LU02b - Jenkins' architecture

Internal reference: learningunits/02-2.md

Goals

1. I can explain (in my own words) the roles and responsibilities of the Jenkins master (controller) and agents (Master–Agent architecture)
2. I can explain (in my own words) how build tasks are delegated, and how communication between master and agents occurs.
3. I can distinguish between vertical scaling (adding more resources to a single instance) and horizontal scaling (adding more master instances).
4. I can identify the benefits and trade-offs of each scaling approach for performance, maintenance, and reliability.
5. I recognize the importance of test and production environments.
6. I understand why Jenkins setups should include separate test and production instances to ensure stability and safe testing of upgrades, plugins, and pipelines.

Basics

In this article, you will learn about Jenkins architecture and its parts.

Internal reference 02-2.md

Exercises

Make your own notes while reading the article.

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