

DWSLA 13 on Parallels Installation

1. Using Parallels Control Center, install Debian from downloads. Named computer DWSLA during installation. Installed with user "biskate".
2. Apache and SSH installed during main installation script.
3. Installed "Software Updater" suggested updates.
4. Installed "Parallels Tools" using the Graphic Installer.
5. Installed Brave and made as default browser.
6. Connected to VistaShare folder on the Mac Computer.
7. Copied directory: .ssh from DWSL to DWSLA
 - a. Including file: .ssh/id_rsa
 - b. Including: .ssh/authorized_keys
8. Install PHP.
 - a. `sudo apt install php libapache2-mod-php php-mysql php-curl`
 - b. `php -v`
 - c. PHP 8.4.11
9. Restart the Apache Web Server.
 - a. `sudo service apache2 restart`
10. Test Web Server with Browser.
 - a. <http://10.211.55.229/>
 - b. Success
11. Test Apache and PHP.
 - a. `cd /var/www/html`
 - b. `echo "<?php phpinfo(); ?>" | sudo tee info.php`
 - c. <http://10.211.55.229/info.php>
 - d. Success
12. In directory /usr/lib/x86_64-linux-gnu – Link libncurses, libncursesw, and libtinfo version 5 to the most recent version.

```
sudo ln -s libncurses.so.6 -T libncurses.so.5
sudo ln -s libncursesw.so.6 -T libncursesw.so.5
sudo ln -s libtinfo.so.6 -T libtinfo.so.5
```

```
dwsla:/usr/lib/x86_64-linux-gnu$ ls -al libncurses*
```

- i. `lrwxrwxrwx 1 root root 15 Aug 10 09:53 libncurses.so.5 -> libncurses.so.6`

- ii. lrwxrwxrwx 1 root root 17 Mar 6 11:01 libncurses.so.6 -> libncurses.so.6.5
- iii. -rw-r--r-- 1 root root 169984 Mar 6 11:01 libncurses.so.6.5
- iv. lrwxrwxrwx 1 root root 16 Aug 10 09:53 libncursesw.so.5 -> libncursesw.so.6
- v. lrwxrwxrwx 1 root root 18 Mar 6 11:01 libncursesw.so.6 -> libncursesw.so.6.5

dwsla:/usr/lib/x86_64-linux-gnu\$ ls -al libtinfo*

- i. lrwxrwxrwx 1 root root 13 Aug 10 09:53 libtinfo.so.5 -> libtinfo.so.6
- ii. lrwxrwxrwx 1 root root 15 Mar 6 11:01 libtinfo.so.6 -> libtinfo.so.6.5
- iii. -rw-r--r-- 1 root root 220464 Mar 6 11:01 libtinfo.so.6.5

2. Installed nodejs:

- a. sudo apt install nodejs
- b. Complete!
- c. node -v
- d. v20.19.2

3. Installed npm:

- a. sudo apt install npm
- b. Complete!
- c. npm -v
- d. 9.2.0

4. Installed pm2

- a. sudo npm install -g pm2
- b. pm2 --version
- c. 6.0.8
- d. pm2 startup

5. Downloaded GT.m from the following link.

- a. <https://sourceforge.net/projects/fis-gtm/>
- b. Made directory: /tmp/gtm
- c. Uncompress.
 - i. Example: tar xvf gtm_V71005_linux_x8664_pro.tar.gz -C /tmp/gtm
- d. Installed GTM: ./configure.
 - i. No to utf8.
 - ii. Installed in /usr/lib/fis-gtm/V71005
 - iii. Uppercase and Lowercase versions: No
 - iv. Keep original .o object files: y
 - v. Remove temporary files: y

6. Installed the most recent Vista backup.

- a. Create the vista directory off the user's root.
- b. Create the backups directory off the user's root.
- c. Copy / sftp the latest Vista backup to the backups directory.
- d. Restore the Vista backup.
 - tar -zxvf 2025-06-27-vista.tar.gz -C ~/vista
- e. Create the /var/www/html/vista directory and change the owner.
 - i. sudo mkdir vista

- ii. `sudo chown biskate:biskate vista`
 - f. Move the files from the `~/vista/html` directory to `/var/www/html/vista` directory.
 - i. `mv * /var/www/html/vista`
 - g. Remove the `~/vista/html`
 - i. `rmdir ~/vista/html`
 - h. Link the two directories.
 - i. `ln -s /var/www/html/vista /home/biskate/vista/html`
7. Edited the `vistabu.sh` to copy from “backups” to “Backups_DWSLA”.
8. Added the following aliases to the `.bashrc`.
- a. `alias vista='/home/biskate/vista/s/vista.sh'`
 - b. `alias vistabu='/home/biskate/vista/s/vistabu.sh'`
 - c. `alias vistatmstart='/home/biskate/vista/s/vistatmstart.sh'`
 - d. `alias vistatmstop='/home/biskate/vista/s/vistatmstop.sh'`
 - e. `alias dictionary='/home/biskate/vista/s/dictionary.sh'`
9. Ran the “vistabu” shell. It worked as expected.
10. Start up the node.js services.
- a. `pm2 start index.js -n '8090 - index'`
 - b. `pm2 save`
11. Installed Beyond Compare.
12. Copied `org.gnome.Terminal.desktop`
- a. From: `/usr/share/applications`
 - b. To: `/home/biskate/.local/share/applications`
 - c. Edited to include terminal profiles: EDU2, FSO, USLA
13. Copied `bcompare.desktop`
- a. From: `/usr/share/applications`
 - b. To: `/home/biskate/.local/share/applications`
 - c. Edited to point to the Workspace Compares
14. Start up the node.js services.
- a. `pm2 start index.js -n '8090 - index'`
 - b. `pm2 save`
15. Test the web pages.
- a. All web pages work as expected.