

CI & Monitoring tools

CI - Jenkins

GENERAL OVERVIEW

Popular free open source server-based CI solution written in Java that requires a web server to operate on.

Jenkins integrates both CI and CD options so it can be used as a simple CI server or turned into a continuous delivery hub for any project. It also provides hundreds of plugins to support building, deploying and automating any project.

Notable highlights

- Open source
- Local app
- Completely free
- Deep workflow customization
- Rich in features and plugins
- Easy installation thanks to the pre-installed OS X, Unix and Windows packages

PLATFORM DOCUMENTATION

The documentation for Jenkins is presented in a “user handbook” format which guides the user from installation to more advanced topics such as sys admin and scaling. The documentation takes into consideration the distinct user skill levels and suggest skipping to specific sections according to the goal of the user.

Both the installation and integration processes are very simple and well detailed. There is information for several popular platforms as well as other special installation and configuration processes.

Getting started with Jenkins is just a matter of installing it, creating a Jenkins pipeline and linking your repository to Jenkins.

There are 3 kinds of tutorials available, ranging from a guided tour into installation and configuration of your first Jenkins project to a more in-depth look at Jenkins pipelines and integration with different kinds of programming stacks and cloud solutions.

SUMMARY OF HOW TO GET STARTED WITH THE TOOL

Downloading and installing Jenkins using any of the available sources for several platforms

Unlocking Jenkins following the setup wizard's instructions

Customizing Jenkins by installing optional plugins

Creating a Jenkins pipeline

Linking your repository to Jenkins.

RESOURCES & LINKS

Jenkins home site - <https://www.jenkins.io>
User handbook - <https://www.jenkins.io/doc/>
Downloads - <https://www.jenkins.io/download/>
Plugins index - <https://plugins.jenkins.io>

MATURITY AND MARKET SHARE

Jenkins is a well established product with an excellent reputation dating back from 2011. Some of the organizations that support Jenkins include, GitHub, AWS, IBM, and the CD Foundation.

Monitoring - Datadog

GENERAL OVERVIEW

Datadog is a monitoring and security platform for cloud applications that allows applications, infrastructure, and third-party services entirely observable by bringing end-to-end traces, metrics, and logs.

Notable highlights

- End-to-end user experience visibility in a single platform.
- Seamlessly aggregates metrics and events across the full devops stack
- See log data in context with automated tagging and correlation
- Automatic grouping of related errors into issues based on error type, error message, and stack trace
- Prioritize business and engineering decisions with user experience metrics and detailed graphs

PLATFORM DOCUMENTATION

Documentation is presented in a range of different documents with individual sections ranging from installation to getting started with the Datadog app. There are individual stand alone documentation articles for each of the features of the platform as well for configuration of Datadog API.

There is documentation available for getting started with Datadog, but there are some caveats to it. There are separate docs regarding the installation of the agent, the app and how to integrate the API to several applications. The latter resides on a separate readme file of the specific platform GitHub repository.

There are courses aimed to train developers in the use of some of the features available in the platform.

SUMMARY OF HOW TO GET STARTED WITH THE TOOL

Install the agent

configure the integrations that you want to add to your project

setup the kind of tracing or monitoring you want to perform using a Yaml config file

Link your project to Datadog

RESOURCES & LINKS

Documentation - <https://docs.datadoghq.com>

Learning center - [https://learn.datadoghq.com/?](https://learn.datadoghq.com/?_gl=1*141q4xw*_ga*MjQxOTMxNTEyLjE2MzQzMDg4MjA.*_ga_KN80RDFSQK*MTYzNDMxMjA)

[_gl=1*141q4xw*_ga*MjQxOTMxNTEyLjE2MzQzMDg4MjA.*_ga_KN80RDFSQK*MTYzNDMxMjA](https://learn.datadoghq.com/?_gl=1*141q4xw*_ga*MjQxOTMxNTEyLjE2MzQzMDg4MjA.*_ga_KN80RDFSQK*MTYzNDMxMjA)
[yNy4yLjEuMTYzNDMxMzA1Mi4w](https://learn.datadoghq.com/?_gl=1*141q4xw*_ga*MjQxOTMxNTEyLjE2MzQzMDg4MjA.*_ga_KN80RDFSQK*MTYzNDMxMjA)

MATURITY AND MARKET SHARE

Some of the companies that use Datadog are:

The Washington Post

21st Century Fox

Peloton

Samsung

Comcast