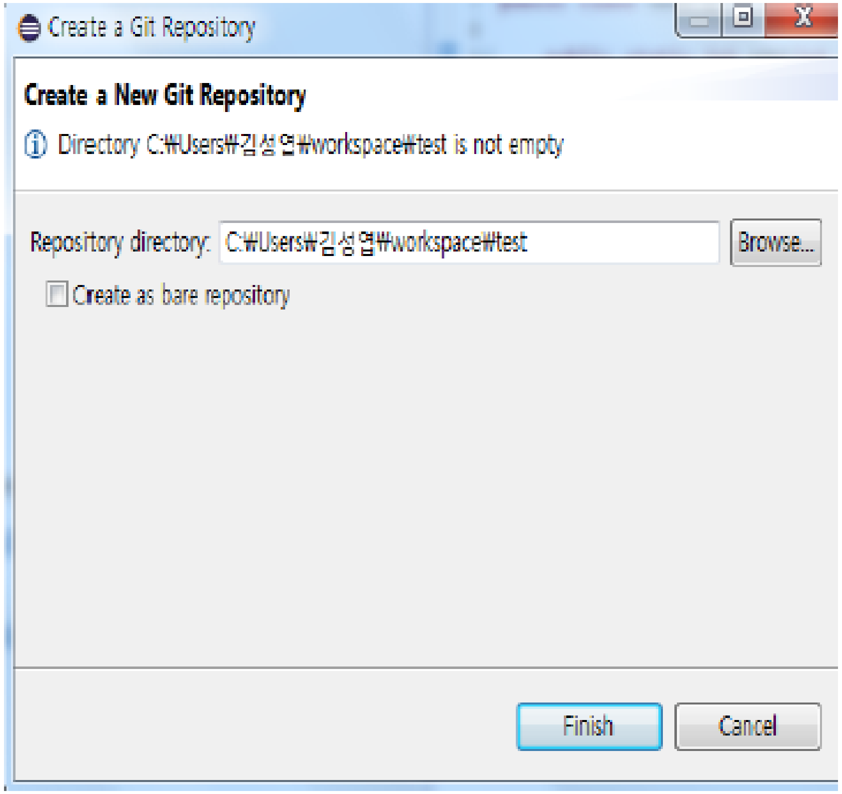
stuff

Setting Up Git


Git - test/src/test/test.java - Eclipse
File Edit Source Refactor Navigate Search Project Run Window Help
Git Repositories

Select one of the following to add a repository to this view:

- Add an existing local Git repository
- Clone a Git repository
- Create a new local Git repository


Create a Git Repository
Browse...
Finish
Cancel

Create a New Git Repository

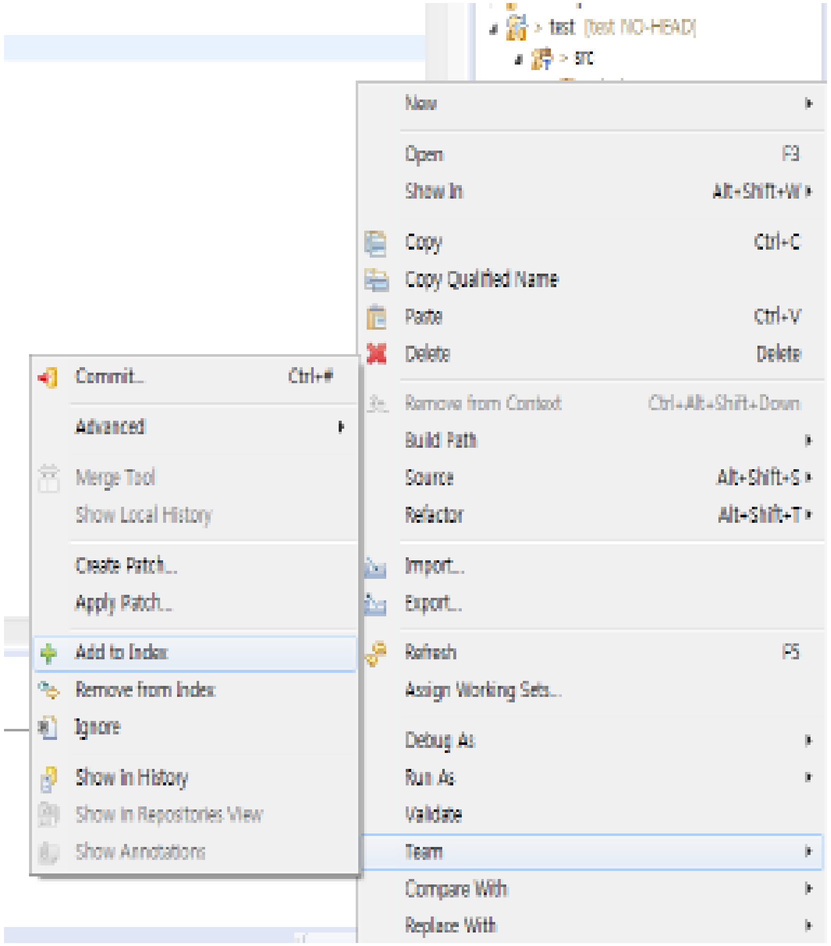
ⓘ Directory C:₩Users₩김성엽₩workspace₩test is not empty

Repository directory: C:₩Users₩김성엽₩workspace₩test

☐ Create as bare repository

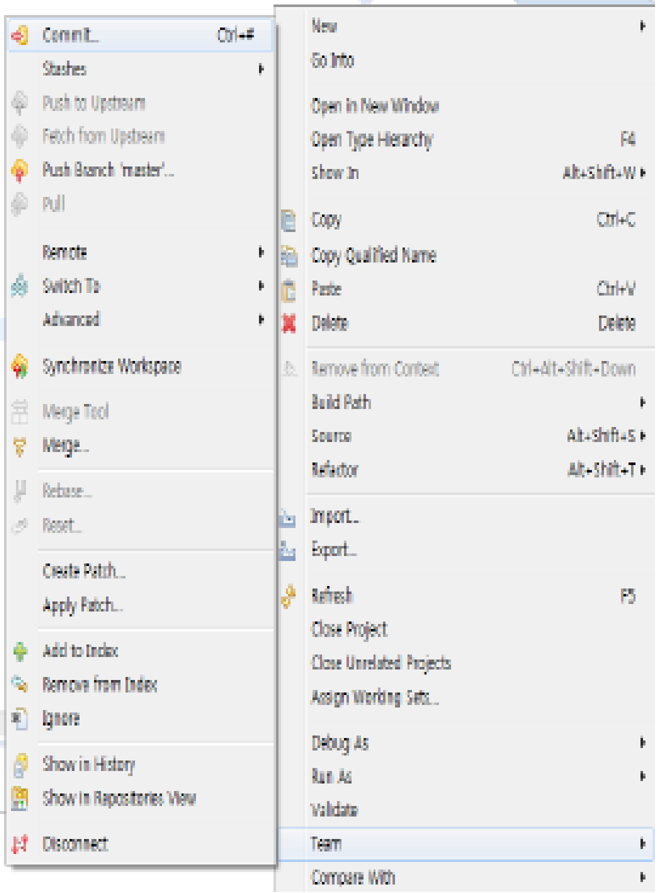
II. GIT

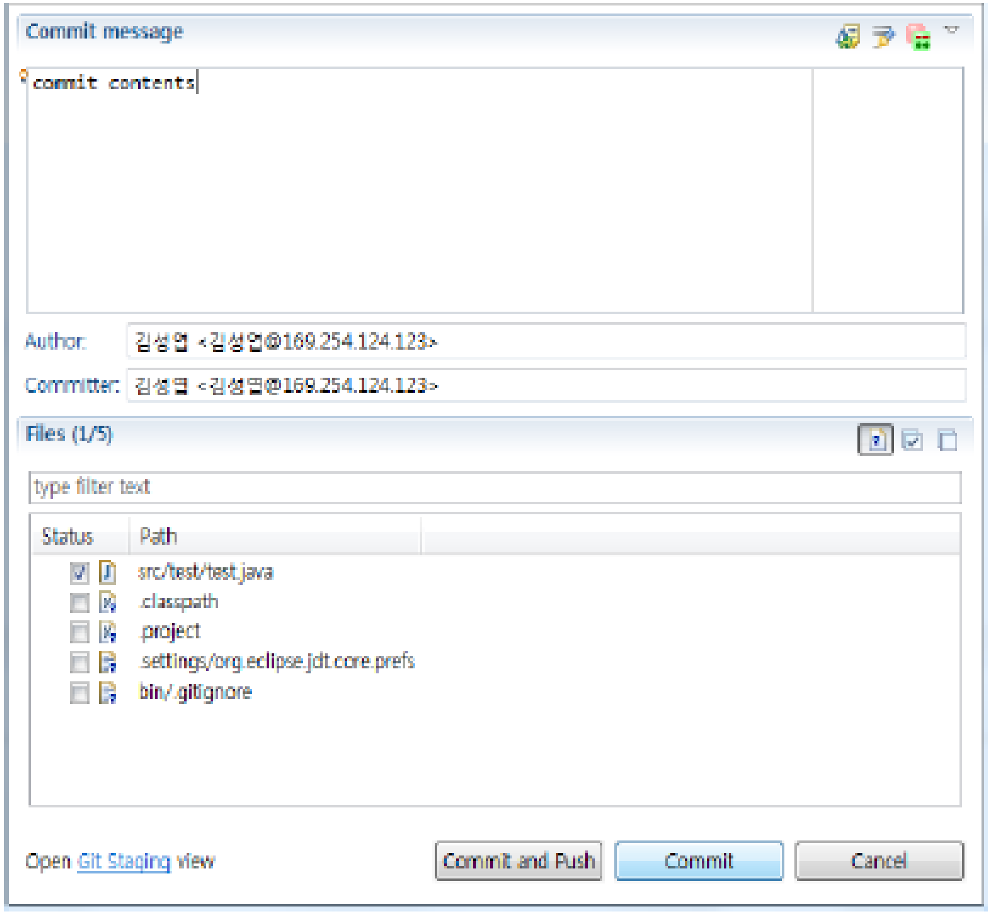
How to Install?


test [test NO-HEAD]
src
New
Open F3
Show In Alt+Shift+W
Copy Ctrl+C
Copy Qualified Name
Paste Ctrl+V
Delete Delete
Remove from Context Ctrl+Alt+Shift+Down
Build Path
Source Alt+Shift+S
Refactor Alt+Shift+T
Import...
Export...
Refresh F5
Assign Working Sets...
Debug As
Run As
Validate
Team
Compare With
Replace With
Commit... Ctrl+#
Advanced
Merge Tool
Show Local History
Create Patch...
Apply Patch...
Add to Index
Remove from Index
Ignore
Show in History
Show in Repositories View
Show Annotations

II. GIT

How to Install?


Commit... Ctrl+#
Stashes
Push to Upstream
Fetch from Upstream
Push Branch 'master'...
Pull
Remote
Switch To
Advanced
Synchronize Workspace
Merge Tool
Merge...
Rebase...
Reset...
Create Patch...
Apply Patch...
Add to Index
Remove from Index
Ignore
Show in History
Show in Repositories View
Disconnect
New
Go Into
Open in New Window
Open Type Hierarchy F4
Show In Alt+Shift+W
Copy Ctrl+C
Copy Qualified Name
Paste Ctrl+V
Delete Delete
Remove from Context Ctrl+Alt+Shift+Down
Build Path
Source Alt+Shift+S
Refactor Alt+Shift+T
Import...
Export...
Refresh F5
Close Project
Close Unrelated Projects
Assign Working Sets...
Debug As
Run As
Validate
Team
Compare With


Commit message
Files (1/5)
type filter text
Status
Path
Open Git Staging view
Commit and Push
Commit
Cancel

```
commit contents
```

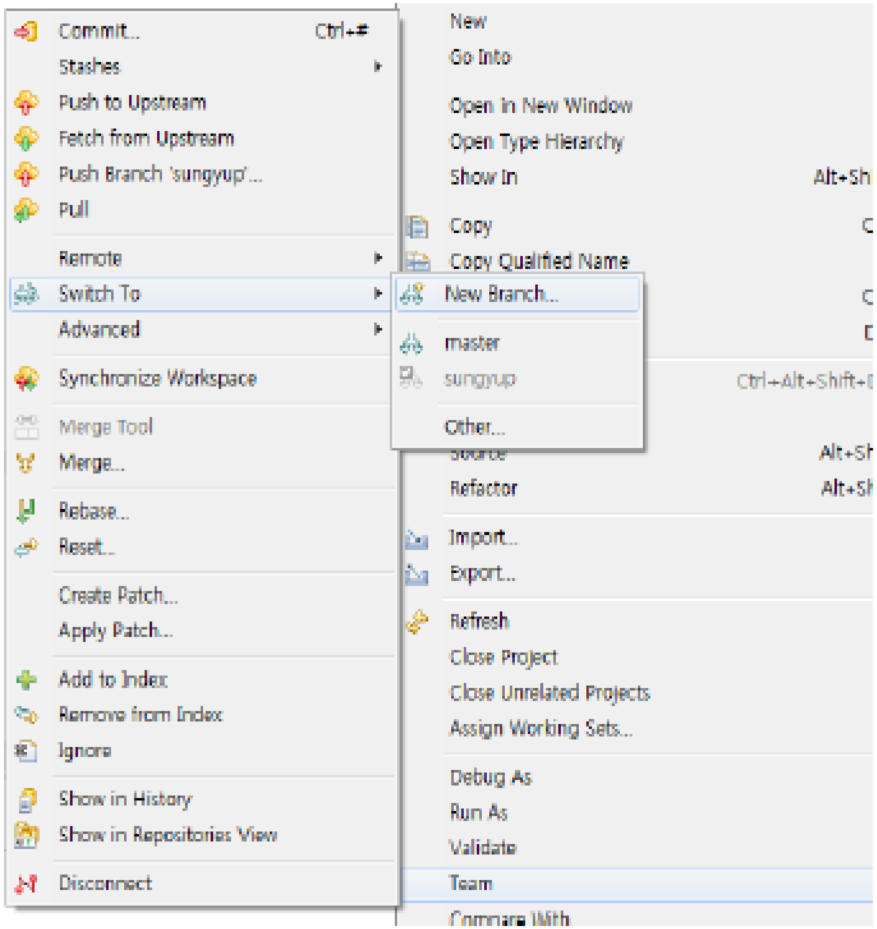
Author: 김성엽 <김성엽@169.254.124.123>

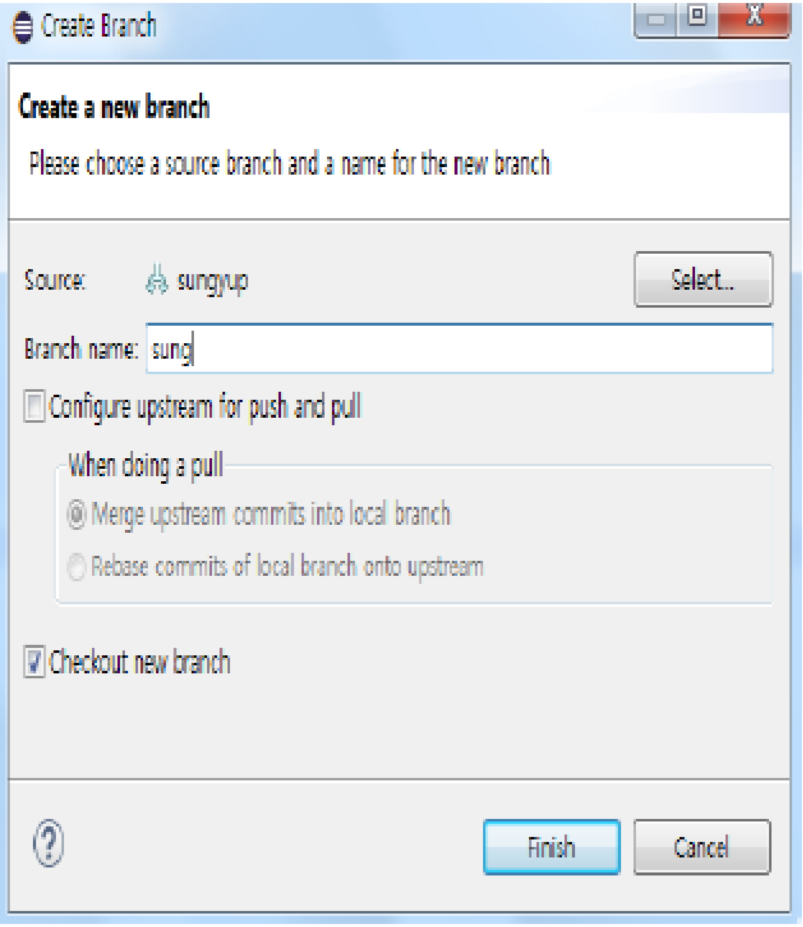
Committer: 김성엽 <김성엽@169.254.124.123>

- ☑ src/test/test.java
- ☐ .classpath
- ☐ .project
- ☐ .settings/org.eclipse.jdt.core.prefs
- ☐ bin/.gitignore

II. GIT

How to Install?


Commit... Ctrl+#
Stashes
Push to Upstream
Fetch from Upstream
Push Branch 'sungyup'...
Pull
Remote
Switch To
Advanced
Synchronize Workspace
Merge Tool
Merge...
Rebase...
Reset...
Create Patch...
Apply Patch...
Add to Index
Remove from Index
Ignore
Show in History
Show in Repositories View
Disconnect
New
Go Into
Open in New Window
Open Type Hierarchy
Show In Alt+Sh
Copy
Copy Qualified Name
New Branch...
master
sungyup
Other...
Ctrl+Alt+Shift+
Source Alt+Sh
Refactor Alt+Sh
Import...
Export...
Refresh
Close Project
Close Unrelated Projects
Assign Working Sets...
Debug As
Run As
Validate
Team
Compare With


Create Branch

Create a new branch

Please choose a source branch and a name for the new branch

Source: sungyup

Select...

Branch name: sung

☐ Configure upstream for push and pull

When doing a pull

● Merge upstream commits into local branch

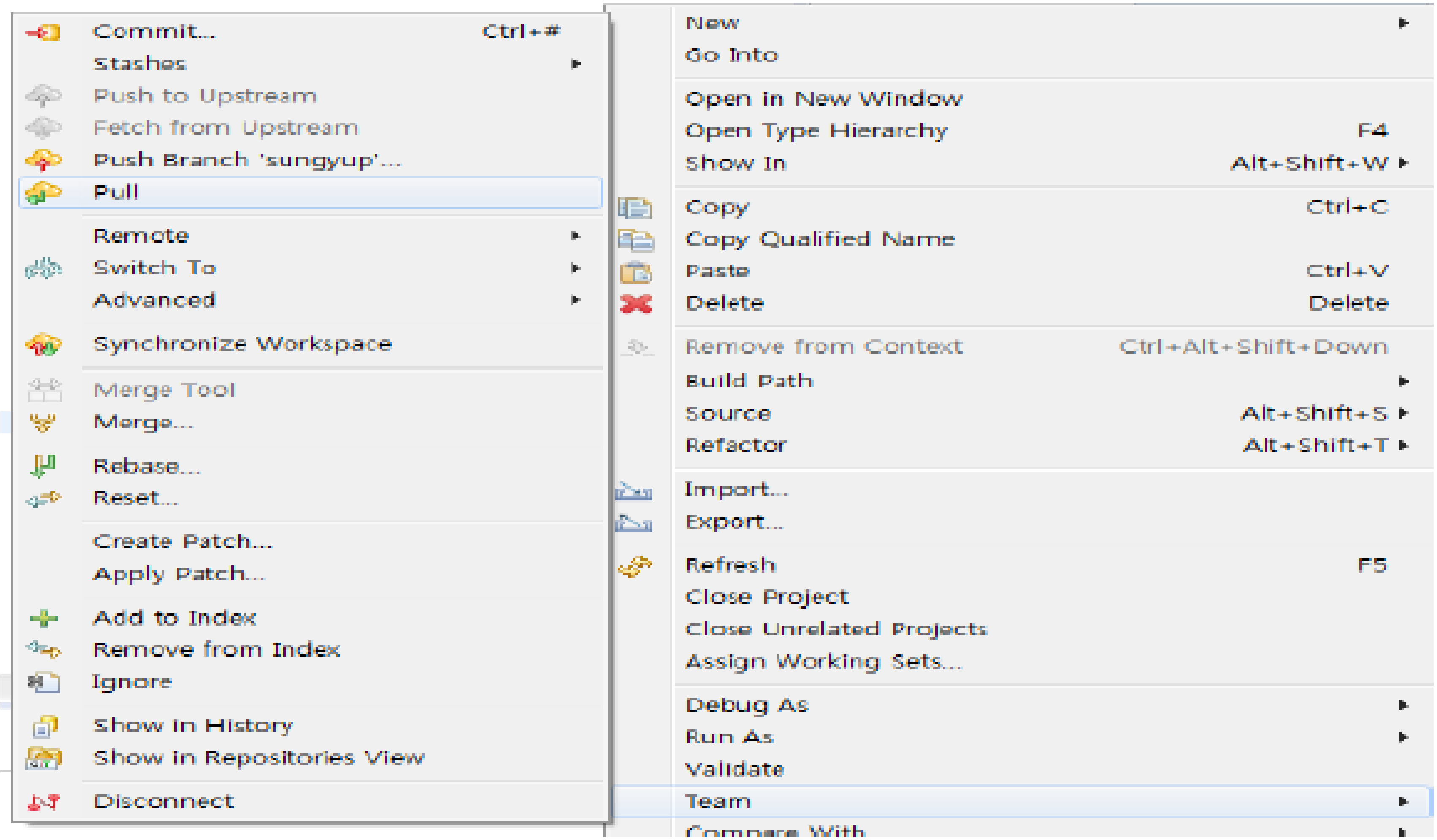
○ Rebase commits of local branch onto upstream

☑ Checkout new branch

Finish
Cancel

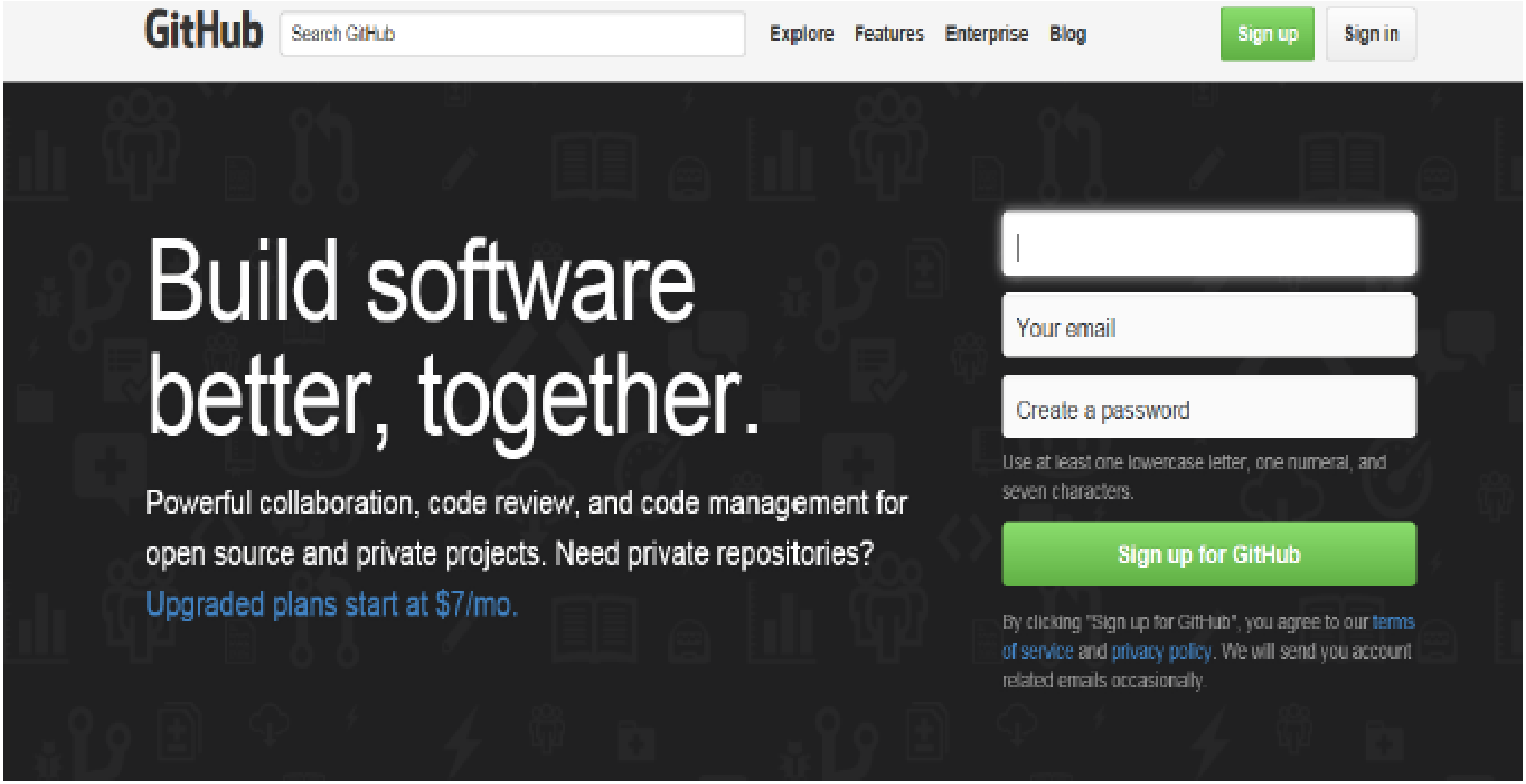
II. GIT

How to Install?


Commit... Ctrl+#
Stashes
Push to Upstream
Fetch from Upstream
Push Branch 'sungyup'...
Pull
Remote
Switch To
Advanced
Synchronize Workspace
Merge Tool
Merge...
Rebase...
Reset...
Create Patch...
Apply Patch...
Add to Index
Remove from Index
Ignore
Show in History
Show in Repositories View
Disconnect
New
Go Into
Open in New Window
Open Type Hierarchy F4
Show In Alt+Shift+W
Copy Ctrl+C
Copy Qualified Name
Paste Ctrl+V
Delete Delete
Remove from Context Ctrl+Alt+Shift+Down
Build Path
Source Alt+Shift+S
Refactor Alt+Shift+T
Import...
Export...
Refresh F5
Close Project
Close Unrelated Projects
Assign Working Sets...
Debug As
Run As
Validate
Team
Compare With

II. GIT

GitHub?


GitHub
Search GitHub
Explore
Features
Enterprise
Blog
Sign up
Sign in

Build software better, together.

Powerful collaboration, code review, and code management for open source and private projects. Need private repositories? Upgraded plans start at $7/mo.

Your email

Create a password

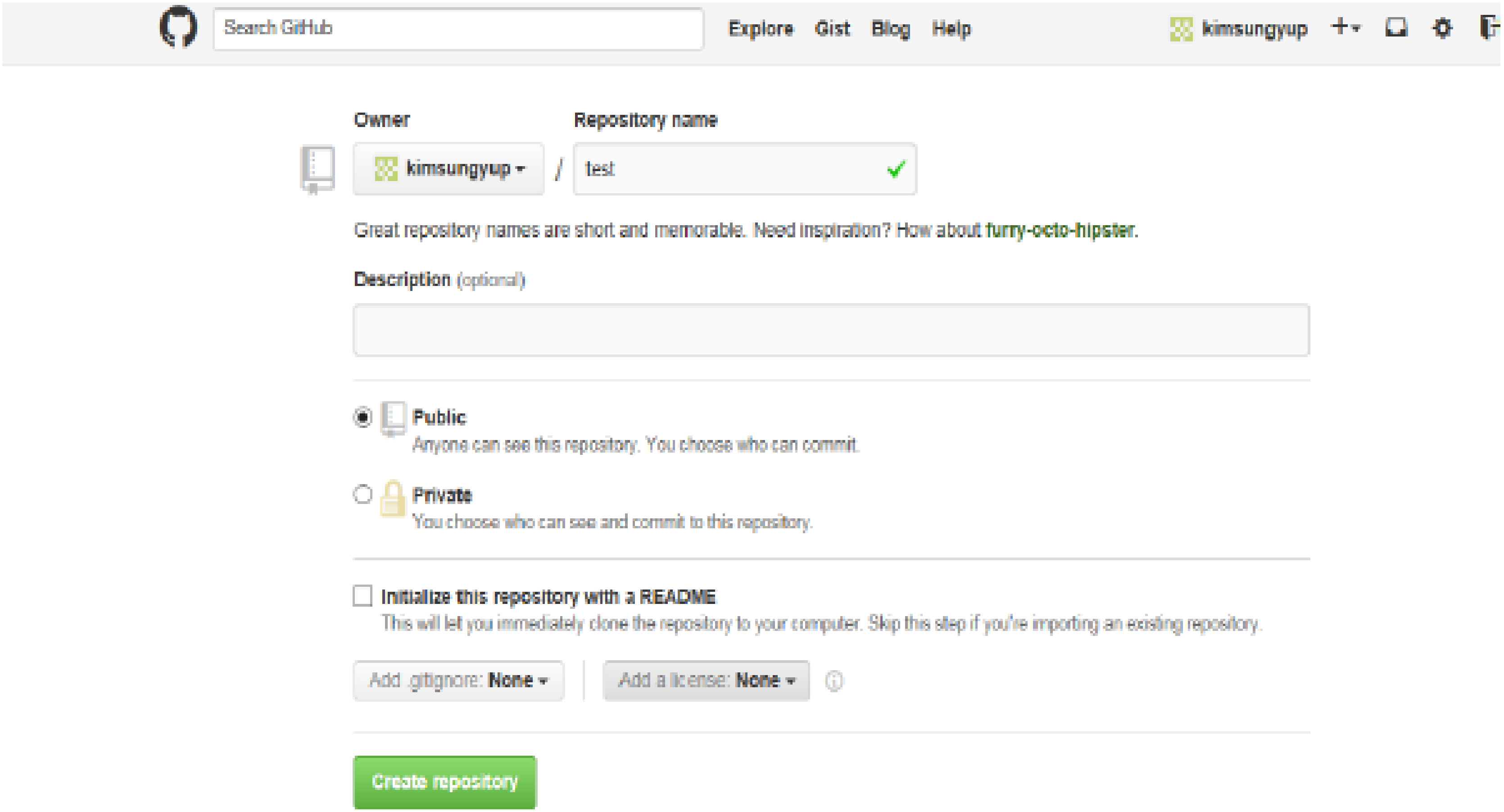
Use at least one lowercase letter, one numeral, and seven characters.

Sign up for GitHub

By clicking "Sign up for GitHub", you agree to our terms of service and privacy policy. We will send you account related emails occasionally.

II. GIT

GitHub?


Search GitHub
Explore
Gist
Blog
Help
kimsungyup
Create repository

Owner: kimsungyup / **Repository name**: test ✓

Great repository names are short and memorable. Need inspiration? How about furry-octo-hipster.

Description (optional)

● **Public**
Anyone can see this repository. You choose who can commit.

○ **Private**
You choose who can see and commit to this repository.

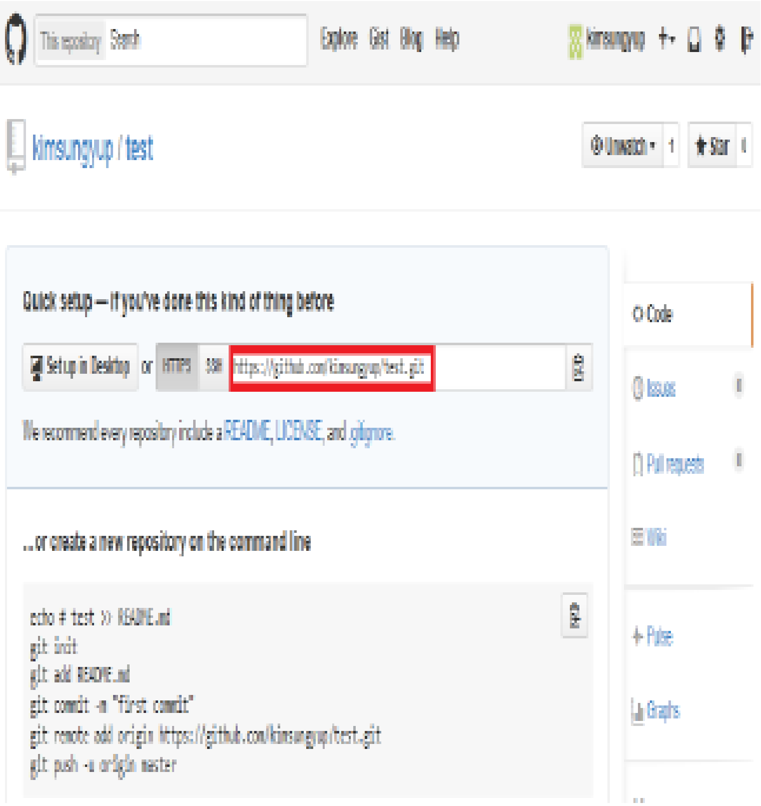
☐ **Initialize this repository with a README**
This will let you immediately clone the repository to your computer. Skip this step if you're importing an existing repository.

Add .gitignore: **None**

Add a license: **None**

II. GIT

GitHub?


This repository
Search
Explore
Gist
Blog
Help
kimsungyup
kimsungyup / test
Unwatch
1
Star
Code
Issues
Pull requests
Wiki
Pulse
Graphs
Set up in Desktop
or
HTTPS
SSH

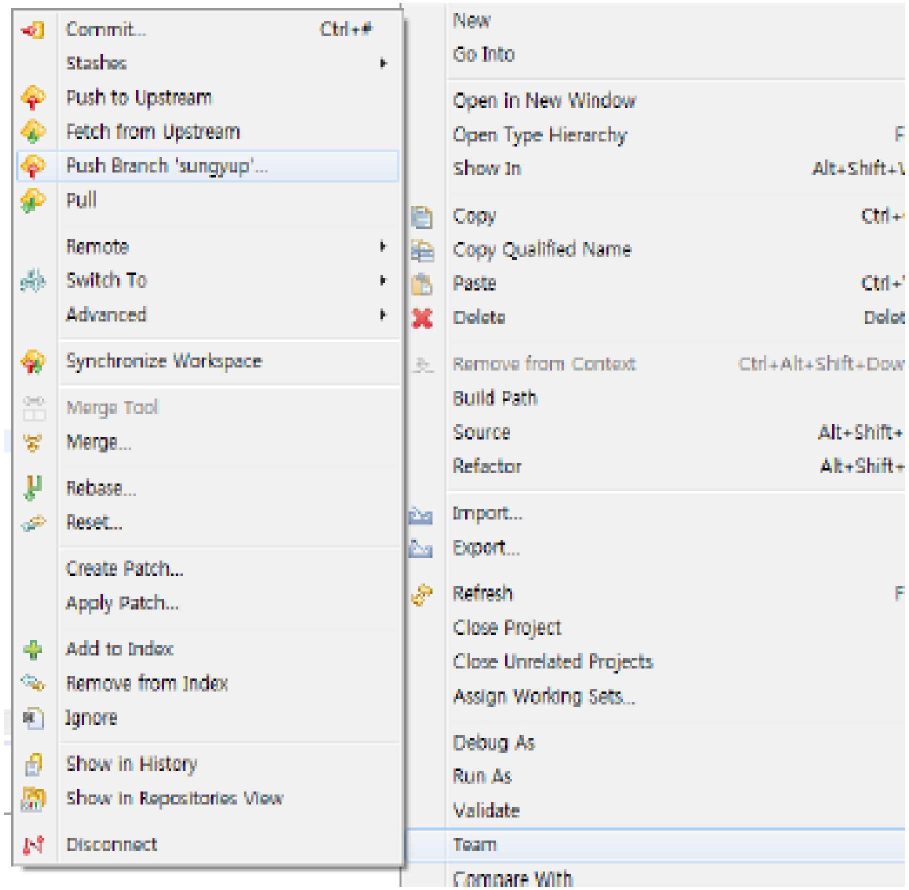
Quick setup — if you've done this kind of thing before

https://github.com/kimsungyup/test.git

We recommend every repository include a README, LICENSE, and .gitignore.

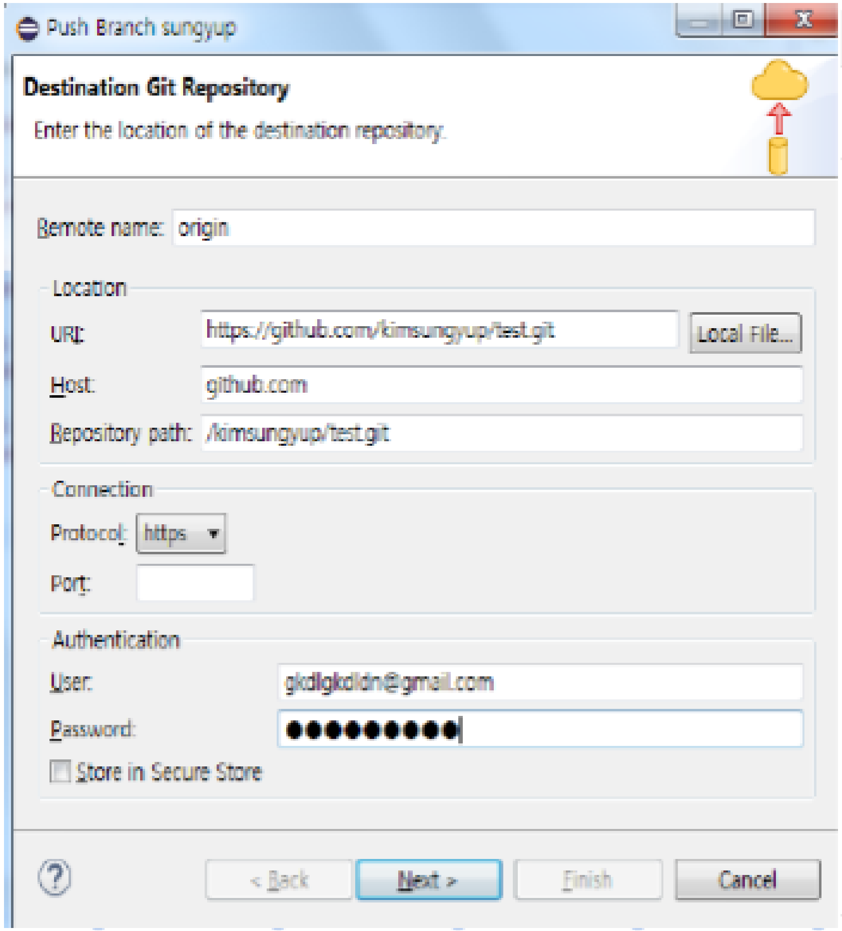
...or create a new repository on the command line

```
echo # test >> README.md
git init
git add README.md
git commit -m "first commit"
git remote add origin https://github.com/kimsungyup/test.git
git push -u origin master
```


Commit... Ctrl+#
Stashes
Push to Upstream
Fetch from Upstream
Push Branch 'sungyup'...
Pull
Remote
Switch To
Advanced
Synchronize Workspace
Merge Tool
Merge...
Rebase...
Reset...
Create Patch...
Apply Patch...
Add to Index
Remove from Index
Ignore
Show in History
Show in Repositories View
Disconnect
New
Go Into
Open in New Window
Open Type Hierarchy
Show In Alt+Shift+W
Copy Ctrl+
Copy Qualified Name
Paste Ctrl+
Delete Delet
Remove from Context Ctrl+Alt+Shift+Dow
Build Path
Source Alt+Shift+
Refactor Alt+Shift+
Import...
Export...
Refresh
Close Project
Close Unrelated Projects
Assign Working Sets...
Debug As
Run As
Validate
Team
Compare With

II. GIT

GitHub?



Push Branch sungyup

Destination Git Repository

Enter the location of the destination repository.

Remote name: origin

Location

URI: https://github.com/kimsungyup/test.git

Host: github.com

Repository path: /kimsungyup/test.git

Connection

Protocol: https

Port:

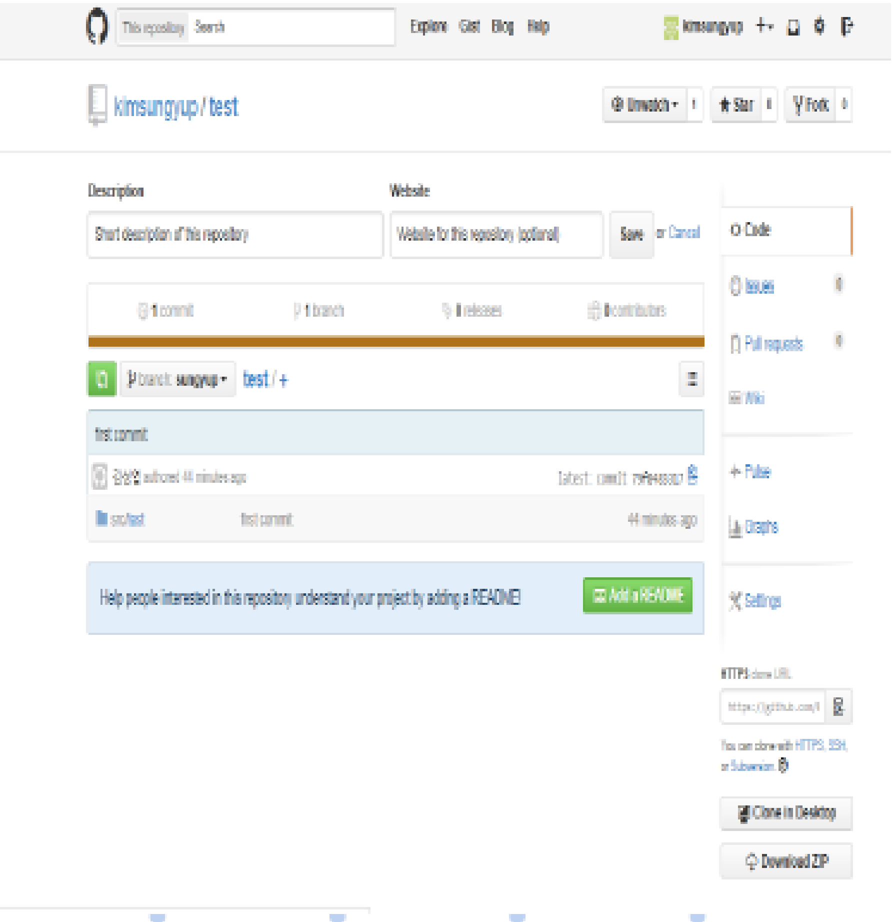
Authentication

User: gkdlgkdldn@gmail.com

Password: ●●●●●●●●●●

☐ Store in Secure Store

Local File...
< Back
Next >
Finish
Cancel



This repository Search
Explore Gist Blog Help
kimsungyup
kimsungyup / test
Unwatch
Star
Fork
Description
Website
Short description of this repository
Website for this repository (optional)
Save or Cancel
1 commit
1 branch
0 releases
0 contributors
branch: sungyup
test / +
test commit
latest commit
src/test
test commit
44 minutes ago
Help people interested in this repository understand your project by adding a README!
Add a README
Code
Issues
Pull requests
Wiki
Pulse
Graphs
Settings
HTTPS clone URL
Clone in Desktop
Download ZIP

III. JUnit

Junit? | How to Use? | JUnit Assert Class | Junit Annotation

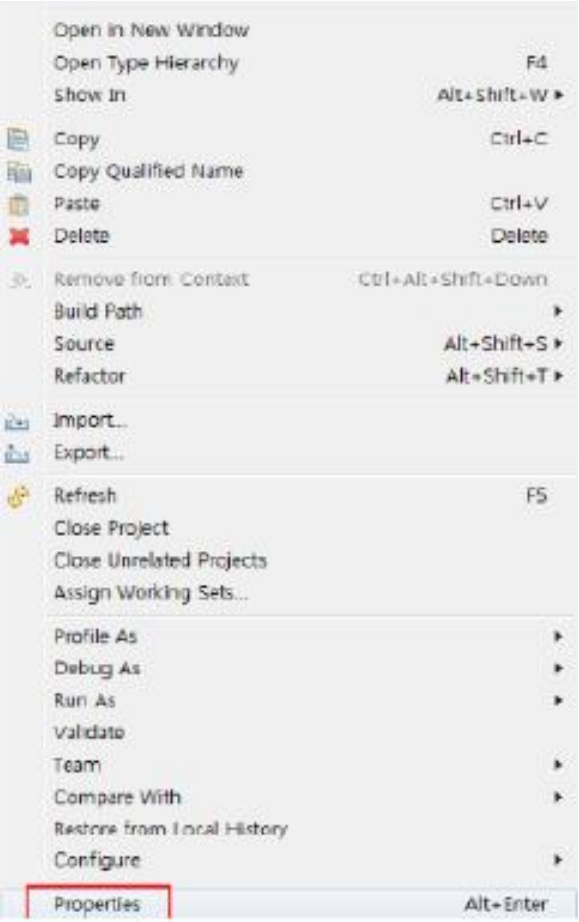
III. JUnit

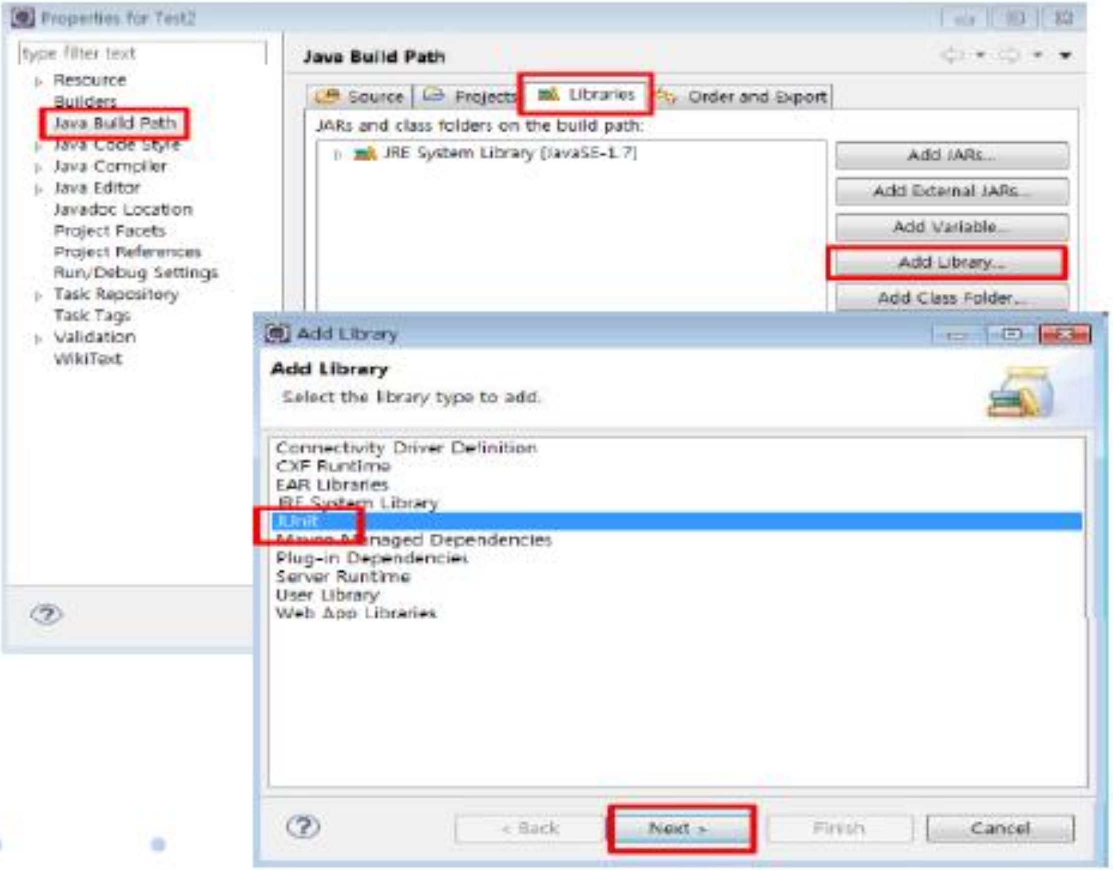
What is Junit?

- ✓ Unit testing을 위한 framework
- ✓ Source code를 최적화 하기 위해 사용
- ✓ Testing을 위한 클래스를 생성

III. JUnit

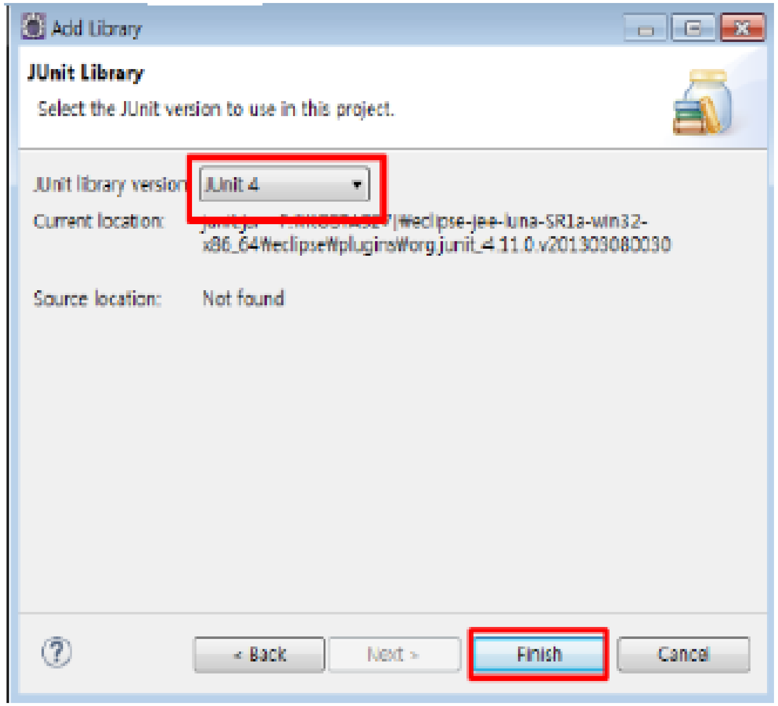
How to Use?


Open in New Window
Open Type Hierarchy F4
Show In Alt+Shift+W
Copy Ctrl+C
Copy Qualified Name
Paste Ctrl+V
Delete Delete
Remove from Context Ctrl+Alt+Shift+Down
Build Path
Source Alt+Shift+S
Refactor Alt+Shift+T
Import...
Export...
Refresh F5
Close Project
Close Unrelated Projects
Assign Working Sets...
Profile As
Debug As
Run As
Validate
Team
Compare With
Restore from Local History
Configure
Properties Alt+Enter


Properties for Test2
type filter text
Resource
Builders
Java Build Path
Java Code Style
Java Compiler
Java Editor
Javadoc Location
Project Facets
Project References
Run/Debug Settings
Task Repository
Task Tags
Validation
WikiText
Java Build Path
Source
Projects
Libraries
Order and Export
JARs and class folders on the build path:
JRE System Library [JavaSE-1.7]
Add JARs...
Add External JARs...
Add Variable...
Add Library...
Add Class Folder...
Add Library
Add Library
Select the library type to add.
Connectivity Driver Definition
CXF Runtime
EAR Libraries
JRE System Library
JUnit
Maven Managed Dependencies
Plug-in Dependencies
Server Runtime
User Library
Web App Libraries
< Back
Next >
Finish
Cancel

III. JUnit

How to Use?



Add Library

JUnit Library

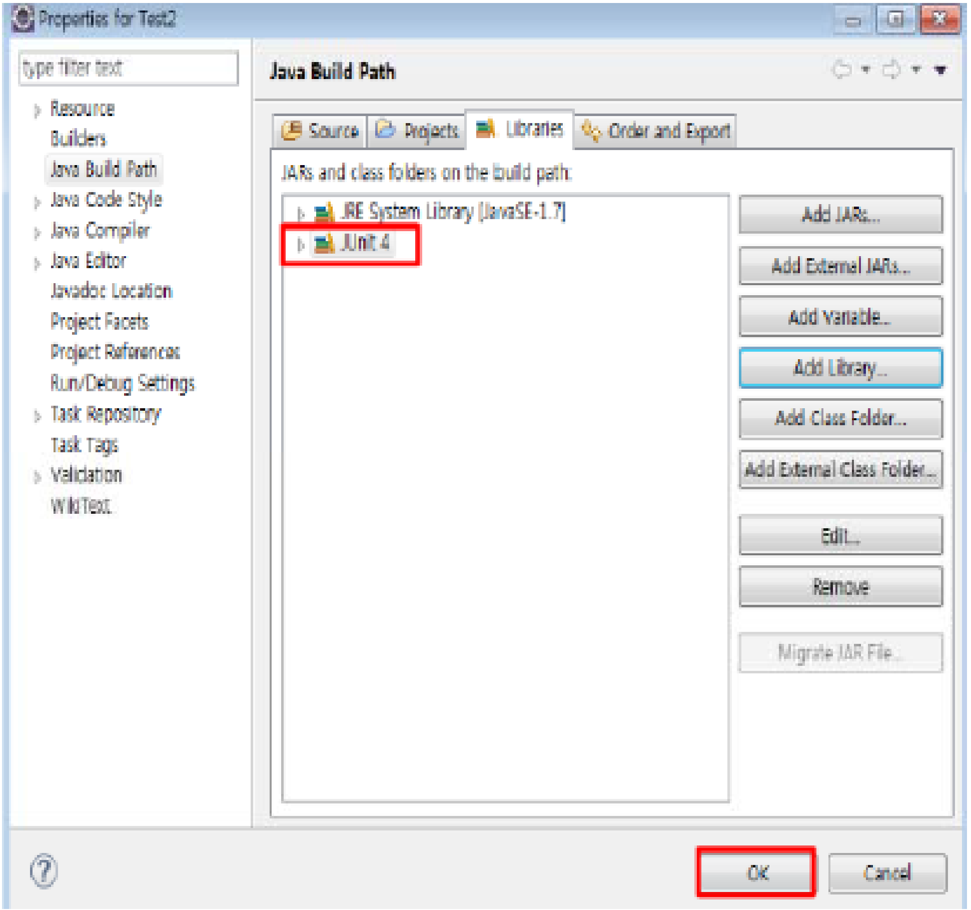
Select the JUnit version to use in this project.

JUnit library version: JUnit 4

Current location: junit.jar |₩eclipse-jee-luna-SR1a-win32-x86_64₩eclipse₩plugins₩org.junit_4.11.0.v201303080030

Source location: Not found

< Back
Next >
Finish
Cancel



Properties for Test2

Java Build Path

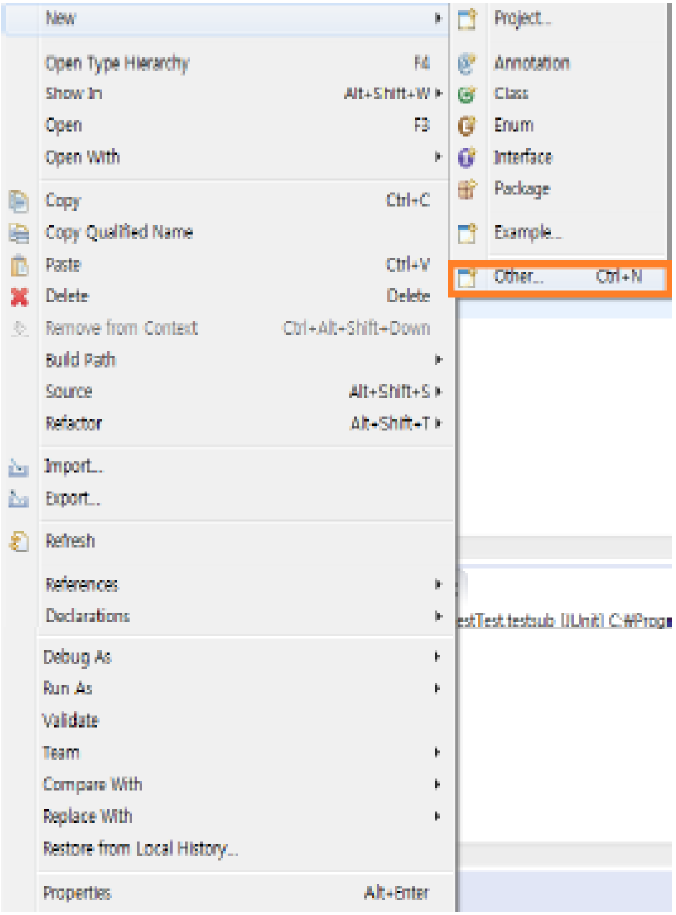
JARs and class folders on the build path:

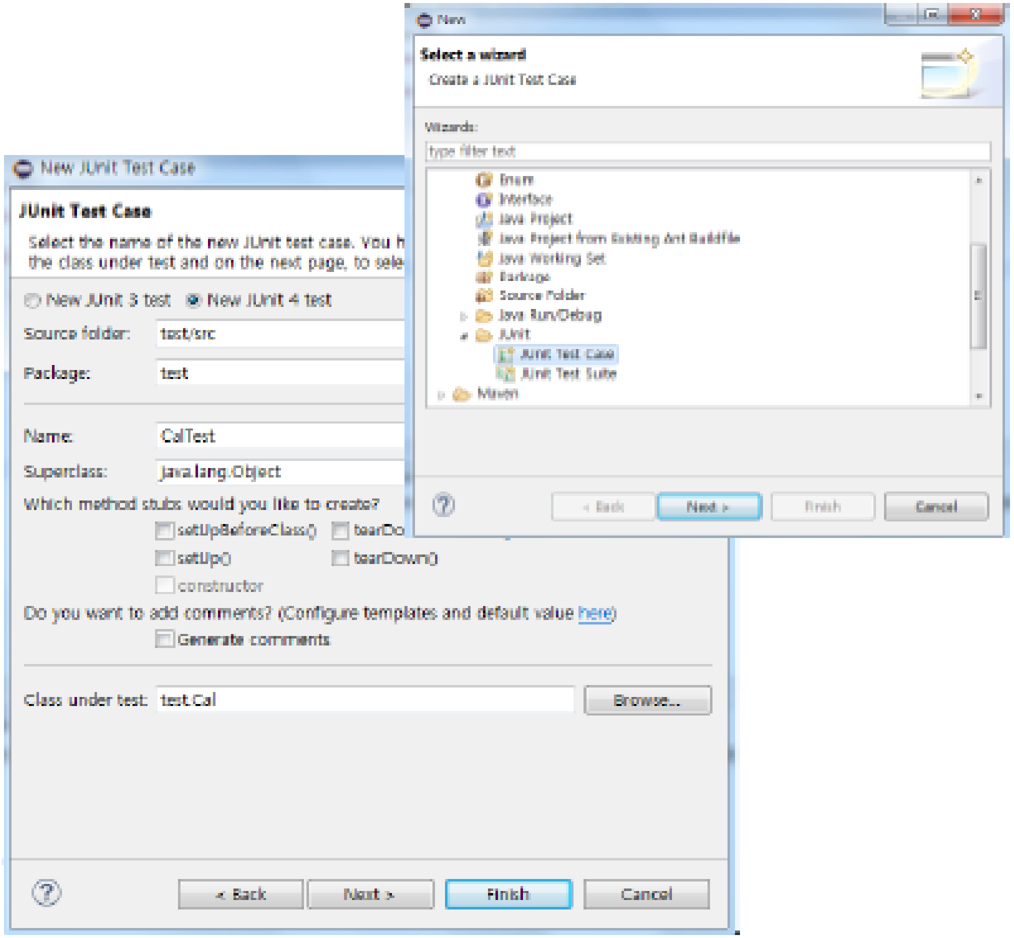
- JRE System Library [JavaSE-1.7]
- JUnit 4

type filter text
Resource
Builders
Java Build Path
Java Code Style
Java Compiler
Java Editor
Javadoc Location
Project Facets
Project References
Run/Debug Settings
Task Repository
Task Tags
Validation
WikiText
Source
Projects
Libraries
Order and Export
Add JARs...
Add External JARs...
Add Variable...
Add Library...
Add Class Folder...
Add External Class Folder...
Edit...
Remove
Migrate JAR File...
OK
Cancel

III. JUnit

How to Use?


New
Open Type Hierarchy F4
Show In Alt+Shift+W
Open F3
Open With
Copy Ctrl+C
Copy Qualified Name
Paste Ctrl+V
Delete Delete
Remove from Context Ctrl+Alt+Shift+Down
Build Path
Source Alt+Shift+S
Refactor Alt+Shift+T
Import...
Export...
Refresh
References
Declarations
Debug As
Run As
Validate
Team
Compare With
Replace With
Restore from Local History...
Properties Alt+Enter
Project...
Annotation
Class
Enum
Interface
Package
Example...
Other... Ctrl+N


New

Select a wizard

Create a JUnit Test Case

Wizards:

type filter text

Enum
Interface
Java Project
Java Project from Existing Ant Buildfile
Java Working Set
Package
Source Folder
Java Run/Debug
JUnit
JUnit Test Case
JUnit Test Suite
Maven
< Back
Next >
Finish
Cancel

New JUnit Test Case

JUnit Test Case

Select the name of the new JUnit test case. You h
the class under test and on the next page, to sele

○ New JUnit 3 test ● New JUnit 4 test

Source folder: test/src

Package: test

Name: CalTest

Superclass: java.lang.Object

Which method stubs would you like to create?

☐ setUpBeforeClass() ☐ tearDo

☐ setUp() ☐ tearDown()

☐ constructor

Do you want to add comments? (Configure templates and default value here)

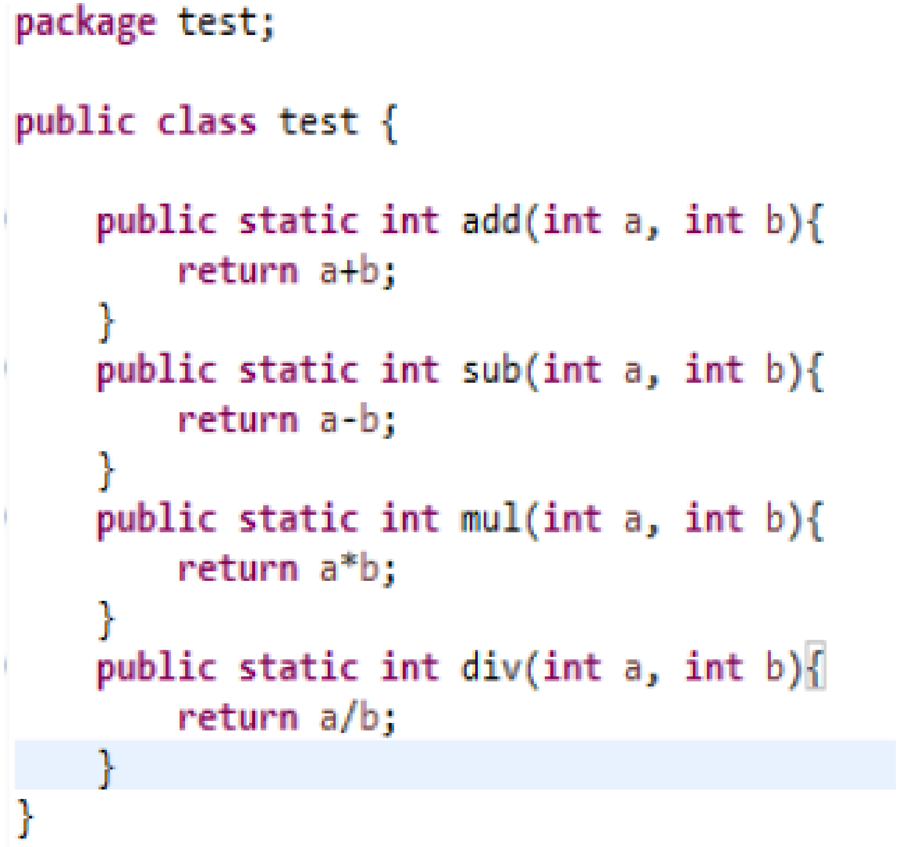
☐ Generate comments

Class under test: test.Cal

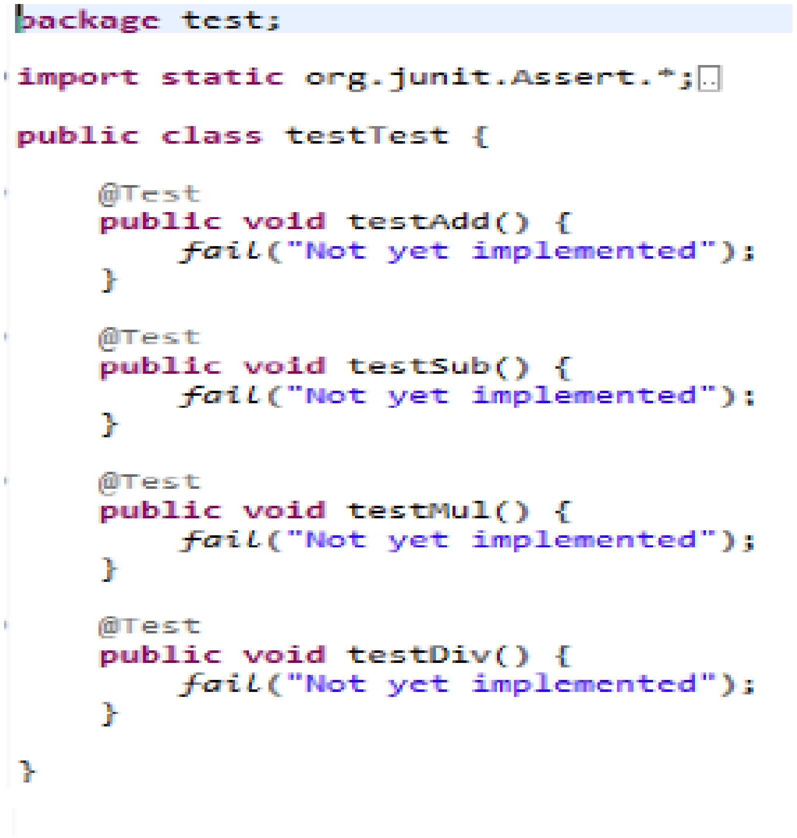
Browse...
< Back
Next >
Finish
Cancel

III. JUnit

How to Use?



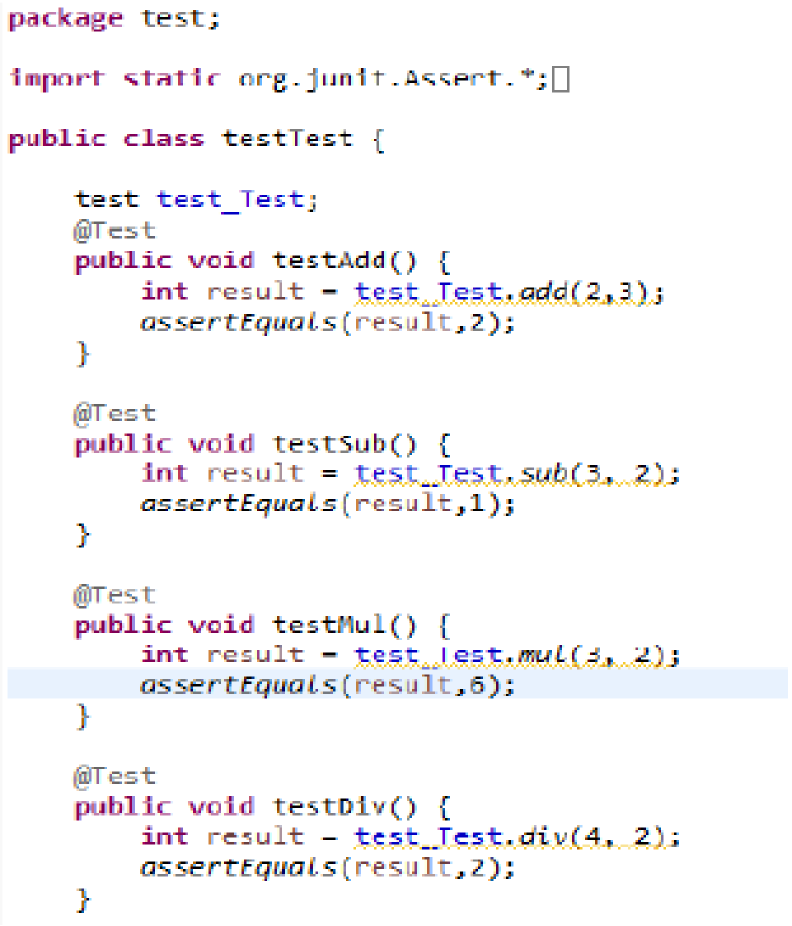
```
package test;

public class test {

    public static int add(int a, int b){
        return a+b;
    }
    public static int sub(int a, int b){
        return a-b;
    }
    public static int mul(int a, int b){
        return a*b;
    }
    public static int div(int a, int b){
        return a/b;
    }
}
```



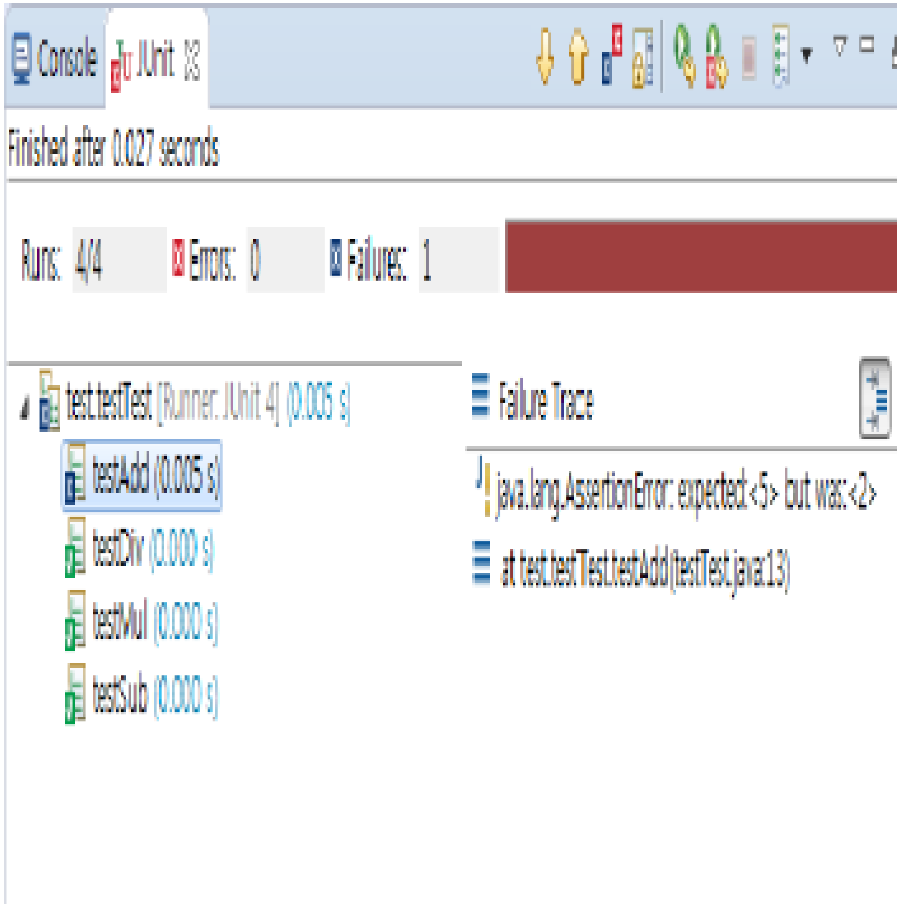
```
package test;

import static org.junit.Assert.*;

public class testTest {

    @Test
    public void testAdd() {
        fail("Not yet implemented");
    }

    @Test
    public void testSub() {
        fail("Not yet implemented");
    }

    @Test
    public void testMul() {
        fail("Not yet implemented");
    }

    @Test
    public void testDiv() {
        fail("Not yet implemented");
    }

}
```

III. JUnit

How to Use?



```
package test;

import static org.junit.Assert.*;

public class testTest {

    test test_Test;
    @Test
    public void testAdd() {
        int result = test_Test.add(2,3);
        assertEquals(result,2);
    }

    @Test
    public void testSub() {
        int result = test_Test.sub(3, 2);
        assertEquals(result,1);
    }

    @Test
    public void testMul() {
        int result = test_Test.mul(3, 2);
        assertEquals(result,6);
    }

    @Test
    public void testDiv() {
        int result = test_Test.div(4, 2);
        assertEquals(result,2);
    }
```



Finished after 0.027 seconds

Runs: 4/4 Errors: 0 Failures: 1

```
test.testTest [Runner: JUnit 4] (0.005 s)
    testAdd (0.005 s)
    testDiv (0.000 s)
    testMul (0.000 s)
    testSub (0.000 s)
```

Failure Trace

```
java.lang.AssertionError: expected:<5> but was:<2>
at test.testTest.testAdd(testTest.java:13)
```

III. JUnit

Junit Assert Class

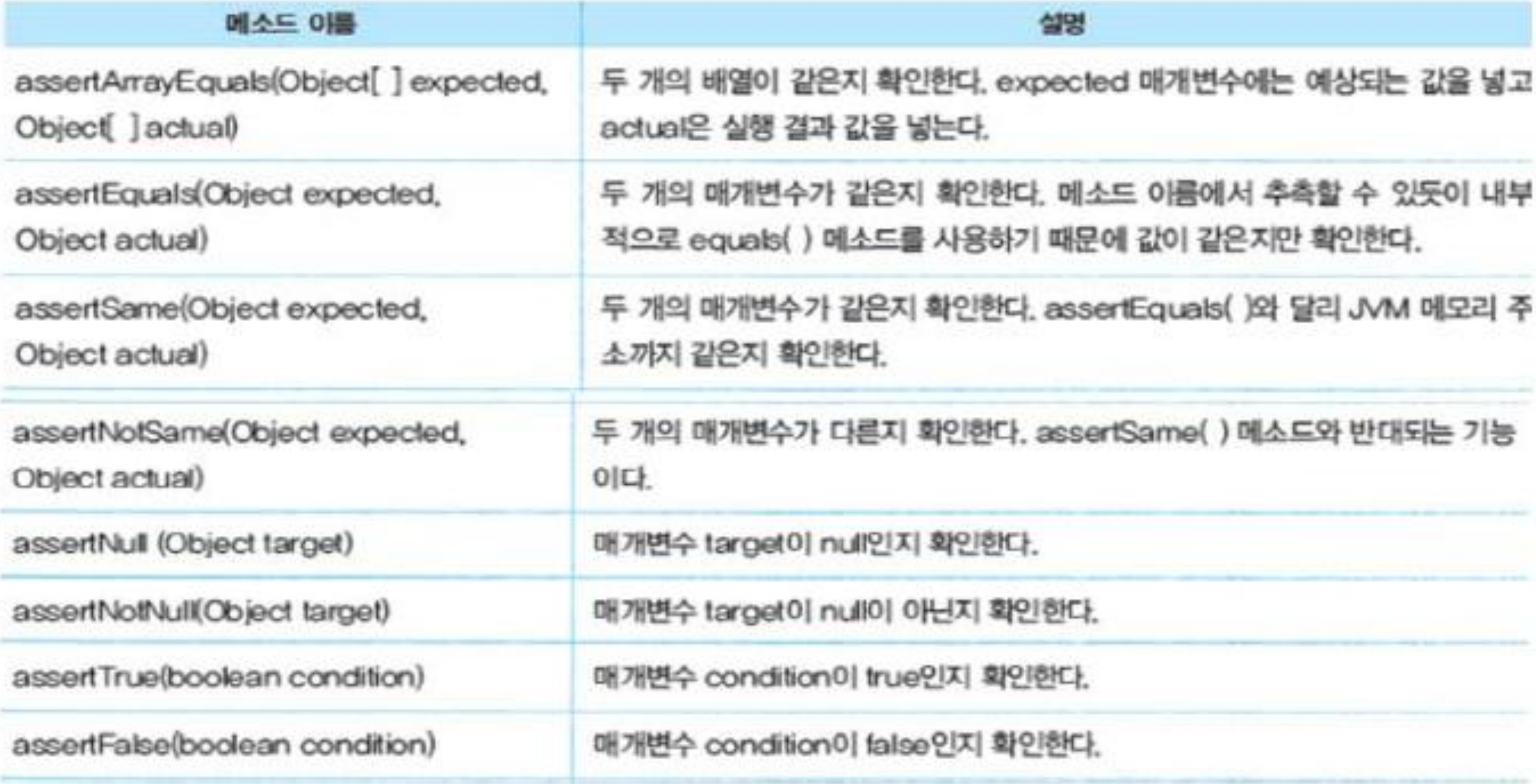
✓ 예상 결과 값과 실제 결과 값이 다른 경우

➡ test가 실패

✓ 같은 경우 ➡ 성공

III. JUnit

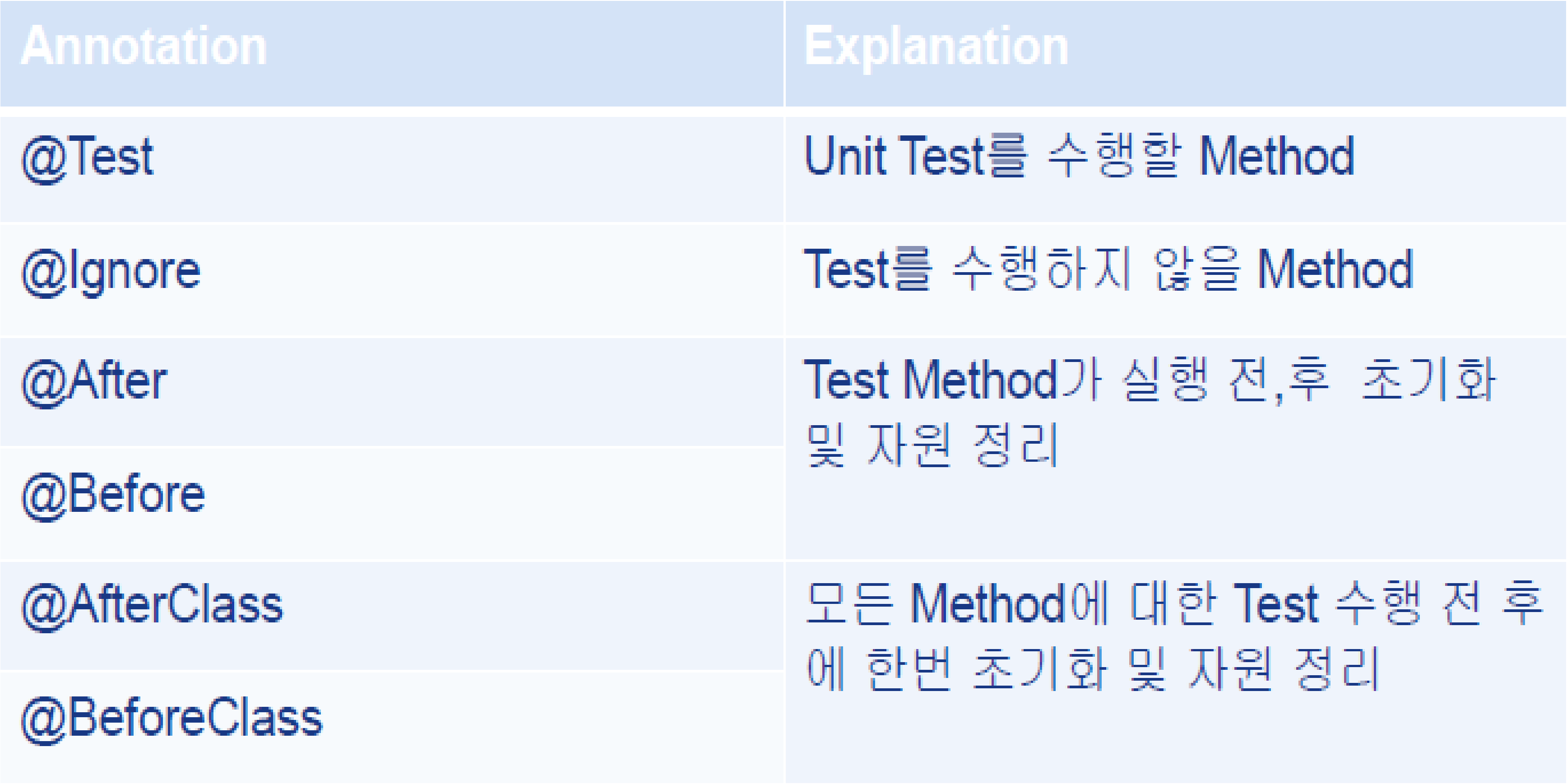
Junit Assert Class



메소드 이름	설명
assertArrayEquals(Object[ ] expected, Object[ ] actual)	두 개의 배열이 같은지 확인한다. expected 매개변수에는 예상되는 값을 넣고 actual은 실행 결과 값을 넣는다.
assertEquals(Object expected, Object actual)	두 개의 매개변수가 같은지 확인한다. 메소드 이름에서 추측할 수 있듯이 내부적으로 equals( ) 메소드를 사용하기 때문에 값이 같은지만 확인한다.
assertSame(Object expected, Object actual)	두 개의 매개변수가 같은지 확인한다. assertEquals( )와 달리 JVM 메모리 주소까지 같은지 확인한다.
assertNotSame(Object expected, Object actual)	두 개의 매개변수가 다른지 확인한다. assertSame( ) 메소드와 반대되는 기능이다.
assertNull (Object target)	매개변수 target이 null인지 확인한다.
assertNotNull(Object target)	매개변수 target이 null이 아닌지 확인한다.
assertTrue(boolean condition)	매개변수 condition이 true인지 확인한다.
assertFalse(boolean condition)	매개변수 condition이 false인지 확인한다.

III. JUnit

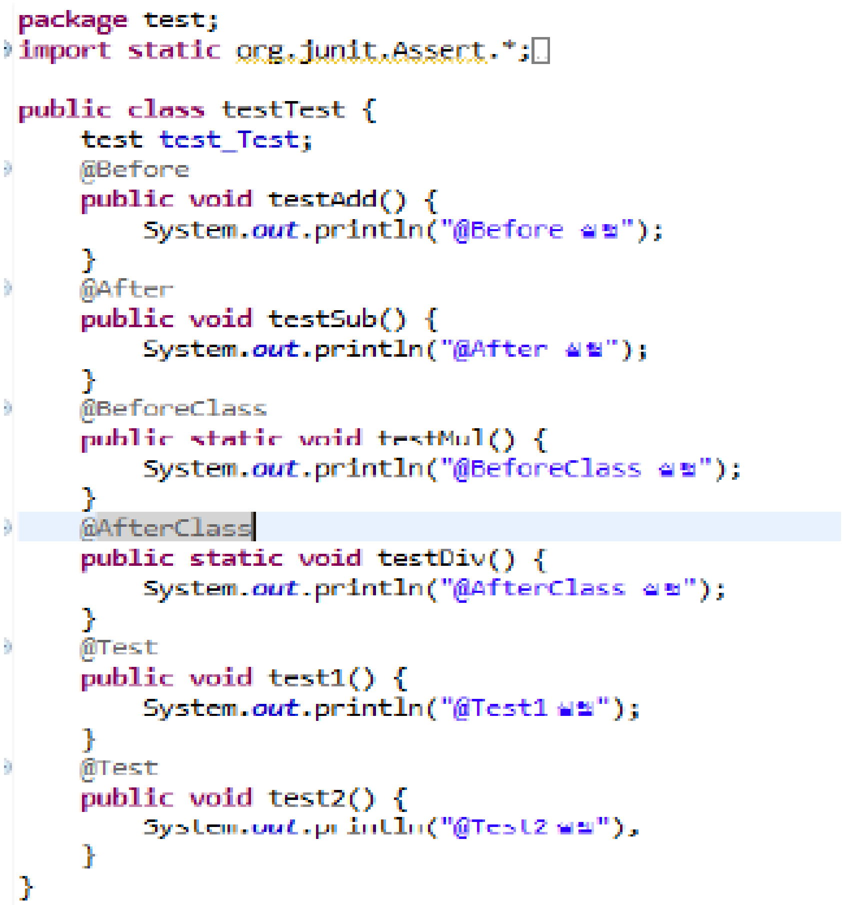
Junit Annotation



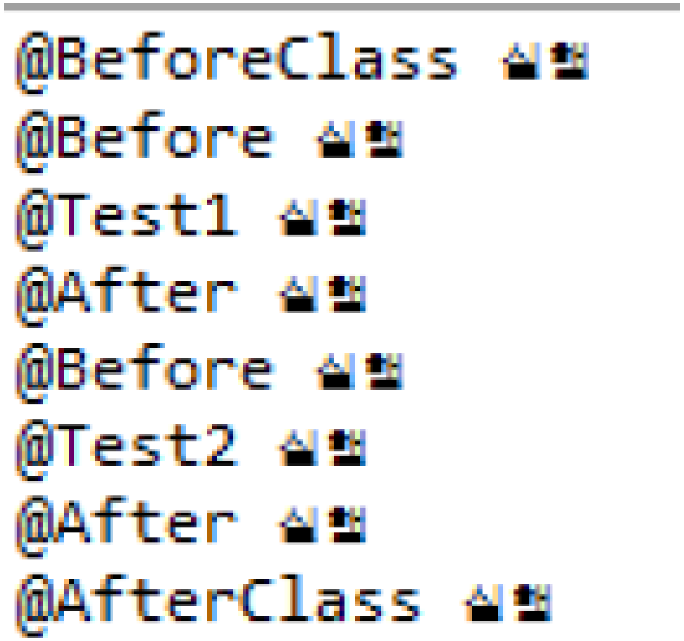
Annotation	Explanation
@Test	Unit Test를 수행할 Method
@Ignore	Test를 수행하지 않을 Method
@After	Test Method가 실행 전,후 초기화 및 자원 정리
@Before	
@AfterClass	모든 Method에 대한 Test 수행 전 후에 한번 초기화 및 자원 정리
@BeforeClass	

III. JUnit

Junit Annotation



```java
package test;
import static org.junit.Assert.*;

public class testTest {
	test test_Test;
	@Before
	public void testAdd() {
		System.out.println("@Before 실행");
	}
	@After
	public void testSub() {
		System.out.println("@After 실행");
	}
	@BeforeClass
	public static void testMul() {
		System.out.println("@BeforeClass 실행");
	}
	@AfterClass
	public static void testDiv() {
		System.out.println("@AfterClass 실행");
	}
	@Test
	public void test1() {
		System.out.println("@Test1 실행");
	}
	@Test
	public void test2() {
		System.out.println("@Test2 실행");
	}
}
```



```
@BeforeClass 실행
@Before 실행
@Test1 실행
@After 실행
@Before 실행
@Test2 실행
@After 실행
@AfterClass 실행
```

IV. CTIP

CTIP? | Setting

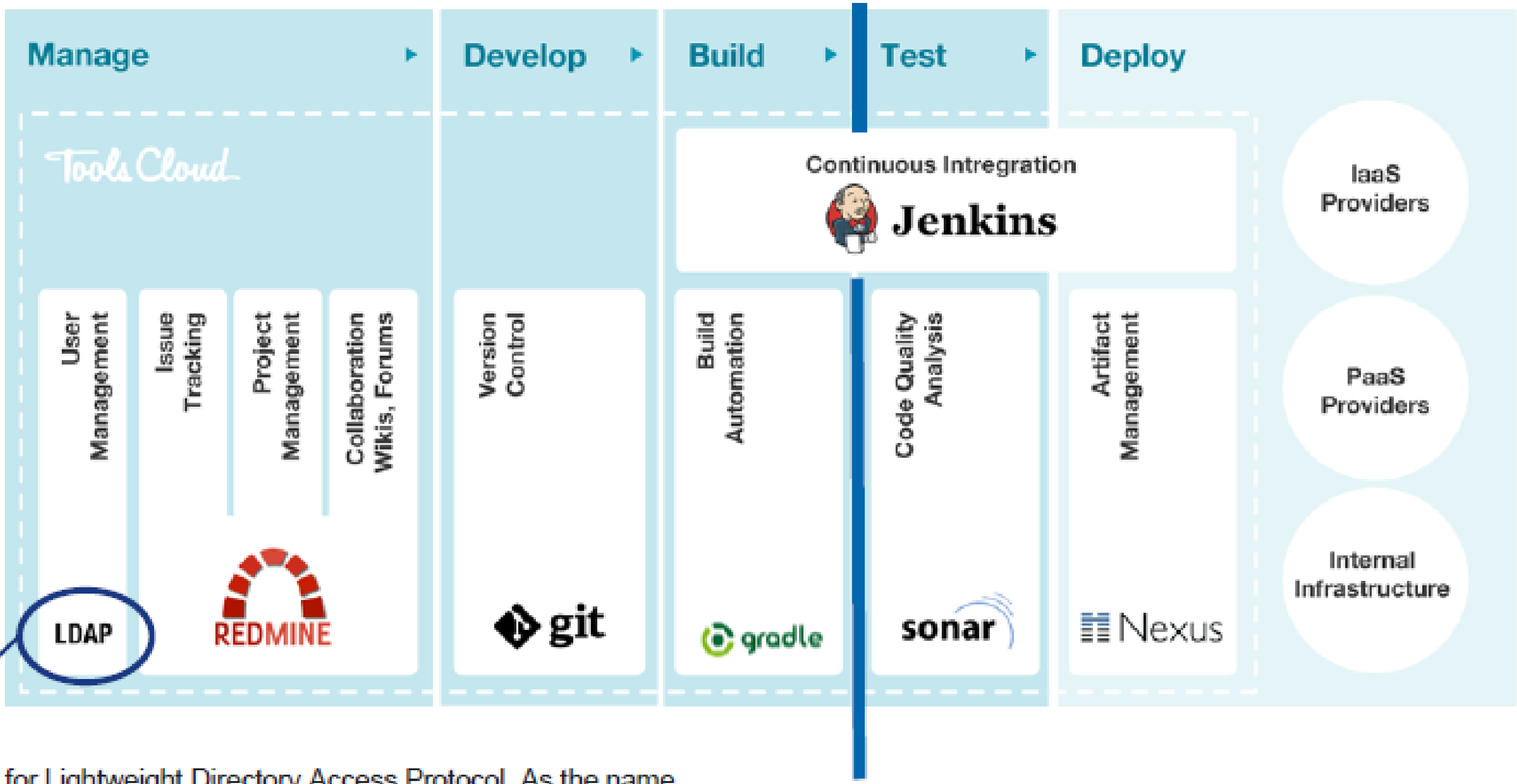
◆ 지속적 통합

개발자는 소스 저장소로부터 최신 소스를 Check out
➡ 검증 ➡ 작업 내용을 소스 저장소에 Check in

- ✓ 많은 프로젝트를 관리
- ✓ Time tracking
- ✓ 웹 기반
- ✓ Git와 연동
- ✓ Role-based access 제어

IV. CTIP

What is CTIP?

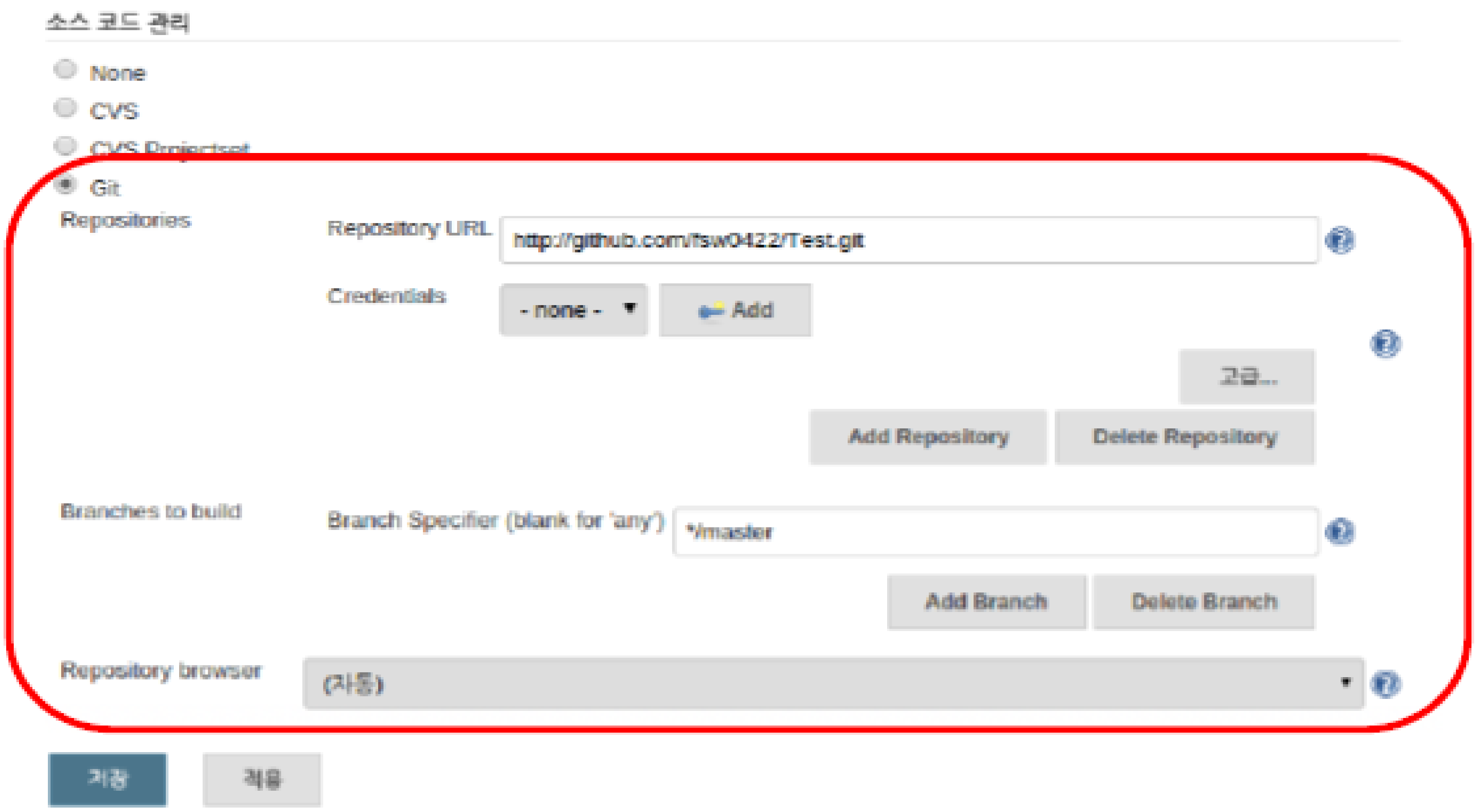

Manage
Develop
Build
Test
Deploy
Tools Cloud
Continuous Intregration
Jenkins
User Management
Issue Tracking
Project Management
Collaboration Wikis, Forums
Version Control
Build Automation
Code Quality Analysis
Artifact Management
IaaS Providers
PaaS Providers
Internal Infrastructure
LDAP
REDMINE
git
gradle
sonar
Nexus

LDAP stands for Lightweight Directory Access Protocol. As the name suggests, it is a lightweight client-server protocol for accessing directory services

We are here

IV. CTIP

Git plugin setting



소스 코드 관리

○ None

○ CVS

○ CVS Projectset

● Git

Repositories

Repository URL: http://github.com/fsw0422/Test.git

Credentials: - none -

Branches to build

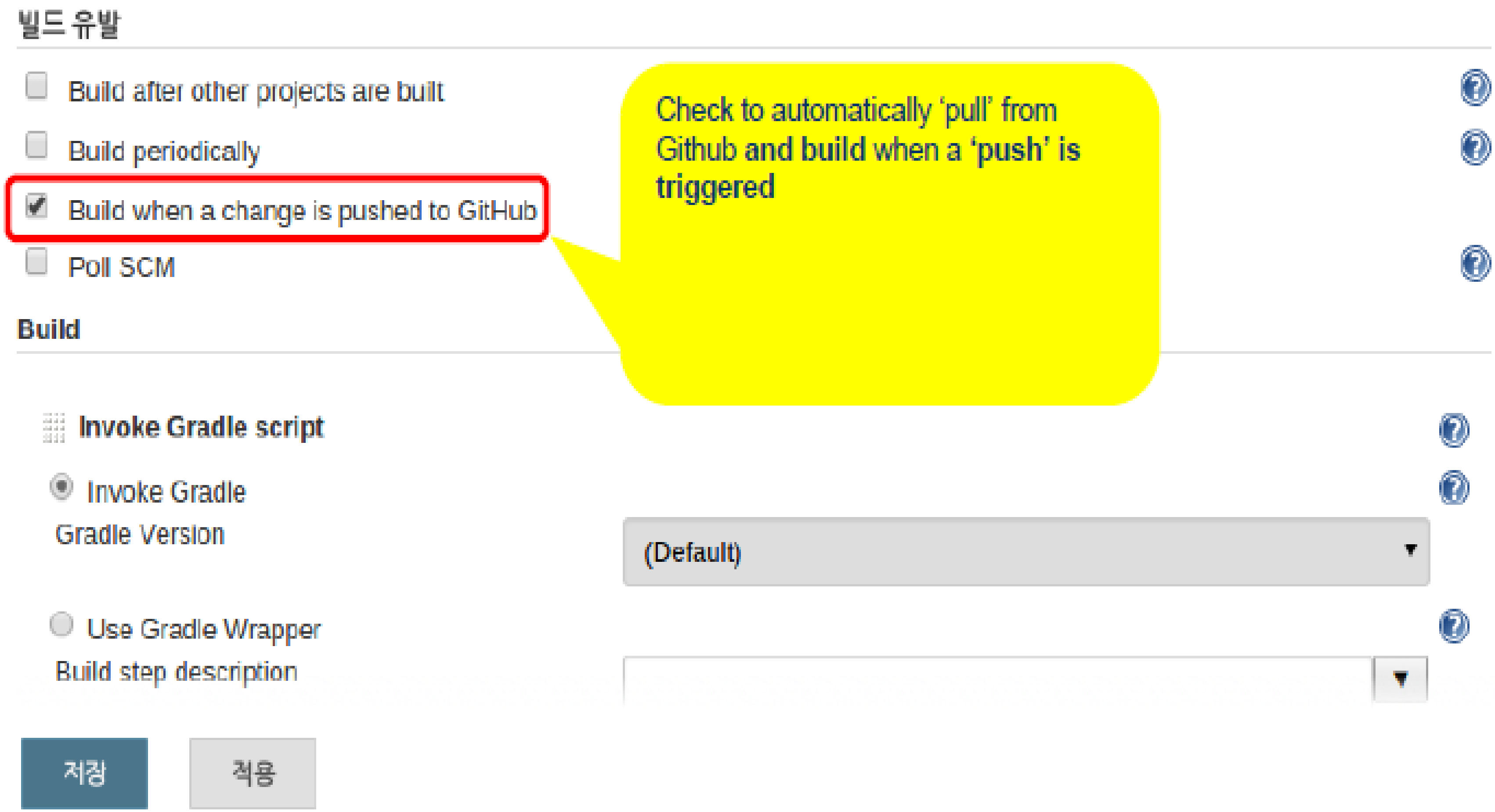
Branch Specifier (blank for 'any'): */master

Repository browser: (자동)

Add
고급...
Add Repository
Delete Repository
Add Branch
Delete Branch
저장
적용

IV. CTIP

Git plugin setting



빌드 유발

☐ Build after other projects are built

☐ Build periodically

☑ Build when a change is pushed to GitHub

☐ Poll SCM

Build

Invoke Gradle script

● Invoke Gradle

Gradle Version: (Default)

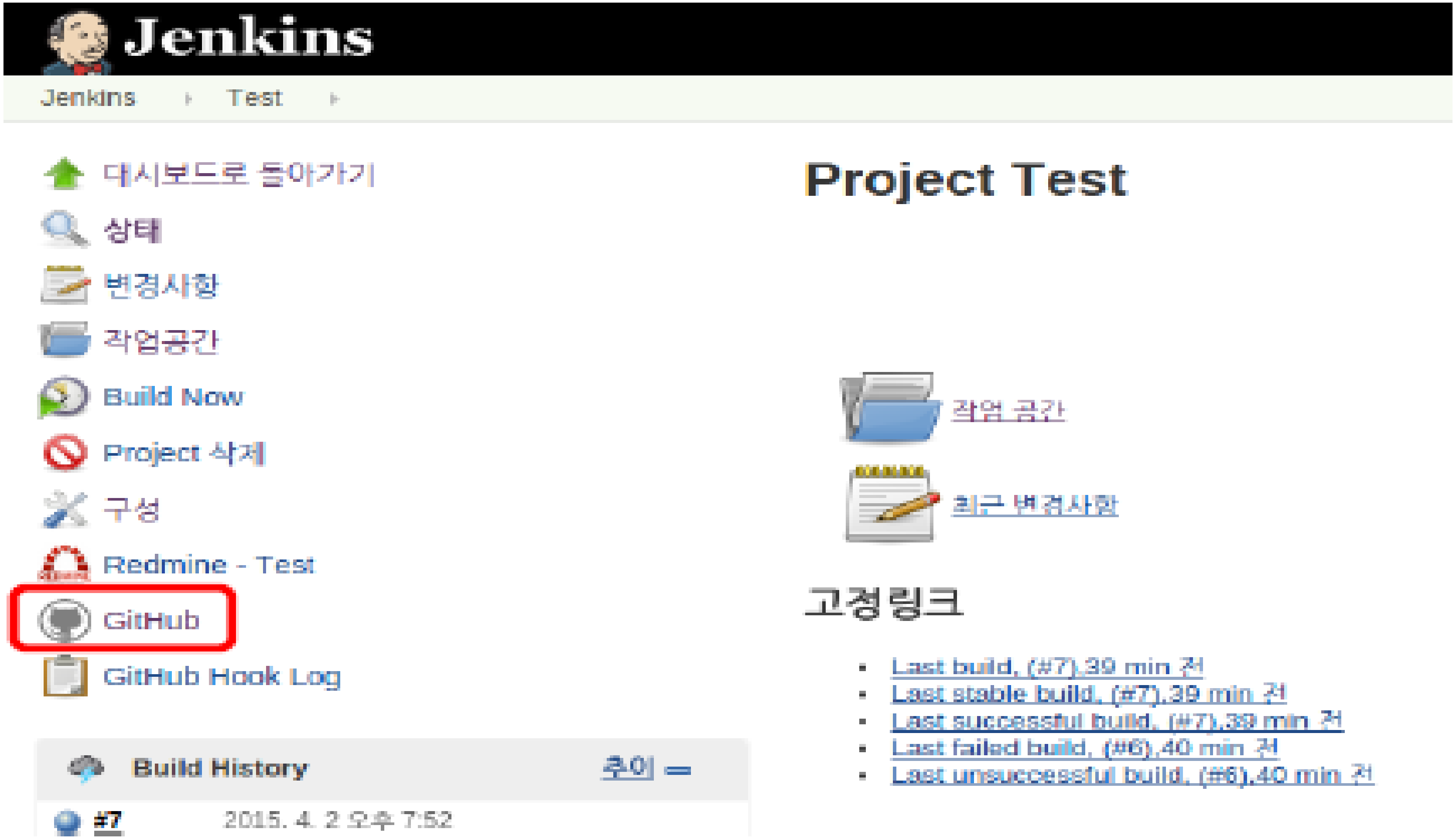
○ Use Gradle Wrapper

Build step description

Check to automatically ‘pull’ from Github and build when a ‘push’ is triggered

IV. CTIP

CTIP(Jenkins - Github)



Jenkins

Jenkins ▸ Test ▸

- 대시보드로 돌아가기
- 상태
- 변경사항
- 작업공간
- Build Now
- Project 삭제
- 구성
- Redmine - Test
- GitHub
- GitHub Hook Log

Build History 추이 —

#7 2015. 4. 2 오후 7:52

Project Test

작업 공간

최근 변경사항

고정링크

- Last build, (#7),39 min 전
- Last stable build, (#7),39 min 전
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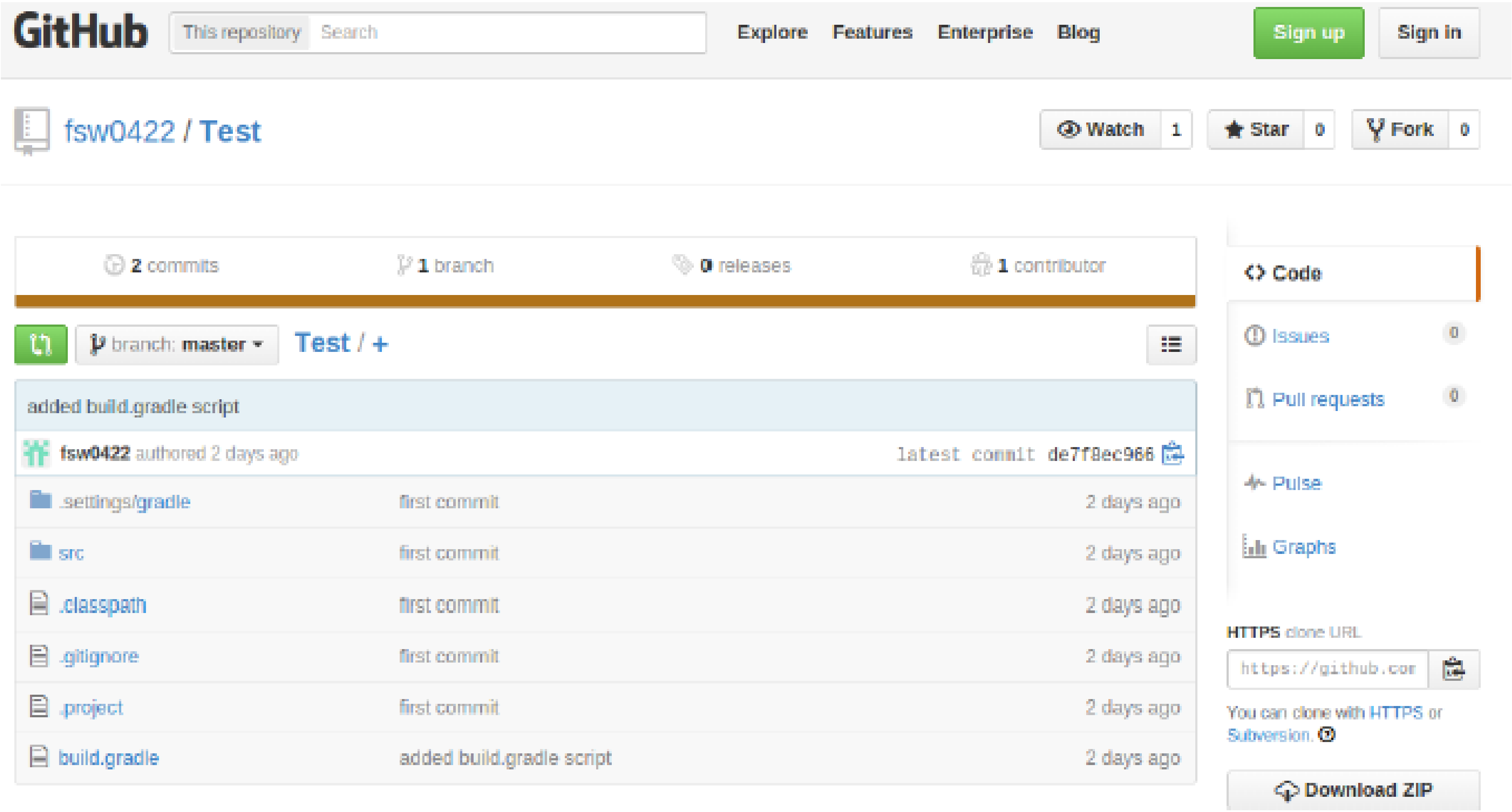
IV. CTIP

CTIP(Github)


GitHub
This repository
Search
Explore
Features
Enterprise
Blog
Sign up
Sign in
Watch 1
Star 0
Fork 0
Code
Issues 0
Pull requests 0
Pulse
Graphs
Download ZIP

fsw0422 / Test

2 commits | 1 branch | 0 releases | 1 contributor

branch: master | Test / +

added build.gradle script

fsw0422 authored 2 days ago | latest commit de7f8ec966

.settings/gradle	first commit	2 days ago
src	first commit	2 days ago
.classpath	first commit	2 days ago
.gitignore	first commit	2 days ago
.project	first commit	2 days ago
build.gradle	added build.gradle script	2 days ago

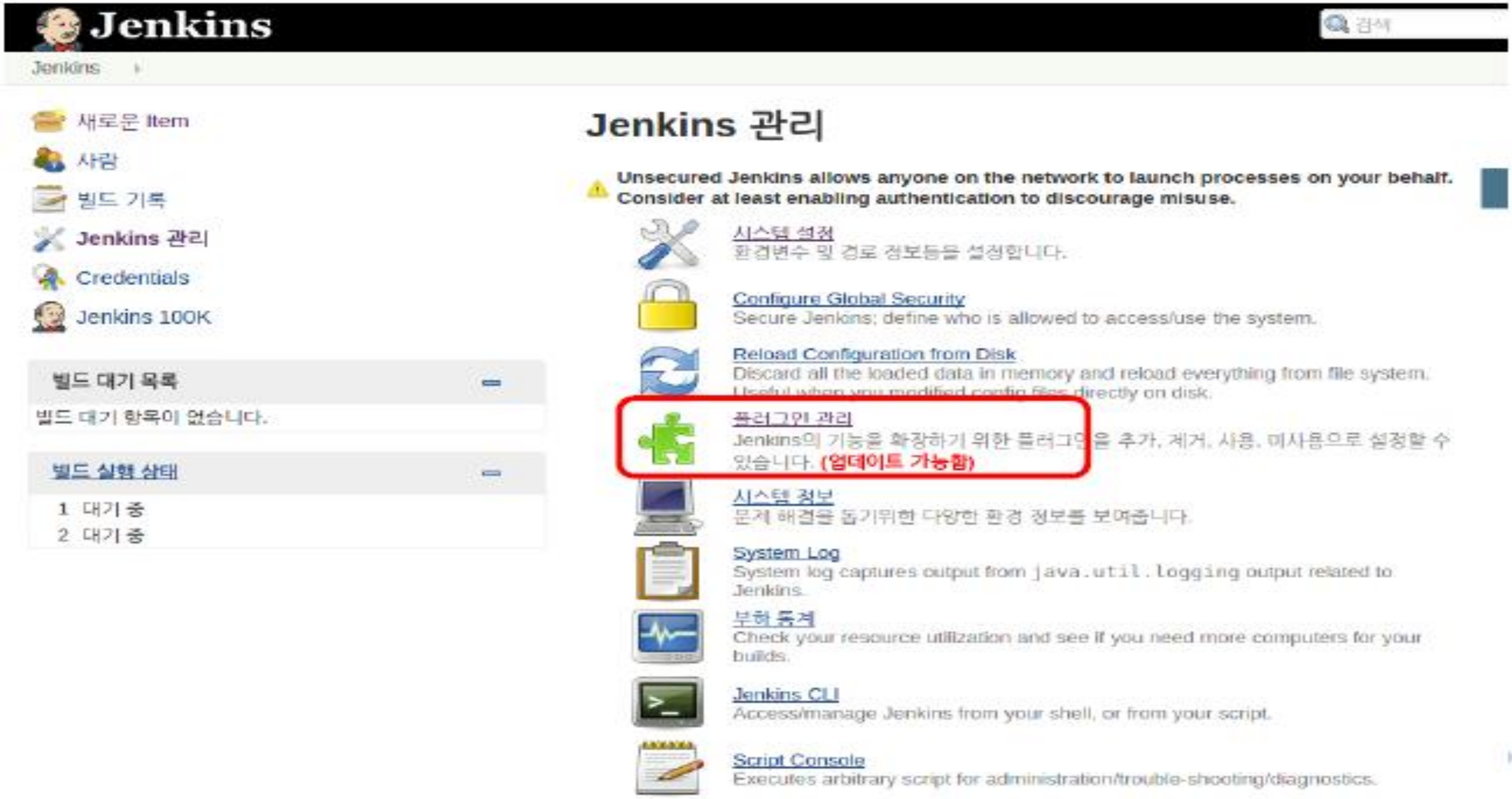
HTTPS clone URL

https://github.com

You can clone with HTTPS or Subversion.

IV. CTIP

Redmine Plugin Setting



빌드 대기 항목이 없습니다.

1 대기 중
2 대기 중

Jenkins 관리

Unsecured Jenkins allows anyone on the network to launch processes on your behalf. Consider at least enabling authentication to discourage misuse.

시스템 설정
환경변수 및 경로 정보등을 설정합니다.

Configure Global Security
Secure Jenkins; define who is allowed to access/use the system.

Reload Configuration from Disk
Discard all the loaded data in memory and reload everything from file system. Useful when you modified config files directly on disk.

플러그인 관리
Jenkins의 기능을 확장하기 위한 플러그인을 추가, 제거, 사용, 미사용으로 설정할 수 있습니다. (업데이트 가능함)

시스템 정보
문제 해결을 돕기위한 다양한 환경 정보를 보여줍니다.

System Log
System log captures output from `java.util.logging` output related to Jenkins.

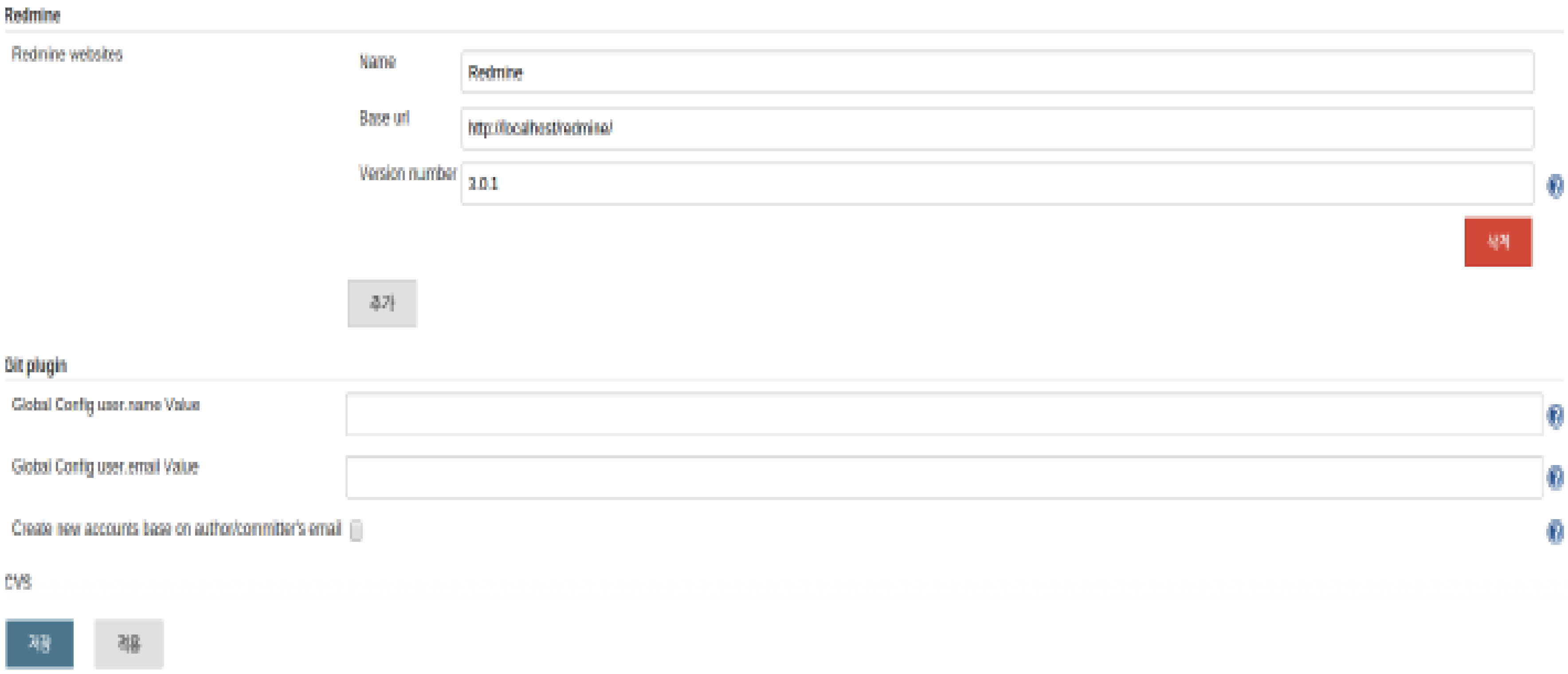
부하 통계
Check your resource utilization and see if you need more computers for your builds.

Jenkins CLI
Access/manage Jenkins from your shell, or from your script.

Script Console
Executes arbitrary script for administration/trouble-shooting/diagnostics.

IV. CTIP

Redmine Plugin Setting



Redmine

Redmine websites

Name: Redmine

Base url: http://localhost/redmine/

Version number: 3.0.1

Git plugin

Global Config user.name Value:

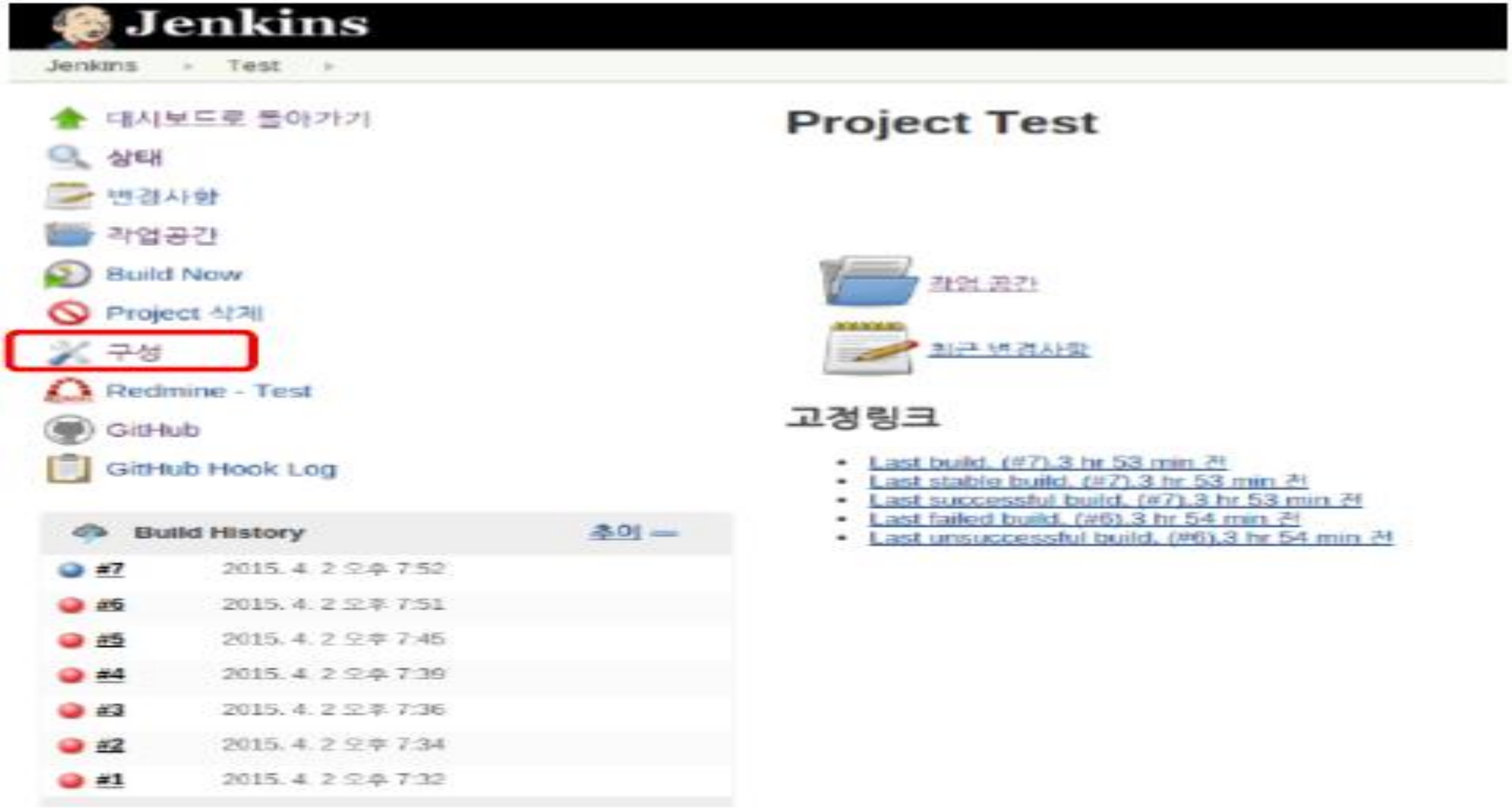
Global Config user.email Value:

Create new accounts base on author/committer's email ☐

CVS

IV. CTIP

Redmine Plugin Setting



Jenkins

Jenkins ▸ Test ▸

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Build History 추이 —

#7	2015. 4. 2 오후 7:52
#6	2015. 4. 2 오후 7:51
#5	2015. 4. 2 오후 7:45
#4	2015. 4. 2 오후 7:39
#3	2015. 4. 2 오후 7:36
#2	2015. 4. 2 오후 7:34
#1	2015. 4. 2 오후 7:32

Project Test

작업 공간

최근 변경사항

고정링크

- Last build, (#7),3 hr 53 min 전
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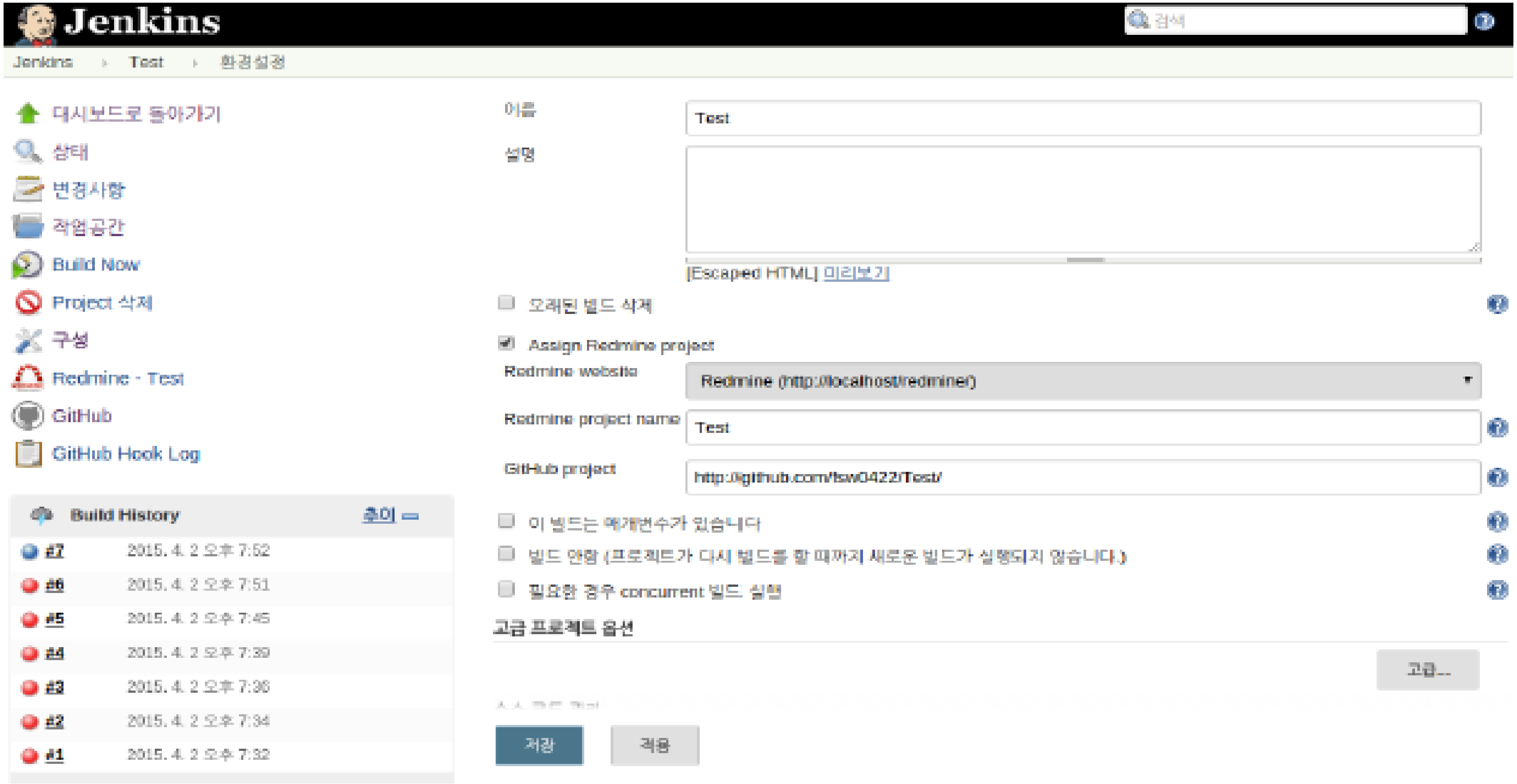
- Last failed build, (#6),3 hr 54 min 전
- Last unsuccessful build, (#6),3 hr 54 min 전

IV. CTIP

Redmine Plugin Setting


Jenkins
검색
Jenkins › Test › 환경설정
대시보드로 돌아가기
상태
변경사항
작업공간
Build Now
Project 삭제
구성
Redmine - Test
GitHub
GitHub Hook Log
[Escaped HTML] 미리보기
고급 프로젝트 옵션
고급...
저장
적용

이름: Test

설명:

☐ 오래된 빌드 삭제

☑ Assign Redmine project

Redmine website: Redmine (http://localhost/redmine/)

Redmine project name: Test

GitHub project: http://github.com/tsw0422/Test/

☐ 이 빌드는 매개변수가 있습니다

☐ 빌드 안함 (프로젝트가 다시 빌드를 할 때까지 새로운 빌드가 실행되지 않습니다.)

☐ 필요한 경우 concurrent 빌드 실행

Build History	추이 —
#7	2015. 4. 2 오후 7:52
#6	2015. 4. 2 오후 7:51
#5	2015. 4. 2 오후 7:45
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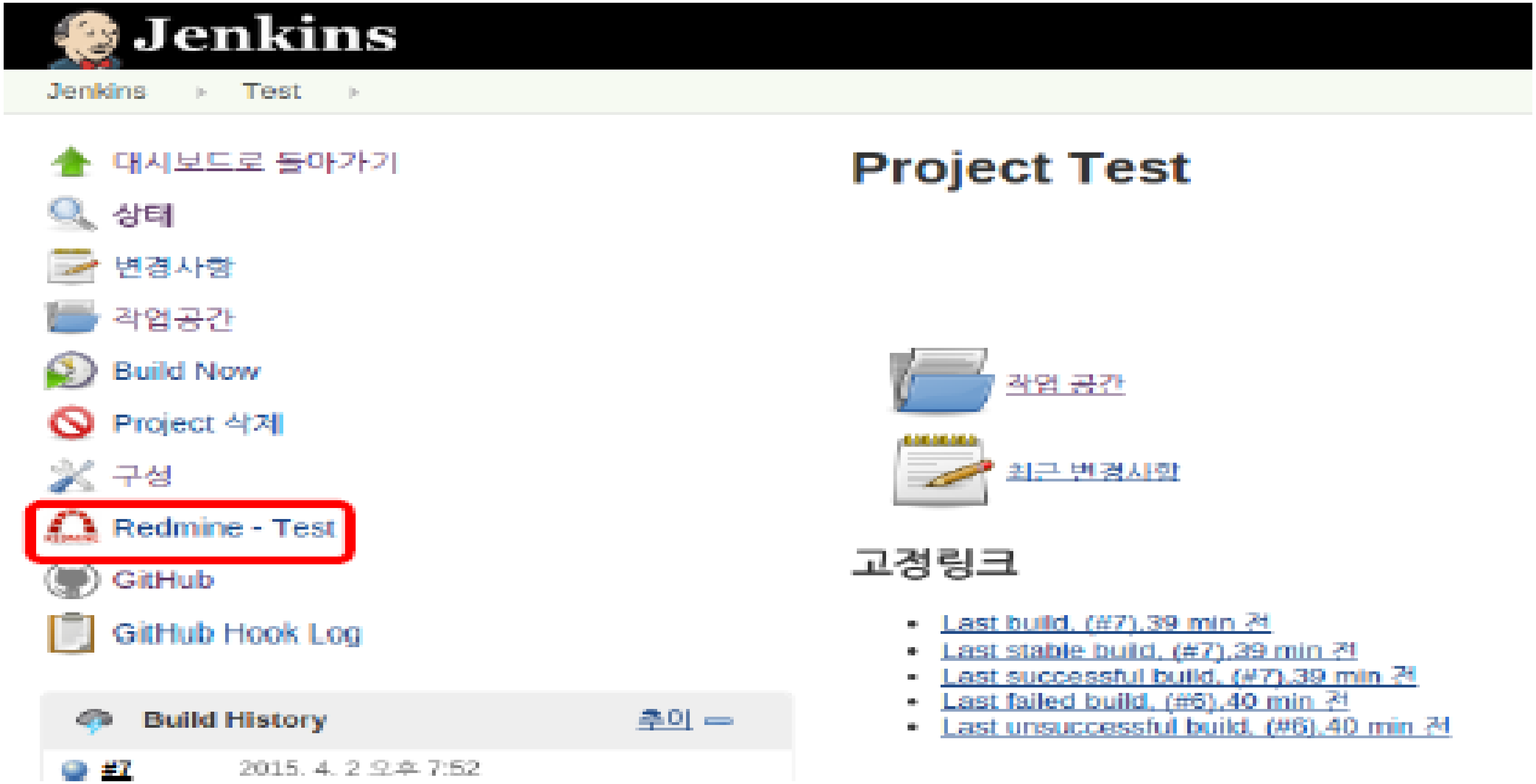
IV. CTIP

CTIP(Jenkins-Redmine)



Jenkins

Jenkins ▸ Test ▸

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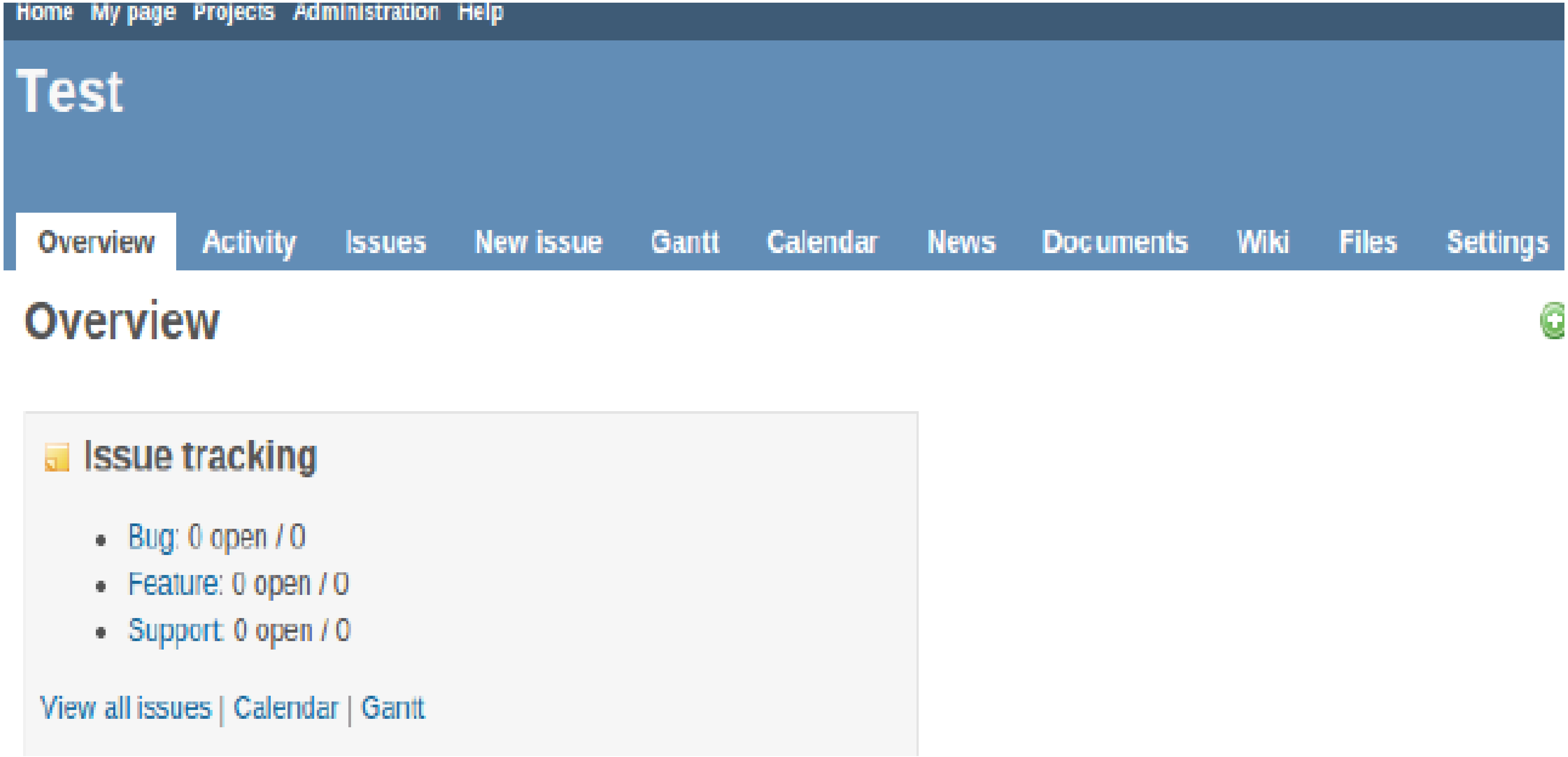
IV. CTIP

CTIP(Redmine)



Home
My page
Projects
Administration
Help
Overview
Activity
Issues
New issue
Gantt
Calendar
News
Documents
Wiki
Files
Settings

Test

Overview

Issue tracking

- Bug: 0 open / 0
- Feature: 0 open / 0
- Support: 0 open / 0

View all issues | Calendar | Gantt

Q&A ?

THANK YOU