Self-Learning Points of Jenkins

Contents

[1. User and Role Model 4](#_Toc446678055)

[1) 2 kinds of user management in Jenkins. 4](#_Toc446678056)

[2) Authorization model 4](#_Toc446678057)

[2. Key Points 4](#_Toc446678058)

[1) Audit and track changes 4](#_Toc446678059)

[2) Jenkins Features controlled by system properties 5](#_Toc446678060)

[3) Jenkins REST API 5](#_Toc446678061)

[4) JDK setting on a Jenkins slave 5](#_Toc446678062)

[3. FAQ 6](#_Toc446678063)

[1) Difference between mvn clean install and mvn clean install:install 6](#_Toc446678064)

[2) Why Jenkins master has a URL like “computer/(master)” while all slaves “computer/slave\_name” 6](#_Toc446678065)

[What's new in 1.472 (2012/06/24) 6](#_Toc446678066)

[3) Why job shows as pending—There are no nodes with the label ‘Job triggered without a valid online node, given where:’ in Rebuild? 6](#_Toc446678067)

[ Phenomenon: 6](#_Toc446678068)

[ Root cause & solution 6](#_Toc446678069)

[4) Do a git submit and push to gerrit through windows batch in a Jenkins job 7](#_Toc446678070)

[5) How to re-trigger a Jenkins voter build? 7](#_Toc446678071)

[6) How to get Jenkins log info except from the Web UI? 7](#_Toc446678072)

Jenkins

# User and Role Model

### 2 kinds of user management in Jenkins.

|  |  |  |
| --- | --- | --- |
| **Type** | **Purpose** | **Example** |
| Jenkins built-in user database | * Include all uses who’d committed changes to projects Jenkins monitors. * Mainly to record who is responsible for which build. | <http://shg-cvom-infra.pgdev.sap.corp:8080/asynchPeople/> |
| Hook up with other user management system | * such as LDAP repositories, unix users and groups etc. | <http://shg-cvom-infra.pgdev.sap.corp:8080/configureSecurity/>   * LDAP |

### Authorization model

|  |  |  |
| --- | --- | --- |
| **Steps** | **Classification** | **Example** |
| Enable Role-based Strategy | In Security realm | <http://shg-cvom-infra.pgdev.sap.corp:8080/configureSecurity/> |
| Manage Roles | * Global roles   + Admin   + Guest   + Job-creator   + user * Project roles   + All\_except\_voter   + tester * Slave roles | <http://shg-cvom-infra.pgdev.sap.corp:8080/role-strategy/manage-roles>  <http://shg-cvom-infra.pgdev.sap.corp:8080/role-strategy/assign-roles>   * To assign user/group to roles |
| Assign Roles |  |  |

# Key Points

### Audit and track changes

|  |  |  |
| --- | --- | --- |
| Plugin Name | Purpose | Current Status |
| Audit Trail plugin | Keeps a record of user changes in a special log file | Not installed |
| JobConfigHistory plugin | Lets you keep a copy of previous versions of the various system and job configuration files that Jenkins uses. | Already installed: v2.8 |

### Jenkins Features controlled by system properties

<https://wiki.jenkins-ci.org/display/JENKINS/Features+controlled+by+system+properties>

### Jenkins REST API

<http://shg-cvom-infra.pgdev.sap.corp:8080/api/>

### JDK setting on a Jenkins slave

##### Step 1. double check and set Java security settings on that slave.

control panel -> java -> security -> add the Jenkins master url "http://\*:8080/" into exception list

---------------------------------------------------------------------

calling Java Application from Web

这是JAVA安全设置

把你的网站加到安全LIST里

控制面板/JAVA:Java（32bit），

---------------------------------------------------------------------

##### Step 2. disable JAVA auto-update

control panel -> java -> Update -> de-select "Check for Updates Automatically" and set "Not check" option.

# FAQ

### Difference between mvn clean install and mvn clean install:install

mvn clean install

is different from...

mvn clean install:install

The former will run all goals in every cycle leading up to and including the install (like compile, package, test, etc.). The latter will not even compile or package your code, it will just run that one goal.

### Why Jenkins master has a URL like “computer/(master)” while all slaves “computer/slave\_name”

[Could be] By designation.

### What's new in 1.472 (2012/06/24)

* Exposed the master's own node properties to be configured in /computer/(master)/configure (whereas /configure controls global node properties that apply to all nodes.)

Ref doc: <https://jenkins-ci.org/changelog-old.html>

Ref doc: <https://github.com/RiotGames/jenkins/blob/master/changelog.html>

### Why job shows as pending—There are no nodes with the label ‘Job triggered without a valid online node, given where:’ in Rebuild?

### Phenomenon:

Job1 has downstream job2, either through “Trigger/call builds on other projects” or “Trigger parameterized build on other projects”, job2 has parameters.

Retrigger Job1 through “Rebuild” works, however retrigger job2 failed. The job pends with status:

(pending—There are no nodes with the label ‘Job triggered without a valid online node,

given where:’)

### Root cause & solution

Job2 has parameters provided through “[Node and Label parameter plugin](https://wiki.jenkins-ci.org/display/JENKINS/NodeLabel+Parameter+Plugin)”.

“[Node and Label parameter plugin](https://wiki.jenkins-ci.org/display/JENKINS/NodeLabel+Parameter+Plugin)” supports “[Rebuilder](http://wiki.jenkins-ci.org/display/JENKINS/Rebuild+Plugin)” plugin since version 1.6 (23. Nov. 2015), while “[Node and Label parameter plugin](https://wiki.jenkins-ci.org/display/JENKINS/NodeLabel+Parameter+Plugin)” version 1.5.1 is used, so retrigger job2 through “Rebuild” doesn’t work.

* Update “[Node and Label parameter plugin](https://wiki.jenkins-ci.org/display/JENKINS/NodeLabel+Parameter+Plugin)” to version > 1.6.

### Do a git submit and push to gerrit through windows batch in a Jenkins job

REM "Set home to using the .ssh/id\_rsa key with git.exe"

set home=%WORKSPACE%

echo Branch out %BranchName% > commit\_msg.txt

echo Branch from: %BranchFrom% >> commit\_msg.txt

echo BranchOwner: %BranchOwner% >> commit\_msg.txt

echo Processed by Jenkins scm\_create\_git\_branch\_uvb job. >> commit\_msg.txt

%git% add .gitreview

%git% commit -F commit\_msg.txt

%git% push -u --progress "origin" HEAD:refs/publish/%BranchName%

del commit\_msg.txt

### How to re-trigger a Jenkins voter build?

##### Use Jenkins Qeury and Trigger Gerrit Patches.

Go to [http://\*\*\*:8080/](http://***:8080/)

-> Query and Trigger Gerrit Patches

-> Input search criteria into “Query String”, click “Search”,

-> Select the to-be-built change, click “Trigger Selected”.

=> The corresponding Jenkins voter job will be triggered.

=> A self-defined recorder job to record gerrit event will be triggered.

##### Use Rebuilder Plugin.

### How to get Jenkins log info except from the Web UI?

<https://wiki.jenkins-ci.org/display/JENKINS/logging>