# 

# Big Data 4 All

# Installation guide

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# Purpose

This present document describes the installation steps to prepare your server to host Hadoop services. This document relies heavily on the Apache Ambari documentation found [here](https://docs.hortonworks.com/HDPDocuments/Ambari-2.7.1.0/bk_ambari-installation/content/ch_Getting_Ready.html).

# Technical Stack

We will be using the Hortonworks distribution of Hadoop : [HDP](https://fr.hortonworks.com/products/data-platforms/hdp/)

As of today, we will use HDP 3.0

# Hardware requirements

The condition to join the project is to contribute a dedicate server with at least 4 cores, 16Go RAM and 1To HDD. Kimsufi provides such servers for a low cost [here](https://www.kimsufi.com/fr/serveurs.xml). We suggest one of the three following offers : KS-10, KS-11 or KS-12.

# Software requirements

### Operating system

You are required to have a CentOS 7 distribution running on the server. We have chosen to limit the OS choice to avoid the complexity of having a multi-OS cluster.

### Software

The installation script will install the following software on your server : **scp, curl, unzip, tar, wget, openssl, python27, ntp.**

Once the host is ready for ambari, various Hadoop services will be installed on your server, depending on the current needs for the cluster. This may include :

* Apache Ranger
* Apache KNOX
* Apache Atlas
* HDFS
* YARN
* HIVE
* Druid
* Apache Zeppelin
* Apache Spark
* TensorFlow
* Apache Karka
* Apache Storm
* Apache Phoenix
* Apache HBASE
* Ambari
* CloudBreak

# Installation

Move your current directory to the repository’s root folder :

cd path/to/the/repo/bigdata4all/

Zip the scripts fodler located in Install/script :

zip -R install.zip Install/script/

Send the zip file to your server :

scp install.zip root@[SERVERIP]:/home/

Connect to your server :

ssh root@[SERVERIP]

Then enter your password (For kimsufi you’ll receive it via mail, check your spam box if you can’t find it)

Move to your home directory and unzip the install.zip file :

cd /home

Unzip install.zip

Run the install\_env\_agent.sh script

bash Install/script/install\_env\_agent.sh

You have finished installing the minimal requirements, you can now notify the administrator that you are ready and send him your Fully Qualified Domain Name (Ex : ns375465.ip-94-23-35.eu)