

On building a free software based development environment for a small company

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<https://nblock.org>

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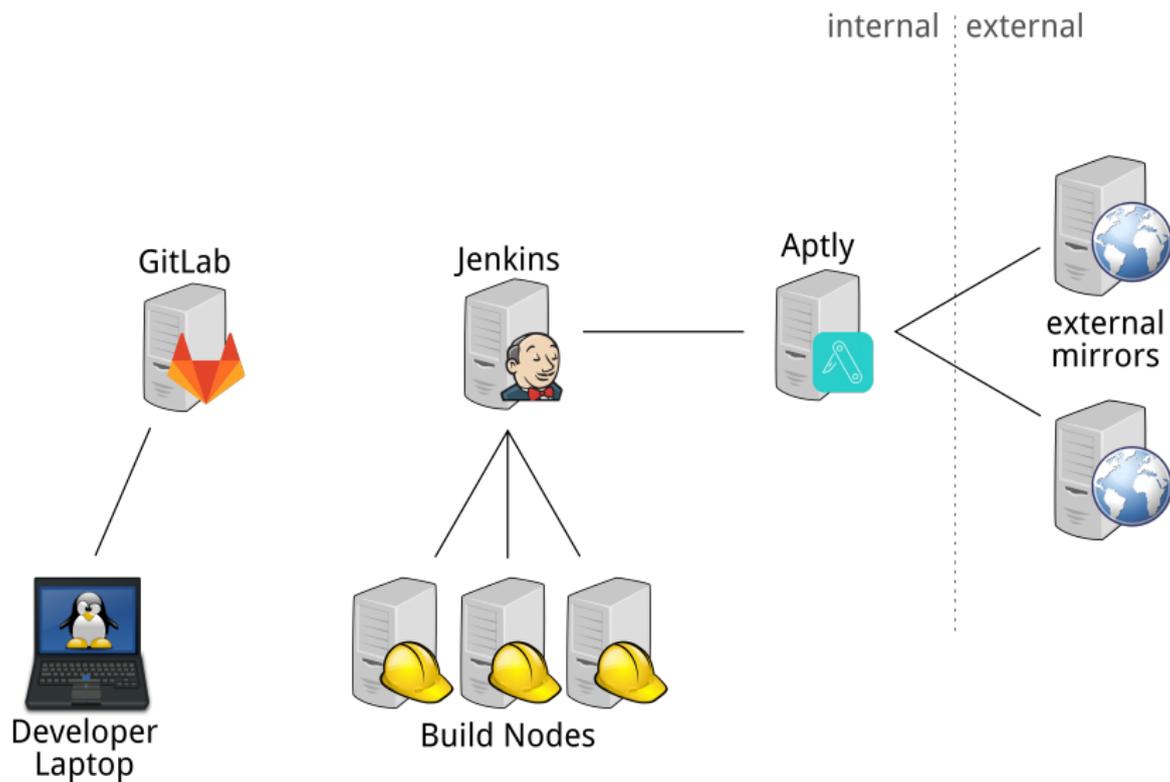
Introduction

- Systems Engineer
- Small startup company
- Laboratory testing equipment
- C++, Python, Bash, ...

Requirements

- Offline
- Independent of the developer machine
- Easy to use
- Understandable

Overview



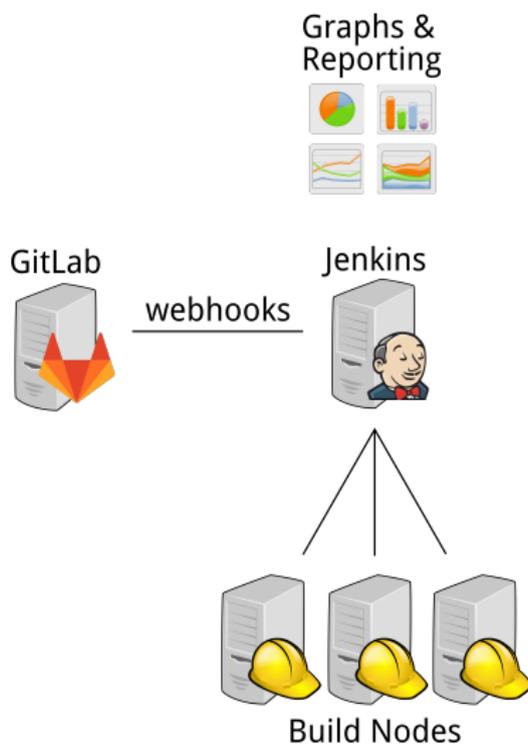
Use case: Build & provide a stable release

Developer & GitLab



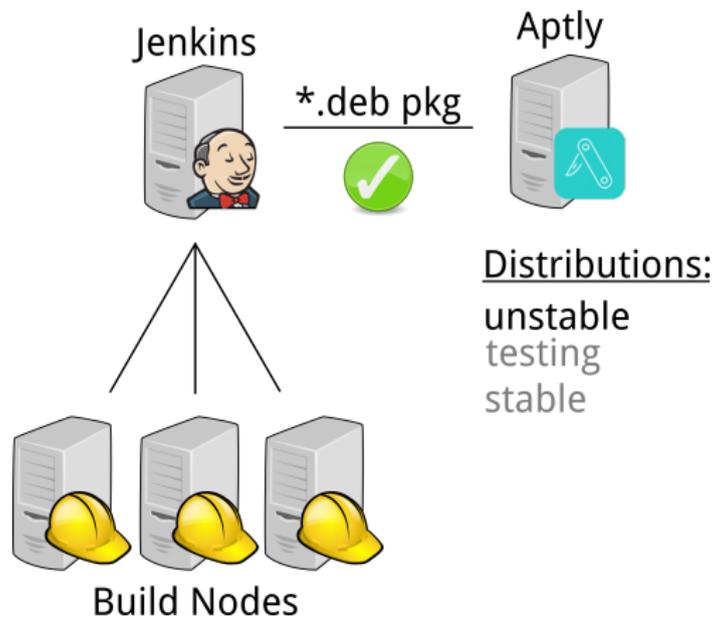
Use case: Build & provide a stable release

GitLab & Jenkins



Use case: Build & provide a stable release

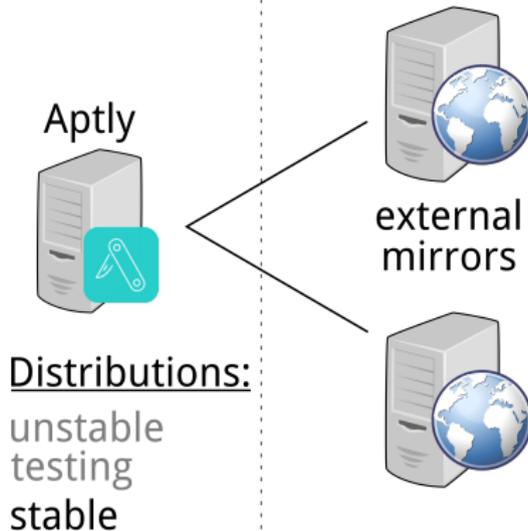
Jenkins & Aptly



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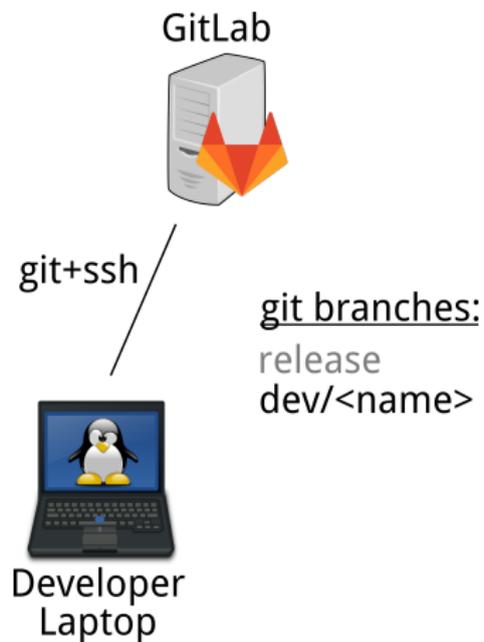
Aptly & external mirrors

internal | external



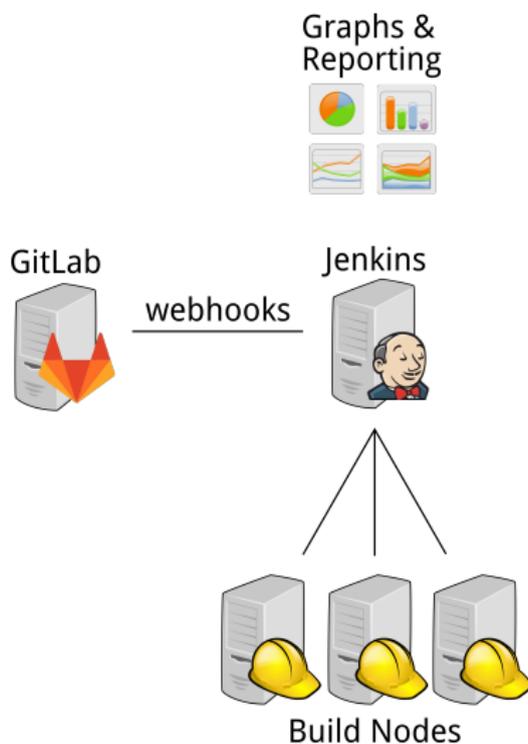
Use case: Build a development version

Developer & GitLab



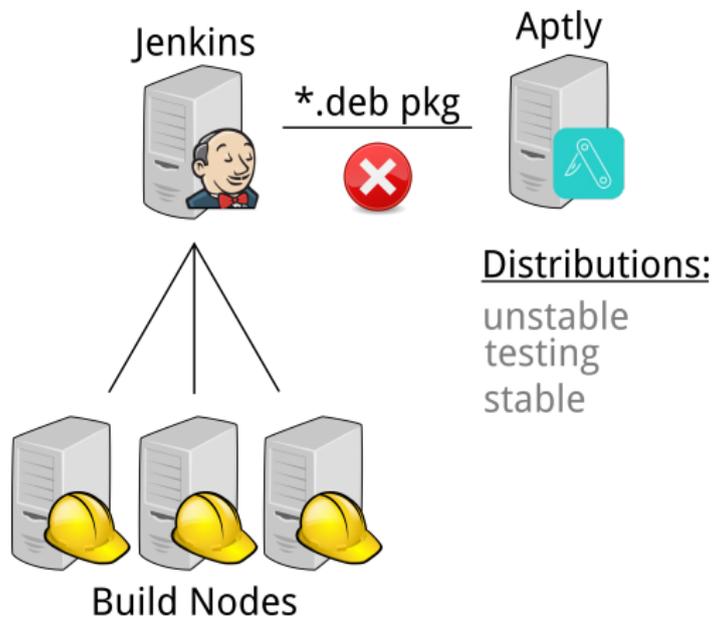
Use case: Build a development version

GitLab & Jenkins



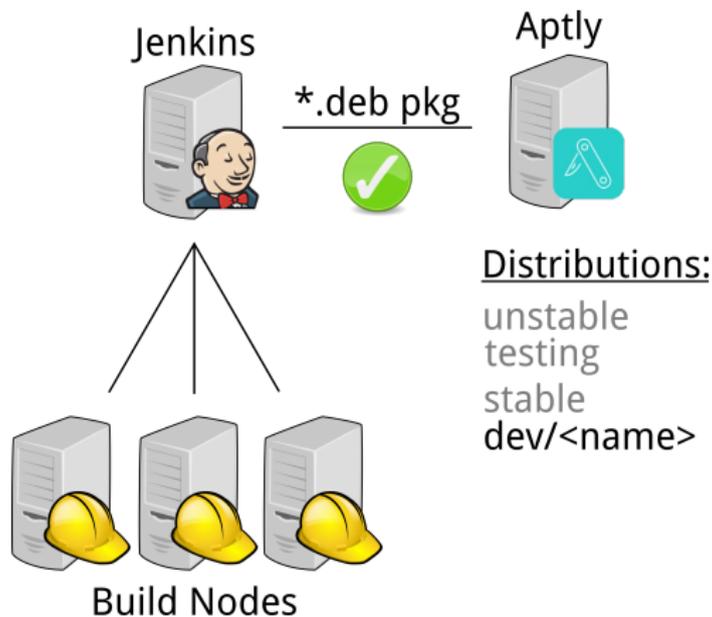
Use case: Build a development version

Jenkins & Aptly



Use case: Build a development version

Jenkins & Aptly (with a dev. distribution)



Lessons learned

- Make it easy to use
- Get services up & running quickly
- Requirements change
- Automate as much as possible
- Choose your tools wisely

References & Attribution

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