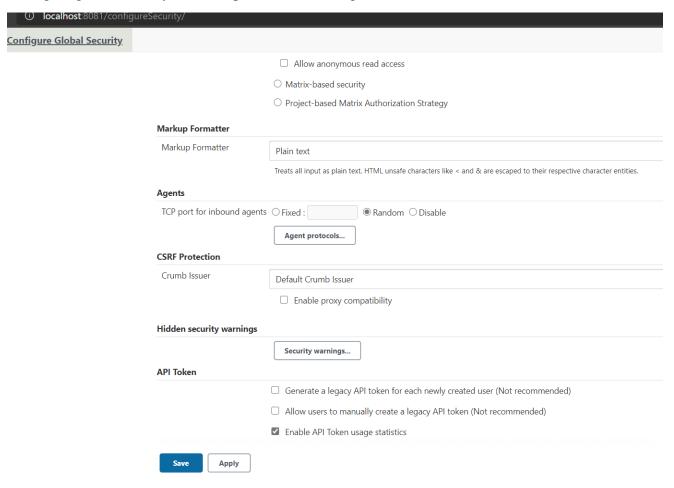
Experiment No. 8

Implementing Master/Slave Architecture in Jenkins

Configure global security, set TCP port for inbound agents random:



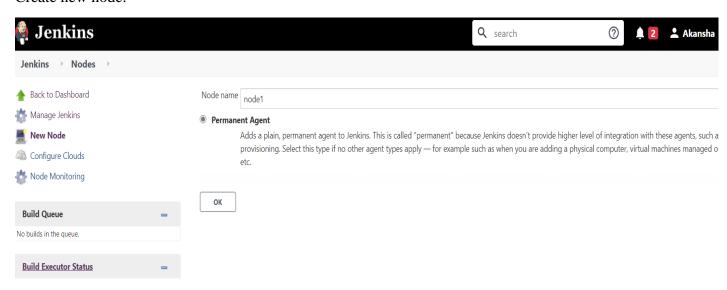
Click on manage nodes and clouds in system configuration:



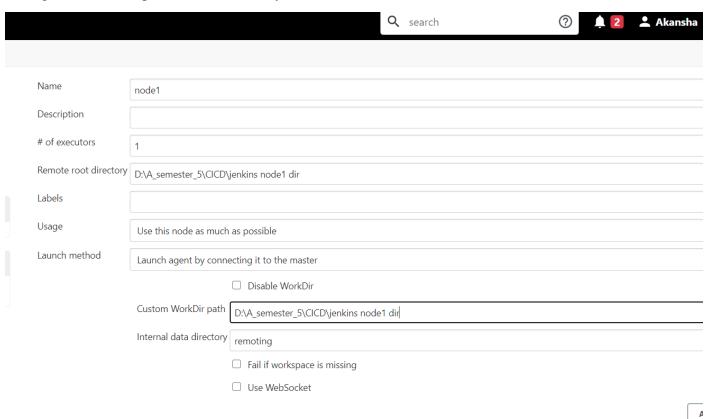
List of nodes is displayed (only master is visible, no other nodes created yet):

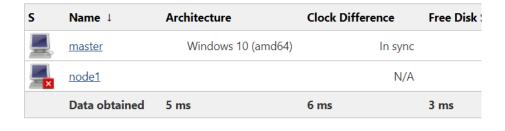
S	Name ↓	Architecture	Clock Difference
	<u>master</u>	Windows 10 (amd64)	In sync
	Data obtained	36 min	36 min

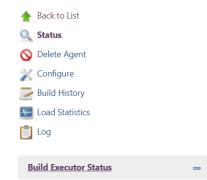
Create new node:



Configure node1, set path of root directory for this node:









Connect agent to Jenkins one of these ways:

- <u>& Launch</u> Launch agent from browser
- Run from agent command line:

java -jar agent.jar -jnlpUrl http://localhost:8081/computer/node1/slave-agent.jnlp -secret
66e46866d78874a34ce7a18756ce632cfe2e8a4215d0543ea970371654466d7c -workDir "D:\A_semester_5\CICD\jenkins

Run from agent command line, with the secret stored in a file:

echo 66e46866d78874a34ce7a18756ce632cfe2e8a4215d0543ea970371654466d7c > secret-file java -jar <u>agent.jar</u> -jnlpUrl http://localhost:8081/computer/node1/slave-agent.jnlp -secret @secret-file dir"

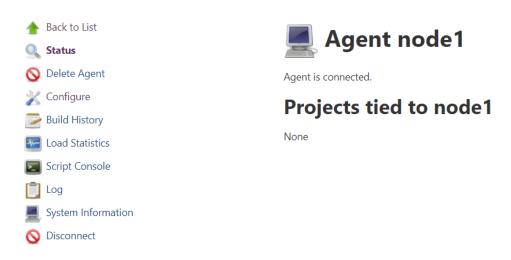
Projects tied to node1

None

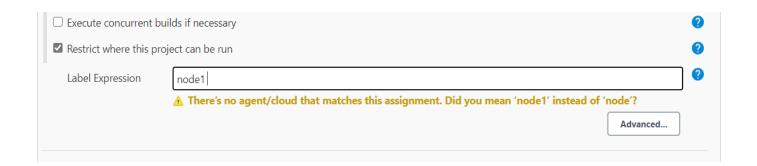
Download agent.jar file and in windows command line run:

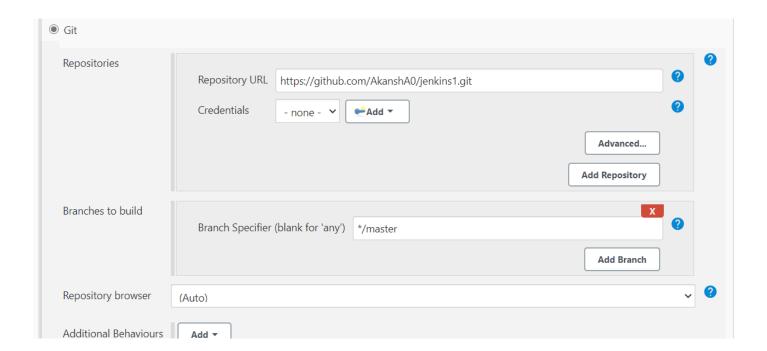
```
D:\A_semester_5\CICD>java -jar agent.jar -jnlpUrl http://localhost:8081/computer/node1/slave-agent.jnlp -secret 66e46866d78874a34ce7a18756
kins node1 dir"
Oct 13, 2020 12:53:37 PM org.jenkinsci.remoting.engine.WorkDirManager initializeWorkDir
INFO: Using D:\A semester 5\CICD\jenkins node1 dir\remoting as a remoting work directory
Oct 13, 2020 12:53:37 PM org.jenkinsci.remoting.engine.WorkDirManager setupLogging
INFO: Both error and output logs will be printed to D:\A_semester_5\CICD\jenkins node1 dir\remoting
Oct 13, 2020 12:53:38 PM hudson.remoting.jnlp.Main createEngine
INFO: Setting up agent: node1
Oct 13, 2020 12:53:38 PM hudson.remoting.jnlp.Main$CuiListener <init>
INFO: Jenkins agent is running in headless mode.
Oct 13, 2020 12:53:38 PM hudson.remoting.Engine startEngine
INFO: Using Remoting version: 4.3
Oct 13, 2020 12:53:38 PM org.jenkinsci.remoting.engine.WorkDirManager initializeWorkDir
INFO: Using D:\A semester 5\CICD\jenkins node1 dir\remoting as a remoting work directory
Oct 13, 2020 12:53:38 PM hudson.remoting.jnlp.Main$CuiListener status
INFO: Locating server among [http://localhost:8081/]
Oct 13, 2020 12:53:38 PM org.jenkinsci.remoting.engine.JnlpAgentEndpointResolver resolve
INFO: Remoting server accepts the following protocols: [JNLP4-connect, Ping]
Oct 13, 2020 12:53:38 PM hudson.remoting.jnlp.Main$CuiListener status
INFO: Agent discovery successful
 Agent address: localhost
                50635
 Agent port:
 Identity:
                0c:b3:f4:01:e3:07:eb:3b:cb:34:c2:dd:bf:ad:27:b4
Oct 13, 2020 12:53:38 PM hudson.remoting.jnlp.Main$CuiListener status
INFO: Handshaking
Oct 13, 2020 12:53:38 PM hudson.remoting.jnlp.Main$CuiListener status
INFO: Connecting to localhost:50635
Oct 13, 2020 12:53:38 PM hudson.remoting.jnlp.Main$CuiListener status
INFO: Trying protocol: JNLP4-connect
Oct 13, 2020 12:53:38 PM hudson.remoting.jnlp.Main$CuiListener status
INFO: Remote identity confirmed: 0c:b3:f4:01:e3:07:eb:3b:cb:34:c2:dd:bf:ad:27:b4
Oct 13, 2020 12:53:39 PM hudson.remoting.jnlp.Main$CuiListener status
INFO: Connected
```

Agent connected:



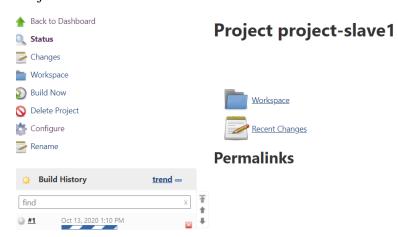
Create new project, restrict it to run on added slave node, configure git repository URL and build:







Project created:



Console output:



Started by user <u>Akansha</u>

Running as SYSTEM

Building remotely on node1 in workspace D:\A_semester_5\CICD\jenkins node1 dir\workspace\pro

The recommended git tool is: NONE

No credentials specified

Cloning the remote Git repository

Cloning repository https://github.com/AkanshA0/jenkins1.git

- > F:\git\Git\bin\git.exe init D:\A_semester_5\CICD\jenkins node1 dir\workspace\project-slav Fetching upstream changes from https://github.com/AkanshA0/jenkins1.git
- > F:\git\Git\bin\git.exe --version # timeout=10
- > git --version # 'git version 2.22.0.windows.1'
- > F:\git\Git\bin\git.exe fetch --tags --force --progress -- https://github.com/AkanshA0/jen
- > F:\git\Git\bin\git.exe config remote.origin.url https://github.com/AkanshA0/jenkins1.git
- $\verb| > F:\git\Git\bin\git.exe config -- add remote.origin.fetch + refs/heads/*:refs/remotes/origin.fetch + refs/remotes/origin.fetch + refs/remotes/origin.fetch + refs/remotes/origin.fetch + refs/remot$ Avoid second fetch
- > F:\git\Git\bin\git.exe rev-parse "refs/remotes/origin/main^{commit}" # timeout=10

Checking out Revision 4306546acdb86feffbbe9d3ad7140a6255dc1cd9 (refs/remotes/origin/main)

- > F:\git\Git\bin\git.exe config core.sparsecheckout # timeout=10
- $\verb| > F:\git\Git\bin\git.exe| checkout -f 4306546acdb86feffbbe9d3ad7140a6255dc1cd9 \# timeout=10 | A constant of the constant$ Commit message: "Update f1.java"

First time build. Skipping changelog.

- + javac f1.java
- + java f1

Finished: SUCCESS