

# Distributed Builds on Jenkins

# Agenda

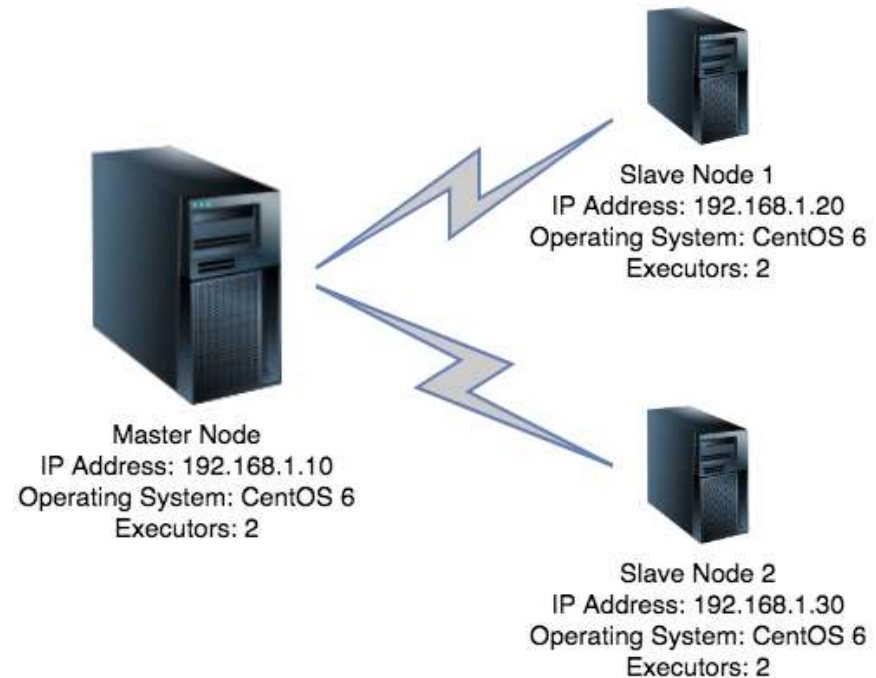
- Connect agents to your Jenkins master and access them securely
- Configure freestyle projects to run on your agents
- Instruct pipelines to run on different agents in your build environment

# Distributed Builds

- Refers to the allocation of different nodes (slaves) to run your build tasks

# The Master-Slave Model

- Allows to configure distributed builds on Jenkins
- The master node is basically the node on which Jenkins is installed
- This is the administrative node that carries out most of the tasks



# Setting up Slave Nodes

- Refer:
  - 2-Devops in Action (Jenkins, Java, MVN).pptx
    - Slide – “Setting up Slave Nodes”

# Configuring Tasks to Run on our Slaves

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

Description

This project will only run on node 2

[Plain text] [Preview](#)

☐ Discard old builds

☐ GitHub project

☐ This project is parameterized

☐ Throttle builds

☐ Disable this project

☐ Execute concurrent builds if necessary

☒ Restrict where this project can be run

Label Expression

node2 |

[Label node2](#) is serviced by 1 node. Permissions or other restrictions provided by plugins may prevent this job from running on those nodes.

Advanced...

# Configuring Tasks to Run on our Slaves

## Build

### Execute shell

Command

```
#!/bin/bash
sleep 10
hostname
echo "Running On Node 2"
```

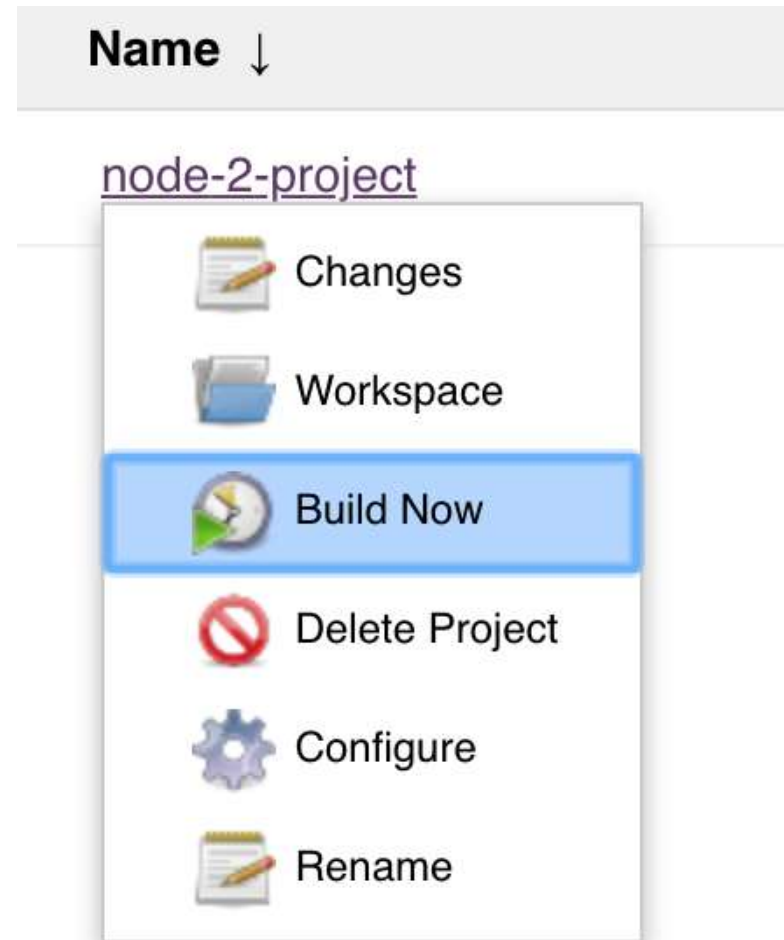
See [the list of available environment variables](#)

Advanced...

Add build step ▼

# Build Project

- We are going to run the project from the main Jenkins dashboard as opposed to the project dashboard.
- Click on the drop-down on the project name and select Build Now, as shown:









# Build Project

- If we watch the executors at the bottom left, we can see that our project is running on node2, as we defined in the configuration
- Review the Console Output

**Build Executor Status**

 **master**  
1 Idle  
2 Idle

 **node1**  
1 Idle  
2 Idle

 **node2**  
1 Idle  
2 node-2-project #1  


# Running Pipelines on Different Nodes

- `node {`
- `stage("Might Run On Node 1 Or Master") {`
- `printMessage("Running")`
- `sh 'sleep 10'`
- `sh 'hostname'`
- `}`
- `}`
- `node('node2') {`
- `stage("On Node 2") {`
- `printMessage("Running On Node 2")`
- `sh 'sleep 10'`
- `sh 'hostname'`
- `}`
- `}`
- `def printMessage(message) { echo "${message}" }`

*Thanks*