docs.md 5/27/2020

CI/CD Documentation

Sources

This section is dedicated to giving useful resources (from actual documentation or various dev communities).

CircleCI

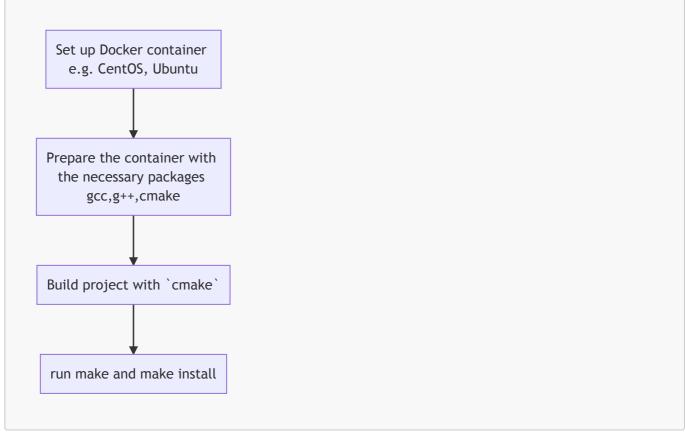
In order to push branches for building on CircleCI, a workflow needs to be configured on the actual project repository. A <code>cricleci</code> directory should be created on the main tree, with a <code>config.yml</code> file inside.

The config file should contain the build information: number of jobs to be pipelined, type of job (e.g. Docker container), and the commands to be executed on each job.

Simplest way is to develop a pipeline for uploading the project to a Docker container with a specific OS (e.g. **Debian, CentOS, Ubuntu**). If the specific container is chosen from the official images (from Docker Hub), then a barebone image will be installed with no additional packages. As a result, some prerequisites should be installed before building and running the project.

For a C++ project

- 1. Update the OS
- 2. Install the sudo rights
- 3. Get g++/gcc and cmake from the OS-specific app repository (like apt or yum)
- 4. Build with CMake
- 5. Test with predefined scripts or pure executable.
- 6. Optional make artifacts for later use.



docs.md 5/27/2020

Developing on multiplatforms