

## Contents

### 1 unix

#### 1.1 Gnome terminal monokai

<https://github.com/pricco/gnome-terminal-colors-monokai>

#### 1.2 Gnome High DPI linux

```
gsettings set org.gnome.desktop.interface scaling-factor 2
```

#### 1.3 Virtual box

```
virtualbox Centos7 ssh 192.168.1.xxx
```

#### 1.4 docker archlinux

```
docker build --rm -t iamwr/arch_texlive:latest .
docker run -it iamwr/arch_texlive bash /startup_wr.sh
docker run -d -p 8888:8888 -v /home/vik/notebooks:/home/ds/notebooks dataquestio/python
docker run -it -v $(pwd)/shared_folder:/home/shared_folder iamwr/arch_texlive bash /sta
```

#### 1.5 toilet

```
toilet
```

```
m      m mmmmmm m      m mmmmmm m      m mmmmmm
#      # #      #      # #      #      # #
#mmm# #mmmm# #mmmm# #mmmm# #mmmm# #mmmm#
#      # #      #      # #      #      # #
#      # #mmmm# #      # #mmmm# #      # #mmmm#
```

#### 1.6 Share folder docker

```
docker run -it --name learn_shared_folder -v /Users/wangren/OneDriveB/OneDrive\ -\ B
```

#### 1.7 oh my zsh show hostname

```
PROMPT='%{$fg_bold[white]}%M %{$fg_bold[red]}%{$fg_bold[green]}%p %{$fg[cyan]}%c %
```

## 1.8 Docker: Data Science Environment with Jupyter

### 1.9 ssh -p

```
: 1485921200:0;ssh -p2222 root@127.0.0.1
```

### 1.10 dd iso U

```
: 1489291031:0;sudo dd if=/Users/wangren/Documents/ISO/CentOS-7-x86_64-Everything-1611
: 1489291378:0;diskutil list
```

### 1.11 Purgeable space on mac

```
: 1489299288:0;mkfile -n 10g ~/Desktop/BIGFILE4
: 1489299337:0;mkfile -n 10g ~/Desktop/BIGFILE5
: 1489299419:0;ls ~/Desktop
: 1489299461:0;sudo RM ~/Desktop/BIGFILE
: 1489299469:0;sudo RM ~/Desktop/BIGFILE1
```

### 1.12 virtualbox

```
diskutil list
```

```
diskutil umountDisk disk2
```

```
sudo VBoxManage internalcommands createrawvmdk \
    -filename /Users/wangren/Phy_virtualbox/u2.vmdk \
    -rawdisk /dev/disk2
```

```
sudo chmod 666 Phy_virtualbox/c1.vmdk
```

### 1.13 dash in IOS

Installation Instructions You can use Xcode 8 to install Dash on your iOS device using just your Apple ID. All you need to do is:

1. Install Xcode 8
2. Download the Dash for iOS Source Code
3. Open "Dash iOS.xcworkspace" in Xcode
4. Open Xcode's Preferences > Accounts and add your Apple ID

5. In Xcode's sidebar select "Dash iOS" and go to Targets > Dash > General > Identity and add a word to the end of the Bundle Identifier to make it unique. Also select your Apple ID in Signing > Team
6. Connect your iPad or iPhone and select it in Xcode's Product menu > Destination
7. Press CMD+R or Product > Run to install Dash
8. If you install using a free (non-developer) account, make sure to rebuild Dash every 7 days, otherwise it will quit at launch when your certificate expires

Contact me if you need help.

## 1.14 PATH mysql

```
show variables like '%char%';
PATH=${PATH}:/usr/local/mysql/bin
```

## 1.15 grep

```
grep -r cube .
```

## 1.16 sjtu yum source

```
# CentOS-Base.repo
#
# The mirror system uses the connecting IP address of the client and the
# update status of each mirror to pick mirrors that are updated to and
# geographically close to the client. You should use this for CentOS updates
# unless you are manually picking other mirrors.
#
# If the mirrorlist= does not work for you, as a fall back you can try the
# remarked out baseurl= line instead.
#
#
[base]
name=CentOS-$releasever - Base - 163.com
#mirrorlist=http://mirrorlist.centos.org/?release=$releasever&arch=$basearch&repo=os
baseurl=http://ftp.sjtu.edu.cn/centos/$releasever/os/$basearch/
gpgcheck=1
```

```
gpgkey=http://ftp.sjtu.edu.cn/centos/RPM-GPG-KEY-CentOS-7
```

```
#released updates
```

```
[updates]
```

```
name=CentOS-$releasever - Updates - 163.com
```

```
#mirrorlist=http://mirrorlist.centos.org/?release=$releasever&arch=$basearch&repo=updates
```

```
baseurl=http://ftp.sjtu.edu.cn/centos/$releasever/os/$basearch/
```

```
gpgcheck=1
```

```
gpgkey=http://ftp.sjtu.edu.cn/centos/RPM-GPG-KEY-CentOS-7
```

```
#additional packages that may be useful
```

```
[extras]
```

```
name=CentOS-$releasever - Extras - 163.com
```

```
#mirrorlist=http://mirrorlist.centos.org/?release=$releasever&arch=$basearch&repo=extras
```

```
baseurl=http://ftp.sjtu.edu.cn/centos/$releasever/os/$basearch/
```

```
gpgcheck=1
```

```
gpgkey=http://ftp.sjtu.edu.cn/centos/RPM-GPG-KEY-CentOS-7
```

```
#additional packages that extend functionality of existing packages
```

```
[centosplus]
```

```
name=CentOS-$releasever - Plus - 163.com
```

```
baseurl=http://ftp.sjtu.edu.cn/centos/$releasever/os/$basearch/
```

```
gpgcheck=1
```

```
enabled=0
```

```
gpgkey=http://ftp.sjtu.edu.cn/centos/RPM-GPG-KEY-CentOS-7
```

## 1.17 vps benchmark

Bandwagon CPU model : Intel(R) Xeon(R) CPU E3-1245 v5 @ 3.50GHz  
Number of cores : 1 CPU frequency : 3504.038 MHz Total size of Disk :  
10.2 GB (1.0 GB Used) Total amount of Mem : 512 MB (5 MB Used) Total  
amount of Swap : 64 MB (0 MB Used) System uptime : 0 days, 0 hour 1  
min Load average : 0.00, 0.00, 0.00 OS : CentOS 7.2.1511 Arch : x86<sub>64</sub> (64  
Bit) Kernel : 2.6.32-042stab113.21

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I/O speed(1st run) : 1.1 GB/s I/O speed(2nd run) : 1.1 GB/s I/O speed(3rd  
run) : 1.1 GB/s Average I/O speed : 1126.4 MB/s

---

Node Name IPv4 address Download Speed CacheFly 205.234.175.175 60.4MB/s

Linode, Tokyo, JP 106.187.96.148 18.5MB/s Linode, Singapore, SG 139.162.23.4  
6.41MB/s Linode, London, UK 176.58.107.39 8.17MB/s Linode, Frankfurt,  
DE 139.162.130.8 6.21MB/s Linode, Fremont, CA 50.116.14.9 14.3MB/s  
Softlayer, Dallas, TX 173.192.68.18 60.8MB/s Softlayer, Seattle, WA 67.228.112.250  
66.8MB/s Softlayer, Frankfurt, DE 159.122.69.4 5.58MB/s Softlayer, Singa-  
pore, SG 119.81.28.170 11.0MB/s Softlayer, HongKong, CN 119.81.130.170  
13.9MB/s

Aliyun

CPU model : Intel(R) Xeon(R) CPU E5-2680 v3 @ 2.50GHz Number of  
cores : 1 CPU frequency : 2494.222 MHz Total size of Disk : 80.5 GB (4.0  
GB Used) Total amount of Mem : 994 MB (740 MB Used) Total amount of  
Swap : 0 MB (0 MB Used) System uptime : 27 days, 14 hour 53 min Load  
average : 0.00, 0.01, 0.05 OS : CentOS 7.0.1406 Arch : x86<sub>64</sub> (64 Bit) Kernel  
: 3.10.0-123.9.3.el7.x86<sub>64</sub>

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I/O speed(1st run) : 56.5 MB/s I/O speed(2nd run) : 56.5 MB/s I/O  
speed(3rd run) : 56.8 MB/s Average I/O speed : 56.6 MB/s

---

Node Name IPv4 address Download Speed CacheFly 204.93.150.152 28.0MB/s  
Linode, Tokyo, JP 106.187.96.148 25.0MB/s Linode, Singapore, SG 139.162.23.4  
31.6MB/s Linode, London, UK 176.58.107.39 4.52MB/s Linode, Frankfurt,  
DE 139.162.130.8 6.34MB/s Linode, Fremont, CA 50.116.14.9 987KB/s Soft-  
layer, Dallas, TX 173.192.68.18 6.21MB/s Softlayer, Seattle, WA 67.228.112.250  
7.72MB/s Softlayer, Frankfurt, DE 159.122.69.4 4.05MB/s Softlayer, Singa-  
pore, SG 119.81.28.170 9.59MB/s Softlayer, HongKong, CN 119.81.130.170  
95.2MB/s

## 1.18 VLC wallpaper

Preferences Video -Advance Video Session Enable wallpaper mode

## 1.19 show the position of disks

lsblk 7.9Gsr0,sr1 tab mount try emacs gist el

## 1.20 SSH to local virtual machine

install centos 7 minimal enable network exact virtual machine setting  
network adaptor NAT Port Forwarding Host IP: 127.0.0.1 Host Port: 2222  
Guest IP: 10.0.2.15 Guest Port: 22

ssh link ssh -p2222 root@127.0.0.1

It should succeed. TODO: write guide/log for yum local iso  
ssh -p2222 root@127.0.0.1  
Use Ifconfig to see the guest ip

## 2 MIT opensource course

### 2.1 CS

Algorithms and Data Structures Artificial Intelligence Computer Design and Engineering Computer Networks Cryptography Data Mining Graphics and Visualization Human-Computer Interfaces Operating Systems Programming Languages Software Design and Engineering Theory of Computation

### 2.2 EE

Digital Systems Electric Power Electronics Robotics and Control Systems Signal Processing Telecommunications

## 3 JI

### 3.1

2016

2016

20172018201620172016 20162017 20172018 2016GPA 20163152%20172018

GPACore-GPAGPAGPAoverall GPA201720183-6 PRPGPA 20162017 20172018

2016201720172018 20172018 PRP 2017201810 2017112+220163152+22002+220172018

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