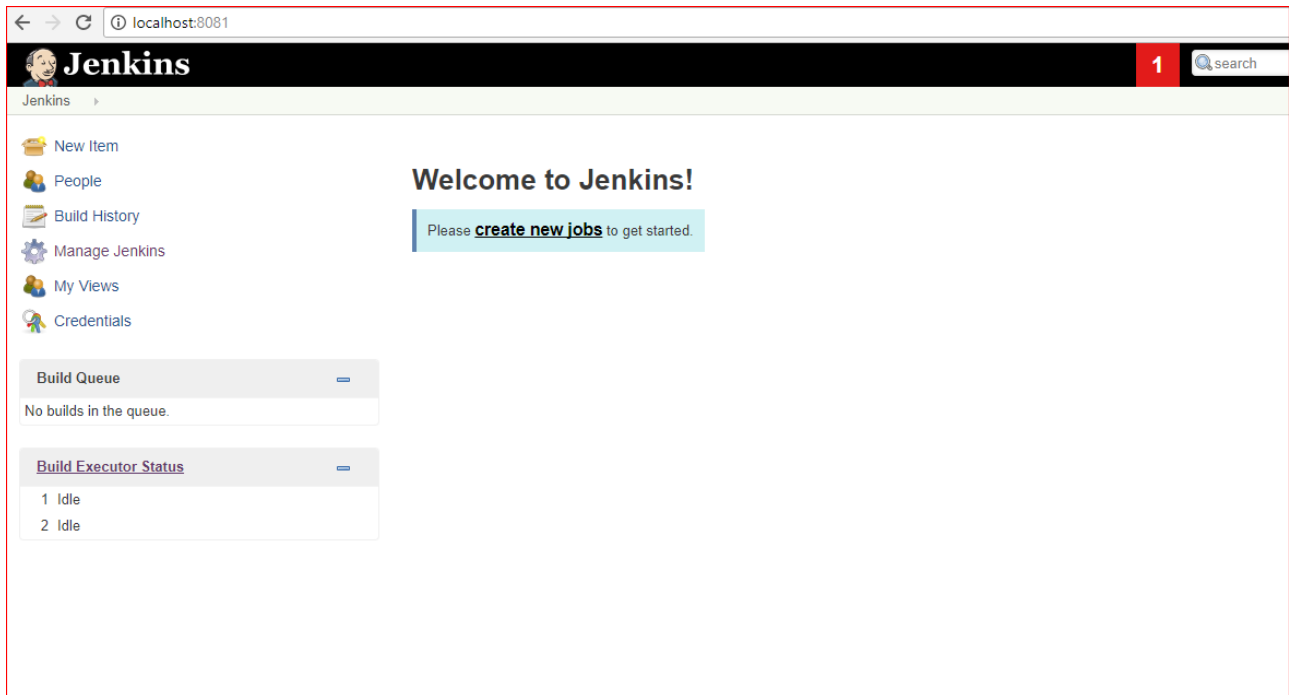


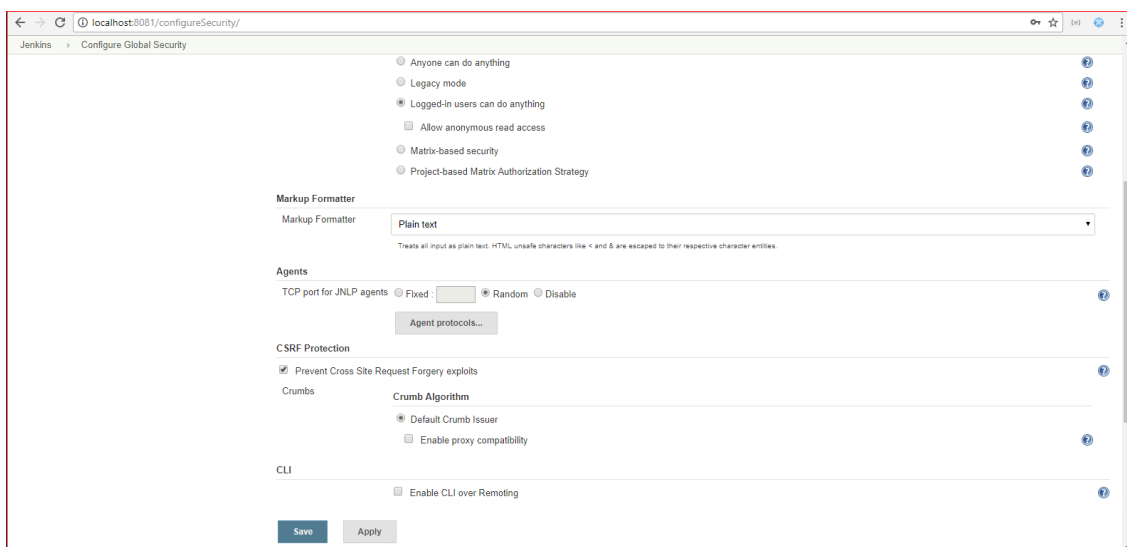
Install Jenkins server on local or remote machine, change port:

Jenkins has been installed on Windows 10 machine. The port has been changed from the jenkins.xml file :--httpPort=8081



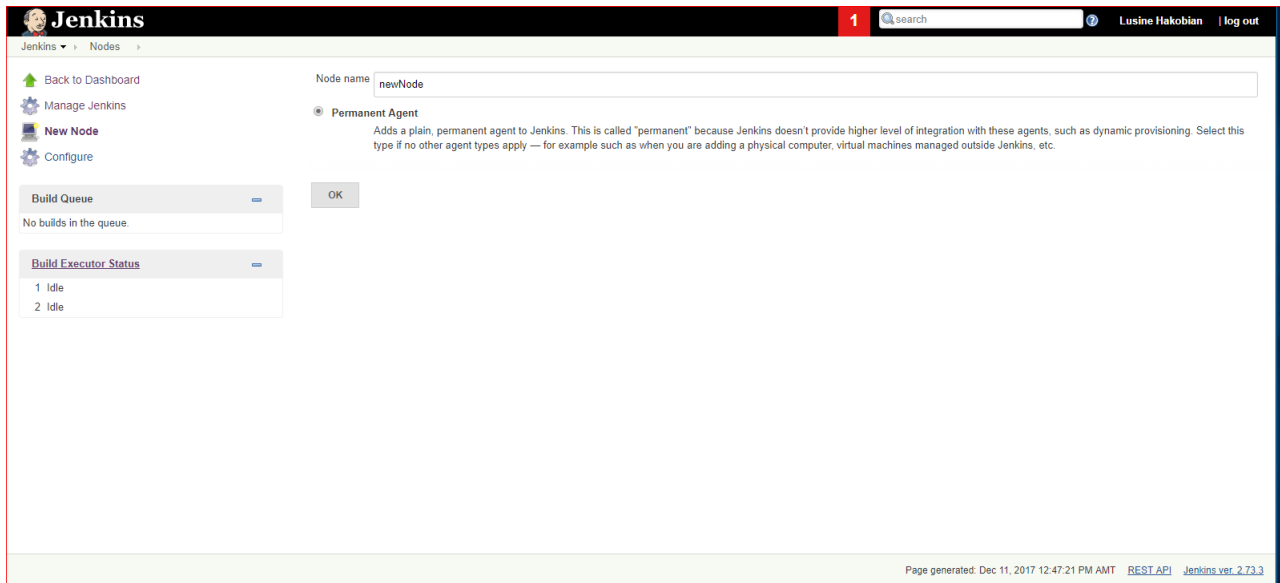
Create slave node on remote or local machine (you may use the same (one) machine for master and slave):

- Go to Manage Jenkins → Configure Global Security → set Agents to random



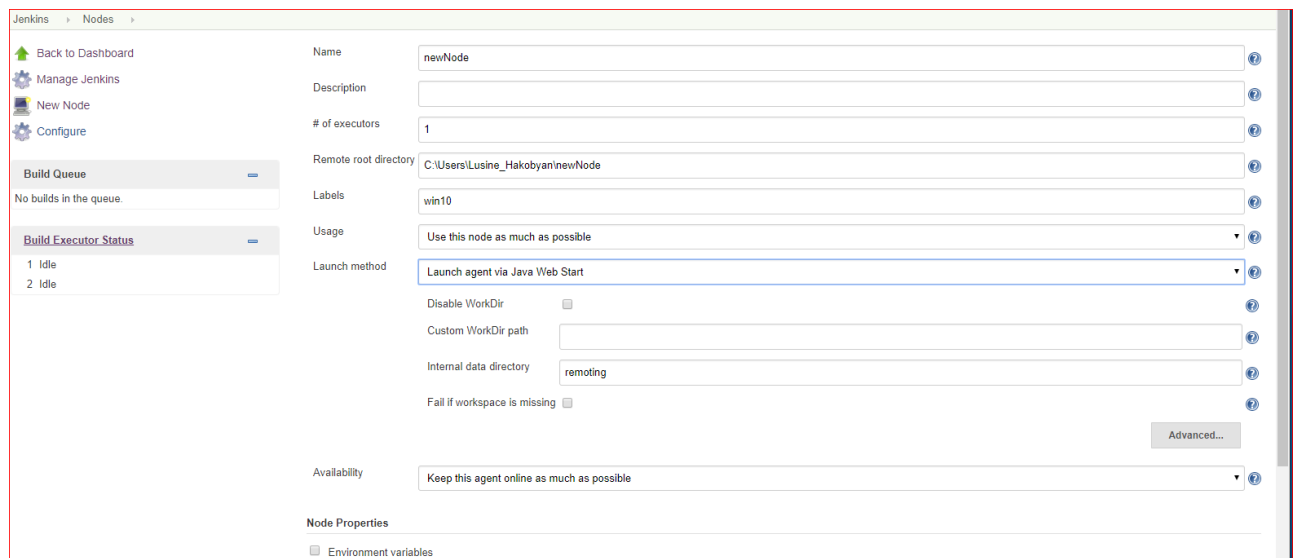
- Create slave node: Go to Manage Jenkins → Manage nodes → New Node →

set the name of slave node → Mark the Permanent Agent and click OK



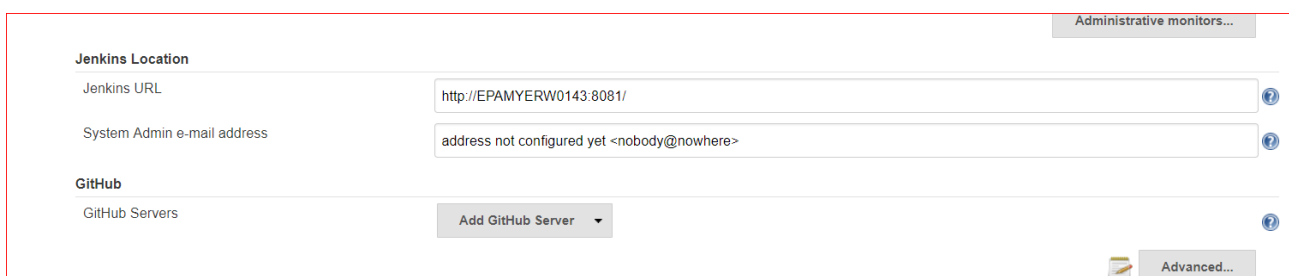
The screenshot shows the Jenkins 'New Node' configuration page. The 'Node name' field is set to 'newNode'. The 'Permanent Agent' radio button is selected. Below it, a description states: 'Adds a plain, permanent agent to Jenkins. This is called "permanent" because Jenkins doesn't provide higher level of integration with these agents, such as dynamic provisioning. Select this type if no other agent types apply — for example such as when you are adding a physical computer, virtual machines managed outside Jenkins, etc.' An 'OK' button is visible. On the left sidebar, there are links for 'Back to Dashboard', 'Manage Jenkins', 'New Node', and 'Configure'. Below these are sections for 'Build Queue' (showing 'No builds in the queue.') and 'Build Executor Status' (showing '1 Idle' and '2 Idle'). The bottom of the page indicates 'Page generated: Dec 11, 2017 12:47:21 PM AMT' and 'Jenkins ver. 2.73.3'.

- In the Opened window enter the node name, remote directory path, label, Launch method



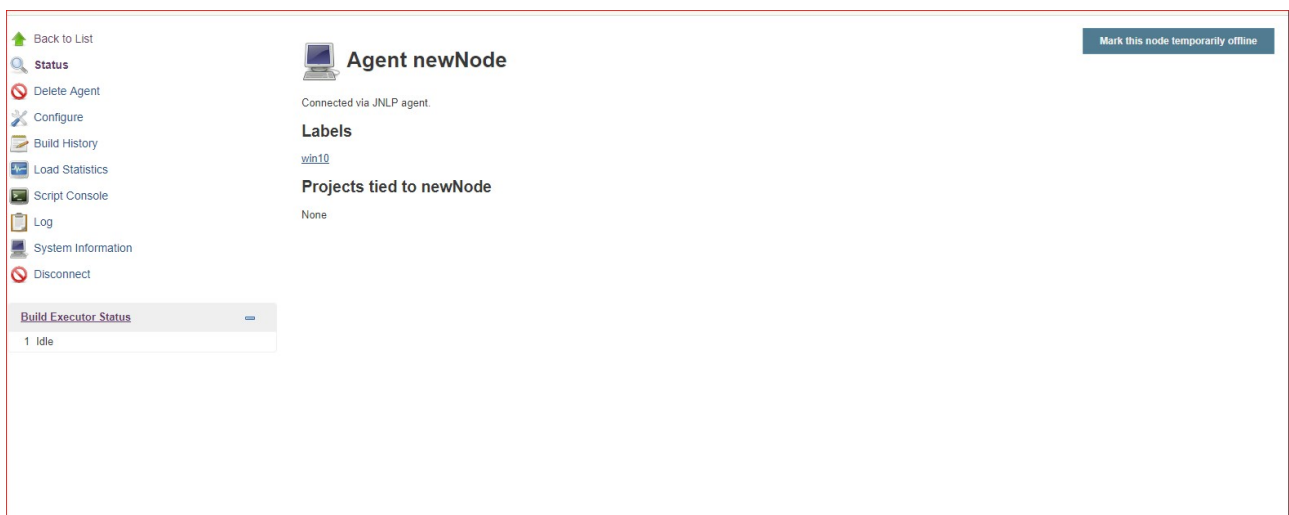
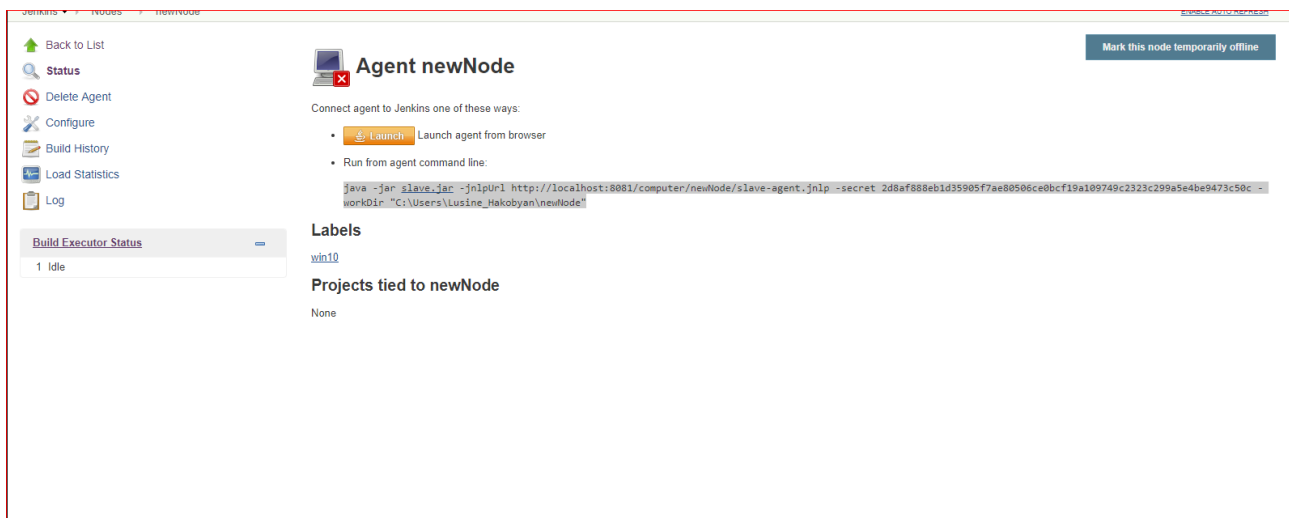
This screenshot shows the same Jenkins 'New Node' configuration page, but with more fields filled out. The 'Name' is 'newNode', 'Description' is empty, '# of executors' is '1', 'Remote root directory' is 'C:\Users\Lusine_Hakobyan\newNode', 'Labels' is 'win10', 'Usage' is 'Use this node as much as possible', and 'Launch method' is 'Launch agent via Java Web Start'. There are checkboxes for 'Disable WorkDir' (unchecked), 'Fail if workspace is missing' (unchecked), and a section for 'Availability' set to 'Keep this agent online as much as possible'. A 'Node Properties' section at the bottom has an unchecked 'Environment variables' checkbox. An 'Advanced...' button is on the right. The left sidebar is identical to the previous screenshot.

- Go to Manage Jenkins → Configure System → set slave node name



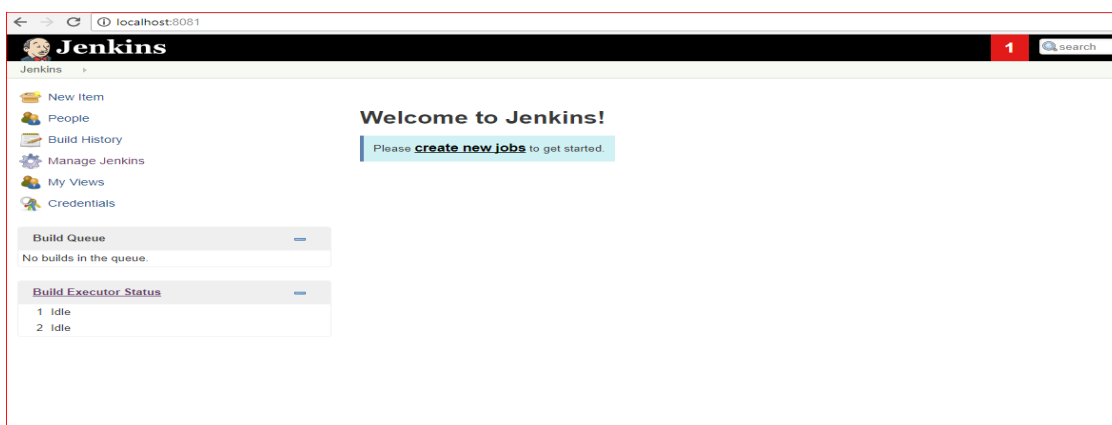
The screenshot shows the 'Configure System' page in Jenkins. It has a section for 'Jenkins Location' with 'Jenkins URL' set to 'http://EPAMYERW0143:8081/'. Below that is 'System Admin e-mail address' set to 'address not configured yet <nobody@nowhere>'. There is a 'GitHub' section with 'GitHub Servers' and an 'Add GitHub Server' button. An 'Administrative monitors...' button is at the top right. An 'Advanced...' button is at the bottom right.

- Download agent.jar from the opened window and run the mentioned command from command line:



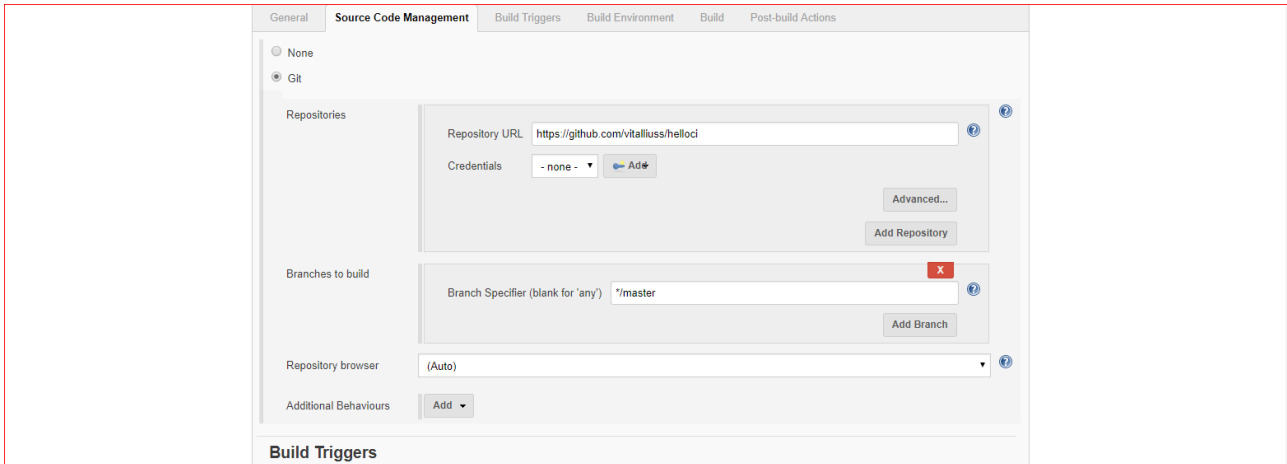
2. Job Configuration

Click on Create New Job → set the name, choose freestyle project.



Make sure that Git plugin and GitHub plugin are installed.

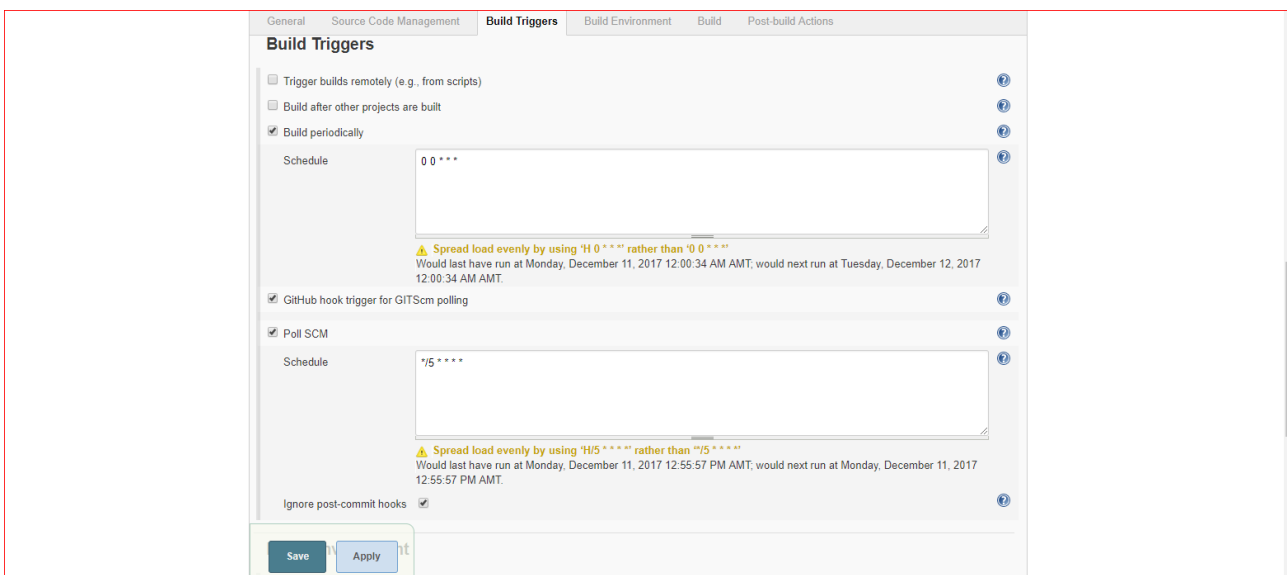
From Source Code Management select git and add path to the repository



The screenshot shows the 'Source Code Management' tab in Jenkins. The 'Git' radio button is selected. Under 'Repositories', the 'Repository URL' is set to 'https://github.com/vitaliuss/helloci' and 'Credentials' is set to '- none -'. There are buttons for 'Advanced...', 'Add Repository', and 'Add Branch'. Under 'Branches to build', the 'Branch Specifier (blank for 'any')' is set to '*/master'. There is a button for 'Add Branch'. The 'Repository browser' is set to '(Auto)'. There is an 'Add' button for 'Additional Behaviours'. The 'Build Triggers' tab is visible at the bottom.

From Git Triggers section select the following options:

- Build periodically – For the midnight builds
- GitHub hook trigger for GITScm polling and Poll SCM(check the checkbox Ignore post-commit hooks) – for the builds after commit to VSC



The screenshot shows the 'Build Triggers' tab in Jenkins. The following options are selected: 'Trigger builds remotely (e.g., from scripts)', 'Build after other projects are built', 'Build periodically', 'GitHub hook trigger for GITScm polling', 'Poll SCM', and 'Ignore post-commit hooks'. The 'Schedule' for 'Build periodically' is set to '0 0 * * *'. A warning message states: 'Spread load evenly by using 'H 0 * * *' rather than '0 0 * * *'. Would last have run at Monday, December 11, 2017 12:00:34 AM AMT; would next run at Tuesday, December 12, 2017 12:00:34 AM AMT.' The 'Schedule' for 'Poll SCM' is set to '* * * * *'. A warning message states: 'Spread load evenly by using 'H/5 * * * *' rather than '* * * * *'. Would last have run at Monday, December 11, 2017 12:55:57 PM AMT; would next run at Monday, December 11, 2017 12:55:57 PM AMT.' There are 'Save' and 'Apply' buttons at the bottom.

From Build choose 'Invoke top-level Maven Targets' . Set the goal 'test', and for the POM path to pom.xml(Java/pom.xml for this case)

Build

Invoke top-level Maven targets

Maven Version

3.5.2

Goals

test

POM

Java/pox.xml

Properties

JVM Options

Inject build variables

☐

Use private Maven repository

☐

Settings file

Use default maven settings

Global Settings file

Use default maven global settings

Also we need to specify git, Maven paths and versions from Manage Jenkins → Global Tool Configuration.

Jenkins > Global Tool Configuration

Default global settings provider

Use default maven global settings

JDK

JDK installations

Add JDK

List of JDK installations on this system

Git

Git installations

Git

Name

2.14.2

Path to Git executable

C:\Program Files\Git\bin\git.exe

Install automatically

☐

Delete Git

Add Git

Ant

Ant installations

Add Ant

List of Ant installations on this system

Maven

Maven installations

Add Maven

List of Maven installations on this system

Save

Apply

Jenkins Global Tool Configuration

Path to Git executable ?

☐ Install automatically ?

Ant

Ant installations

List of Ant installations on this system

Maven

Maven installations

Maven Name

MAVEN_HOME

☐ Install automatically ?

List of Maven installations on this system

Docker

Docker installations

List of Docker installations on this system

Job should run on slave only:

Connect project to slave node:

General Source Code Management Build Triggers Build Environment Build Post-build Actions

Project name

Description

[Plain text] [Preview](#)

☐ Discard old builds ?

☐ GitHub project ?

☐ Permission to Copy Artifact ?

☐ This project is parameterized ?

☐ Throttle builds ?

☐ Disable this project ?

☐ Execute concurrent builds if necessary ?

☒ Restrict where this project can be run ?

Label Expression

[Label newNode](#) is serviced by 1 node

Source Code Management

☐ None

☒ Git

Repository

Repository URL ?

localhost:8081

Back to Project

Status

Changes

Console Output

View as plain text

Edit Build Information

Delete Build

Git Build Data

No Tags

Previous Build

Console Output

Started by user [Lusine_Hakobian](#)
Building remotely on [newNode](#) (win10) in workspace C:\Users\Lusine_Hakobyan\newNode\workspace\newProject
> C:\Program Files\git\bin\git.exe rev-parse --is-inside-work-tree # timeout=10
Fetching changes from the remote Git repository
> C:\Program Files\git\bin\git.exe config remote.origin.url <https://github.com/vitallius/helloci> # timeout=10
Fetching upstream changes from <https://github.com/vitallius/helloci>
> C:\Program Files\git\bin\git.exe --version # timeout=10
> C:\Program Files\git\bin\git.exe fetch --tags --progress <https://github.com/vitallius/helloci> +refs/heads/*:refs/remotes/origin/*
> C:\Program Files\git\bin\git.exe rev-parse "refs/remotes/origin/master^{commit}" # timeout=10
> C:\Program Files\git\bin\git.exe rev-parse "refs/remotes/origin/origin/master^{commit}" # timeout=10
Checking out Revision 61547077994a9bcea2e84a9e3b1739c3c2cdc259 (refs/remotes/origin/master)
> C:\Program Files\git\bin\git.exe config core.sparsecheckout # timeout=10
> C:\Program Files\git\bin\git.exe checkout -f 61547077994a9bcea2e84a9e3b1739c3c2cdc259
Commit message: "change project name in readme"
> C:\Program Files\git\bin\git.exe rev-list 61547077994a9bcea2e84a9e3b1739c3c2cdc259 # timeout=10
Finished: SUCCESS

Back to List

Status

Delete Agent

Configure

Build History

Load Statistics

Script Console

Log

System Information

Disconnect

Build Executor Status

1 Idle

Agent newNode

Connected via JNLP agent.

Labels

[win10](#)

Projects tied to newNode

S	W	Name ↓	Last Success	Last Failure	Last Duration
		newProject	1 hr 34 min - #2	N/A	2.6 sec

Icon: [S](#) [M](#) [L](#)

[Legend](#) [RSS for all](#) [RSS for failures](#) [RSS for just latest builds](#)

Mark this node temporarily offline

Back to List

Status

Configure

Build History

Load Statistics

Script Console

Build Executor Status

1 Idle
2 Idle

Master (the master Jenkins node)

Projects tied to master

None

Mark this node temporarily offline