ArchPi cheat book

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Preface

How to book to learn you a few things you need to know about ArchLinux ARM on RPi. From basic setup of the system to side packages installation to turn your Raspberry into a music sharing or even a versioning control server.

Structure of book

The first part of this book will be focused on system setup and basic settings as keyboard language, user account and others. The second part will describe how to install some third party sofwares as git and mpd server.

Author words

I am not an expert in linux system as ArchLinux and even less in electronic stuff. However, as a developer I like to tinker with my new toy which is a Raspberry Pi. I had a lot of troubles when I decided to find uses for it and tried to install some third party software. As a result, I am glad to write this "book" to help you to install things on your RPi with ArchLinux.

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Chapter 1

Introduction

1.1 Are you interested?

This book is written by a non-specialist of ArchLinux with basic knowledge of linux system so I will try to made it as simple as possible for people who have no idea about what is console. Indeed, all commands will be explained for a better comprehension and an index will be available for you.

No matter if you are an expert or a novice, you will be able to find how to install stuff on your your Pi plus tips which includes all the problems I encounter during my first installation.

1.2 What is a Raspberry

If you succeed to find this book I guess you allready know but some people buy a Raspberry with OpenELEC¹ pre-installed so here is a little explaination.

The Raspberry Pi is a credit-size computer with low performance if you compare with a common PC. Nevertheless, it means its power consumption is very low (1W for B+ version²) so it is not a problem to let it on forever.

Finally if you install a good linux distribution on it you can turn this old computer into a cheap server on which you will have the control. You can use it at home for file sharing, media player or others but it is also possible to host a website which will be available on the internet³.

 $^{^1\}mathrm{Tiny}$ linux system based on XBMC media center. More details on open elec.tv

²Most robust version of RPi with 512MB of RAM and 4 usb ports

³An example of website hosted by a Rpi on raspberrypi.goddess-gate.com

1.3 Why ArchLinux and not Raspbian

The operating system recommended by Raspberry fundation is Raspbian, a custom version of the famous Debian⁴ system optimized for RPi hardware.

In general it will be the default choice for an inexperienced user to get a user interface and most common software allready installed at the first boot. However we forget the poor performances of the Raspberry and you can realize it for yourself if you decided to install Raspbian.

A server does not need a user interface exept a terminal which is enough to manage it everyday from anywhere. As a result, my choice has been focused on ArchLinux which is pretty a light and fast system. In addition, system updates are based on rolling release ⁵ model, so it means you do not have one version of the system. You will just receive updates frequently – as soon as their availability – and it will be not necessary to reboot the system to upgrade it.

 $^{^4\}mathrm{One}$ of the most popular linux system. See debian.org for more details

⁵Definition on wikipedia/Rolling_release