Expertmaker Accelerator

Quick Install using the "Project Skeleton" Repository

Introduction and System Requirements

The `accelerator_project_skeleton` project provides a simple and convenient way to install the Accelerator. This document lists the necessary steps to set up the Accelerator using it.

The Accelerator will run on almost any hardware, from small laptops to large multi-CPU rack servers. It is assumed in this manual that the computer is running Ubuntu 16.04 LTS or Debian 9. The Accelerator team is actively testing on Ubuntu, Debian, and FreeBSD, but the Accelerator will most likely run on many other Linux distributions as well.

Installation

There are three steps in the installation: resolve dependencies, clone repository, and run the initiation script. These steps will be descibed next.

1. Dependencies

The first step is to make sure that all software package dependencies are met. This command will install all required packages

```
sudo apt-get install build-essential python-dev python3-dev zlib1g-dev git virtualenv
```

The installer requires nothing but `git`, `virtualenv`, and some `dev` packages in order to compile C-code.

2. Clone Repository

Clone the `accelerator_project_skeleton` like this

```
git clone https://github.com/drougge/accelerator_project_skeleton.git
```

3. Setup

The Accelerator will now be installed *locally without any administrator privileges*. To continue, `cd` into the cloned directory

```
cd accelerator_project_skeleton
```

In this directory there is a file `init.py` that performs all the installation steps. It will work out-of-the-box, but for a customised install it is recommended to read and modify this file before continuing. The next step is to run the script

```
./init.py
```

This script will do a complete setup, and the next section provides more information about the process. After the script is finished, the Acclerator installation is complete. It could be run by issuing

```
cd accelerator
./daemon.py
```

The first time the Accelerator is run, it will compile some functions written in the C programming language. On some systems, this process may generate a few warning messages, but that is okay. Setup is now complete.

Overview of the Installation

The `accelerator_project_skeleton` script `init.py` will setup virtual environments for Python2 and Python3. In these virtual environments, it will download and install some depending packages, and `git clone` and install the `accelerator-gzutil` library. The Accelerator itself is `git cloned` into a git submodule in the `accelerator` directory.

The default configuration file is located in `conf/framework.conf`. This file is used to specify workdirs, method directories, and more. For more information, see the Accelerator User's Reference Manual.

References

`https://berkeman.github.io/pdf/acc_manual.pdf`