



소프트웨어 검증 #2

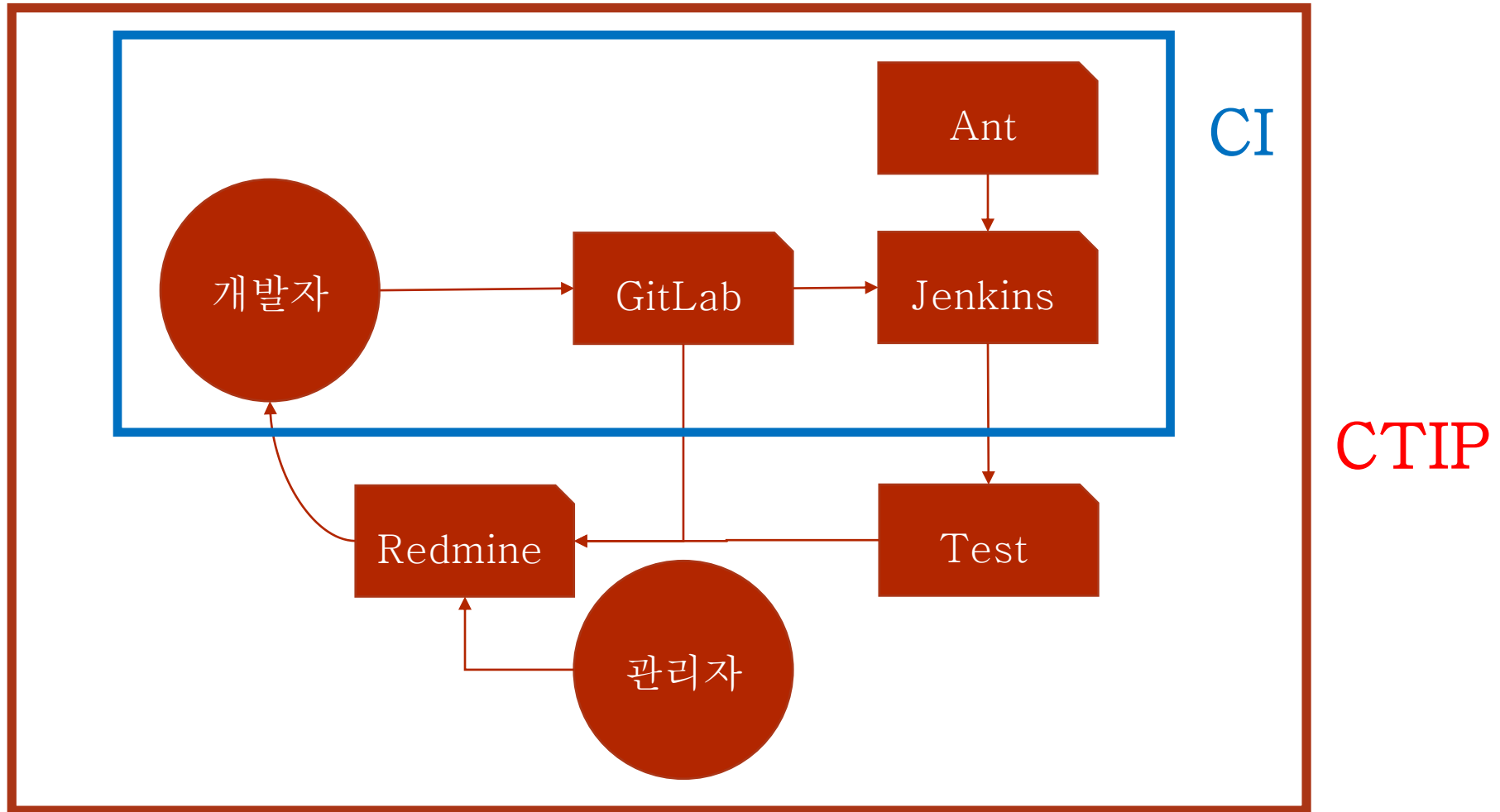
201111353 박수민

201111371 원정일

201111386 조경래



CI & CTIP



CTIP

| | |
|----|---------------------|
| OS | Ubuntu 14.04 Server |
|----|---------------------|

| | |
|------|---------------|
| java | Java 1.8.0_77 |
|------|---------------|

| | |
|-------|---------------|
| Build | Jenkins 1.655 |
|-------|---------------|

| | |
|----|----------------------|
| PM | Redmine 2.4.2.stable |
|----|----------------------|

| | |
|-----|--------------|
| Git | GitLab 8.6.1 |
|-----|--------------|

| | |
|----------|---------|
| UnitTest | Junit 4 |
|----------|---------|

| | |
|-------------|-----------|
| BuildScript | Ant 1.9.6 |
|-------------|-----------|

CTIP 환경 구축 : JDK 설치

```
$ sudo add-apt-repository ppa:webupd8team/java
```

```
$ sudo apt-get update
```

```
$ sudo apt-get install oracle-java8-installer
```

```
$ sudo update-alternatives --config java
```

CTIP 환경 구축 : JDK 설정

java version "1.8.0_77"

- java -version

javac 1.8.0_77

- javac -version

```
root@cicsserver:~# java -version
java version "1.8.0_77"
Java(TM) SE Runtime Environment (build 1.8.0_77-b03)
Java HotSpot(TM) 64-Bit Server VM (build 25.77-b03, mixed mode)
root@cicsserver:~#
```

```
root@cicsserver:~# javac -version
javac 1.8.0_77
root@cicsserver:~#
```

CTIP 환경 구축 : Tomcat 설치

```
$ sudo apt-get install tomcat7
```

```
$ sudo vi /etc/default/tomcat7
```

```
root@ciserver:~# vi /etc/default/tomcat7
```

```
Creating config file /etc/logrotate.d/tomcat7 with new version
* no JDK or JRE found - please set JAVA_HOME
invoke-rc.d: initscript tomcat7, action "start" failed.
Setting up authbind (2.1.1) ...
Processing triggers for ureadahead (0.100.0-16) ...
root@ciserver:~#
root@ciserver:~#
root@ciserver:~# echo $JAVA_HOME
```

CTIP 환경 구축 : Tomcat 설정

```
JAVA_HOME =/usr/lib/jvm/java-8-oracle
```

```
$ sudo ufw allow 8080/tcp
```

```
root@ciserver:~# ufw allow 8080/tcp  
Rule added  
Rule added (v6)
```

```
$ sudo vi /etc/bash.bashrc
```

```
JAVA_HOME =/usr/lib/jvm/java-8-oracle
```

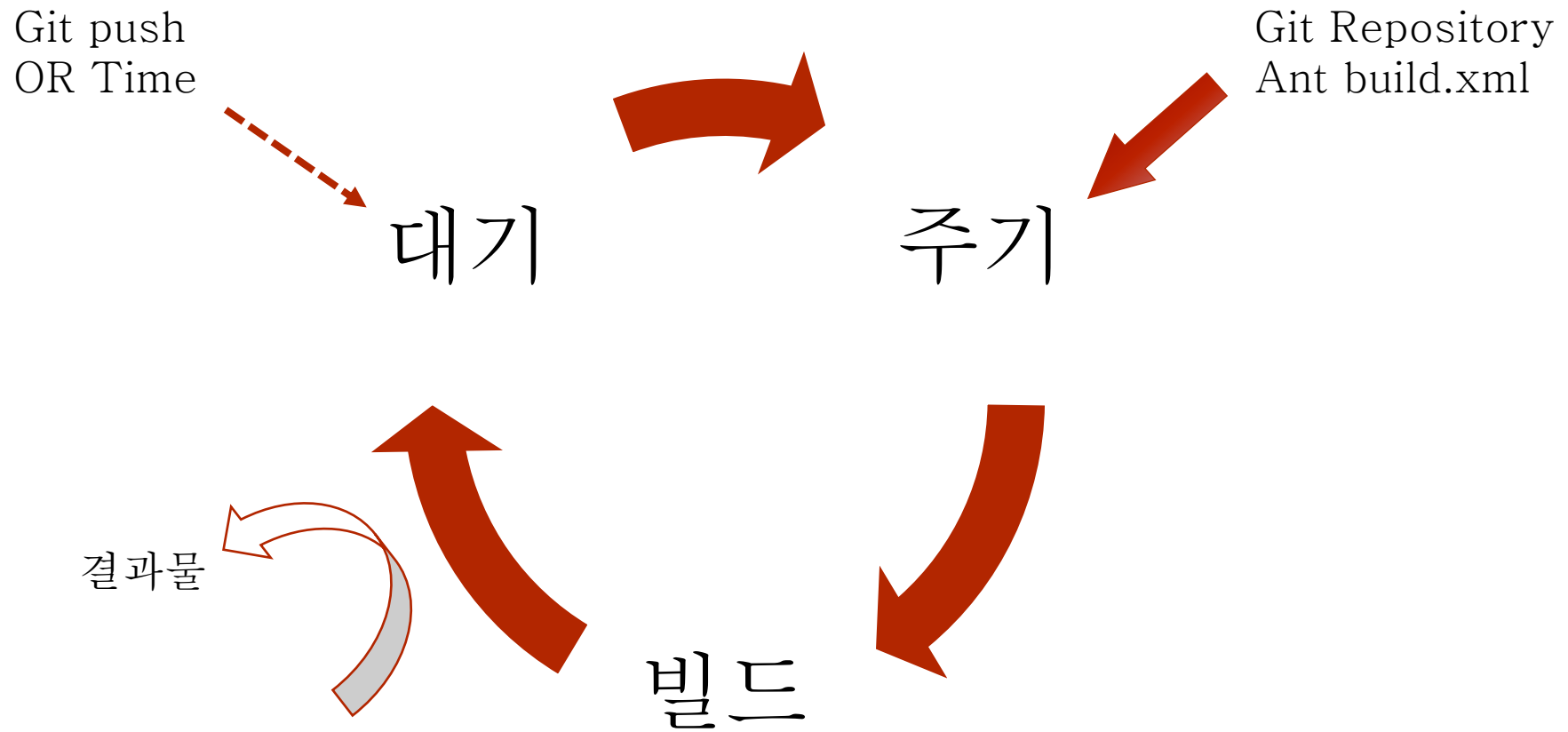
```
JAVA_HOME=/usr/lib/jvm/java-8-oracle
```


CTIP 환경 구축 : Tomcat 실행

```
root@ciserver:/etc/default# vi tomcat7
root@ciserver:/etc/default# service tomcat7 restart
* no JDK or JRE found - please set JAVA_HOME
root@ciserver:/etc/default# vi tomcat7
root@ciserver:/etc/default# service tomcat7 restart
* Starting Tomcat servlet engine tomcat7
root@ciserver:/etc/default#
```

[OK]

Jenkins : 빌드 자동화 환경



CTIP 환경 구축 : Jenkins 설치

```
$ sudo wget -q -O - http://pkg.jenkins-ci.org/debian/jenkins-ci.org.key | sudo apt-key add -
```

```
root@cicsserver:~# wget -q -O - https://jenkins-ci.org/debian/jenkins-ci.org.key | apt-key add -
```

```
$ sudo sh -c 'echo deb http://pkg.jenkins-ci.org/debian binary/ > /etc/apt/sources.list.d/jenkins.list'
```

```
root@cicsserver:~# sh -c 'echo deb http://pkg.jenkins-ci.org/debian binary/ > /etc/apt/sources.list.d/jenkins.list'
```

```
$ sudo apt-get update
```

```
root@cicsserver:~# apt-get install jenkins
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following extra packages will be installed:
  daemon
The following NEW packages will be installed:
  daemon jenkins
```

```
$ sudo apt-get install jenkins
```

CTIP 환경 구축 : Jenkins 설정

```
* Starting Jenkins Continuous Integration Server jenkins
The selected http port (8080) seems to be in use by another program
Please select another port to use for jenkins

invoke-rc.d: initscript jenkins, action "start" failed.
dpkg: error processing package jenkins (--configure):
 subprocess installed post-installation script returned error exit status 7
Processing triggers for ureadahead (0.100.0-16) ...
Errors were encountered while processing:
 jenkins
E: Sub-process /usr/bin/dpkg returned an error code (1) [fail]
```

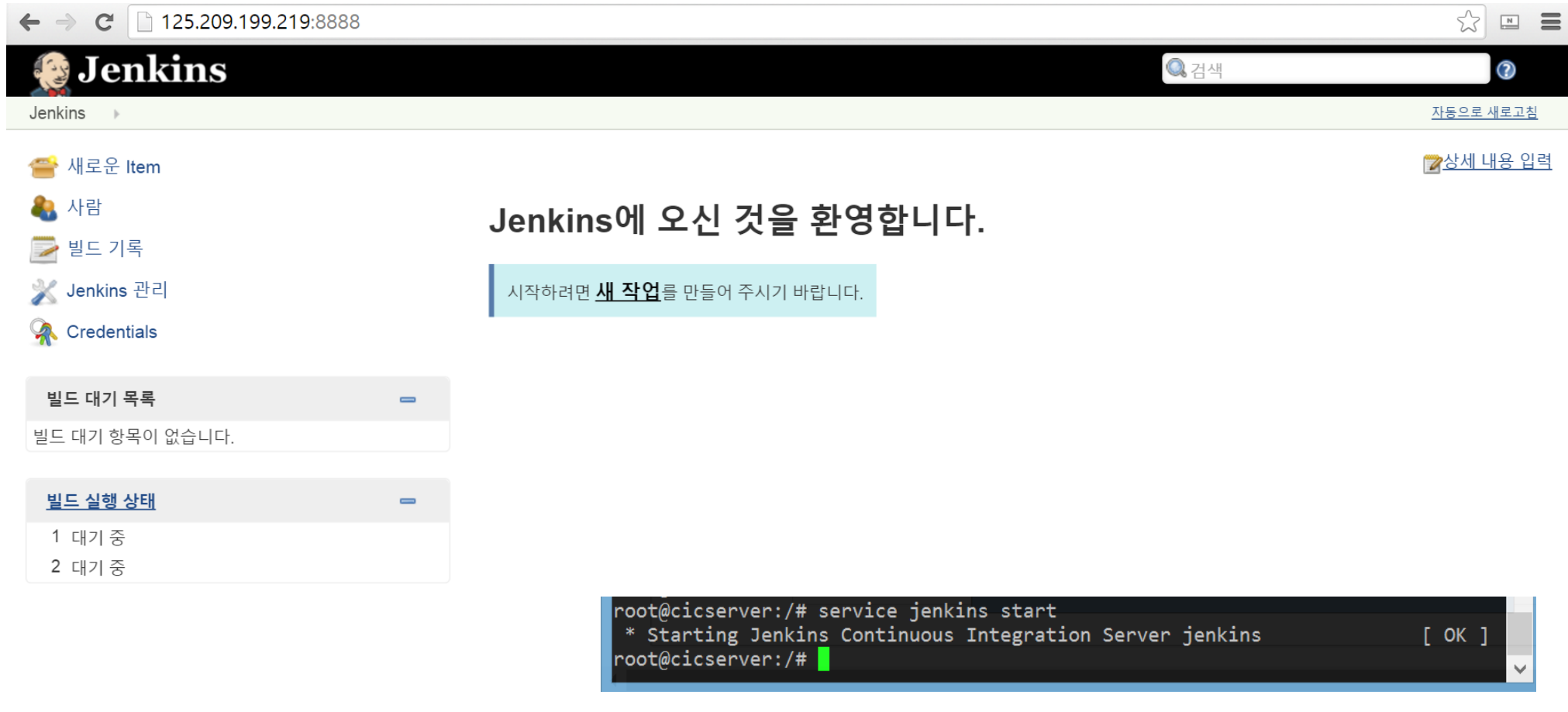
```
$ sudo vi /etc/default/jenkins
```

```
root@cicserver:~# vi /etc/default/jenkins
```

```
HTTP_PORT=8888
```

```
# port for HTTP connector (default 8080; disable with -1)
HTTP_PORT=8888
```

Jenkins : 접속

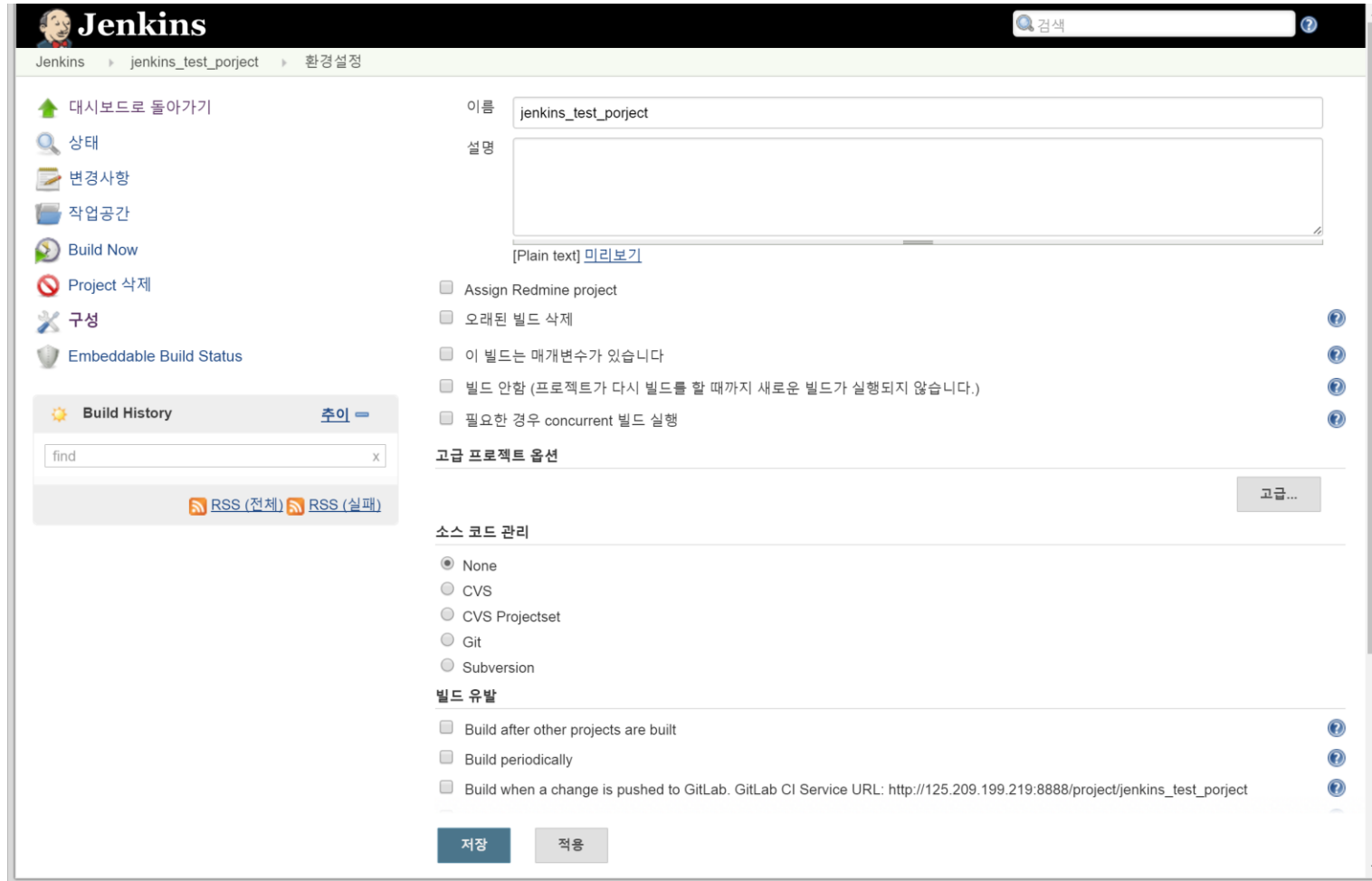


The screenshot shows the Jenkins web interface in a browser window. The address bar displays the URL `125.209.199.219:8888`. The page header includes the Jenkins logo and a search bar. The main content area features a central welcome message: "Jenkins에 오신 것을 환영합니다." (Welcome to Jenkins). Below this, a light blue box contains the instruction: "시작하려면 새 작업을 만들어 주시기 바랍니다." (To get started, please create a new job). On the left sidebar, there are navigation links for "새로운 Item", "사람", "빌드 기록", "Jenkins 관리", and "Credentials". Below these are two expandable panels: "빌드 대기 목록" (Build Queue) which is currently empty, and "빌드 실행 상태" (Build Execution Status) which shows two items in the queue. At the bottom right, a terminal window displays the command `service jenkins start` and its output: `* Starting Jenkins Continuous Integration Server jenkins [OK]`.

Jenkins : 프로젝트 생성

The screenshot shows the Jenkins 'New Item' configuration page. At the top, the Jenkins logo and a search bar are visible. Below the header, there's a breadcrumb 'Jenkins > All'. The left sidebar contains several menu items: '새로운 Item' (New Item), '사람' (People), '빌드 기록' (Build History), 'Jenkins 관리' (Jenkins Management), and 'Credentials'. The main content area is titled 'Item 이름' (Item Name) and has a text input field containing 'jenkins_test_porject'. Below this, there are five radio button options for project types: 'Freestyle project' (selected), 'Maven project', 'External Job', 'Multi-configuration project', and '기존 Item 복사' (Copy Existing Item). Each option has a brief description. At the bottom of the main area is an 'OK' button. The bottom left sidebar shows '빌드 대기 목록' (Build Queue) with the message '빌드 대기 항목이 없습니다.' (No build items in queue) and '빌드 실행 상태' (Build Execution Status) with a list of two items: '1 대기 중' (1 Pending) and '2 대기 중' (2 Pending).

Jenkins : 프로젝트 생성



Jenkins : 설정

Jenkins Location

Jenkins URL

http://125.209.199.219:8888/

System Admin e-mail address

notwice92@gmail.com

JDK

JDK installations

JDK

Name

jdk8

JAVA_HOME

/usr/lib/jvm/java-8-oracle

Install automatically

Ant

Ant installations

Ant

Name

ant1.9

Install automatically

Install from Apache

Version

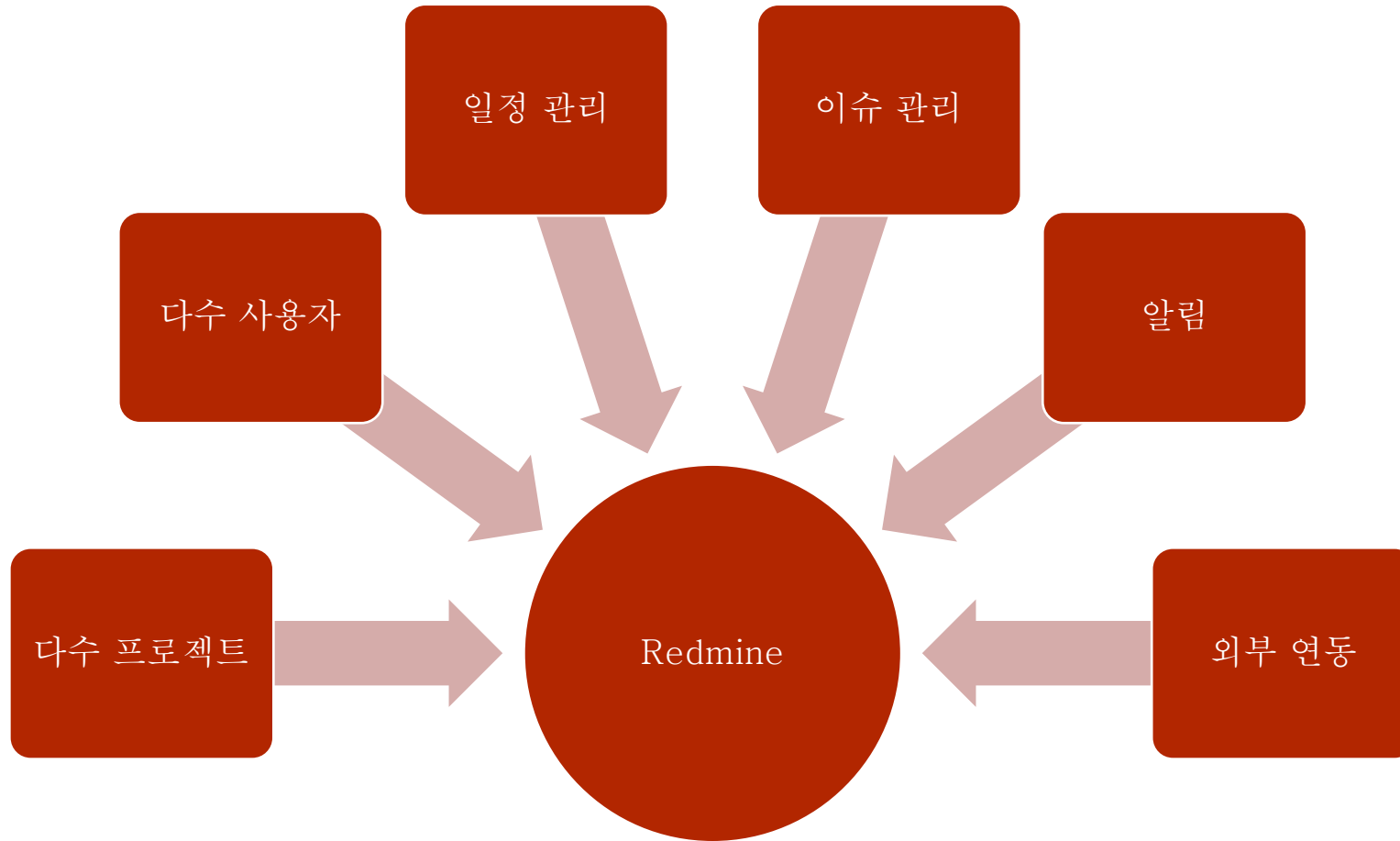
1.9.6

Jenkins : 대시 보드

The screenshot shows the Jenkins dashboard interface. On the left, there is a sidebar with navigation links: '새로운 Item', '사람', '빌드 기록', 'Jenkins 관리', and 'Credentials'. Below these are two expandable sections: '빌드 대기 목록' (Build Queue) which is currently empty, and '빌드 실행 상태' (Build Execution Status) showing 1 and 2 builds in progress. The main area displays a table of build jobs. The table has columns for status (S), weather icon (W), Name, 최근 성공 (Last Success), 최근 실패 (Last Failure), and 최근 소요 시간 (Last Duration). Three jobs are listed: 'jenkins_test_porject', 'testAnt', and 'testJen'. Below the table, there are links for '아이콘: S M L' and a legend for RSS feeds: 'RSS 모두', 'RSS 실패', and 'RSS 최근 빌드'. The top of the dashboard includes the Jenkins logo, a search bar, and a '자동으로 새로고침' (Auto Refresh) button.

| S | W | Name ↓ | 최근 성공 | 최근 실패 | 최근 소요 시간 |
|---|---|--------------------------------------|-----------------------------------|----------------------------------|----------|
| | | jenkins_test_porject | — | — | — |
| | | testAnt | 1 hr 0 min - #80 | 1 hr 1 min - #79 | 1 sec |
| | | testJen | 8 hr 15 min - #25 | 48 min - #26 | 0.55 sec |

Redmine : 프로젝트 관리



CTIP 환경 구축 : Redmine 설치

```
$ sudo apt-get update && apt-get upgrade -y
```

```
$ sudo apt-get install apache2 libapache2-mod-passenger mysql-  
l-server mysql-client
```

```
$ sudo apt-get install redmine redmine-mysql
```

```
$ sudo gem update
```

```
$ sudo gem install bundler
```

```
$ sudo ln -s /usr/share/redmine/public /var/www/html/redmine
```

CTIP 환경 구축 : Apache2 설정

```
<IfModule mod_passenger.c>  
    PassengerDefaultUser www-data  
    PassengerRoot /usr/lib/ruby/vendor_ruby/phusion_passenger/locations.ini  
    PassengerDefaultRuby /usr/bin/ruby  
</IfModule>
```

- \$ sudo vim /etc/apache2/mods-available/passenger.conf

```
<Directory /var/www/html/redmine>  
    RailsBaseURI /redmine  
    PassengerResolveSymlinksInDocumentRoot on  
</Directory>
```

- \$ sudo vim /etc/apache2/sites-available/000-default.conf

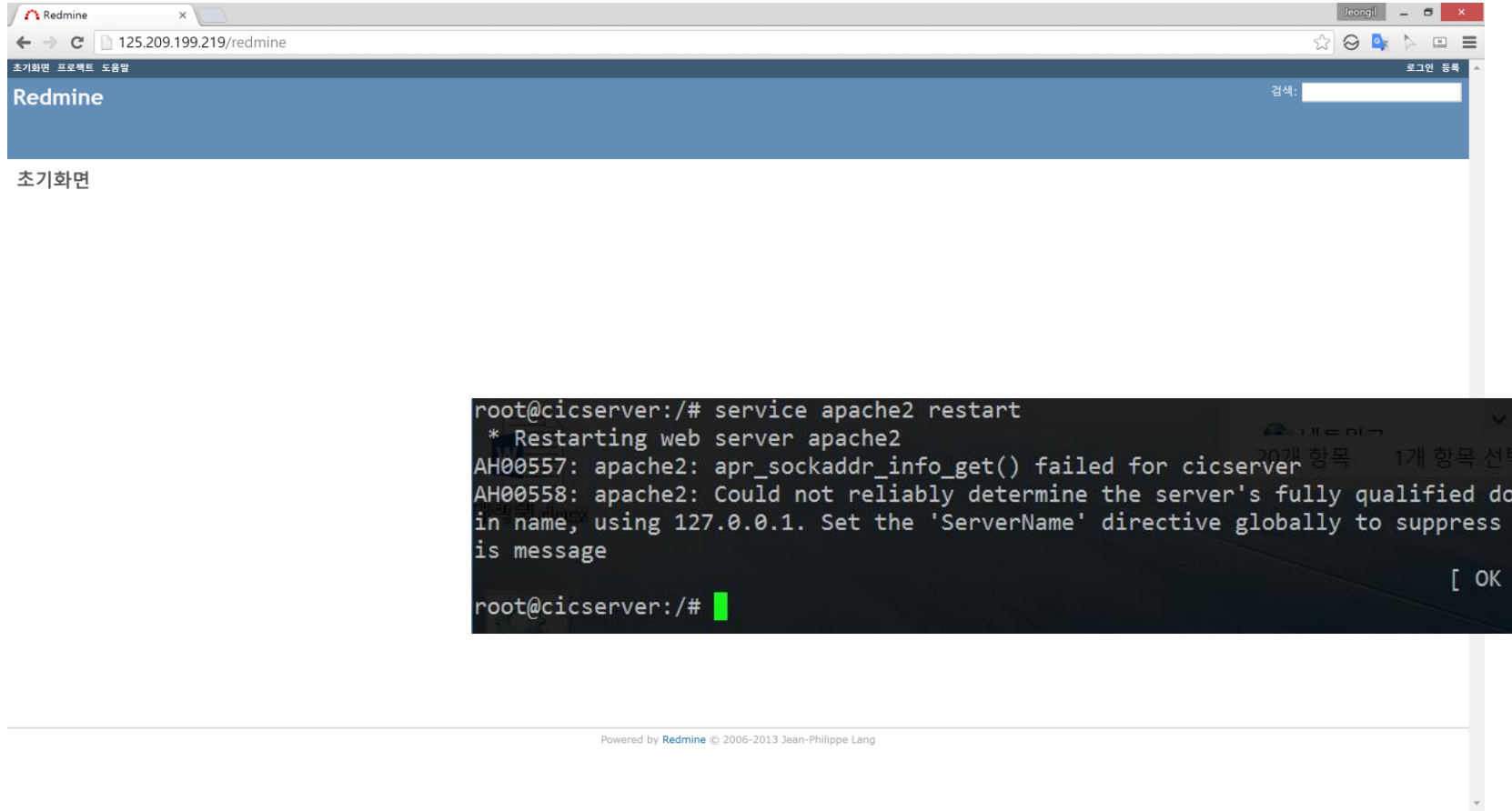
CTIP 환경 구축 : 메일 알림 환경 구성

```
$ sudo apt-get install sendmail
```

```
$ sudo vim /etc/redmine/default/configuration.yml
```

```
production:  
  email_delivery:  
    delivery_method: :smtp  
    smtp_settings:  
      address: localhost  
      port: 25  
      domain: test  
      authentication: :none  
      openssl_verify_mode: 'none'
```

Redmine : 접속



The image shows a web browser window displaying the Redmine homepage. The browser's address bar shows the URL `125.209.199.219/redmine`. The page title is "Redmine" and the main content area displays "초기화면" (Home page). A search bar is visible in the top right corner.

Overlaid on the bottom right of the browser window is a terminal window showing the following command and output:

```
root@cicserver:/# service apache2 restart
* Restarting web server apache2
AH00557: apache2: apr_sockaddr_info_get() failed for cicserver
AH00558: apache2: Could not reliably determine the server's fully qualified do
in name, using 127.0.0.1. Set the 'ServerName' directive globally to suppress
is message
root@cicserver:/# █
```

At the bottom of the browser window, there is a footer that reads: "Powered by Redmine © 2006-2013 Jean-Philippe Lang".

Redmine : 메일 알림 설정

초기화면 내 페이지 프로젝트 관리 도움말 로그인계정: admin 내 계정 로그아웃

Redmine 검색:

설정

일반 표시방식 인증 프로젝트 일감 추적 **메일 알림** 수신 메일 저장소

발신 메일 주소

참조자들을 bcc로 숨기기

텍스트만 (HTML 없이)

기본 알림 옵션

알림메일이 필요한 작업을 선택하세요.

- 일감 추가
- 일감 수정
 - 댓글이 추가되었습니다.
 - 상태가 변경되었습니다.
 - 우선 순위가 변경되었습니다.
- 뉴스 추가
- 뉴스에 설명이 추가되었습니다.
- 문서 추가
- 파일 추가
- 글 추가
- 위키페이지 추가
- 위키페이지 수정

[모두선택](#) | [선택해제](#)

관리

- 프로젝트
- 사용자
- 그룹
- 역할 및 권한
- 일감 유형
- 일감 상태
- 업무흐름
- 사용자 정의 항목
- 코드값
- 설정**
- LDAP 인증
- 플러그인
- 정보

Redmine : 프로젝트 생성

초기화면 내 페이지 프로젝트 관리 도움말 로그인계정: admin 내 계정 로그아웃

Redmine 검색:

새 프로젝트

이름 * testProject

설명 **B** *I* U ~~S~~ **C** H1 H2 H3 pre

TEST

식별자 * testproject
1 에서 100 글자 소문자(a-z),숫자,대위(-)와 밑줄(_)만 가능합니다.
식별자는 저장후에는 수정할 수 없습니다.

홈페이지

공개

상위 프로젝트로부터 구성원을 상속

모듈

| | | | | |
|------------------------------------------|------------------------------------------|-----------------------------------------|----------------------------------------|----------------------------------------------|
| <input checked="" type="checkbox"/> 일감관리 | <input checked="" type="checkbox"/> 시간추적 | <input checked="" type="checkbox"/> 뉴스 | <input checked="" type="checkbox"/> 문서 | <input checked="" type="checkbox"/> 파일 |
| <input checked="" type="checkbox"/> 위키 | <input checked="" type="checkbox"/> 저장소 | <input checked="" type="checkbox"/> 게시판 | <input checked="" type="checkbox"/> 달력 | <input checked="" type="checkbox"/> Gantt 차트 |

일감 유형

| | | |
|-----------------------------------------|---------------------------------------------|---------------------------------------------|
| <input checked="" type="checkbox"/> Bug | <input checked="" type="checkbox"/> Feature | <input checked="" type="checkbox"/> Support |
|-----------------------------------------|---------------------------------------------|---------------------------------------------|

만들기 | 만들고 계속하기

Powered by Redmine © 2006-2013 Jean-Philippe Lang

Redmine : 일감 생성

개요 작업내역 일감 새 일감만들기 Gantt 차트 달력 뉴스 문서 위키 파일 설정

새 일감만들기

유형 * Bug 비공개

제목 *

설명 **B** *I* U ~~S~~ **C** H1 H2 H3

상태 * New

우선순위 * Normal

담당자

상위 일감

시작시간 2016-03-31

완료기한

추정시간 시간

진척도 0 %

파일 선택된 파일 없음 (최대 크기: 5 MB)

일감관람자 추가할 일감관람자 검색

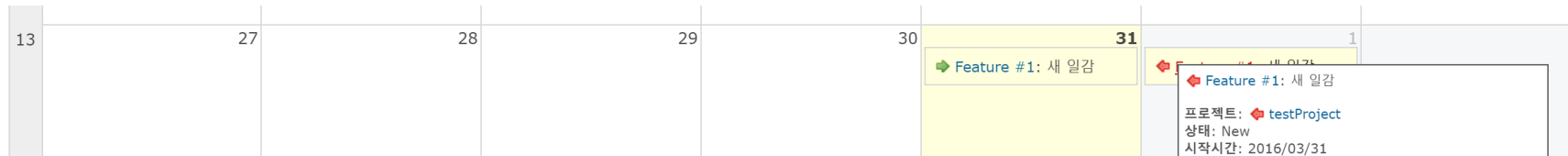
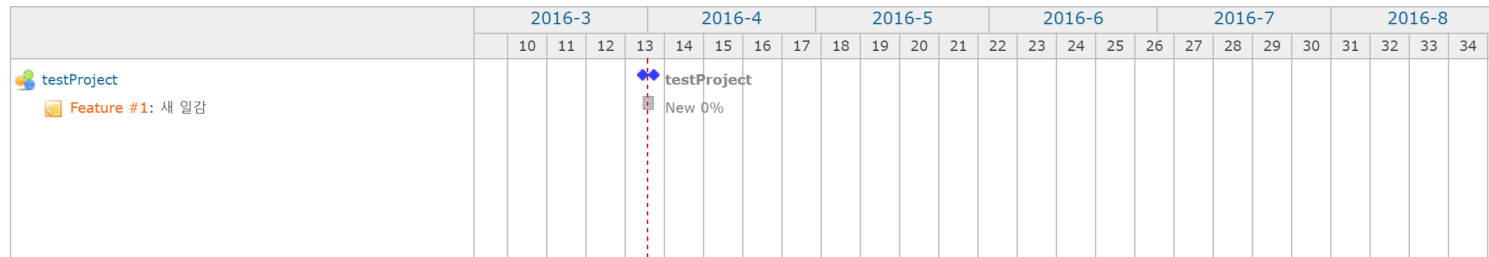
Redmine : 프로젝트 관리

✔ 적용 🔄 지우기 📄 저장

| ✔ # | 유형 | 상태 | 우선순위 | 제목 | 담당자 | 변경 |
|----------------------------|---------|-----|------|------|---------------|------------------|
| <input type="checkbox"/> 1 | Feature | New | High | 새 일감 | Redmine Admin | 2016/03/31 02:43 |

6 개월 동안 | 다음부터 3월 2016 ✔ 적용 🔄 지우기 📄 저장

🌐 더 크게 🗨 더 작게



- 👉 오늘 시작하는 업무(task)
- 👈 오늘 종료하는 업무(task)
- 👉👈 오늘 시작하고 종료하는 업무(task)

👈 Feature #1: 새 일감

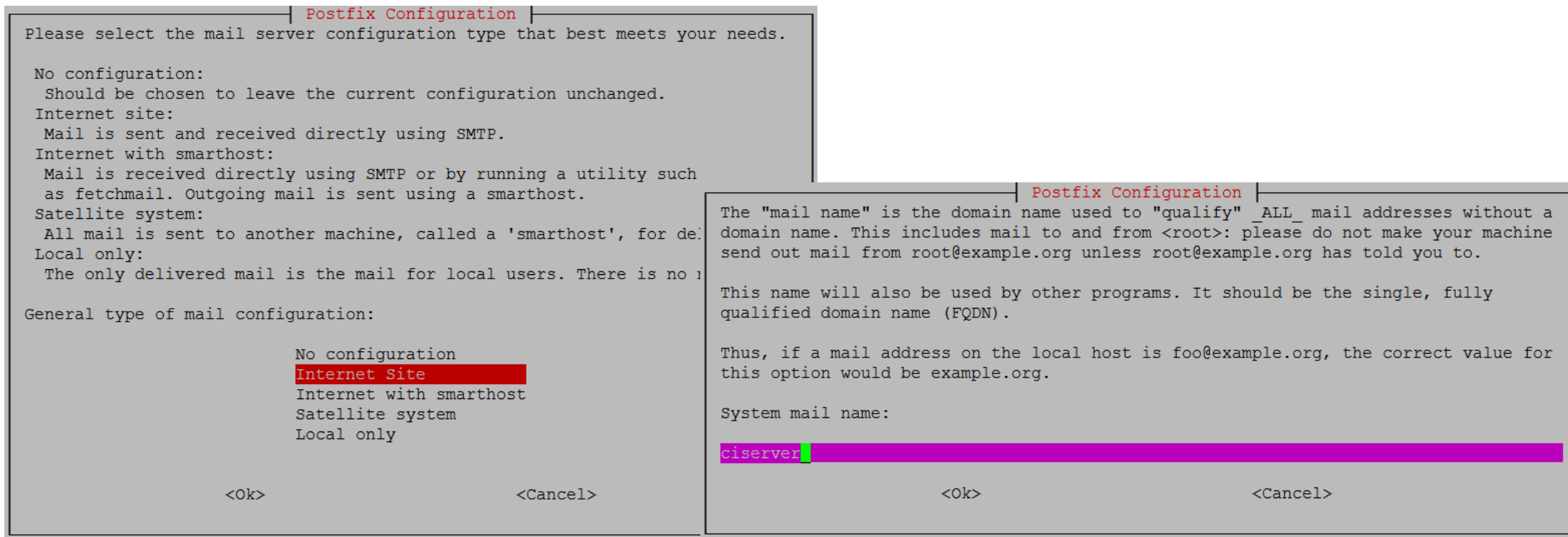
프로젝트: 📌 testProject
 상태: New
 시작시간: 2016/03/31
 완료기한: 2016/04/01
 담당자: Redmine Admin
 우선순위: High

Git : 형상관리



CTIP 환경 구축 : GitLab 준비

```
$ sudo apt-get install curl openssh-server ca-certificates postfix
```



CTIP 환경 구축 : GitLab 설치

```
$ curl -sS  
https://packages.gitlab.com/install/repositories/gitlab/gitlab  
-ce/script.deb.sh | sudo bash
```

```
$ sudo apt-get install gitlab-ce
```

```
root@ciserver:~# apt-get install gitlab-ce  
Reading package lists... Done  
Building dependency tree  
Reading state information... Done  
The following packages were automatically installed and are no longer required:  
  m4 sendmail-base sendmail-cf sensible-mdm  
Use 'apt-get autoremove' to remove them.  
The following NEW packages will be installed:  
  gitlab-ce  
0 upgraded, 1 newly installed, 0 to remove and 3 not upgraded.  
Need to get 268 MB of archives.  
After this operation, 790 MB of additional disk space will be used.  
0% [Working]
```

CTIP 환경 구축 : GitLab 설정

```
$ sudo vi /etc/hosts
```

```
:~# vi /etc/hosts
```

```
127.0.0.1 localhost → 127.0.0.1 localhost ciserver
```

```
127.0.0.1 localhost ciserver
```

```
$ sudo vi /etc/gitlab/gitlab.rb
```

```
root@ciserver:~# vi /etc/gitlab/gitlab.rb
```

```
external_url 'http://125.209.199.219:9999'
```

```
external_url 'http://125.209.199.219:9999'
```

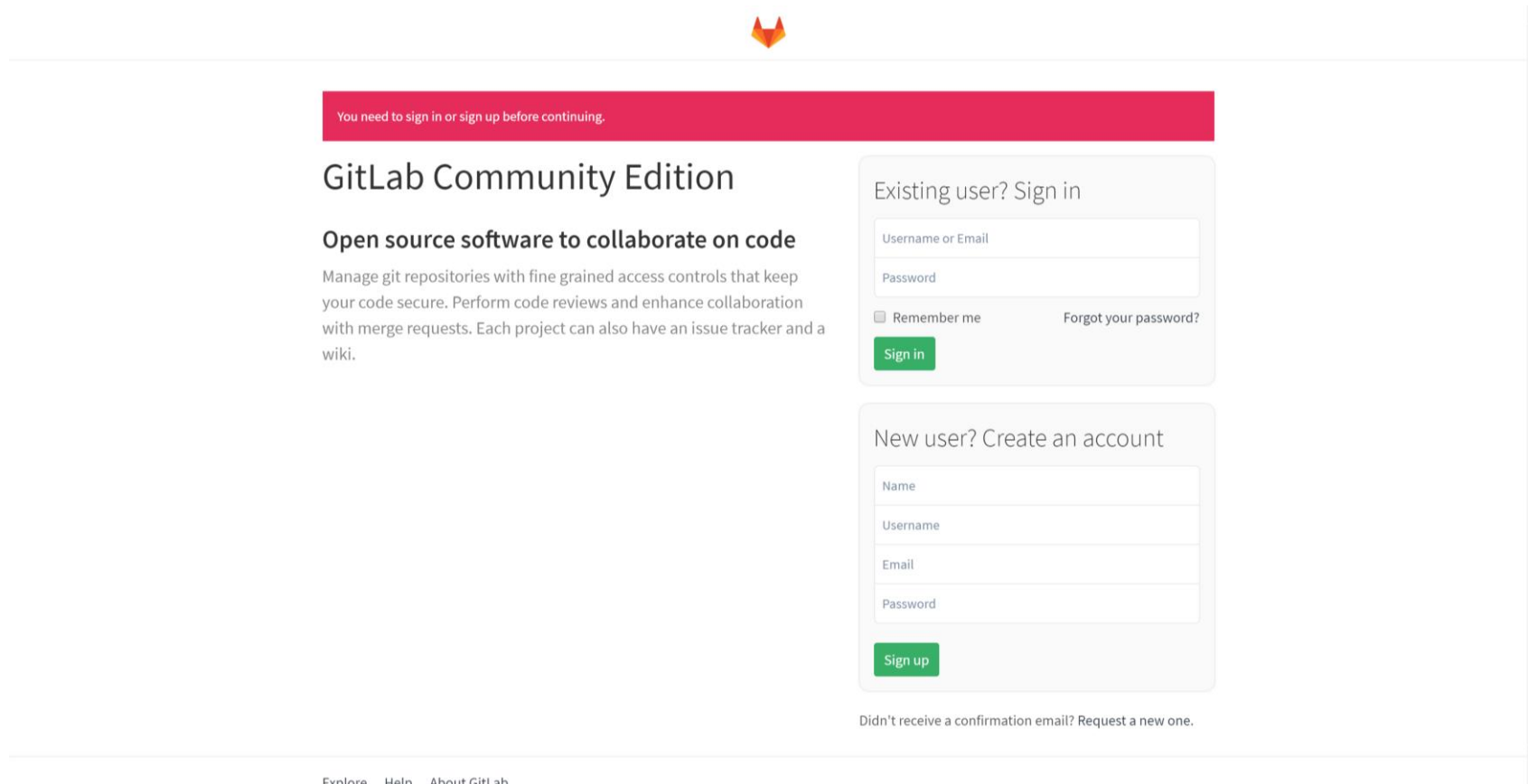
CTIP 환경 구축 : GitLab 설정

```
$ sudo gitlab-ctl reconfigure
```

```
- execute the ruby block reload sidekiq svlogd configuration
Recipe: gitlab::gitlab-workhorse
  * service[gitlab-workhorse] action restart
    - restart service service[gitlab-workhorse]
  * ruby_block[reload gitlab-workhorse svlogd configuration] action create
    - execute the ruby block reload gitlab-workhorse svlogd configuration
Recipe: gitlab::nginx
  * ruby_block[reload nginx svlogd configuration] action create
    - execute the ruby block reload nginx svlogd configuration
Recipe: gitlab::logrotate
  * ruby_block[reload logrotate svlogd configuration] action create
    - execute the ruby block reload logrotate svlogd configuration

Running handlers:
Running handlers complete
Chef Client finished, 217/297 resources updated in 01 minutes 04 seconds
gitlab Reconfigured!
```

GitLab : 접속



The screenshot shows the GitLab login page. At the top center is the GitLab logo (a fox head). Below it is a red banner with the text "You need to sign in or sign up before continuing." The main content is divided into two columns. The left column contains the text "GitLab Community Edition" and "Open source software to collaborate on code", followed by a paragraph describing the software's features. The right column contains two form sections: "Existing user? Sign in" and "New user? Create an account". The "Existing user? Sign in" section has input fields for "Username or Email" and "Password", a "Remember me" checkbox, a "Forgot your password?" link, and a green "Sign in" button. The "New user? Create an account" section has input fields for "Name", "Username", "Email", and "Password", and a green "Sign up" button. At the bottom of the right column, there is a link: "Didn't receive a confirmation email? Request a new one." The footer of the page contains the links "Explore", "Help", and "About GitLab".

You need to sign in or sign up before continuing.

GitLab Community Edition

Open source software to collaborate on code

Manage git repositories with fine grained access controls that keep your code secure. Perform code reviews and enhance collaboration with merge requests. Each project can also have an issue tracker and a wiki.

Existing user? Sign in

Username or Email

Password

Remember me [Forgot your password?](#)

Sign in

New user? Create an account

Name

Username

Email

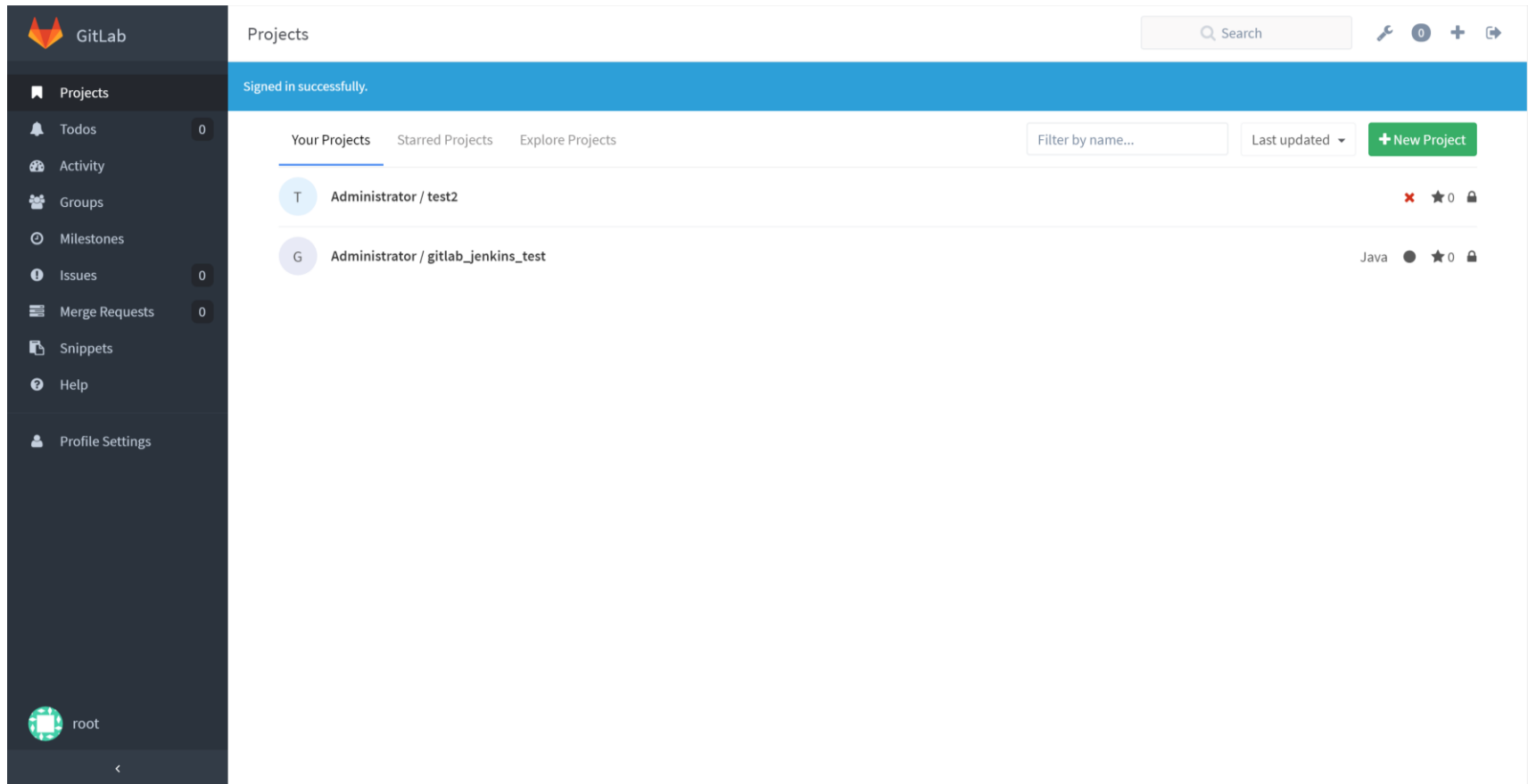
Password

Sign up

[Didn't receive a confirmation email? Request a new one.](#)

[Explore](#) [Help](#) [About GitLab](#)

GitLab : 접속



GitLab : 프로젝트 생성

Projects

Search

New Project

Project path

Want to house several dependent projects under the same namespace? [Create a group](#)

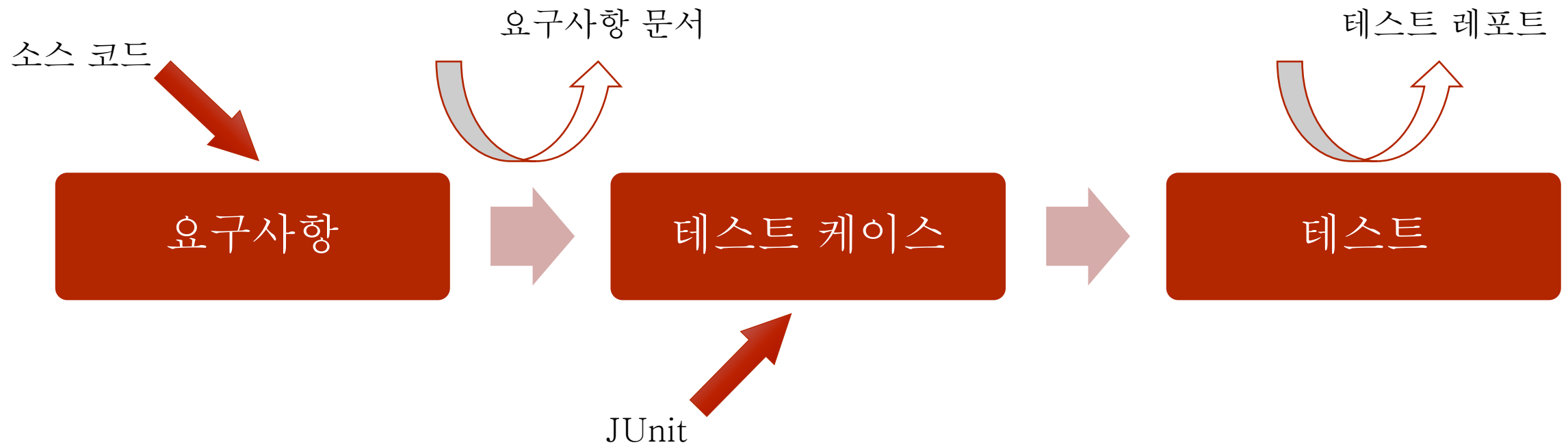
Import project from

Description (optional)

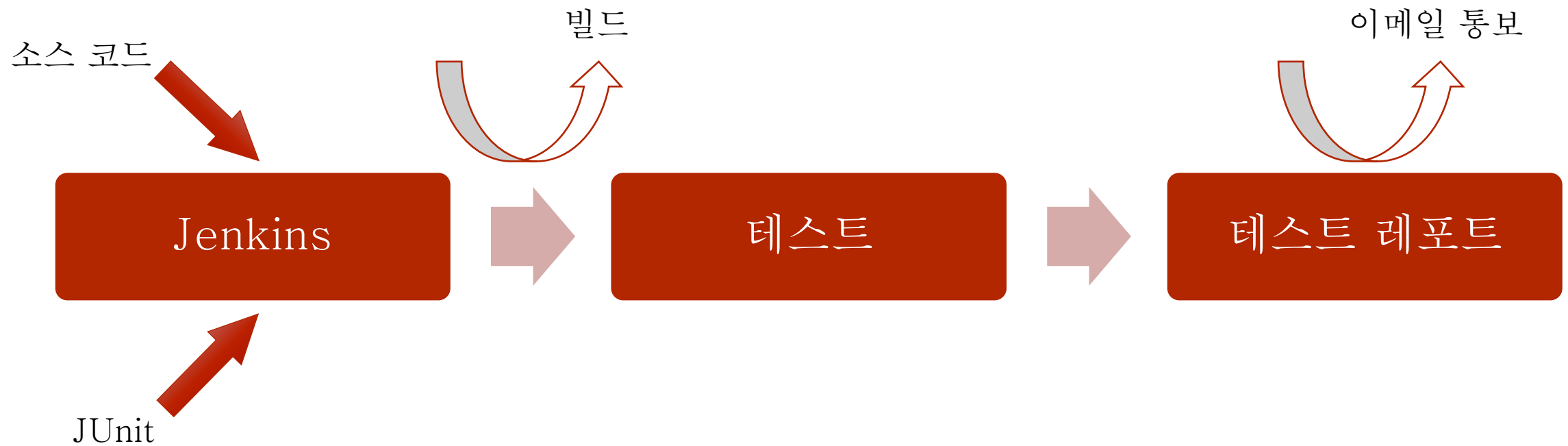
Visibility Level (?)

- Private**
Project access must be granted explicitly to each user.
- Internal**
The project can be cloned by any logged in user.
- Public**
The project can be cloned without any authentication.

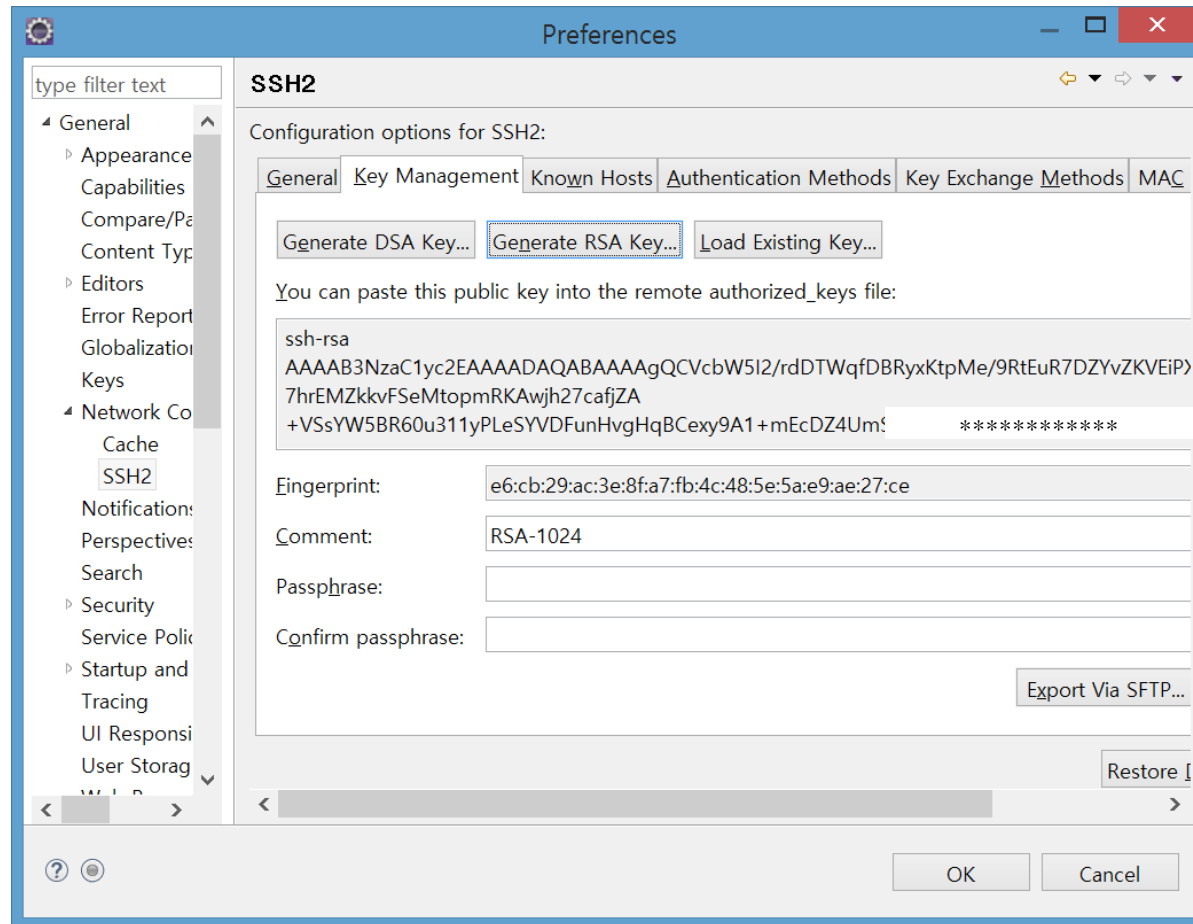
Jfeature : 이슈관리



이슈관리



Eclipse-GitLab ssh 키 발급



Eclipse-GitLab ssh키 등록

SSH Keys

SSH keys allow you to establish a secure connection between your computer and GitLab.

Add an SSH key

Before you can add an SSH key you need to [generate it](#).

Key

```
ssh-rsa  
AAAAB3NzaC1yc2EAAAADAQABAAQgODWT4fnAsABqp3FyL0iqT08eF/WkjKODObX8igygsf4xbtjKAqa1FFkfgbslyUrYXWoKa+6VKpECc8jZ3sF2Y8tX  
z9CFEgbQaisNRngbMbcw/rZxfh/ALcsytlm43/2HSg/mKh54JfBlw/q1WkZcg0Urf ***** 24
```

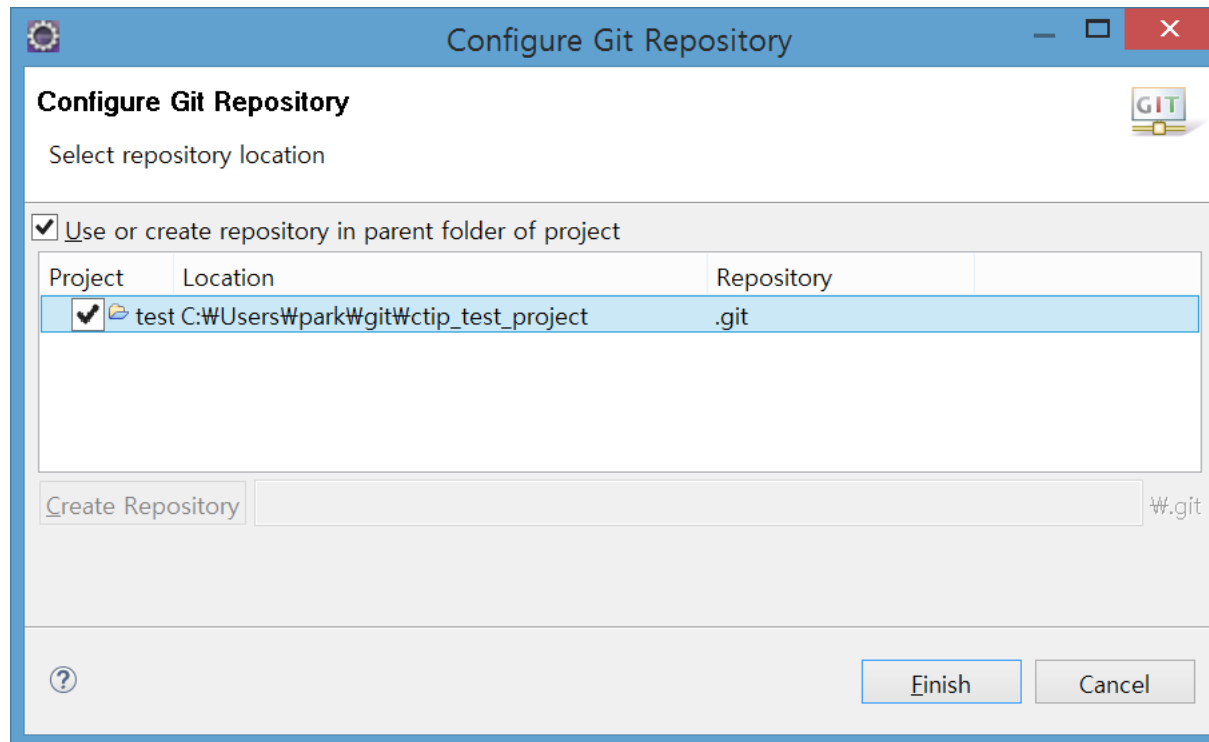
Title

Add key

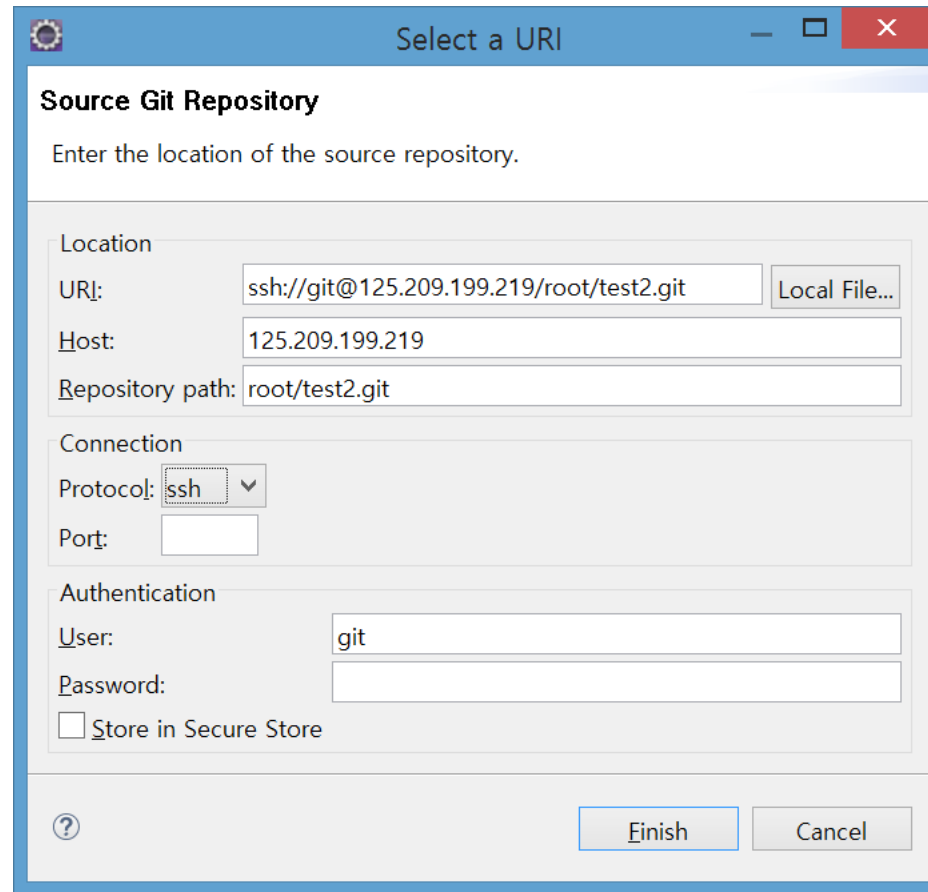
Your SSH keys (0)

There are no SSH keys with access to your account.

Eclipse-GitLab Git 설정



Eclipse-GitLab 인증 설정

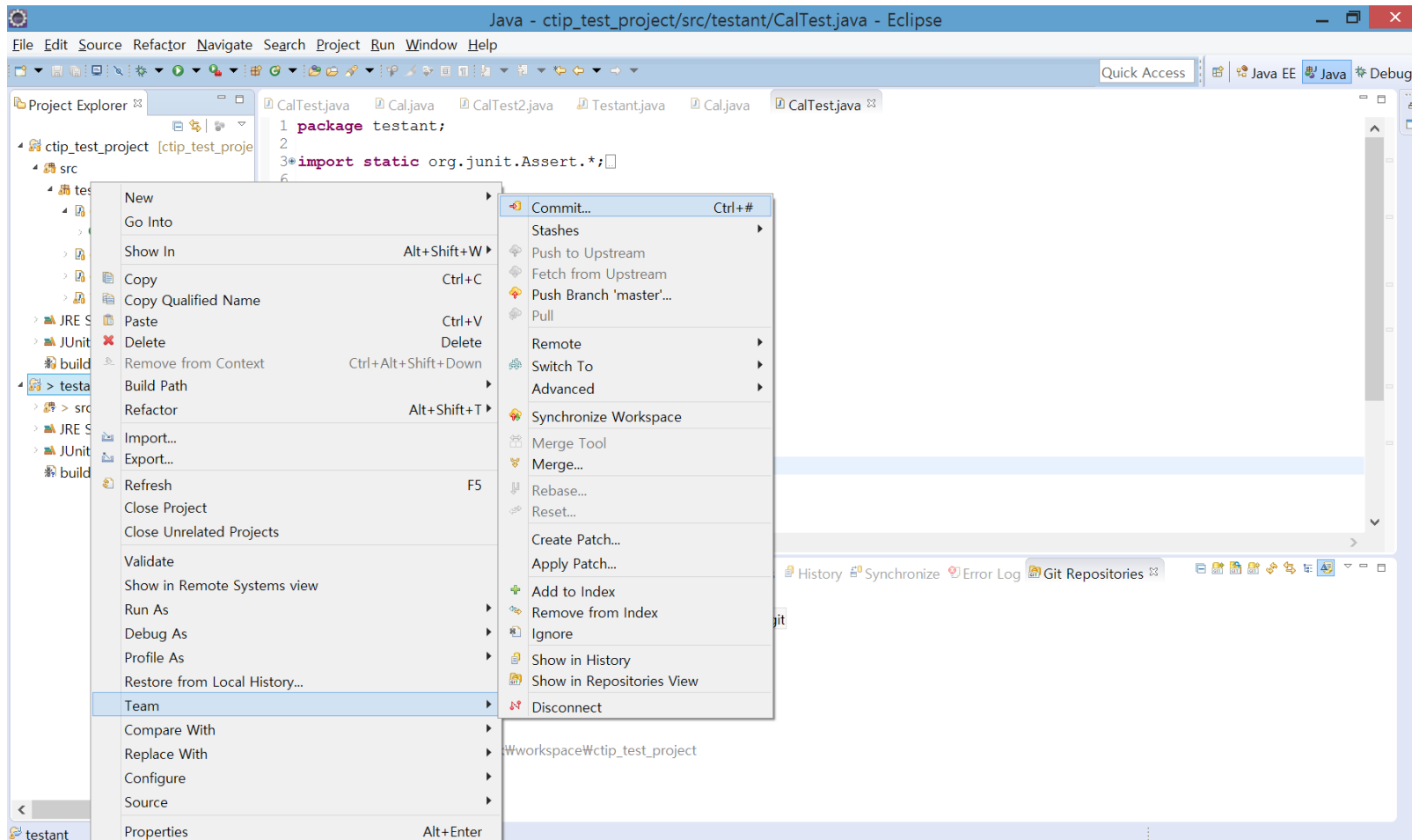


The screenshot shows the 'Select a URI' dialog box in Eclipse. The dialog is titled 'Select a URI' and has a blue header bar. Below the header, the text 'Source Git Repository' is displayed, followed by the instruction 'Enter the location of the source repository.' The dialog is divided into several sections:

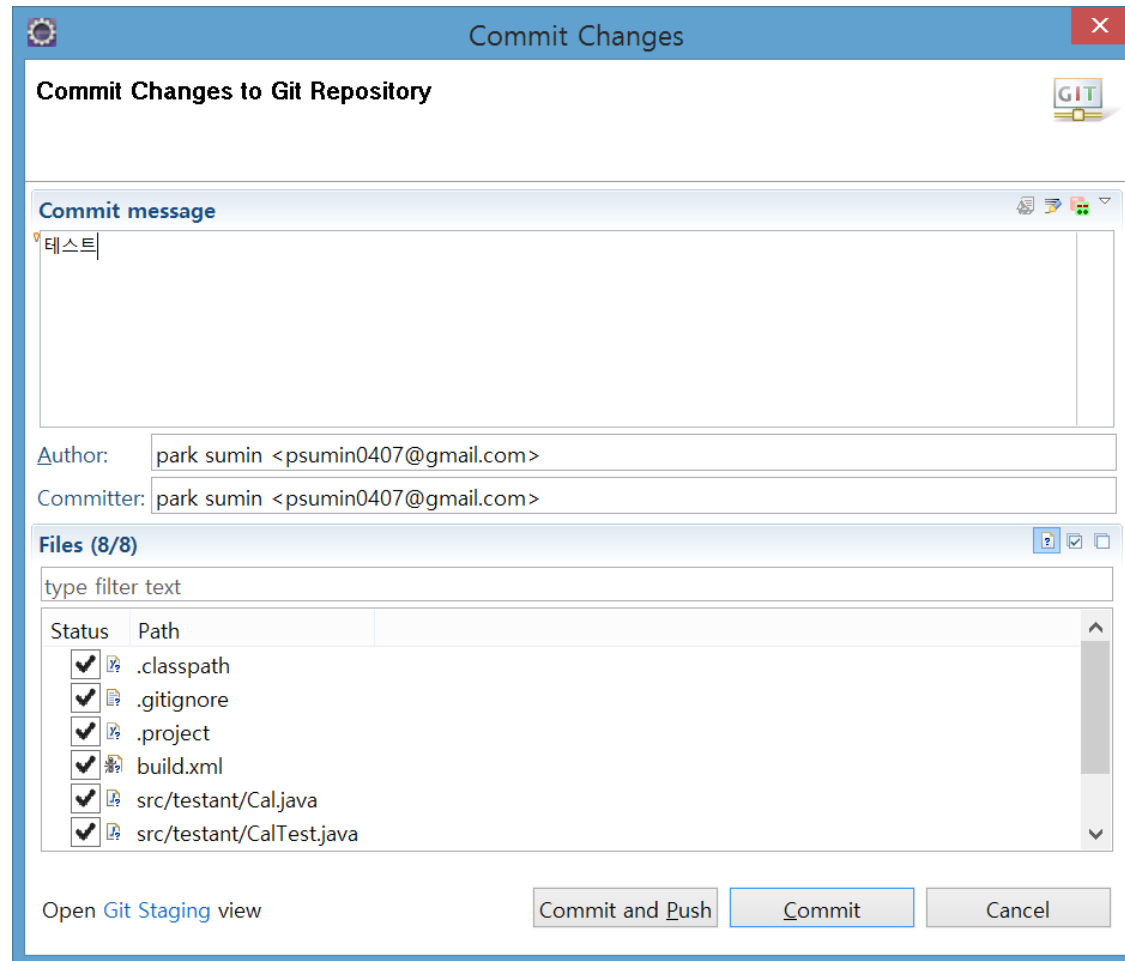
- Location:** Contains three input fields: 'URI:' with the value 'ssh://git@125.209.199.219/root/test2.git', 'Host:' with the value '125.209.199.219', and 'Repository path:' with the value 'root/test2.git'. A 'Local File...' button is located to the right of the URI field.
- Connection:** Contains a 'Protocol:' dropdown menu set to 'ssh' and an empty 'Port:' input field.
- Authentication:** Contains a 'User:' input field with the value 'git', an empty 'Password:' input field, and a checkbox labeled 'Store in Secure Store' which is currently unchecked.

At the bottom of the dialog, there is a question mark icon on the left and two buttons, 'Finish' and 'Cancel', on the right.

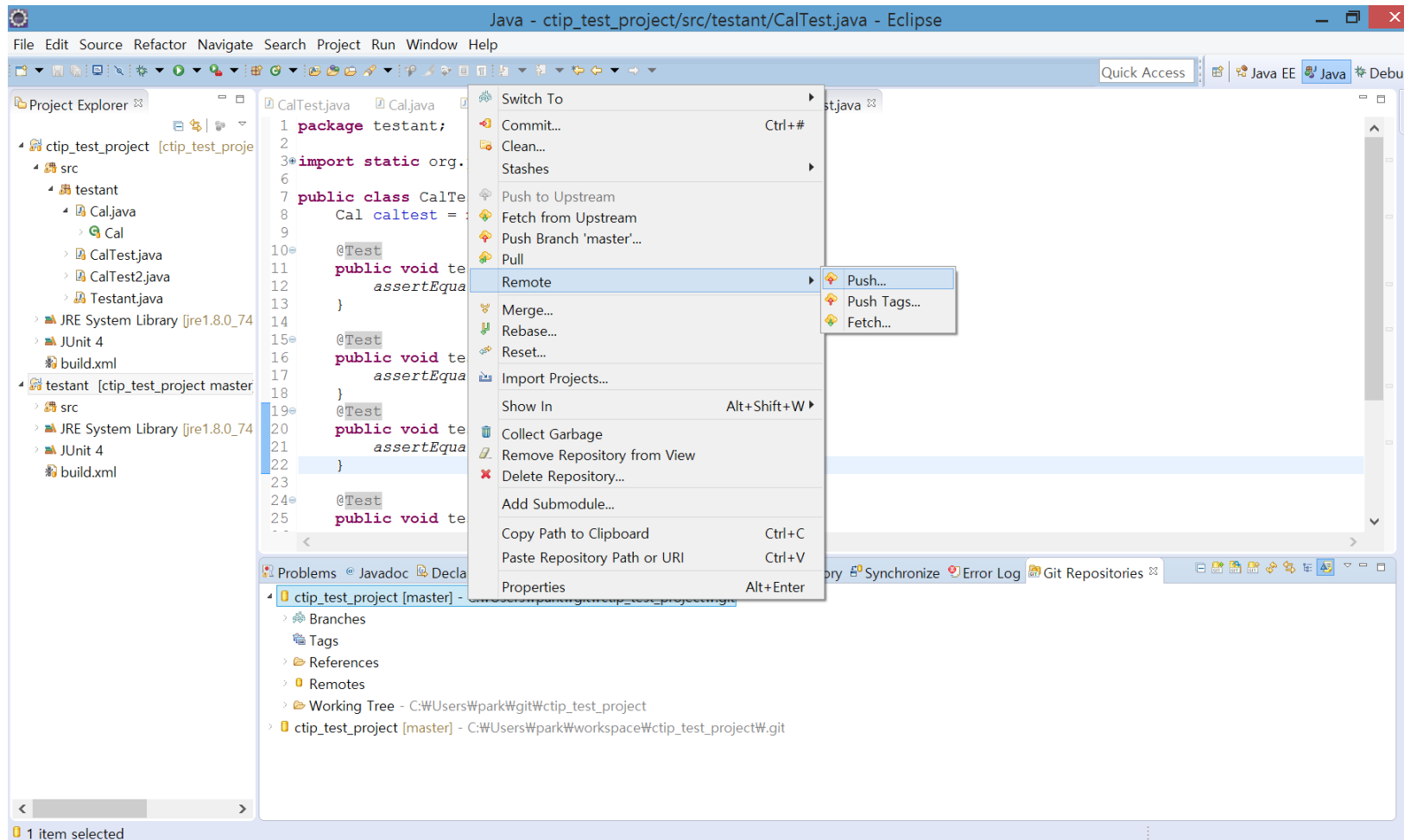
Eclipse - GitLab Git 메뉴



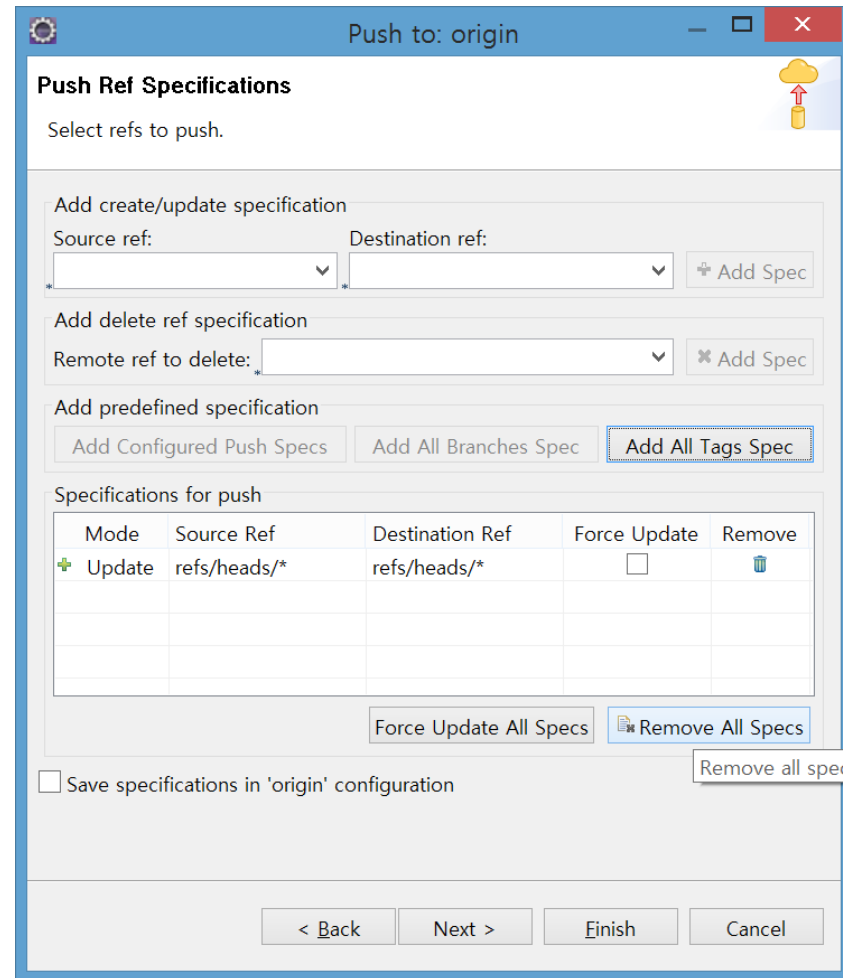
Eclipse-GitLab add & commit



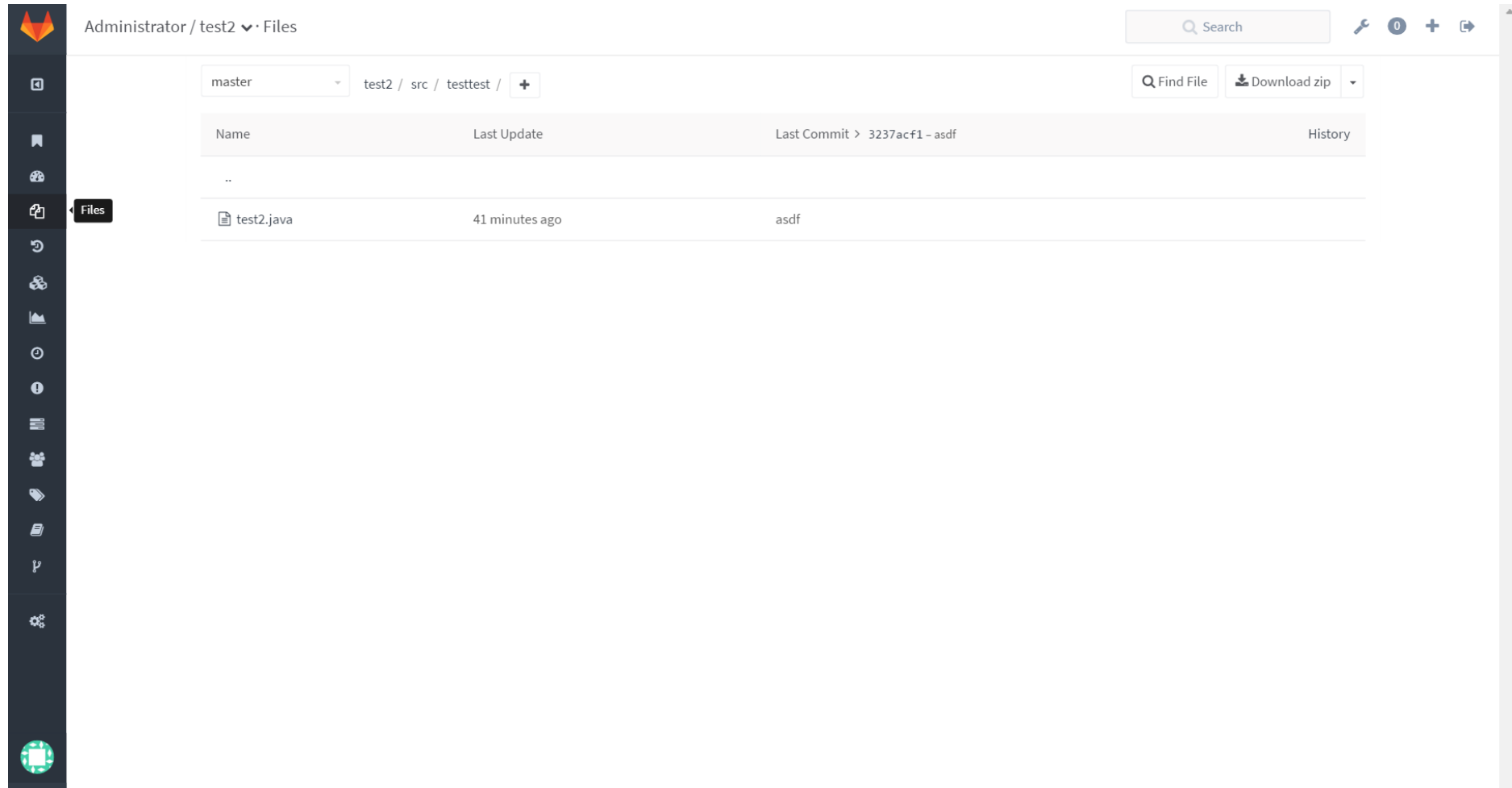
Eclipse - GitLab push



Eclipse - GitLab push



Eclipse - GitLab 연동



Redmine - GitLab 연동

The screenshot shows the Redmine interface for a project named 'test_ant_and_jenkins'. The user is logged in as 'admin'. The page title is 'test_ant_and_jenkins'. The navigation menu includes: 개요, 작업내역, 일감, 새 일감만들기, Gantt 차트, 달력, 뉴스, 문서, 위키, 파일, and **설정**. The main heading is '저장소 추가'. The form contains the following fields and options:

- 형상관리시스템: Git (dropdown)
- 주 저장소:
- 식별자:
1 에서 255 글자 소문자(a-z),숫자,대위(-)와 밑줄(_)만 가능합니다.
식별자는 저장후에는 수정할 수 없습니다.
- 저장소 경로:
로컬의 bare 저장소 (예: /gitrepo, c:\gitrepo)
- 경로 인코딩:
기본: UTF-8
- 파일이나 폴더의 마지막 커밋 (commit)을 보고:

Buttons: 만들기, 취소

Footer: Powered by Redmine © 2006-2013 Jean-Philippe Lang

125.209.199.219의 응답을 기다리는 중...

Redmine - GitLab 연동

The screenshot shows the Redmine interface for a project named 'test_ant_and_jenkins'. The user is logged in as 'admin'. The interface displays the project's file structure and a list of recent commits.

Project: test_ant_and_jenkins

root @ master

| 이름 | 크기 | 개정판 | 마지막 수정일 | 저자 | 설명 |
|------------|-----------|----------|---------|------------|-------------|
| src | | af1e5272 | | | |
| .classpath | 232 Bytes | 841d3a1d | 약 7시간 | park sumin | 틀론받고 다시 테스트 |
| .gitignore | 6 Bytes | 841d3a1d | 약 7시간 | park sumin | ant 되는지 테스트 |
| .project | 383 Bytes | 841d3a1d | 약 7시간 | park sumin | ant 되는지 테스트 |
| README.md | 0 Bytes | f47eb3ae | 약 7시간 | Jenkins | add README |
| build.xml | 2.453 KB | 841d3a1d | 약 7시간 | park sumin | ant 되는지 테스트 |

최근 개정판

| # | 날짜 | 저자 | 설명 |
|----------|------------------|---------------|------------------|
| f47eb3ae | 2016/03/31 14:47 | Jenkins | add README |
| af1e5272 | 2016/03/31 14:41 | park sumin | 틀론받고 다시 테스트 |
| b631df25 | 2016/03/31 14:33 | Administrator | change at gitlab |
| 841d3a1d | 2016/03/31 14:27 | park sumin | ant 되는지 테스트 |

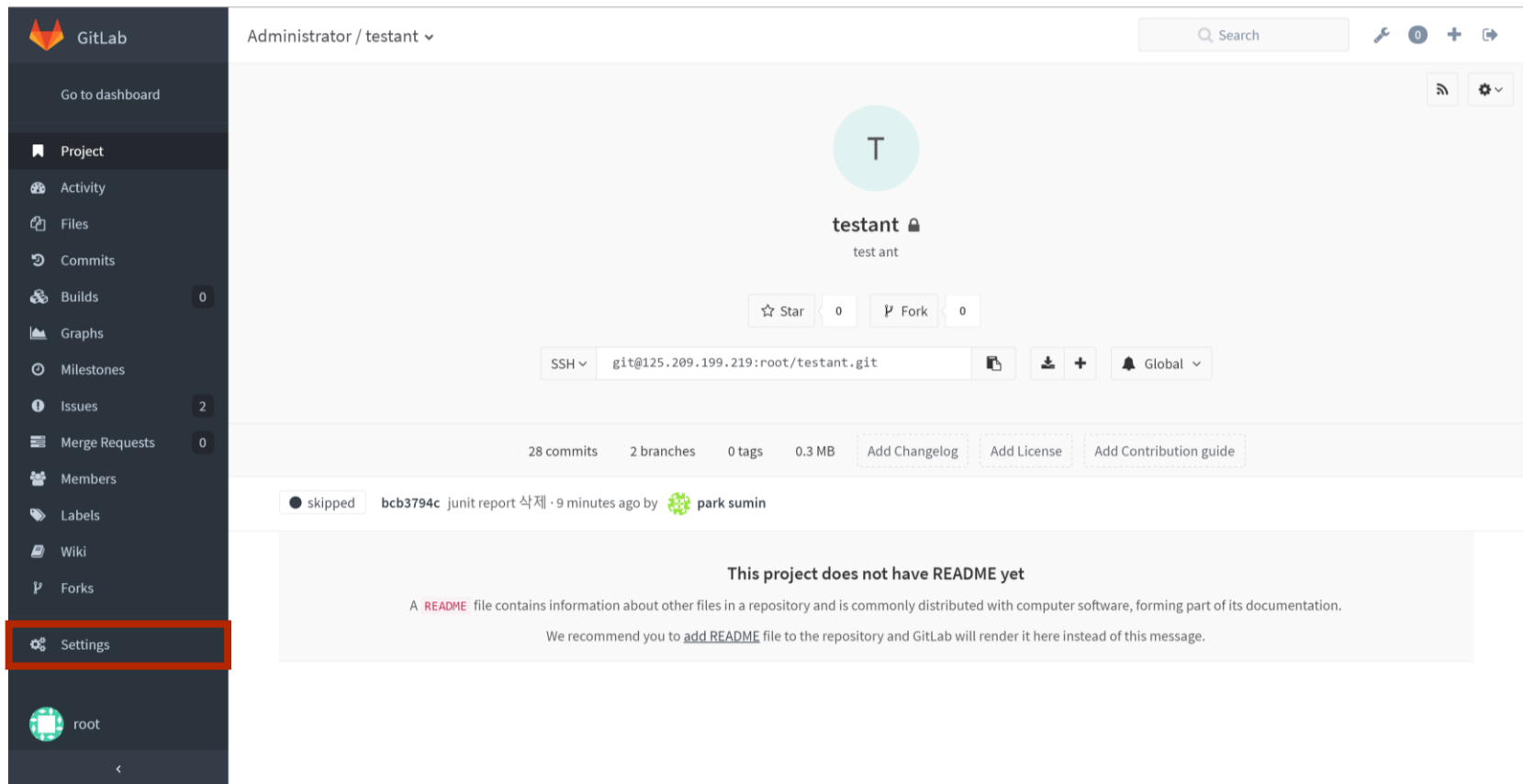
차이점 보기

모든 개정판 표시 | 개정판 보기

내보내기 Atom

Powered by Redmine © 2006-2013 Jean-Philippe Lang

Redmine - GitLab 연동



Redmine - GitLab 연동

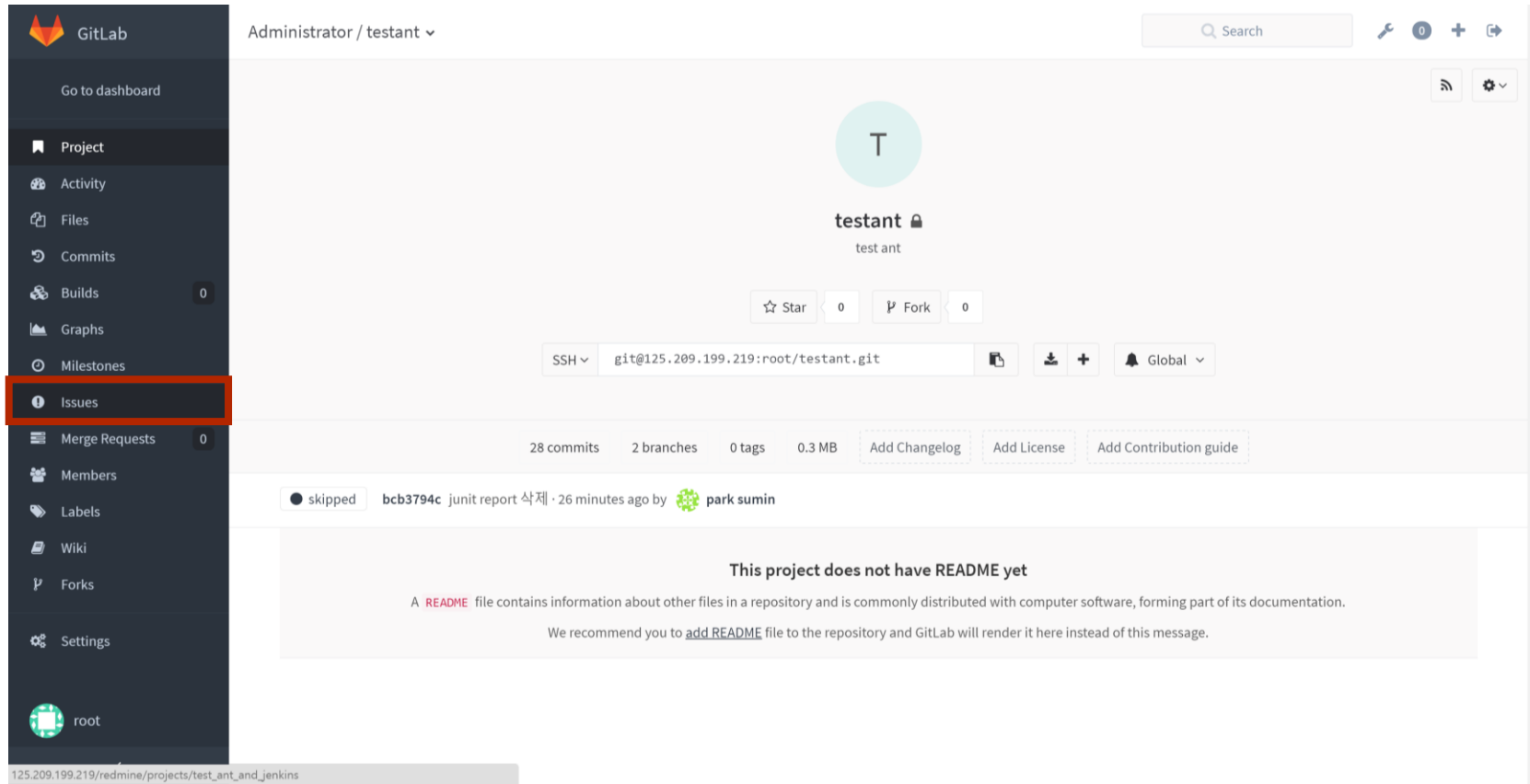
The screenshot shows the GitLab 'Services' page for an administrator. The left sidebar contains navigation options, with 'Services' highlighted. The main content area lists various services, with 'Redmine' highlighted. The 'Redmine' entry is described as a 'Redmine issue tracker' and was updated '3 minutes ago'.

| Service Name | Description | Last Updated |
|-----------------------|----------------------------------------------------------------------------------------------------------|----------------------|
| Atlassian Bamboo CI | A continuous integration and build server | about 7 hours ago |
| Buildkite | Continuous integration and deployments | about 7 hours ago |
| Builds emails | Email the builds status to a list of recipients. | about 7 hours ago |
| Campfire | Simple web-based real-time group chat | about 7 hours ago |
| Custom Issue Tracker | Custom issue tracker | about 7 hours ago |
| Drone CI | Drone is a Continuous Integration platform built on Docker, written in Go | about 7 hours ago |
| Emails on push | Email the commits and diff of each push to a list of recipients. | about 7 hours ago |
| External Wiki | Replaces the link to the internal wiki with a link to an external wiki. | about 7 hours ago |
| Flowdock | Flowdock is a collaboration web app for technical teams. | about 7 hours ago |
| Gemnasium | Gemnasium monitors your project dependencies and alerts you about updates and security vulnerabilities. | about 7 hours ago |
| HipChat | Private group chat and IM | about 7 hours ago |
| Irker (IRC gateway) | Send IRC messages, on update, to a list of recipients through an Irker gateway. | about 7 hours ago |
| JIRA | Jira issue tracker | about 7 hours ago |
| JetBrains TeamCity CI | A continuous integration and build server | about 7 hours ago |
| PivotalTracker | Project Management Software (Source Commits Endpoint) | about 7 hours ago |
| Pushover | Pushover makes it easy to get real-time notifications on your Android device, iPhone, iPad, and Desktop. | about 7 hours ago |
| Redmine | Redmine issue tracker | 3 minutes ago |
| Slack | A team communication tool for the 21st century | about 7 hours ago |

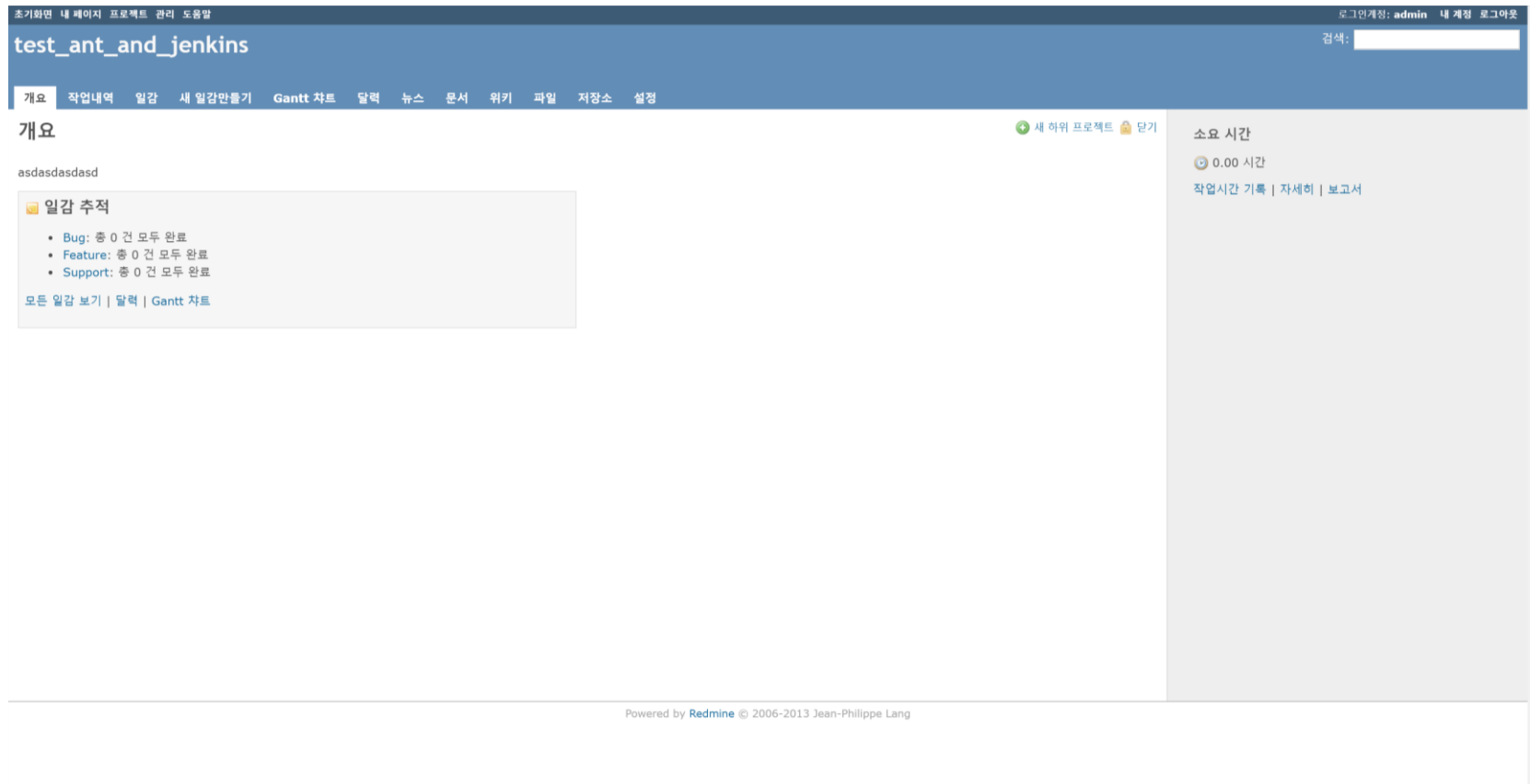
Redmine - GitLab 연동

The screenshot shows the GitLab web interface. On the left is a dark sidebar with navigation options: Go to project, Project Settings, Groups, Deploy Keys, Webhooks, Services (highlighted), Protected Branches, Runners, Variables, and Triggers. The main content area is titled 'Administrator / testant · Settings' and features a search bar and utility icons. The 'Redmine' section is active, showing a 'Redmine issue tracker' configuration. It includes a checked 'Active' checkbox and four text input fields: 'Description' (Redmine issue tracker), 'Project url' (http://125.209.199.219/redmine/projects/test_ant_and_jenkins), 'Issues url' (http://125.209.199.219/redmine/projects/test_ant_and_jenkins/issues), and 'New issue url' (http://125.209.199.219/redmine/projects/test_ant_and_jenkins/issues/new). At the bottom of this section are 'Save changes' and 'Cancel' buttons.

Redmine - GitLab 연동



Redmine - GitLab 연동



Redmine - Jenkins 연동

[Redmine plugin](#) 0.15
This plugin integrates [Redmine](#) project management into Jenkins.

Assign Redmine project
Redmine website

Redmine project name

- 오래된 빌드 삭제
- 이 빌드는 매개변수가 있습니다
- 빌드 안함 (프로젝트가 다시 빌드를 할 때까지 새로운 빌드가 실행되지 않습니다.)
- 필요한 경우 concurrent 빌드 실행

고급 프로젝트 옵션

Jenkins - GitLab 연동

업데이트된 플러그인 목록 **설치 가능** 설치된 플러그인 목록 고급

| 설치 ↓ | 이름 |
|-------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <input checked="" type="checkbox"/> | GitLab Plugin This plugin is a build trigger that allows GitLab to trigger Jenkins builds when code is pushed or a merge request is created on a job basis. |
| <input type="checkbox"/> | GitLab Logo Plugin Display GitLab Repository Icon on dashboard |
| <input type="checkbox"/> | Gitlab Merge Request Builder A plugin to build merge requests created in Gitlab. |
| <input checked="" type="checkbox"/> | Gitlab Hook Plugin Enables Gitlab web hooks to be used to trigger SMC polling on Gitlab projects |

[재시작 없이 설치하기](#) [지금 다운로드하고 재시작 후 설치하기](#) Update information obtained: 8 min 18 sec ago

플러그인 설치/업그레이드 중

준비

- Checking internet connectivity

| | |
|------------------------|-------|
| Icon Shim Plugin | ● 대기중 |
| Credentials Plugin | ● 대기중 |
| SSH Credentials Plugin | ● 대기중 |
| Git client plugin | ● 대기중 |
| SCM API Plugin | ● 대기중 |
| Mailer Plugin | ● 대기중 |
| JUnit Plugin | ● 대기중 |
| Matrix Project Plugin | ● 대기중 |
| Git plugin | ● 대기중 |
| GitLab Plugin | ● 대기중 |
| Ruby Runtime Plugin | ● 대기중 |
| Gitlab Hook Plugin | ● 대기중 |

➔ [메인 페이지로 돌아가기](#)
(설치된 플러그인을 바로 사용할 수 있습니다.)

➔ 설치가 끝나고 실행중인 작업이 없으면 Jenkins 재시작.

Jenkins - GitLab 연동

Git

Git installations

Git

Name

Path to Git executable

Install automatically

Delete Git

```
root@ciserver:/usr/lib/jvm# apt-get install git
```

```
root@ciserver:~# whereis git
git: /usr/bin/git /usr/bin/X11/git /usr/share/man/man1/git.1.gz
root@ciserver:~#
```

Jenkins - GitLab 연동

The screenshot shows the GitLab Account settings page. A red box highlights the 'Gitlab' configuration section, which includes the following fields:

- Gitlab host URL:** `http://125.209.199.219:9999`
- API Token:** `*****`
- Ignore SSL Certificate Errors:**

Other sections visible on the page include:

- Private Token:** A field containing `*****` with a 'Reset private token' button below it.
- Two-factor Authentication:** Status: disabled. Includes a green 'Enable two-factor authentication' button.
- Change username:** Path: `http://125.209.199.219:9999/u/ro`. Includes an orange 'Update username' button.
- Remove account:** Includes a red 'Delete account' button.

Jenkins - GitLab 연동

소스 코드 관리

- None
- CVS
- CVS Projectset
- Git

Repositories

Repository URL

Credentials

빌드 유발

- 빌드를 원격으로 유발 (예: 스크립트 사용)
- Build after other projects are built
- Build periodically
- Build when a change is pushed to GitLab. GitLab CI Service URL: <http://125.209.199.219:8888/project/testAnt>

Build on Merge Request Events

Build on Push Events

Rebuild open Merge Requests

Enable [ci-skip]

Set build description to build cause (eg. Merge request or Git Push)

Add note with build status on merge requests

Use GitLab CI features (GitLab 8.1 required!)

Vote added to note with build status on merge requests

Accept merge request on success

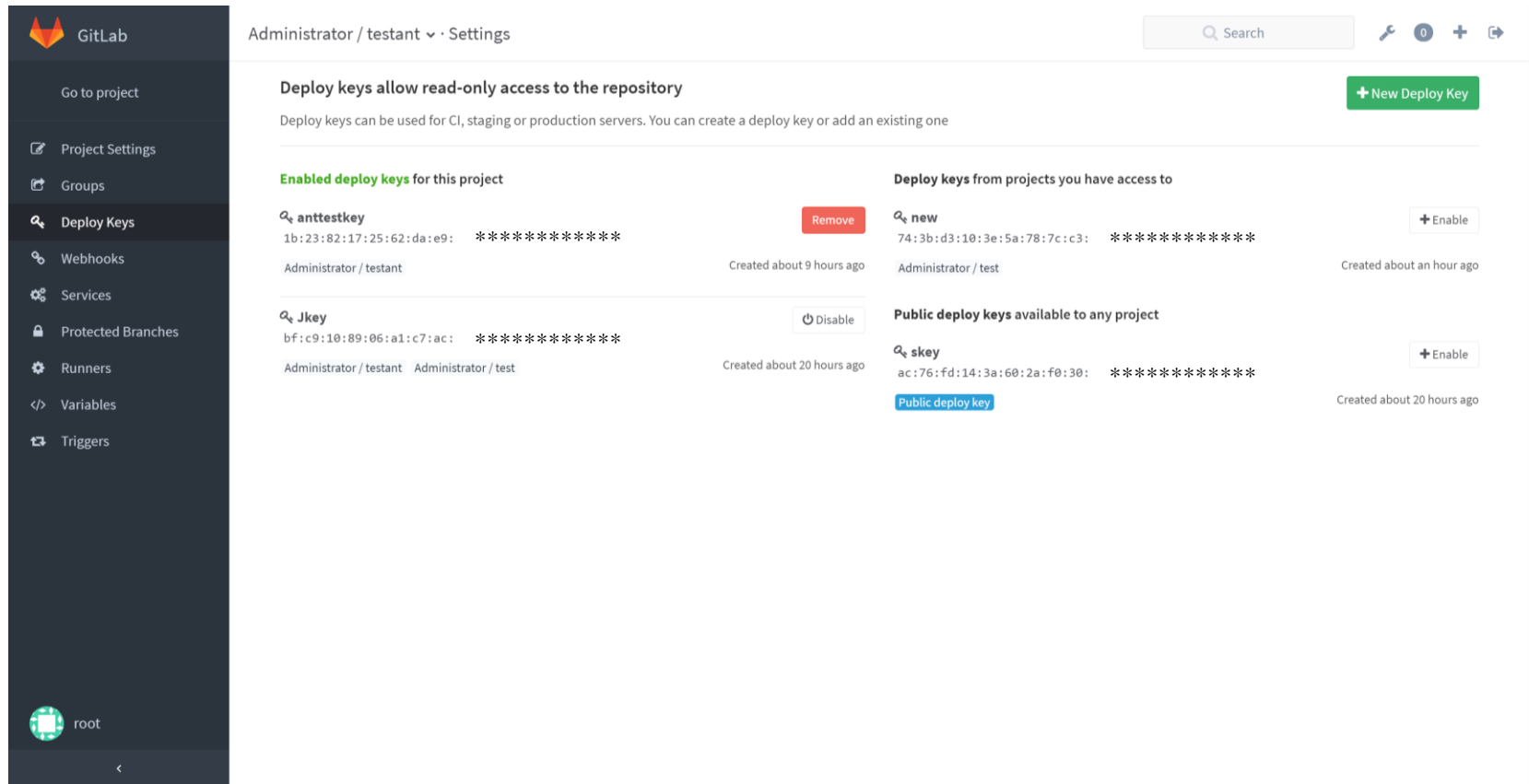
Jenkins-GitLab 연동시 인증 문제 해결

```
root@ciserver:~# sudo -i -u jenkins
```

```
jenkins@ciserver:~$ ssh-keygen
Generating public/private rsa key pair.
Enter file in which to save the key (/var/lib/jenkins/.ssh/id_rsa):
Enter passphrase (empty for no passphrase):
Enter same passphrase again:
Your identification has been saved in /var/lib/jenkins/.ssh/id_rsa.
Your public key has been saved in /var/lib/jenkins/.ssh/id_rsa.pub.
The key fingerprint is:
14:a5:ca:2f:0c:a4:31:94:09:c4:05:8c:eb:ba:d4:59 jenkins@ciserver
The key's randomart image is:
+--[ RSA 2048 ]-----+
|*+++   ...          |
|. +o    o           |
|. o .   o           |
|.  = . o           |
|. . .Eo S          |
|.. oo .           |
+-----+
Branch Specifier (blank for 'any') */master
|o .
|..
+-----+
```

```
jenkins@ciserver:~/ssh$ cat id_rsa.pub
ssh-rsa AAAAB3NzaC1yc2EAAAADAQABAAQDk7
```

Jenkins - GitLab 연동시 인증 문제 해결



Jenkins - GitLab 연동 결과

The screenshot shows the Jenkins web interface for a project named 'ctip_test_project'. The top navigation bar includes the Jenkins logo, a search bar, and user information 'root | 로그아웃'. Below the navigation bar, there are several utility links: '대시보드로 돌아가기', '상태', '변경사항', '작업공간', 'Build Now', 'Project 삭제', '구성', and 'Redmine - ctip_test_project'. The main content area is titled 'Project ctip_test_project' and contains several sections: '작업공간', '최근 변경사항', and '가장 최근 테스트 결과 ("2 실패 / ±0")'. A '고정링크' (Fixed Links) section lists various build-related links such as 'Last build', 'Last stable build', 'Last successful build', 'Last failed build', 'Last unstable build', 'Last unsuccessful build', and 'Last completed build'. On the right side, there is a '테스트 결과 현황' (Test Result Status) chart showing the count of successful and failed tests over time. The chart has a y-axis labeled 'count' ranging from 0 to 5 and an x-axis with labels from 4:0 to 4:10. A red area represents failed tests, and a blue area represents successful tests. The chart shows a transition from 5 failed tests to 2 failed and 3 successful tests. Below the chart is a button labeled '(실패한 테스트만 보기) 크게보기'.

Build History

| Build # | Time | Status |
|---------|--------------------|---------|
| #10 | 2016. 4. 1 오전 3:40 | Success |
| #9 | 2016. 4. 1 오전 3:32 | Success |
| #8 | 2016. 4. 1 오전 3:31 | Success |
| #7 | 2016. 4. 1 오전 3:31 | Success |
| #6 | 2016. 4. 1 오전 3:18 | Success |
| #5 | 2016. 4. 1 오전 3:16 | Success |
| #4 | 2016. 4. 1 오전 3:10 | Success |
| #3 | 2016. 4. 1 오전 3:09 | Success |
| #2 | 2016. 4. 1 오전 3:02 | Success |
| #1 | 2016. 4. 1 오전 2:56 | Failure |

고정링크

- [Last build, \(#10\), 28 min 전](#)
- [Last stable build, \(#5\), 52 min 전](#)
- [Last successful build, \(#10\), 28 min 전](#)
- [Last failed build, \(#1\), 1 hr 12 min 전](#)
- [Last unstable build, \(#10\), 28 min 전](#)
- [Last unsuccessful build, \(#10\), 28 min 전](#)
- [Last completed build, \(#10\), 28 min 전](#)

테스트 결과 현황

count

(실패한 테스트만 보기) 크게보기

Jenkins - GitLab 빌드 결과

콘솔 출력

```
Started by user anonymous
Building in workspace /var/lib/jenkins/jobs/ctip_test_project/workspace
> /usr/bin/git rev-parse --is-inside-work-tree # timeout=10
Fetching changes from the remote Git repository
> /usr/bin/git config remote.origin.url http://125.209.199.219:9999/root/ctip\_test\_project.git # timeout=10
Fetching upstream changes from http://125.209.199.219:9999/root/ctip\_test\_project.git
> /usr/bin/git --version # timeout=10
using .gitcredentials to set credentials
> /usr/bin/git config --local credential.username root # timeout=10
> /usr/bin/git config --local credential.helper store --file=/tmp/git6524966100660051891.credentials # timeout=10
> /usr/bin/git -c core.askpass=true fetch --tags --progress http://125.209.199.219:9999/root/ctip\_test\_project.git
+refs/heads/*:refs/remotes/origin/*
> /usr/bin/git config --local --remove-section credential # timeout=10
> /usr/bin/git rev-parse refs/remotes/origin/master^{commit} # timeout=10
> /usr/bin/git rev-parse refs/remotes/origin/origin/master^{commit} # timeout=10
Checking out Revision be4b5f3ebae935806a1002081127aa37f3057071 (refs/remotes/origin/master)
> /usr/bin/git config core.sparsecheckout # timeout=10
> /usr/bin/git checkout -f be4b5f3ebae935806a1002081127aa37f3057071
> /usr/bin/git rev-list be4b5f3ebae935806a1002081127aa37f3057071 # timeout=10
[workspace] $ /var/lib/jenkins/tools/hudson.tasks.Ant_AntInstallation/ant1.9/bin/ant build testant
Buildfile: /var/lib/jenkins/jobs/ctip_test_project/workspace/build.xml

build-subprojects:

init:

build-project:
[echo] testant: /var/lib/jenkins/jobs/ctip_test_project/workspace/build.xml
[javac] Compiling 4 source files to /var/lib/jenkins/jobs/ctip_test_project/workspace/bin

build:

testant:
[mkdir] Created dir: /var/lib/jenkins/jobs/ctip_test_project/workspace/junit
[junit] Running testant.CalTest
[junit] Tests run: 5, Failures: 5, Errors: 0, Skipped: 0, Time elapsed: 0.172 sec
[junit] Test testant.CalTest FAILED

BUILD SUCCESSFUL
Total time: 1 second
Sending e-mails to: notwice92@gmail.com alwayday1108@gmail.com
Finished: SUCCESS
```



Question

And Thank you!