

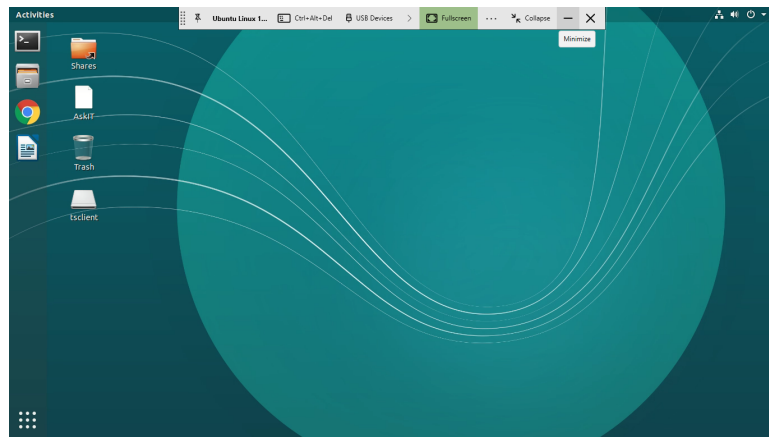
# Using Ubuntu FlexIT

Avinash Malik

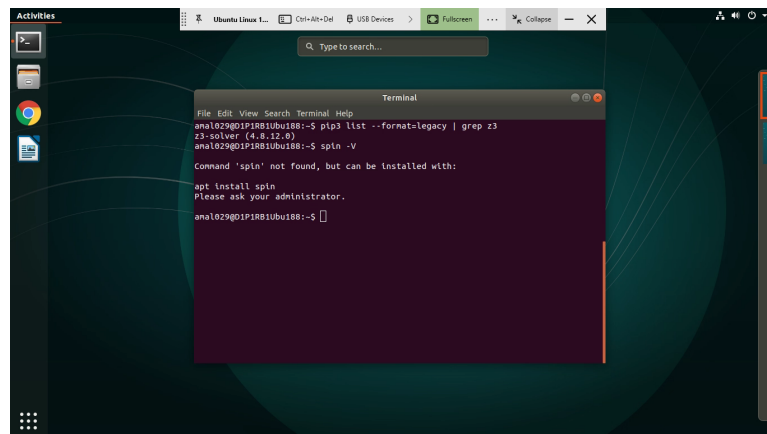
September 1, 2021

## 1 Using FlexIT for LTL model checking

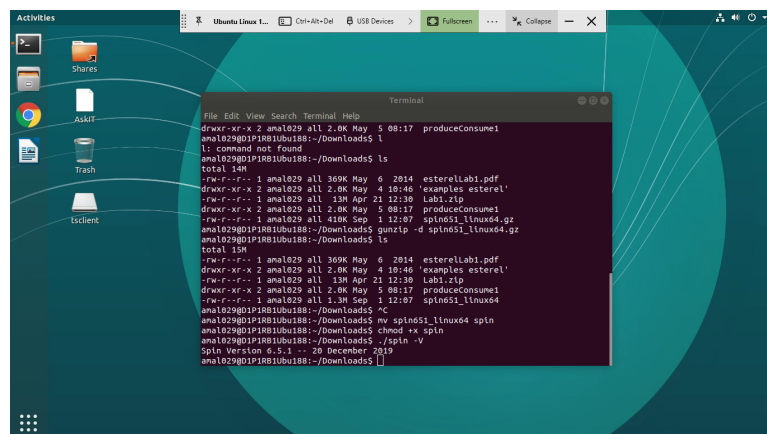
1. Please visit FlexIT Getting Started to get instructions for installing VMWare horizon client for any operating system needed for FlexIT.
2. Please visit FlexIT software catalog and search for Ubuntu in the search box.
3. Click on Launch. You should see image similar to the one below.



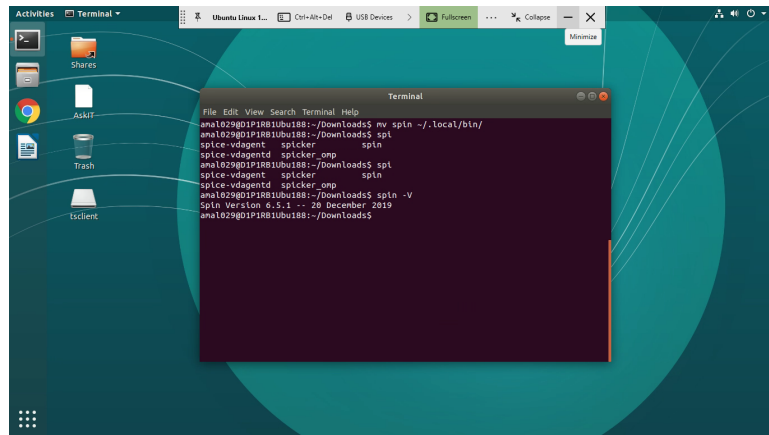
4. Open the terminal window (top left corner)
5. Please type `spin -V` on the terminal
6. If you get the following:



7. Then you should visit the link here
8. Download the spin binary for Linux from the link above
9. Go to the folder, via terminal, where you have downloaded the `spin651_linux64.gz`
10. Run command `gunzip -d spin651_linux64.gz`
11. Run command `mv spin651_linux64 spin` to rename the binary to just `spin`.
12. Run command `chmod +x spin`
13. Run command `./spin -V` to see if you get the output as shown below



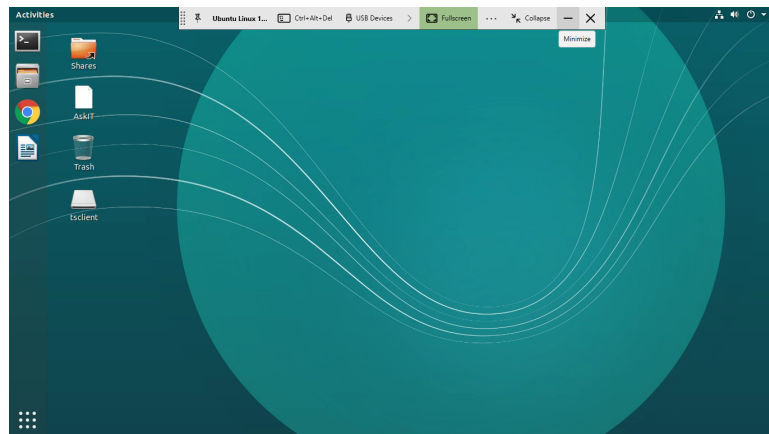
14. You can now move the spin binary to `~/local/bin` folder to make it available for use from anywhere as shown below



15. Finally, follow the lab instructions to carry out the lab (or complete the assignment).

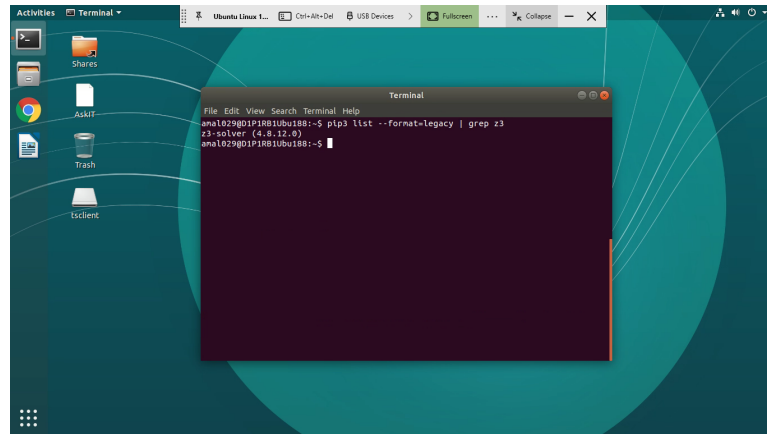
## 2 Using FlexIT for SMT solving

1. Please visit FlexIT Getting Started to get instructions for installing VMWare horizon client for any operating system needed for FlexIT.
2. Please visit FlexIT software catalog and search for Ubuntu in the search box.
3. Click on Launch. You should see image similar to the one below.



4. Open the terminal window (top left corner)
5. Please type `pip3 list --format=legacy | grep z3` on the command line.

6. If everything is installed then you should get the output as shown below



The screenshot shows a terminal window titled 'Terminal' with a menu bar (File, Edit, View, Search, Terminal, Help). The terminal output is as follows:

```
ama1029@IP18B1Ubu188:~$ pip3 list --format=legacy | grep z3
z3-solver (4.8.22.0)
ama1029@IP18B1Ubu188:~$
```

7. If you do **not** get the output above, *then* please type: `pip3 install -U --user z3-solver` on the command line to install Python bindings to z3.
8. Once the installation of Python bindings to z3 is done, you can re-run command `pip3 list --format=legacy | grep z3` to see the output in the figure above.
9. Finally, follow the lab instructions to do the lab (or complete the assignment).