

GraphLab: Setting up a Single Node Cluster

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If you meet any errors during installation or execution, please try to google them and solve them!

Prerequisites:

Supported Platforms

Windows is also a supported platform but the followings steps are for Linux (Ubuntu 14.04 – 64bit) only.

Software install:

Related software:

```
$ sudo apt-get update
$ sudo apt-get install openssh-server
$ sudo apt-get install gcc g++ build-essential libopenmpi-dev openmpi-bin
default-jdk cmake zlib1g-dev git
```

Single Node GraphLab:

Download source code and compile:

```
$ git clone https://github.com/graphlab-code/graphlab.git
$ sudo chmod 777 configure
$ ./configure
$ make -j2
```

If errors like “Error: no such instruction:vmadd312sd” occurs, try to delete line “check_cxx_compiler_flag(-march=native HAS_MARCH_NATIVE)” in ~/graphlab/CMakeFiles.txt

Create machines file:

Create a file named machines in ~/ :

```
localhost
```

Simple test:

This is test which calculate pagerank for a sythetic graph:

```
$ mpiexec -n 1 -hostfile ~/machines
~/graphlab/release/toolkits/graph_analytics/pagerank --powerlaw=10000 --
saveprefix=/home/qsong/out
```

For more information about developing GraphLab applications, please refer to [this](#). You can also try [GraphLab Create](#), which provides more powerful functions.