

## Example: How to Use the VM Parallel SECONDO

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A virtual machine (VM) image of Parallel SECONDO is provided, in order to let the user directly test Parallel SECONDO on a single computer without installing it on his/her own machine.

The VM image is prepared and generated by VMWare, just like what SecondoVM does, and being distributed as a zip-archive file. The user can download the free VMware Player from the official website (http://www.vmware.com/), for both Windows and Linux platforms. He can also get the VMWare Fusion, with a free trial license of 30 days, for Mac OS X.

The operating system of the VM is 32bit Ubuntu 12.04.02 LTS, on which a Parallel SECONDO 3.3.2 has been installed. Both the account name and the password are **psecondo**. The user can use it with the following steps:

- 1. Install VMware Player on Windows or Linux, or the VMWare Fusion on Mac OS.
- 2. Download the VMware image of Parallel SECONDO from our website, and its md5 checksum is: d17f5602ca74e8ba7211dfca6ae561a0
- 3. Load the image to VMware Player or Fusion, and start the system. Open a terminal console, and the output looks like:

```
Preparing the Data Server ...
Initialize the Data Server based on the new IP address ...
```

These are output from the script \$HOME/.parasecrc, which is executed automatically when the VM image is used for the first time. It prepares and initializes the Data Server of the current system. Afterwards, format the Namenode of Hadoop by the command:

```
$ hadoop namenode -format
```

This also only needs to be done once.

4. Each time, Parallel SECONDO is started with commands:

```
$ start-all.sh
$ ps-startMonitors
```

- 5. Open the Firefox browser, which has two home pages: localhost:50070 and localhost:50030, monitoring the distributed file system and jobs in Hadoop, respectively. Observe these two pages to make sure that Hadoop is working, which means the HDFS has left the safe mode and also JobTracker has a living node.
- 6. Return to the terminal, start the text interface of Parallel SECONDO by:

```
$ ps-startTTYCS -s 1
```

At last, Parallel SECONDO is stopped by the following two commands:

\$ ps-stopMonitors

\$ stop-all.sh