

Module 4: Continuous Integration With Jenkins

Demo Document - 2

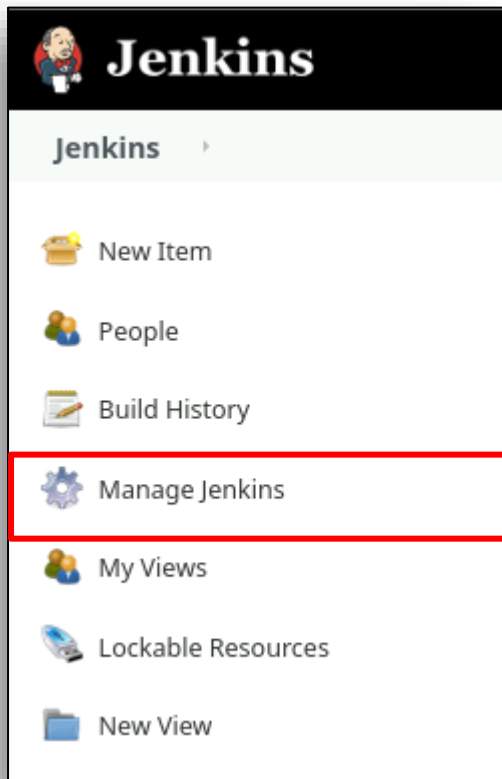
edureka!

edureka!

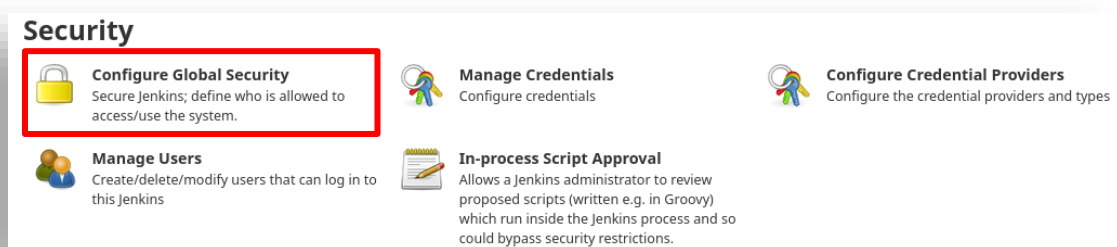
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Demo 2: Add a slave node in your Jenkins.

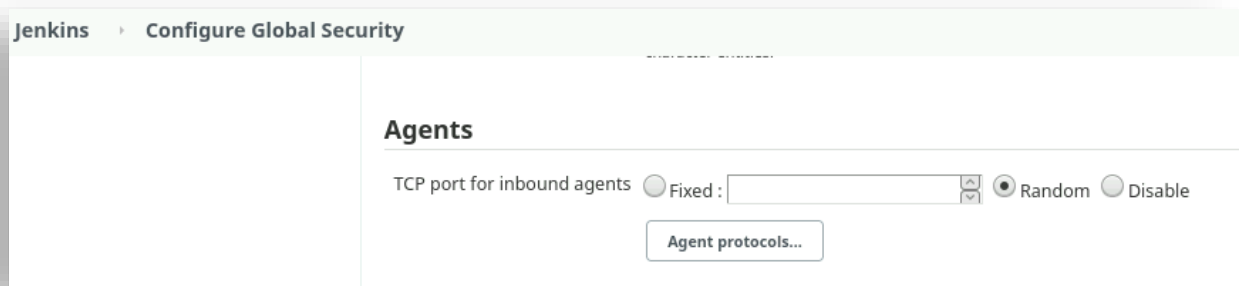
Step 1: Open Jenkins Dashboard and click on manage Jenkins.



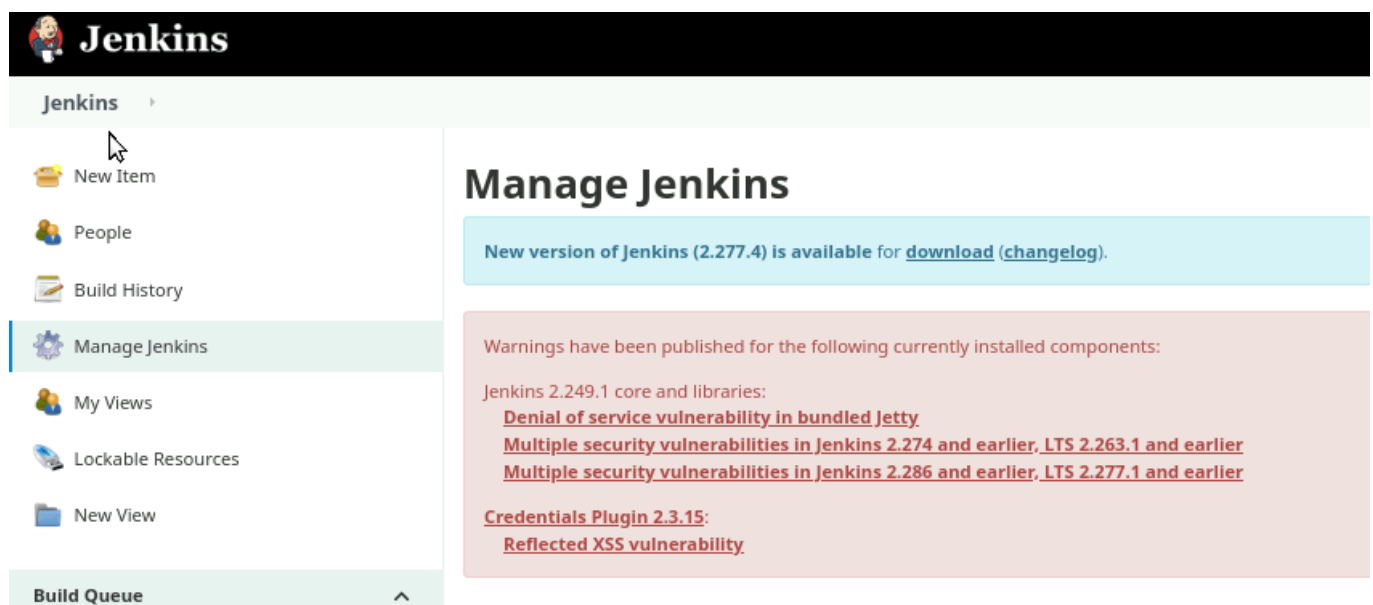
Step 2: Click on configure global security.



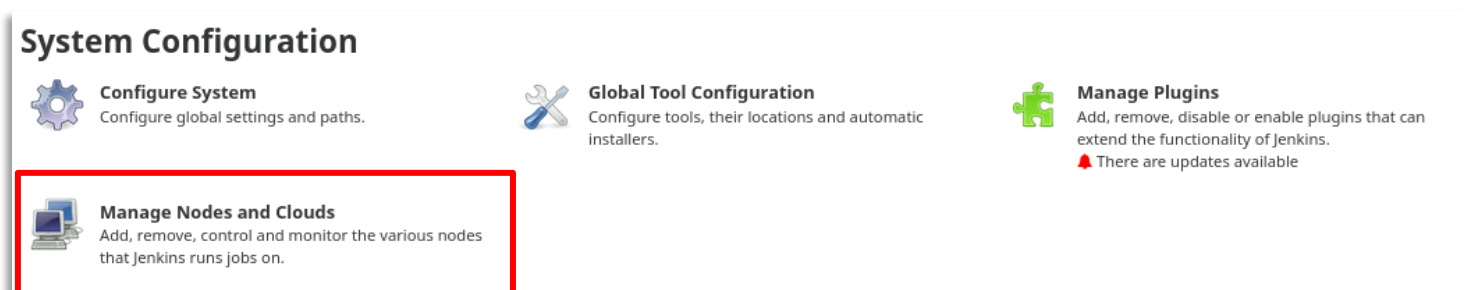
Step 3: Select random option for TCP ports for JLNK agents



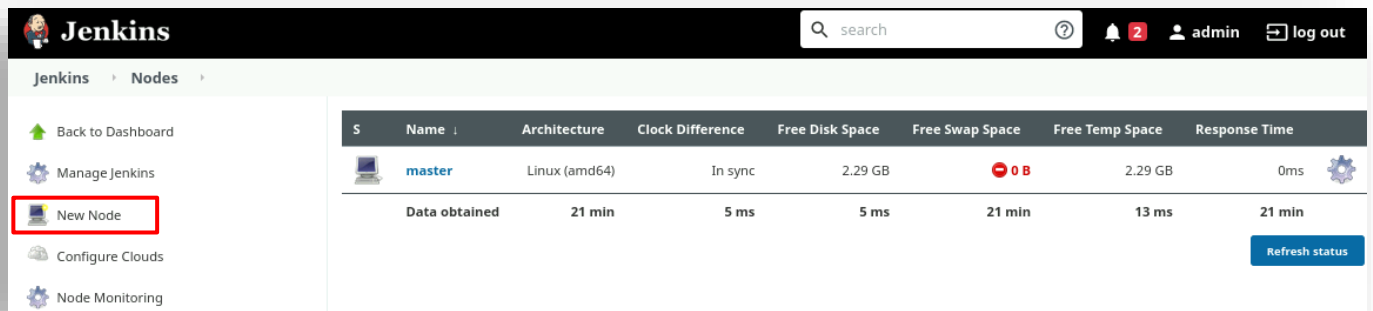
Step 4: Click on manage Jenkins.



Step 5: Click on the Manage Nodes option.

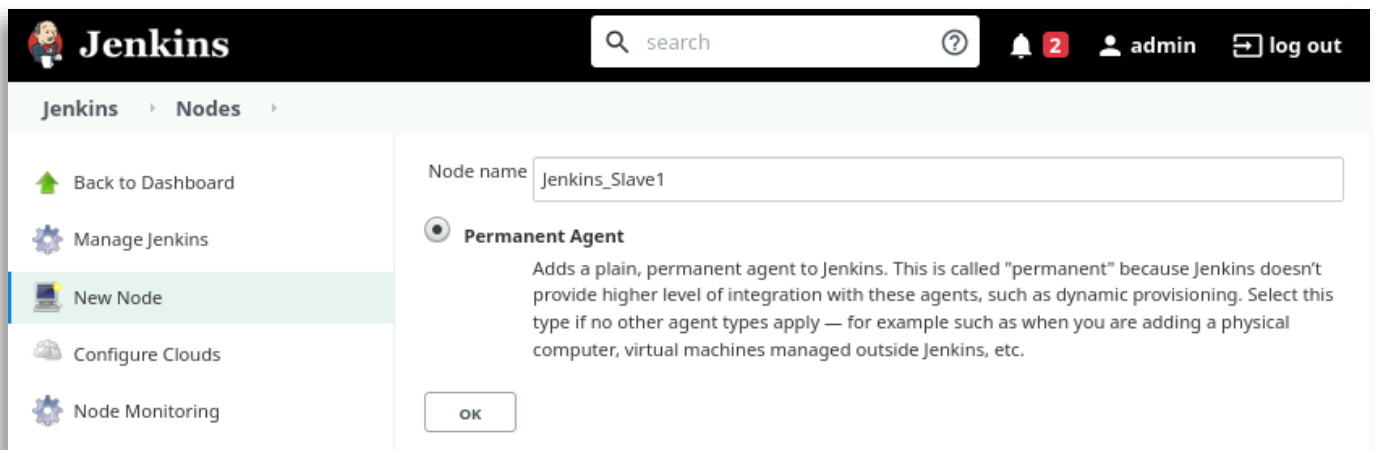


Step 6: Click on new node and then give your node a name and make it a permanent agent.



The screenshot shows the Jenkins 'Nodes' page. On the left sidebar, the 'New Node' option is highlighted with a red rectangle. The main table lists the 'master' node with various resource metrics. A 'Refresh status' button is located at the bottom right of the table.

| S | Name | Architecture | Clock Difference | Free Disk Space | Free Swap Space | Free Temp Space | Response Time |
|---------------|--------|---------------|------------------|-----------------|-----------------|-----------------|---------------|
| 1 | master | Linux (amd64) | In sync | 2.29 GB | 0 B | 2.29 GB | 0ms |
| Data obtained | | 21 min | 5 ms | 5 ms | 21 min | 13 ms | 21 min |



The screenshot shows the 'New Node' configuration page in Jenkins. The 'Node name' field is filled with 'jenkins_Slave1'. The 'Permanent Agent' radio button is selected. A description for the 'Permanent Agent' is provided. An 'OK' button is at the bottom.

Node name:

☒ **Permanent Agent**

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.

Step 7: Select the launch method as shown in the screenshot, and then set the availability as shown in the screenshot and then click on the Save button.

Jenkins Nodes Jenkins_Slave1

Back to List
Status
Delete Agent
Configure
Build History
Load Statistics
Log
Build Executor Status

Name: Jenkins_Slave1
Description:
of executors: 2
Remote root directory: /var/lib/jenkins/
Labels:
Usage: Use this node as much as possible
Launch method: Launch agent by connecting it to the master
☐ Disable WorkDir
Custom WorkDir path:
Internal data directory: remoting

Availability: Keep this agent online as much as possible

Node Properties
☐ Environment variables
☐ Tool Locations
Save

Step 8: Click on the name you have given to your slave node.

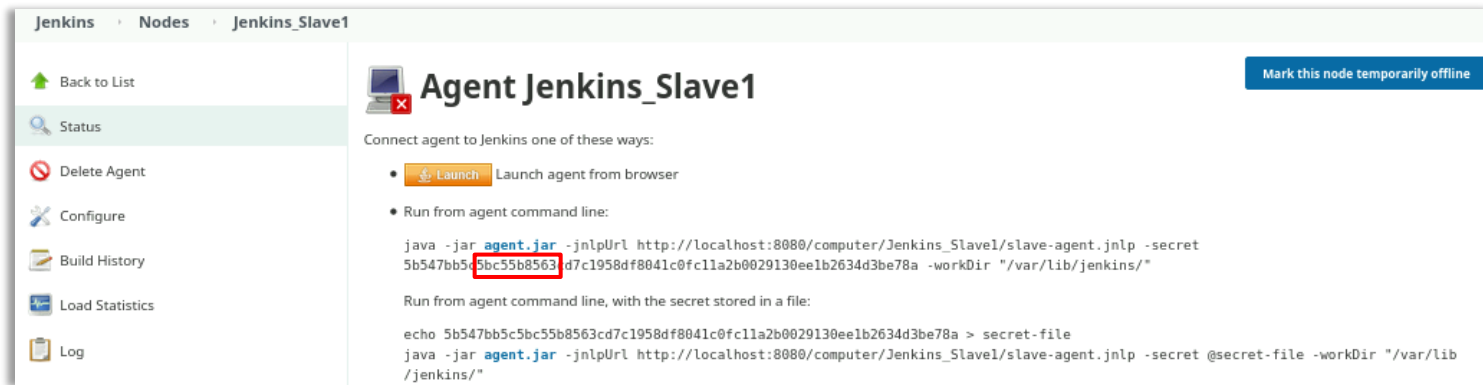
Jenkins Nodes

Back to Dashboard
Manage Jenkins
New Node
Configure Clouds
Node Monitoring

| S | Name | Architecture | Clock Difference | Free Disk Space | Free Swap Space | Free Temp Space | Response Time |
|---------------|-----------------------|---------------|------------------|-----------------|-----------------|-----------------|---------------|
| | Jenkins_Slave1 | | N/A | N/A | N/A | N/A | N/A |
| | master | Linux (amd64) | In sync | 2.22 GB | 0 B | 2.22 GB | 0ms |
| Data obtained | | 2 min 17 sec | 2 min 17 sec | 2 min 17 sec | 2 min 17 sec | 2 min 17 sec | 2 min 17 sec |

Refresh status

Step 9: Click on the agent.jar and download the file, and it should be present on the node which you want to add as a slave node.



Step 10: Copy the whole link and run it on the slave node which you want to add.



Step 11: Go to the slave node and download that agent.jar file on this node. Change the permission of that file.

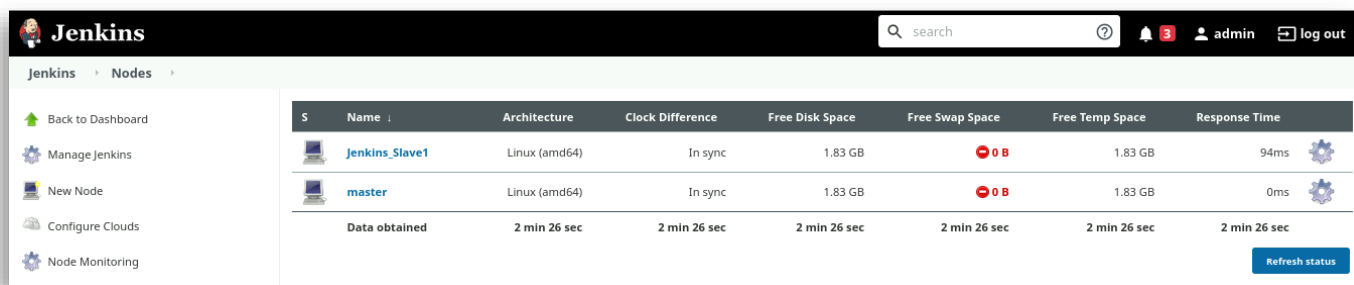
Then the copied link from Jenkins master should be pasted here and replace the localhost with the IP address of the Jenkins master node. You will get the below output.

```

edureka@kslavel:~/Downloads$ cd /home/edureka/Downloads/
edureka@kslavel:~/Downloads$ ls
agent.jar
edureka@kslavel:~/Downloads$ sudo chmod 777 agent.jar
edureka@kslavel:~/Downloads$ sudo java -jar agent.jar -jnlpUrl http://localhost:8080/computer/Jenkins_Slave1/slave-agent.jnlp -secret 5b547bb5c5bc55b8563cd7c1958df8041c0fc11a2b0029130ee1b2634d3be78a
-workDir "/var/lib/jenkins/"
May 17, 2021 11:01:44 AM org.jenkinsci.remoting.engine.WorkDirManager initializeWorkDir
INFO: Using /var/lib/jenkins/remoting as a remoting work directory
May 17, 2021 11:01:44 AM org.jenkinsci.remoting.engine.WorkDirManager setupLogging
INFO: Both error and output logs will be printed to /var/lib/jenkins/remoting
May 17, 2021 10:51:00 AM hudson.remoting.jnlp.Main createEngine
INFO: Setting up agent: Jenkins_Slave1
May 17, 2021 10:51:00 AM hudson.remoting.jnlp.Main$CuiListener <init>
INFO: Jenkins agent is running in headless mode.
May 17, 2021 10:51:00 AM hudson.remoting.Engine startEngine
INFO: Using Remoting version: 4.5
May 17, 2021 10:51:00 AM org.jenkinsci.remoting.engine.WorkDirManager initializeWorkDir
INFO: Using /var/lib/jenkins/remoting as a remoting work directory
May 17, 2021 10:51:00 AM hudson.remoting.jnlp.Main$CuiListener status
INFO: Locating server among [http://localhost:8080/]
May 17, 2021 10:51:00 AM org.jenkinsci.remoting.engine.JnlpAgentEndpointResolver resolve
INFO: Remoting server accepts the following protocols: [JNLP4-connect, Ping]
May 17, 2021 10:51:00 AM hudson.remoting.jnlp.Main$CuiListener status
INFO: Agent discovery successful
Agent address: localhost
Agent port: 34855
Identity: 23:a0:be:1a:4b:77:01:7d:60:7a:ce:14:26:d7:24:bc
May 17, 2021 10:51:00 AM hudson.remoting.jnlp.Main$CuiListener status
INFO: Handshaking
May 17, 2021 10:51:00 AM hudson.remoting.jnlp.Main$CuiListener status
INFO: Connecting to localhost:34855
May 17, 2021 10:51:00 AM hudson.remoting.jnlp.Main$CuiListener status
INFO: Trying protocol: JNLP4-connect
May 17, 2021 10:51:00 AM hudson.remoting.jnlp.Main$CuiListener status
INFO: Remote identity confirmed: 23:a0:be:1a:4b:77:01:7d:60:7a:ce:14:26:d7:24:bc
May 17, 2021 10:51:01 AM hudson.remoting.jnlp.Main$CuiListener status
INFO: Connected

```

Step 12: Go to your Jenkins master and check if your slave node is connected or not.



| S | Name | Architecture | Clock Difference | Free Disk Space | Free Swap Space | Free Temp Space | Response Time |
|---------------|----------------|---------------|------------------|-----------------|-----------------|-----------------|---------------|
| | Jenkins_Slave1 | Linux (amd64) | In sync | 1.83 GB | 0 B | 1.83 GB | 94ms |
| | master | Linux (amd64) | In sync | 1.83 GB | 0 B | 1.83 GB | 0ms |
| Data obtained | | 2 min 26 sec | 2 min 26 sec | 2 min 26 sec | 2 min 26 sec | 2 min 26 sec | 2 min 26 sec |

Refresh status