

Tour of Jenkins

Section 2

What you will learn in this section

- Learn key concepts in Jenkins
- Explore Jenkins Dashboard
- Explore the most important options in Jenkins' admin console
- Configure and run your first Jenkins job

Tour of Jenkins Dashboard

Video 2.1

What you will learn in this video

- Explore Jenkins Dashboard
- Learn key concepts in Jenkins:
 - job
 - build
 - view
 - plugin
- Explore the most important options in Jenkins' admin console

Jenkins Dashboard

1. Dashboard
2. Breadcrumbs
3. Sidebar
4. Build Queue
5. Build Executor Status
6. "All" view
7. Jobs/projects
8. Build
9. Build status
10. Build trend

The screenshot shows the Jenkins Dashboard interface with the following components and annotations:

- 1**: The main header area at the top of the dashboard.
- 2**: The breadcrumb navigation bar showing the current path (Jenkins).
- 3**: The left sidebar containing navigation links such as New Item, People, Build History, Project Relationship, Check File Fingerprint, Manage Jenkins, Support, Credentials, My Views, Pooled Virtual Machines, Groups, Roles, and Docker Traceability.
- 4**: The Build Queue section, which currently shows "No builds in the queue."
- 5**: The Build Executor Status section, showing two executors (1 and 2) both running builds for the "App" job.
- 6**: The "All" view button in the top left of the jobs table.
- 7**: The jobs/projects table, which lists builds with columns for Name, Last Success, Last Failure, and Last Duration.
- 8**: The build details for the "App" job, showing a progress bar and build number #64.
- 9**: The build status icons (green for success, red for failure, blue for in progress) in the jobs table.
- 10**: The build trend icon (a line graph) in the jobs table.

S	W	Name	Last Success	Last Failure	Last Duration
		App	6 mo 15 days - #32	N/A	44 sec
		Base Image Build	5 mo 13 days - #31 kohsuke/acmecorp-base	5 days 1 hr - #32 kohsuke/acmecorp-base	23 sec
		Just another build	5 mo 13 days - #11	6 mo 21 days - #4	14 sec
		With custom build environment	5 mo 13 days - #7	6 mo 21 days - #1	6.7 sec

Legend: RSS for all RSS for failures RSS for just latest builds

Image: <https://www.cloudbees.com/sites/default/files/cje-study-guide-2017.pdf>

Key Concepts

- **Job/Project:** a runnable task (e.g. compiling code, running tests, etc.)
- **Build:** the result of a single execution of a job/project
- **Build Status:** last status of a build
- **Build Trend:** weather icon showing the trend of the last builds
- **View:** a way to display jobs in tabbed categories

Manage Jenkins

1. Manage Jenkins (admin console)

2. Configuration pages:

2.a Configure System
(global configuration)

2.b Configure Global Security

2.c Manage Plugins
(Jenkins update center)

2.d Manage Nodes
(node/slave configuration)

The screenshot shows the Jenkins 'Manage Jenkins' page. A large bracket at the top of the slide points to the 'Manage Jenkins' section of the interface. On the left sidebar, the 'Manage Jenkins' link is highlighted. The main content area lists various configuration options, each with an icon and a description. Annotations are placed over the image: a '1' with a bracket above the 'Manage Jenkins' section; a '2' next to the 'Configure System' link; '2.a' next to the 'Configure System' link; '2.b' next to the 'Configure Global Security' link; '2.c' next to the 'Manage Plugins' link; and '2.d' next to the 'Manage Nodes' link. The 'Build Queue' section shows 'No builds in the queue.' The 'Build Executor Status' section shows two executors, #64 and #63, both with a red status bar. The 'Wasted Minutes' section shows '0 ms were wasted because you didn't have enough executors.'

Jenkins

ENABLE AUTO REFRESH

Manage Jenkins

2 of Jenkins (1.609.15.1) is available for [download](#) ([changelog](#)).

- 2** **2.a** **2.b** **2.c** **2.d**
 - [Configure System](#)
Configure global settings and paths.
 - [Configure Global Security](#)
Secure Jenkins; define who is allowed to access/use the system.
 - [Configure Analytics](#)
Configure the storage and reporting of Analytics
 - [Reload Configuration from Disk](#)
Discard all the loaded data in memory and reload everything from file system. Useful when you modified config files directly on disk.
 - [Manage Plugins](#)
Add, remove, disable or enable plugins that can extend the functionality of Jenkins. (updates available)
 - [System Information](#)
Displays various environmental information to assist trouble-shooting.
 - [System Log](#)
System log captures output from `java.util`, logging output related to Jenkins.
 - [Load Statistics](#)
Check your resource utilization and see if you need more computers for your builds.
 - [Jenkins CLI](#)
Access/manage Jenkins from your shell, or from your script.
 - [Script Console](#)
Executes arbitrary script for administration/trouble-shooting/diagnostics.
 - [Manage Nodes](#)
Add, remove, control and monitor the various nodes that Jenkins runs jobs on.
 - [High Availability Status](#)
Monitor the status of the Jenkins Enterprise HA cluster

Build Queue [View](#)

No builds in the queue.

Build Executor Status [View](#)

1	part of App	#64	
2	part of App	#63	

Wasted Minutes [View](#)

0 ms were wasted because you didn't have enough executors.

Image: <https://www.cloudbees.com/sites/default/files/cje-study-guide-2017.pdf>

Key Concepts

- **Plugin:** an extension to Jenkins core functionalities
- **Node:** a machine part of the Jenkins environment and capable of executing a job (master/agent)

Next Video

Video 2.2 Job Configuration

