Continuous Integration: Jenkins (https://www.jenkins.io/)

Continuous Integration and Continuous Delivery:
As an extensible automation server, Jenkins can be used as a simple CI server or turned into the continuous delivery hub for any project.

Easy installation: Jenkins is a self-contained Java-based program, ready to run out-of-the-box, with packages for Windows, Linux, macOS and other Unix-like operating systems.

Easy configuration: Jenkins can be easily set up and configured via its web interface, which includes on-the-fly error checks and built-in help.

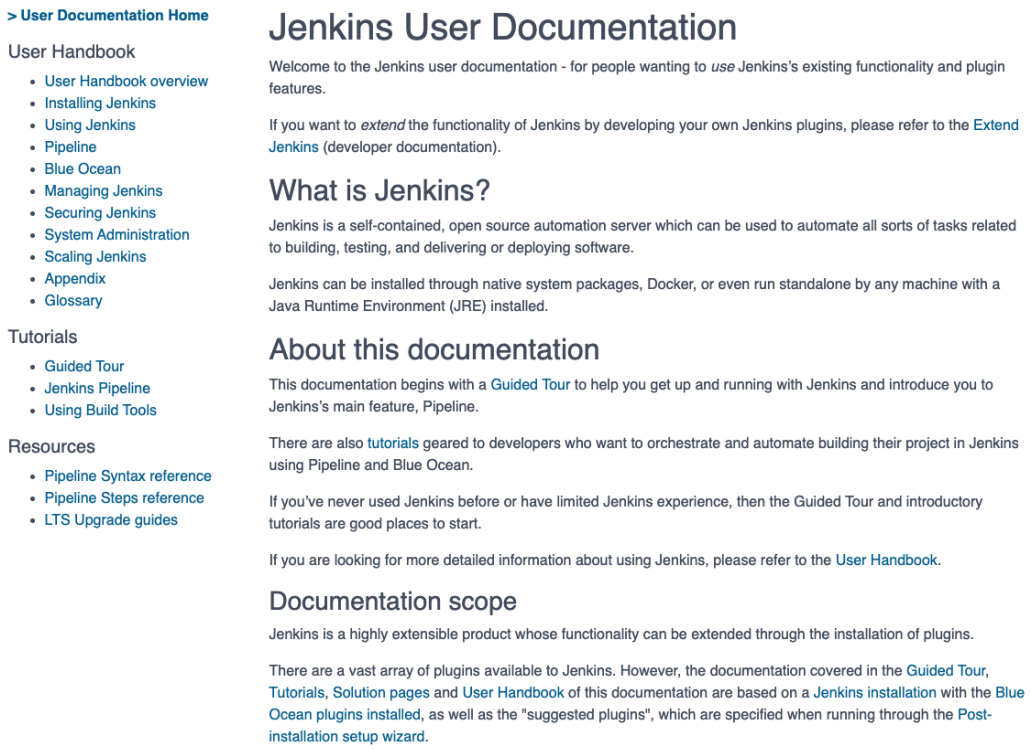
Plugins: With hundreds of plugins in the Update Center, Jenkins integrates with practically every tool in the continuous integration and continuous delivery toolchain.

Extensible: Jenkins can be extended via its plugin architecture, providing nearly infinite possibilities for what Jenkins can do.

Distributed: Jenkins can easily distribute work across multiple machines, helping drive builds, tests and deployments across multiple platforms faster.

Documentation: https://www.jenkins.io/doc/

Very easy to navigate documentation page. Lots of resources available to get the most out of using Jenkins. Even allows for developers to develop their own Jenkins plugins, extending Jenkins' functionality.



> User Documentation Home

User Handbook

- User Handbook overview
- Installing Jenkins
- Using Jenkins
- Pipeline
- Blue Ocean
- Managing Jenkins
- Securing Jenkins
- System Administration
- Scaling Jenkins
- Appendix
- Glossary

Tutorials

- Guided Tour
- Jenkins Pipeline
- Using Build Tools

Resources

- Pipeline Syntax reference
- Pipeline Steps reference
- LTS Upgrade guides

Jenkins User Documentation

Welcome to the Jenkins user documentation - for people wanting to *use* Jenkins's existing functionality and plugin features.

If you want to *extend* the functionality of Jenkins by developing your own Jenkins plugins, please refer to the Extend Jenkins (developer documentation).

What is Jenkins?

Jenkins is a self-contained, open source automation server which can be used to automate all sorts of tasks related to building, testing, and delivering or deploying software.

Jenkins can be installed through native system packages, Docker, or even run standalone by any machine with a Java Runtime Environment (JRE) installed.

About this documentation

This documentation begins with a Guided Tour to help you get up and running with Jenkins and introduce you to Jenkins's main feature, Pipeline.

There are also tutorials geared to developers who want to orchestrate and automate building their project in Jenkins using Pipeline and Blue Ocean.

If you've never used Jenkins before or have limited Jenkins experience, then the Guided Tour and introductory tutorials are good places to start.

If you are looking for more detailed information about using Jenkins, please refer to the User Handbook.

Documentation scope

Jenkins is a highly extensible product whose functionality can be extended through the installation of plugins.

There are a vast array of plugins available to Jenkins. However, the documentation covered in the Guided Tour, Tutorials, Solution pages and User Handbook of this documentation are based on a Jenkins installation with the Blue Ocean plugins installed, as well as the "suggested plugins", which are specified when running through the Post-installation setup wizard.

History/Popularity: https://github.com/jenkinsci/jenkins

Jenkins was initially released on February 2, 2011. The most recent build was released on October 12th, 2021. Jenkins is used by millions of users and over 2500 companies, including Facebook, Netflix, and Twitch (https://www.jenkins.io/project/adopters/).

Real Time Error Monitoring: Datadog (https://www.datadoghq.com/)

Automatically Aggregate Similar Errors into Issues:

- Reduce noise by automatically grouping related errors into issues based on error type, error message, and stack trace
- Follow issues over time to understand when they started, how they have evolved, and how often their errors are occurring
- Quickly filter through issues with a simple faceted search - no query language required

Triage Issues Faster with Error Tracking Monitors:

- Receive real-time alerts when new issues arise, so you can resolve them before many users are affected
- Quickly discover when a particular issue starts having too many occurrences or is impacting too many end users
- Get notified when an issue, that has been previously fixed, starts to have new occurrences

Easily Identify & Troubleshoot the Root Cause of Errors:

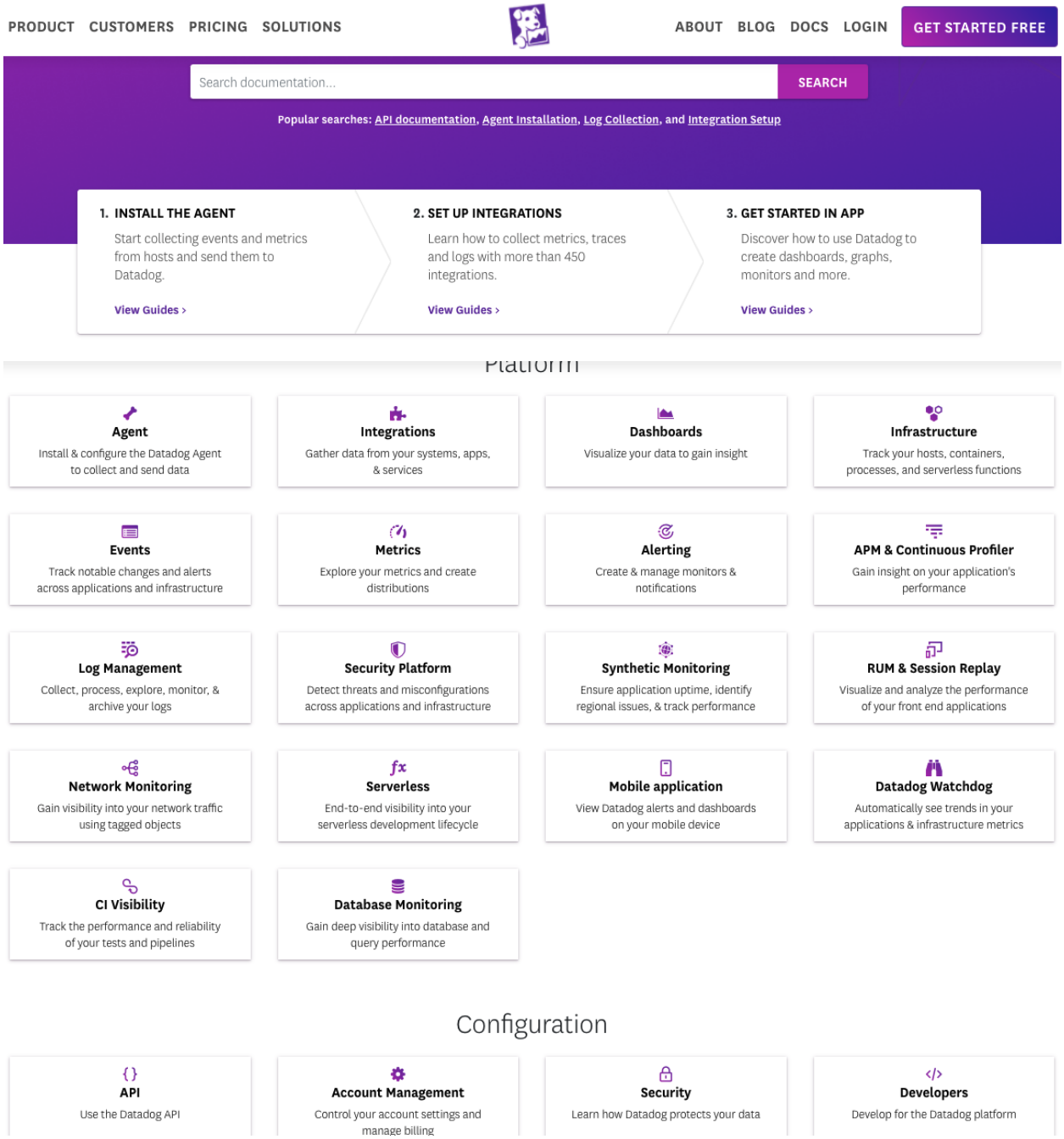
- Investigate errors down to lines of code with un-minification of JavaScript stack traces, deobfuscation of Android crashes, and symbolication of iOS crashes
- Identify the root cause of an issue by linking error stack traces to the relevant source code through Datadog's integrations with Github, Gitlab, and Bitbucket
- Quickly determine where particular errors are most prevalent using all associated tags, such as version, url, and environment

Gain Full Visibility into Frontend and Backend Data:

- Get full-stack visibility through seamless correlation of frontend, backend, and mobile data
- Navigate to backend traces or logs in a single click to rapidly pinpoint the root cause of errors
- Explore performance and error data for individual user sessions with Datadog RUM and Session Replay

Documentation: https://docs.datadoghq.com/

Datadog's documentation seems more robust, but kind of overwhelming at first. Instead of a simple handbook like Jenkins, Datadog's documentation allows for complex searches, and also offers a multitude of button options for your specific needs. I like that it has specific guides for installing the agent, setting up integrations, as well as one for getting started in the app.



History/Popularity: https://en.wikipedia.org/wiki/Datadog

Datadog seems to be a much larger company than Jenkins. Their platform has a wide reach in the market and is used by multiple big tech companies. In 2014, Datadog support was broadened to multiple cloud service providers including Amazon Web Services (AWS), Microsoft Azure, Google Cloud Platform and Red Hat OpenShift. Datadog went public on the Nasdaq exchange on September 19, 2019, selling 24 million shares and raising $648 million. As of this year, Datadog has a reported revenue of $802 million. It was also listed as one of the top 100 places to work in New York City in 2015 and 2016.