

Class 17

Time:8:30 AM IST to 10:30 AM IST



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<http://www.learn-automation.com>

High Level Agenda

- What is Jenkins
- How to download Jenkins
- How to configure jenkins to run test from local machine
- What is GIT
- What is GITHUB
- Upload complete framework on GITHUB
- Execution of test from Jenkins and GITHUB
- Cron pattern



- Open source CI Tool- Continuous Integration tool.
- Installation: Jenkins is easy to install either using direct installation file (exe) or war file to deploy using application server.
- Email integration: Jenkins can be configured to email the content of the status of the build.
- Easy Configuration: To configure various tasks on Jenkins is easy.



Jenkins

- TestNG test: Jenkins can be configured to run the automation test build on TestNG after each build of SVN.
- Jenkins can schedule your tests to run at specific time.
- Plugins: 3rd party plugin can be configured in Jenkins to use features and additional functionality.
- Permanent links: Jenkins provides direct links to the latest build or failed build that can be used for easy communication



Jenkins

- It is cross-platform and can be used on Windows, Linux, Mac OS and Solaris environments. Jenkins is written in Java.



Jenkins

Install

Java -jar jenkins.war

Configuration

Step 1- Set JAVA

Step 2- Set MAVEN

Step 3- Set Git

Step 4- Set Email configuration

Step 5- Create Build



- Git is a mature, actively maintained open source project originally developed in 2005 by Linus Torvalds,
- GIT is Version control System for tracking changes in computer files.
- It helps in coordinating work on those files among multiple people.
- It is primarily used for Software development.



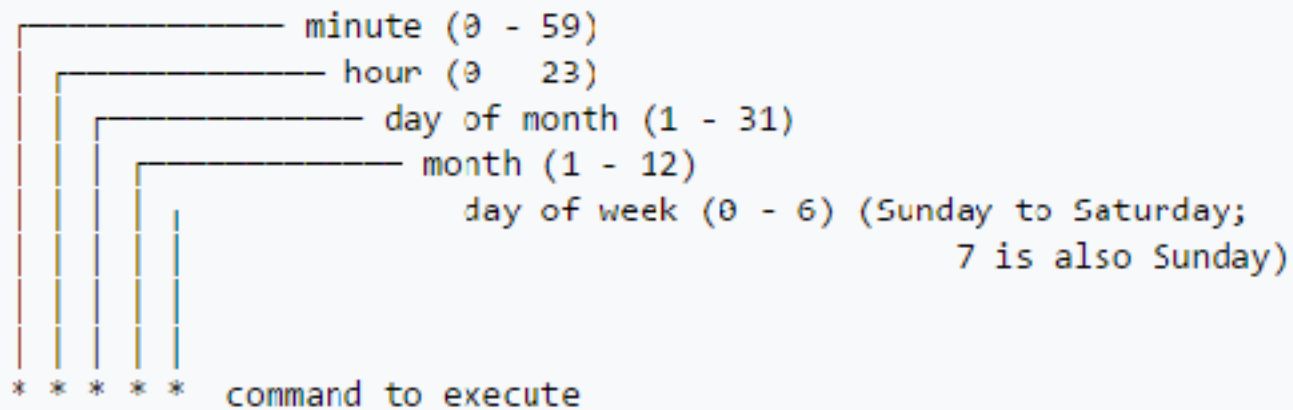
- **GitHub** is a web-based GIT
- The site was launched in April 2008 by [Tom Preston-Werner](#)
- GitHub is mostly used for code.
- It offers all of the distributed version control and Source code management (SCM) functionality of Git as well as adding its own features.

Other Features of GITHUB

- Documentation, including automatically rendered [README](#) files
- Issues Tracking (including feature requests) with labels, milestones, assignees and a search engine.
- Wikkis
- Commits history.

Cron Pattern

- Cron is time based job scheduler



The diagram illustrates the structure of a cron job pattern. It shows a sequence of five asterisks (*) representing the fields: minute, hour, day of month, month, and day of week. Each field is connected by a line to its corresponding label and range. The labels are: minute (0 - 59), hour (0 - 23), day of month (1 - 31), month (1 - 12), and day of week (0 - 6) (Sunday to Saturday; 7 is also Sunday). The command to execute is indicated by the text 'command to execute' at the bottom.

```
* * * * * command to execute
```

minute (0 - 59)
hour (0 - 23)
day of month (1 - 31)
month (1 - 12)
day of week (0 - 6) (Sunday to Saturday;
7 is also Sunday)

Entry	Description	Equivalent to
@yearly (or @annually)	Run once a year at midnight of 1 January	0 0 1 1 *
@monthly	Run once a month at midnight of the first day of the month	0 0 1 * *
@weekly	Run once a week at midnight on Sunday morning	0 0 * * 0
@daily	Run once a day at midnight	0 0 * * *
@hourly	Run once an hour at the beginning of the hour	0 * * * *
@reboot	Run at startup	N/A

Thank you 🙏

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