Raspberry PI - Installation from scratch

Installation du système

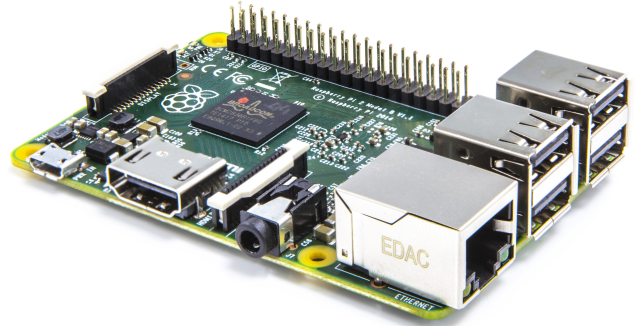|	
Hardware Raspbberry Pi 2, Model B, 1GB RAM *Système installé:* **Raspbian Jessie Lite** Minimal image based on Debian Jessie Version: **April 2017** Release date: **2017-04-10** Kernel version: **4.4**	

Téléchargement de l'image depuis le lien officiel : https://downloads.raspberrypi.org/raspbian_lite_latest

> fichier : **2017-04-10-raspbian-jessie-lite.img**

Copie de l'image sur la carte SD (sous linux)(cible "sdb")

> dd bs=4M if=2017-04-10-raspbian-jessie-lite.img of=/dev/sdb

Installation de la carte SD et boot

Configuration minimale en console :

> sudo raspi-config

>> --> activation du ssh
>> --> configuration du clavier FR Azerty

la suite de la configuration est effectuée via une connexion SSH en root
ssh pi@10.111.114.xx
sudo -s

Copie des clés SSH

```
mkdir /home/pi/.ssh
echo 'ssh-rsa AAAAB3NzaC1yc2EAAAABIwAAAQEAwjQz+Y1Q8UhJtoSGloHqJYsQt4FFX5l17cmsBJFX/COTExd5cN4VN6my
P7bvaEohZtpV7yX1Ha4FNWLC9DHk8/6CqRgn+UIg/agTEVzSm8QMNMJueCcTKv7Bp9Oq0e/uqQh82IViwUvLgwzORgUftvxmeV
5VN5pegYPLumW8ZJMH0WWHeaNafcpz5ZvE7c/yQOqArbQwfQ2E8eJmnkdCmzBn/RBV0ZZhUZ6mZHmsmMx2rgCUaEiBAWJW4t8K
rKJVHr39zzk53/IFOzf2HM7SdrY5FqKL6bR/CeUdJqB/eYbGzK9oIX9ltliibNH5FdQxKVRffoo4VW9gDmKxwpBiaQ== borle
th@P3601' >> /home/pi/.ssh/authorized_keys2
echo 'ssh-rsa AAAAADAQABAAABAQDFLEplmBCZQtWKCYXb3toX13sz7USZnb3BCMTZhHqbJ9bR4UlsU4i
dzCp4hzCfdYF65i7bxF9xsOpdkT0AjmQoFJE9zl2bzM7E6GhE9n26lJs0SMWuui0T56yMg3/ORy+23y4ZGOLcu1CstHrZWZx+b
```

```
Oe27GRzmUQbBbTRPBr6kPZ/VQlt1IJKP/DMO9hqlC1zhy2V0daOeeJMBbl9tsBpTU0LrpMYgq2yFvMNDp8Jqju0dZE9h+69RhV
ptiutVOmVlMMHpr2YBsRMismSRnTV0vw9o6I3ejDkBvGZQzD6UmmdMkHTM/WDfpeynNkcg4hy827KPrVTDnnwQ1ADmPv roots
ib@streamer-tnt' >> /home/pi/.ssh/authorized_keys2
```
```
echo 'ssh-rsa AAAAB3NzaC1yc2EAAAADAQABAAACAQDNSgnkpxunhBCTIYi6ORnzSNZHT4sfgusbdoW8u1hENZ8sDIUkgFBt
Cd8yykn6CkMKZu1RmcsaK9AyPeobkafojHWX2kzVr1M/YRRLyjxOFILjtPkjvP6Rt3Z8NY60vhkZDw2anUuQjOK9Im6o7UNQLb
K6e16BriBA+eJmN0XAatlgRqhh3Xmww9Kqypa8NG44lX4w38rfJDALxplMtMjITOHDbW0Gf6MYSdqXblCNsBQo/QmIiseYvkwo
DVdI2/o54x/JN4VHw+KiSh0W8RBmm26qJbt+mrBm+LAXCafZLU80gmrSjjnhd5NYo5WNUtq+YqIP8vWNwEnCkyDGn9Zus3Q9Xr
79N1slPxIqfi/9UbT3dWMdfYXwqbGpW8sVMheFVhEhbL5KtFaESGwYKNzgaiNQa+uHcMTR325Eh2z938TmlhaGBtiNSYBlc7tp
vIPJDO86werUkyFdo9usEhCP0riP6imehKbCcdE2/zVdHHWuTqUyLzP+Y5nXLgVKJJWC6JIQByC5HxBXwpMV2R2ogX6cx7ARHj
T2g3e3gxuxZmO5DyNaUTPPGi2hro8DhKsD50q2Nbp2HWbpfYv99FfrrvKImbZOVwWfi4WlpBpon1DBpWj353O1ta5AYMm+iYKu
kgAMfv0p/V1829tqsL4kd6SjhVww4fDrTjk24l4wkQ== fjelmoni@Fred-PC' >> /home/pi/.ssh/authorized_keys2
chown -R pi:pi /home/pi/.ssh
chmod 600 /home/pi/.ssh/authorized_keys2
```

Configuration du proxy HTTP

```
echo 'Acquire::http::Proxy "http://10.111.114.1:3128";' > /etc/apt/apt.conf.d/99proxy
echo 'proxy = 10.111.114.1:3128;' > /root/.curlrc
echo 'http_proxy = http://10.111.114.1:3128' > /root/.wgetrc
```

Configuration NTP

```
echo 'server 10.111.114.1' >> /etc/ntp.conf

# Timezone
sed -i 's#Etc/UTC#Europe/Paris#g' /etc/timezone
cp /usr/share/zoneinfo/Europe/Paris /etc/localtime
```

Mise à jour du système

```
apt update
apt full-upgrade
apt install rpi-update
rpi-update
```

Configuration 802.1x

Dans la nouvelle version JESSIE, "systemd" vient remplacer complètement "initd".
Le fichier "/etc/network/interfaces" n'est donc plus utilisé lors de la séquence de lancement !!!
.
il est donc nécessaire de configurer le service "wpa_supplicant"

création du fichier de configuration du client 802.1x

```
echo 'ctrl_interface=/var/run/wpa_supplicant' >> /etc/wpa_supplicant/wpa_supplicant_wired.conf
echo 'eapol_version=2'                         >> /etc/wpa_supplicant/wpa_supplicant_wired.conf
echo 'network={'                               >> /etc/wpa_supplicant/wpa_supplicant_wired.conf
echo '    key_mgmt=IEEE8021X'                  >> /etc/wpa_supplicant/wpa_supplicant_wired.conf
echo '    eap=MD5'                             >> /etc/wpa_supplicant/wpa_supplicant_wired.conf
echo '    identity="authTVIP-Defil"'           >> /etc/wpa_supplicant/wpa_supplicant_wired.conf
echo '    password="xxxxxxxxxx"'               >> /etc/wpa_supplicant/wpa_supplicant_wired.conf
echo '}'                                       >> /etc/wpa_supplicant/wpa_supplicant_wired.conf
```

modification du service "wpa_supplicant"

```
mv /lib/systemd/system/wpa_supplicant.service /lib/systemd/system/wpa_supplicant.service.old

cat <<EOF > /lib/systemd/system/wpa_supplicant.service
[Unit]
Description=WPA supplicant

[Service]
Type=dbus
BusName=fi.epitest.hostap.WPASupplicant
#ExecStart=/sbin/wpa_supplicant -u -s -O /run/wpa_supplicant
ExecStart=/sbin/wpa_supplicant -u -s -O /run/wpa_supplicant -i eth0 -D wired -c /etc/wpa_supplican
t/wpa_supplicant_wired.conf

[Install]
WantedBy=multi-user.target
Alias=dbus-fi.epitest.hostap.WPASupplicant.service
EOF
```

installation et démarrage du service "wpa_supplicant"

```
systemctl enable wpa_supplicant.service
systemctl start wpa_supplicant.service
systemctl status wpa_supplicant.service
```

Fichiers

Pi2ModB1GB_-comp.jpeg	2,89 Mo	08/06/2017	Frédéric Jelmoni