

Continuous integration

Elevator Pitch

Jenkins is an open source continuous integration software that was initially released February 2, 2011. The software was originally forked by Oracle under the name Hudson. After some discussion over naming it went solo and is now known as Jenkins. A major plus to this software is that it's open source and has over 667 members contributing with 2,200 public repositories. The software has plenty of plugins and is compatible with a plethora of languages. It also has built in security functions that require a log in or prior authorization to contribute, this will ensure our code is protected from malicious attacks. Also it's free.

Getting started

Getting started with Jenkins is incredibly easy. You simply need to download their software (which is available for almost all operating systems). You can either opt for a 12 week update or a weekly automatic update. This continuous oversight of the software makes it very reliable and up to date. Once the software is downloaded run it via your terminal then open a browser and run the program through it. Build your job then upload your project via git. Run your test and the program will show you all the test results as well as the history of your test results.

There is a plethora of information on how the software works on the Jenkins website. While the how to documents might not be as sexy and clean cut as other software (Circle CI) it still covers all of the necessary operations. As well as the company information there are also YouTube videos to help, below is a collection of useful links:

<https://www.youtube.com/watch?v=LFDnKpOTg>

<https://www.youtube.com/watch?v=NovHZZwlCfk>

<https://www.jenkins.io/doc/>

Summary

Jenkins has been around for about 10 years. After a small head butt with Oracle it has become almost entirely user supported. Currently 56% of continuous integration is done through Jenkins. As of today (July 2, 2021) there have been 31,333 commits! The software is used by companies like Facebook, Netflix, Udemy and Instacart just to name a few. It is also compatible with Amazon Web Services, Azure, Google Cloud and IBM Cloud. All in all Jenkins is a solid, reliable continuous integration service that is useful and great!

Real time error monitoring

Elevator Pitch

Sentry is a real time error monitoring software that was created early 2010. The application works in over 30 languages and is used by over 70K organizations. The website and documents are sleek and easy to read. The only downside is we would have to pay to use this software.

Getting Started

Using Sentry is super simple. The website has a host of documents to help you set it up on your machine. On top of that they have a knowledgeable team that is able to answer your questions. First sign in, then download the software and you're good to go. After signing in upload your program and Sentry will tell you when a bug appears.

<https://docs.sentry.io/product/performance/getting-started/>
<https://www.youtube.com/watch?v=Kz-SudCTdu4>
<https://develop.sentry.dev/self-hosted/>

Summary

With over 10 years of experience Sentry is an excellent choice. The software is used by a number of huge companies including Peloton, Reddit, Sonos, CloudFlare. It is written using Python making the syntax very simple and is compatible with a number of different languages. The company has raised millions in venture capital and has a strong team monitoring it. According to datanyze Sentry commands 93% of the real time error monitoring market!