Hortonworks Data Platform

Apache Ambari Installation

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docs.cloudera.com

Hortonworks Data Platform: Apache Ambari Installation

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The Hortonworks Data Platform, powered by Apache Hadoop, is a massively scalable and 100% open source platform for storing, processing and analyzing large volumes of data. It is designed to deal with data from many sources and formats in a very quick, easy and cost-effective manner. The Hortonworks Data Platform consists of the essential set of Apache Hadoop projects including MapReduce, Hadoop Distributed File System (HDFS), HCatalog, Pig, Hive, HBase, ZooKeeper and Ambari. Hortonworks is the major contributor of code and patches to many of these projects. These projects have been integrated and tested as part of the Hortonworks Data Platform release process and installation and configuration tools have also been included.

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Please visit the Hortonworks Data Platform page for more information on Hortonworks technology. For more information on Hortonworks services, please visit either the Support or Training page. Feel free to Contact Us directly to discuss your specific needs.

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1. Getting Ready

This section describes the information and materials you should get ready to install a cluster using Ambari. Ambari provides an end-to-end management and monitoring solution for your cluster. Using the Ambari Web UI and REST APIs, you can deploy, operate, manage configuration changes, and monitor services for all nodes in your cluster from a central point.

> **Important**
>
> As of January 31, 2021, all downloads of HDP and Ambari require a username and password and use a modified URL. You must use the modified URL, including the username and password when downloading the repository content.

> **Note**
>
> If you are on Ambari 2.5.x.x version, it is recommended to upgrade to Ambari 2.6.1.21 HotFix version.

• Product Interoperability [1]

• Meet Minimum System Requirements [1]

• Collect Information [3]

• Prepare the Environment [4]

1.1. Product Interoperability

The Support Matrix tool provides information about:

• Operating Systems

• Databases

• Browsers

• JDK

Use the following URL to determine support for each product version.

https://supportmatrix.hortonworks.com

1.2. Meet Minimum System Requirements

Your system must meet the following minimum requirements:

• Software Requirements [2]

• Memory Requirements [2]

- Package Size and Inode Count Requirements [3]

- Maximum Open Files Requirements [3]

1.2.1. Software Requirements

On each of your hosts:

- `yum` and `rpm` (RHEL/CentOS/Oracle Linux)

- `zypper` and `php_curl` (SLES)

- `apt` (Debian/Ubuntu)

- `scp, curl, unzip, tar,` and `wget`

- OpenSSL (v1.01, build 16 or later)

- Python

For SLES 12:	Python 2.7.x
For CentOS 7, Ubuntu 14, Ubuntu 16, and Debian 9:	Python 2.7.x

1.2.2. Memory Requirements

The Ambari host should have at least 1 GB RAM, with 500 MB free.

To check available memory on any host, run:

```
free -m
```

If you plan to install the Ambari Metrics Service (AMS) into your cluster, you should review Using Ambari Metrics in Hortonworks Data Platform Apache Ambari Operations, for guidelines on resources requirements. In general, the host you plan to run the Ambari Metrics Collector host should have the following memory and disk space available based on cluster size:

Number of hosts	Memory Available	Disk Space
1	1024 MB	10 GB
10	1024 MB	20 GB
50	2048 MB	50 GB
100	4096 MB	100 GB
300	4096 MB	100 GB
500	8096 MB	200 GB
1000	12288 MB	200 GB
2000	16384 MB	500 GB

Note

Use these values as guidelines. Be sure to test them for your specific environment.

1.2.3. Package Size and Inode Count Requirements

	Size	Inodes
Ambari Server	100MB	5,000
Ambari Agent	8MB	1,000
Ambari Metrics Collector	225MB	4,000
Ambari Metrics Monitor	1MB	100
Ambari Metrics Hadoop Sink	8MB	100
After Ambari Server Setup	N/A	4,000
After Ambari Server Start	N/A	500
After Ambari Agent Start	N/A	200

*Size and Inode values are approximate

1.2.4. Maximum Open Files Requirements

The recommended maximum number of open file descriptors is 10000, or more. To check the current value set for the maximum number of open file descriptors, execute the following shell commands on each host:

```
ulimit -Sn
```

```
ulimit -Hn
```

If the output is not greater than 10000, run the following command to set it to a suitable default:

```
ulimit -n 10000
```

1.3. Collect Information

Before deploying a cluster, you should collect the following information:

• The fully qualified domain name (FQDN) of each host in your system. The Ambari Cluster Install wizard supports using IP addresses. You can use

```
hostname -f
```

to check or verify the FQDN of a host.

Note

Deploying all components on a single host is possible, but is appropriate only for initial evaluation purposes. Typically, you set up at least three hosts; one master host and two slaves, as a minimum cluster.

• A list of components you want to set up on each host.

• The base directories you want to use as mount points for storing:

• NameNode data

• DataNodes data

- Secondary NameNode data

- Oozie data

- YARN data

- ZooKeeper data, if you install ZooKeeper

- Various log, pid, and db files, depending on your install type

> **Important**
>
> You must use base directories that provide persistent storage locations for your components and your Hadoop data. Installing components in locations that may be removed from a host may result in cluster failure or data loss. For example: Do Not use `/tmp` in a base directory path.

1.4. Prepare the Environment

To deploy your Hadoop instance, you need to prepare your deployment environment:

- Set Up Password-less SSH [4]

- Set Up Service User Accounts [5]

- Enable NTP on the Cluster and on the Browser Host [5]

- Check DNS and NSCD [6]

- Configuring iptables [7]

- Disable SELinux and PackageKit and check the umask Value [8]

1.4.1. Set Up Password-less SSH

To have Ambari Server automatically install Ambari Agents on all your cluster hosts, you must set up password-less SSH connections between the Ambari Server host and all other hosts in the cluster. The Ambari Server host uses SSH public key authentication to remotely access and install the Ambari Agent.

> **Note**
>
> You can choose to manually install an Ambari Agent on each cluster host. In this case, you do not need to generate and distribute SSH keys.

1. Generate public and private SSH keys on the Ambari Server host.

```
ssh-keygen
```

2. Copy the SSH Public Key (id_rsa.pub) to the root account on your target hosts.

```
.ssh/id_rsa
```

```
.ssh/id_rsa.pub
```

3. Add the SSH Public Key to the authorized_keys file on your target hosts.

```
cat id_rsa.pub >> authorized_keys
```

4. Depending on your version of SSH, you may need to set permissions on the .ssh directory (to 700) and the authorized_keys file in that directory (to 600) on the target hosts.

```
chmod 700 ~/.ssh
```

```
chmod 600 ~/.ssh/authorized_keys
```

5. From the Ambari Server, make sure you can connect to each host in the cluster using SSH, without having to enter a password.

```
ssh root@<remote.target.host>
```

where `<remote.target.host>` has the value of each host name in your cluster.

6. If the following warning message displays during your first connection: `Are you sure you want to continue connecting (yes/no)?` Enter **Yes**.

7. Retain a copy of the SSH Private Key on the machine from which you will run the web-based Ambari Install Wizard.

Note

It is possible to use a non-root SSH account, if that account can execute `sudo` without entering a password.

More Information

Installing Ambari Agents Manually

1.4.2. Set Up Service User Accounts

Each service requires a service user account. The Ambari Cluster Install wizard creates new and preserves any existing service user accounts, and uses these accounts when configuring Hadoop services. Service user account creation applies to service user accounts on the local operating system and to LDAP/AD accounts.

More Information

Defining Service Users and Groups for a HDP 2.x Stack

1.4.3. Enable NTP on the Cluster and on the Browser Host

The clocks of all the nodes in your cluster and the machine that runs the browser through which you access the Ambari Web interface must be able to synchronize with each other.

To install the NTP service and ensure it's ensure it's started on boot, run the following commands on each host:

RHEL/CentOS/Oracle 6	`yum install -y ntp` `chkconfig ntpd on`
RHEL/CentOS/Oracle 7	`yum install -y ntp`

```
                          systemctl enable ntpd
```

SLES
```
                          zypper install ntp
                          chkconfig ntp on
```

Ubuntu
```
                          apt-get install ntp
                          update-rc.d ntp defaults
```

Debian
```
                          apt-get install ntp
                          update-rc.d ntp defaults
```

1.4.4. Check DNS and NSCD

All hosts in your system must be configured for both forward and and reverse DNS.

If you are unable to configure DNS in this way, you should edit the /etc/hosts file on every host in your cluster to contain the IP address and Fully Qualified Domain Name of each of your hosts. The following instructions are provided as an overview and cover a basic network setup for generic Linux hosts. Different versions and flavors of Linux might require slightly different commands and procedures. Please refer to the documentation for the operating system(s) deployed in your environment.

Hadoop relies heavily on DNS, and as such performs many DNS lookups during normal operation. To reduce the load on your DNS infrastructure, it's highly recommended to use the Name Service Caching Daemon (NSCD) on cluster nodes running Linux. This daemon will cache host, user, and group lookups and provide better resolution performance, and reduced load on DNS infrastructure.

1.4.4.1. Edit the Host File

1. Using a text editor, open the hosts file on every host in your cluster. For example:

```
vi /etc/hosts
```

2. Add a line for each host in your cluster. The line should consist of the IP address and the FQDN. For example:

```
1.2.3.4 <fully.qualified.domain.name>
```

> ⚠️ **Important**
>
> Do **not** remove the following two lines from your hosts file. Removing or editing the following lines may cause various programs that require network functionality to fail.
>
> ```
> 127.0.0.1 localhost.localdomain localhost
> ```
>
> ```
> ::1 localhost6.localdomain6 localhost6
> ```

1.4.4.2. Set the Hostname

1. Confirm that the hostname is set by running the following command:

```
hostname -f
```

This should return the <fully.qualified.domain.name> you just set.

2. Use the "hostname" command to set the hostname on each host in your cluster. For example:

```
hostname <fully.qualified.domain.name>
```

1.4.4.3. Edit the Network Configuration File

1. Using a text editor, open the network configuration file on every host and set the desired network configuration for each host. For example:

```
vi /etc/sysconfig/network
```

2. Modify the HOSTNAME property to set the fully qualified domain name.

```
NETWORKING=yes
```

```
HOSTNAME=<fully.qualified.domain.name>
```

1.4.5. Configuring iptables

For Ambari to communicate during setup with the hosts it deploys to and manages, certain ports must be open and available. The easiest way to do this is to temporarily disable iptables, as follows:

RHEL/CentOS/Oracle Linux 6	`chkconfig iptables off` `/etc/init.d/iptables stop`
RHEL/CentOS/Oracle Linux 7	`systemctl disable firewalld` `service firewalld stop`
SLES	`rcSuSEfirewall2 stop` `chkconfig SuSEfirewall2_setup off`

Debian	`sudo iptables -X`
	`sudo iptables -t nat -F`
	`sudo iptables -t nat -X`
	`sudo iptables -t mangle -F`
	`sudo iptables -t mangle -X`
	`sudo iptables -P INPUT ACCEPT`
	`sudo iptables -P FORWARD ACCEPT`
	`sudo iptables -P OUTPUT ACCEPT`

Ubuntu	`sudo ufw disable`
	`sudo iptables -X`
	`sudo iptables -t nat -F`
	`sudo iptables -t nat -X`
	`sudo iptables -t mangle -F`
	`sudo iptables -t mangle -X`
	`sudo iptables -P INPUT ACCEPT`
	`sudo iptables -P FORWARD ACCEPT`
	`sudo iptables -P OUTPUT ACCEPT`

You can restart iptables after setup is complete. If the security protocols in your environment prevent disabling iptables, you can proceed with iptables enabled, if all required ports are open and available.

Ambari checks whether iptables is running during the Ambari Server setup process. If iptables is running, a warning displays, reminding you to check that required ports are open

and available. The Host Confirm step in the Cluster Install Wizard also issues a warning for each host that has iptables running.

More Information

1.4.6. Disable SELinux and PackageKit and check the umask Value

1. You must disable SELinux for the Ambari setup to function. On each host in your cluster,

    ```
    setenforce 0
    ```

    > **Note**
    >
    > To permanently disable SELinux set SELINUX=disabled in `/etc/selinux/config` This ensures that SELinux does not turn itself on after you reboot the machine .

2. On an installation host running RHEL/CentOS with PackageKit installed, open `/etc/yum/pluginconf.d/refresh-packagekit.conf` using a text editor. Make the following change:

    ```
    enabled=0
    ```

    > **Note**
    >
    > PackageKit is not enabled by default on Debian, SLES, or Ubuntu systems. Unless you have specifically enabled PackageKit, you may skip this step for a Debian, SLES, or Ubuntu installation host.

3. UMASK (User Mask or User file creation MASK) sets the default permissions or base permissions granted when a new file or folder is created on a Linux machine. Most Linux distros set 022 as the default umask value. A umask value of 022 grants read, write, execute permissions of 755 for new files or folders. A umask value of 027 grants read, write, execute permissions of 750 for new files or folders.

    Ambari & support umask values of 022 (0022 is functionally equivalent), 027 (0027 is functionally equivalent). These values must be set on all hosts.

    UMASK Examples:

    Setting the umask for your current login session:

    ```
    umask 0022
    ```

    Checking your current umask:

    ```
    umask
    ```

    Permanently changing the umask for all interactive users:

    ```
    echo umask 0022 >> /etc/profile
    ```

1.5. Using a Local Repository

Local repositories are frequently used in enterprise clusters that have limited outbound internet access. In these scenarios, having packages available locally provides more governance, and better installation performance. These repositories are used heavily during installation for package distribution, as well as post-install for routine cluster operations such as service start/restart operations. The following section describes the steps required to setup and use a local repository:

- Accessing Cloudera Repositories [9]

- Set up a local repository having:

  - Setting Up a Local Repository with No Internet Access [14]

  - Setting up a Local Repository With Temporary Internet Access [16]

- Preparing The Ambari Repository Configuration File [18]

1.5.1. Accessing Cloudera Repositories

These sections describe how to obtain:

- Ambari Repositories [9]

- HDP Stack Repositories [10]

1.5.1.1. Ambari Repositories

Use the link appropriate for your OS family to **download a repository file** that contains the software for setting up Ambari.

Ambari 2.5.0 Repositories

OS	Format	URL
RedHat 6	Base URL	https://archive.cloudera.com/p/ambari/2.x/2.5.0.3
CentOS 6	Repo File	https://archive.cloudera.com/p/ambari/2.x/2.5.0.3/centos6/ambari.repo
Oracle Linux 6	Tarball md5 | asc	https://archive.cloudera.com/p/ambari/2.x/2.5.0.3/centos6/ambari-2.5.0.3-centos6.tar.gz
RedHat 7	Base URL	https://archive.cloudera.com/p/ambari/2.x/2.5.0.3/centos7
CentOS 7	Repo File	https://archive.cloudera.com/p/ambari/2.x/2.5.0.3/centos7/ambari.repo
Oracle Linux 7	Tarball md5 | asc	https://archive.cloudera.com/p/ambari/2.x/2.5.0.3/centos7/ambari-2.5.0.3-centos7.tar.gz
SLES 12	Base URL	https://archive.cloudera.com/p/ambari/2.x/2.5.0.3/sles12
	Repo File	https://archive.cloudera.com/p/ambari/2.x/2.5.0.3/sles12/ambari.repo
	Tarball md5 | asc	https://archive.cloudera.com/p/ambari/2.x/2.5.0.3/sles12/ambari-2.5.0.3-sles12.tar.gz
SLES 11	Base URL	https://archive.cloudera.com/p/ambari/2.x/2.5.0.3/suse11
	Repo File	https://archive.cloudera.com/p/ambari/2.x/2.5.0.3/suse11/ambari.repo
	Tarball md5 | asc	https://archive.cloudera.com/p/ambari/2.x/2.5.0.3/suse11/ambari-2.5.0.3-suse11.tar.gz
Ubuntu 14	Base URL	https://archive.cloudera.com/p/ambari/2.x/2.5.0.3/ubuntu14

	Repo File	https://archive.cloudera.com/p/ambari/2.x/2.5.0.3/ubuntu14/ambari.list
	Tarball md5 | asc	https://archive.cloudera.com/p/ambari/2.x/2.5.0.3/ubuntu14/ambari-2.5.0.3-ubuntu14.tar.gz
Ubuntu 16	Base URL	https://archive.cloudera.com/p/ambari/2.x/2.5.0.3/ubuntu16
	Repo File	https://archive.cloudera.com/p/ambari/2.x/2.5.0.3/ubuntu16/ambari.list
	Tarball md5 | asc	https://archive.cloudera.com/p/ambari/2.x/2.5.0.3/ubuntu16/ambari-2.5.0.3-ubuntu16.tar.gz
Debian 7	Base URL	https://archive.cloudera.com/p/ambari/2.x/2.5.0.3/debian7
	Repo File	https://archive.cloudera.com/p/ambari/2.x/2.5.0.3/debian7/ambari.list
	Tarball md5 | asc	https://archive.cloudera.com/p/ambari/2.x/2.5.0.3/debian7/ambari-2.5.0.3-debian7.tar.gz

1.5.1.2. HDP Stack Repositories

Use the link appropriate for your OS family to download a repository file that contains the software for setting up the Stack.

- HDP 2.6 Repositories [10]

- HDP 2.5 Repositories [11]

1.5.1.2.1. HDP 2.6 Repositories

OS	Version Number	Repository Name	Format	URL
RedHat 6 CentOS 6 Oracle Linux 6	HDP-2.6.0.3	HDP	Version Definition File (VDF)	https://archive.cloudera.com/p/HDP/2.x/2.6.0.3/centos6/HDP-2.6.0.3-8.xml
			Base URL	https://archive.cloudera.com/p/HDP/2.x/2.6.0.3/centos6
			Repo File	https://archive.cloudera.com/p/HDP/2.x/2.6.0.3/centos6/hdp.repo
			Tarball md5 | asc	https://archive.cloudera.com/p/HDP/2.x/2.6.0.3/centos6/HDP-2.6.0.3-centos6-rpm.tar.gz
		HDP-UTILS	Base URL	https://archive.cloudera.com/p/HDP-UTILS/1.1.0.21/repos/centos6
			Tarball md5 | asc	https://archive.cloudera.com/p/HDP-UTILS/1.1.0.21/repos/centos6/HDP-UTILS-1.1.0.21-centos6.tar.gz
RedHat 7 CentOS 7 Oracle Linux 7	HDP-2.6.0.3	HDP	Version Definition File (VDF)	https://archive.cloudera.com/p/HDP/2.x/2.6.0.3/centos7/HDP-2.6.0.3-8.xml
			Base URL	https://archive.cloudera.com/p/HDP/2.x/2.6.0.3/centos7
			Repo File	https://archive.cloudera.com/p/HDP/2.x/2.6.0.3/centos7/hdp.repo
			Tarball md5 | asc	https://archive.cloudera.com/p/HDP/2.x/2.6.0.3/centos7/HDP-2.6.0.3-centos7-rpm.tar.gz
		HDP-UTILS	Base URL	https://archive.cloudera.com/p/HDP-UTILS/1.1.0.21/repos/centos7
			Tarball md5 | asc	https://archive.cloudera.com/p/HDP-UTILS/1.1.0.21/repos/centos7/HDP-UTILS-1.1.0.21-centos7.tar.gz
SLES 12	HDP-2.6.0.3	HDP	Version Definition File (VDF)	https://archive.cloudera.com/p/HDP/2.x/2.6.0.3/sles12/HDP-2.6.0.3-8.xml
			Base URL	https://archive.cloudera.com/p/HDP/2.x/2.6.0.3/sles12
			Repo File	https://archive.cloudera.com/p/HDP/2.x/2.6.0.3/sles12/hdp.repo
			Tarball md5 | asc	https://archive.cloudera.com/p/HDP/2.x/2.6.0.3/sles12/HDP-2.6.0.3-sles12-rpm.tar.gz

		HDP-UTILS	Base URL	https://archive.cloudera.com/p/HDP-UTILS/1.1.0.21/repos/sles12
			Tarball md5 | asc	https://archive.cloudera.com/p/HDP-UTILS/1.1.0.21/repos/sles12/HDP-UTILS-1.1.0.21-sles12.tar.gz
SLES 11	HDP-2.6.0.3	HDP	Version Definition File (VDF)	https://archive.cloudera.com/p/HDP-UTILS/1.1.0.21/repos/suse11sp3/HDP-2.6.0.3-8.xml
			Base URL	https://archive.cloudera.com/p/HDP/2.x/2.6.0.3/suse11sp3
			Repo File	https://archive.cloudera.com/p/HDP/2.x/2.6.0.3/suse11sp3/hdp.repo
			Tarball md5 | asc	https://archive.cloudera.com/p/HDP/2.x/2.6.0.3/suse11sp3/HDP-2.6.0.3-suse11sp3-rpm.tar.gz
		HDP-UTILS	Base URL	https://archive.cloudera.com/p/HDP-UTILS/1.1.0.21/repos/suse11sp3
			Tarball md5 | asc	https://archive.cloudera.com/p/HDP-UTILS/1.1.0.21/repos/suse11sp3/HDP-UTILS-1.1.0.21-suse11sp3.tar.gz
Ubuntu 14	HDP-2.6.0.3	HDP	Version Definition File (VDF)	https://archive.cloudera.com/p/HDP/2.x/2.6.0.3/ubuntu14/HDP-2.6.0.3-8.xml
			Base URL	https://archive.cloudera.com/p/HDP/2.x/2.6.0.3/ubuntu14
			Repo File	https://archive.cloudera.com/p/HDP/2.x/2.6.0.3/ubuntu14/hdp.list
			Tarball md5 | asc	https://archive.cloudera.com/p/HDP/2.x/2.6.0.3/ubuntu14/HDP-2.6.0.3-ubuntu14-deb.tar.gz
		HDP-UTILS	Base URL	https://archive.cloudera.com/p/HDP-UTILS/1.1.0.21/repos/ubuntu14/
			Tarball md5 | asc	https://archive.cloudera.com/p/HDP-UTILS/1.1.0.21/repos/ubuntu14/HDP-UTILS-1.1.0.21-ubuntu14.tar.gz
Ubuntu 16	HDP-2.6.0.3	HDP	Version Definition File (VDF)	https://archive.cloudera.com/p/HDP/2.x/2.6.0.3/ubuntu16/HDP-2.6.0.3-8.xml
			Base URL	https://archive.cloudera.com/p/HDP/2.x/2.6.0.3/ubuntu16
			Repo File	https://archive.cloudera.com/p/HDP/2.x/2.6.0.3/ubuntu16/hdp.list
			Tarball md5 | asc	https://archive.cloudera.com/p/HDP/2.x/2.6.0.3/ubuntu16/HDP-2.6.0.3-ubuntu16-deb.tar.gz
		HDP-UTILS	Base URL	https://archive.cloudera.com/p/HDP-UTILS/1.1.0.21/repos/ubuntu16
			Tarball md5 | asc	https://archive.cloudera.com/p/HDP-UTILS/1.1.0.21/repos/ubuntu16/HDP-UTILS-1.1.0.21-ubuntu16.tar.gz
Debian7	HDP-2.6.0.3	HDP	Version Definition File (VDF)	https://archive.cloudera.com/p/HDP/2.x/2.6.0.3/debian7/HDP-2.6.0.3-8.xml
			Base URL	https://archive.cloudera.com/p/HDP/2.x/2.6.0.3/debian7
			Repo File	https://archive.cloudera.com/p/HDP/2.x/2.6.0.3/debian7/hdp.list
			Tarball md5 | asc	https://archive.cloudera.com/p/HDP/2.x/2.6.0.3/debian7/HDP-2.6.0.3-debian7-deb.tar.gz
		HDP-UTILS	Base URL	https://archive.cloudera.com/p/HDP-UTILS/1.1.0.21/repos/debian7
			Tarball md5 | asc	https://archive.cloudera.com/p/HDP-UTILS/1.1.0.21/repos/debian7/HDP-UTILS-1.1.0.21-debian7.tar.gz

1.5.1.2.2. HDP 2.5 Repositories

OS	Version Number	Repository Name	Format	URL

RedHat 6 CentOS 6 Oracle Linux 6	HDP-2.5.5.0	HDP	Version Definition File (VDF)	https://archive.cloudera.com/p/HDP/2.x/2.5.5.0/centos6/HDP-2.5.5.0-157.xml
			Base URL	https://archive.cloudera.com/p/HDP/2.x/2.5.5.0/centos6
			Repo File	https://archive.cloudera.com/p/HDP/2.x/2.5.5.0/centos6/hdp.repo
			Tarball md5 | asc	https://archive.cloudera.com/p/HDP/2.x/2.5.5.0/centos6/HDP-2.5.5.0-centos6-rpm.tar.gz
		HDP-UTILS	Base URL	https://archive.cloudera.com/p/HDP-UTILS/1.1.0.21/repos/centos6
			Tarball md5 | asc	https://archive.cloudera.com/p/HDP-UTILS/1.1.0.21/repos/centos6/HDP-UTILS-1.1.0.21-centos6.tar.gz
RedHat 7 CentOS 7 Oracle Linux 7	HDP-2.5.5.0	HDP	Version Definition File (VDF)	https://archive.cloudera.com/p/HDP/2.x/2.5.5.0/centos7/HDP-2.5.5.0-157.xml
			Base URL	https://archive.cloudera.com/p/HDP/2.x/2.5.5.0/centos7
			Repo File	https://archive.cloudera.com/p/HDP/2.x/2.5.5.0/centos7/hdp.repo
			Tarball md5 | asc	https://archive.cloudera.com/p/HDP/2.x/2.5.5.0/centos7/HDP-2.5.5.0-centos7-rpm.tar.gz
		HDP-UTILS	Base URL	https://archive.cloudera.com/p/HDP-UTILS/1.1.0.21/repos/centos7
			Tarball md5 | asc	https://archive.cloudera.com/p/HDP-UTILS/1.1.0.21/repos/centos7/HDP-UTILS-1.1.0.21-centos7.tar.gz
SLES 12	HDP-2.5.5.0	HDP	Version Definition File (VDF)	https://archive.cloudera.com/p/HDP/2.x/2.5.5.0/sles12/HDP-2.5.5.0-157.xml
			Base URL	https://archive.cloudera.com/p/HDP/2.x/2.5.5.0/sles12
			Repo File	https://archive.cloudera.com/p/HDP/2.x/2.5.5.0/sles12/hdp.repo
			Tarball md5 | asc	https://archive.cloudera.com/p/HDP/2.x/2.5.5.0/sles12/HDP-2.5.5.0-sles12-rpm.tar.gz
		HDP-UTILS	Base URL	https://archive.cloudera.com/p/HDP-UTILS/1.1.0.21/repos/sles12
			Tarball md5 | asc	https://archive.cloudera.com/p/HDP-UTILS/1.1.0.21/repos/sles12/HDP-UTILS-1.1.0.21-sles12.tar.gz
SLES 11	HDP-2.5.5.0	HDP	Version Definition File (VDF)	https://archive.cloudera.com/p/HDP/2.x/2.5.5.0/suse11sp3/HDP-2.5.5.0-157.xml
			Base URL	https://archive.cloudera.com/p/HDP/2.x/2.5.5.0/suse11sp3
			Repo File	https://archive.cloudera.com/p/HDP/2.x/2.5.5.0/suse11sp3/hdp.repo
			Tarball md5 | asc	https://archive.cloudera.com/p/HDP/2.x/2.5.5.0/suse11sp3/HDP-2.5.5.0-suse11sp3-rpm.tar.gz
		HDP-UTILS	Base URL	https://archive.cloudera.com/p/HDP-UTILS/1.1.0.21/repos/suse11sp3
			Tarball md5 | asc	https://archive.cloudera.com/p/HDP-UTILS/1.1.0.21/repos/suse11sp3/HDP-UTILS-1.1.0.21-suse11sp3.tar.gz
Ubuntu 12	HDP-2.5.5.0	HDP	Version Definition File (VDF)	https://archive.cloudera.com/p/HDP/2.x/2.5.5.0/ubuntu12/HDP-2.5.5.0-157.xml
			Base URL	https://archive.cloudera.com/p/HDP/2.x/2.5.5.0/ubuntu12
			Repo File	https://archive.cloudera.com/p/HDP/2.x/2.5.5.0/ubuntu12/hdp.list
			Tarball md5 | asc	https://archive.cloudera.com/p/HDP/2.x/2.5.5.0/ubuntu12/HDP-2.5.5.0-ubuntu12-deb.tar.gz
		HDP-UTILS	Base URL	https://archive.cloudera.com/p/HDP-UTILS/1.1.0.21/repos/ubuntu12

			Tarball md5 | asc	https://archive.cloudera.com/p/HDP-UTILS/1.1.0.21/repos/ubuntu12/HDP-UTILS-1.1.0.21-ubuntu12.tar.gz
Ubuntu 14	HDP-2.5.5.0	HDP	Version Definition File (VDF)	https://archive.cloudera.com/p/HDP/2.x/2.5.5.0/ubuntu14/HDP-2.5.5.0-157.xml
			Base URL	https://archive.cloudera.com/p/HDP/2.x/2.5.5.0/ubuntu14
			Repo File	https://archive.cloudera.com/p/HDP/2.x/2.5.5.0/ubuntu14/hdp.list
			Tarball md5 | asc	https://archive.cloudera.com/p/HDP/2.x/2.5.5.0/ubuntu14/HDP-2.5.5.0-ubuntu14-deb.tar.gz
		HDP-UTILS	Base URL	https://archive.cloudera.com/p/HDP-UTILS/1.1.0.21/repos/ubuntu14
			Tarball md5 | asc	https://archive.cloudera.com/p/HDP-UTILS/1.1.0.21/repos/ubuntu14/HDP-UTILS-1.1.0.21-ubuntu14.tar.gz
Debian7	HDP-2.5.5.0	HDP	Version Definition File (VDF)	https://archive.cloudera.com/p/HDP/2.x/2.5.5.0/debian7/HDP-2.5.5.0-157.xml
			Base URL	https://archive.cloudera.com/p/HDP/2.x/2.5.5.0/debian7
			Repo File	https://archive.cloudera.com/p/HDP/2.x/2.5.5.0/debian7/hdp.list
			Tarball md5 | asc	https://archive.cloudera.com/p/HDP/2.x/2.5.5.0/debian7/HDP-2.5.5.0-debian7-deb.tar.gz
		HDP-UTILS	Base URL	https://archive.cloudera.com/p/HDP-UTILS/1.1.0.21/repos/debian7
			Tarball md5 | asc	https://archive.cloudera.com/p/HDP-UTILS/1.1.0.21/repos/debian7/HDP-UTILS-1.1.0.21-debian7.tar.gz

1.5.2. Setting Up a Local Repository

Based on your Internet access, choose one of the following options:

• No Internet Access

This option involves downloading the repository tarball, moving the tarball to the selected mirror server in your cluster, and extracting to create the repository.

• Temporary Internet Access

This option involves using your temporary Internet access to sync (using reposync) the software packages to your selected mirror server and creating the repository.

Both options proceed in a similar, straightforward way. Setting up for each option presents some key differences, as described in the following sections:

  • Getting Started Setting Up a Local Repository [13]

  • Setting Up a Local Repository with No Internet Access [14]

  • Setting up a Local Repository With Temporary Internet Access [16]

1.5.3. Getting Started Setting Up a Local Repository

Before setting up your local repository, complete the following:

Prerequisites

- Select an existing server in, or accessible to the cluster, that runs a supported operating system.

- Enable network access from all hosts in your cluster to the mirror server.

- Ensure the mirror server has a package manager installed such as yum (RHEL / CentOS / Oracle Linux), zypper (SLES), or apt-get (Debian/Ubuntu).

- **Optional:** If your repository has temporary Internet access, and you are using RHEL/ CentOS/Oracle Linux as your OS, install yum utilities:

```
yum install yum-utils createrepo
```

To begin setting up your local repository:

Steps

1. Create an HTTP server.

   a. On the mirror server, install an HTTP server (such as Apache httpd) using the instructions provided on the Apache community website.

   b. Activate this web server.

   c. Ensure that any firewall settings allow inbound HTTP access from your cluster nodes to your mirror server.

   > **Note**
   >
   > If you are using Amazon EC2, make sure that SELinux is disabled.

2. On your mirror server, create a directory for your web server.

   - For example, from a shell window, type:

     | **For RHEL/CentOS/Oracle Linux:** | `mkdir -p /var/www/html/` |
     | **For SLES:** | `mkdir -p /srv/www/htdocs/rpms` |
     | **For Debian/Ubuntu:** | `mkdir -p /var/www/html/` |

   - If you are using a symlink, enable the `followsymlinks` on your web server.

Next Steps

After you have completed the steps in this section, move on to specific set up for your repository internet access type.

More Information

httpd.apache.org/download.cgi

1.5.3.1. Setting Up a Local Repository with No Internet Access

Prerequisites

Complete the Getting Started Setting up a Local Repository procedure.

- -

To finish setting up your local repository, complete the following:

Steps

1. Obtain the tarball for the repository you would like to create.

2. Copy the repository tarballs to the web server directory and untar the archive.

    a. Browse to the web server directory you created.

For RHEL/CentOS/Oracle Linux:	`cd /var/www/html/`
For SLES:	`cd /srv/www/htdocs/rpms`
For Debian/Ubuntu:	`cd /var/www/html/`

    b. Untar the repository tarballs to the following locations: where <web.server>, <web.server.directory>, <OS>, <version>, and <latest.version> represent the name, home directory, operating system type, version, and most recent release version, respectively.

    Untar Locations for a Local Repository - No Internet Access

Ambari Repository	Untar under <web.server.directory>
HDP Stack Repositories	Create directory and untar under <web.server.directory>/hdp

3. Confirm you can browse to the newly created local repositories.

    URLs for a Local Repository - No Internet Access

Ambari Base URL	http://<web.server>/Ambari-2.5.0.3/<OS>
HDP Base URL	http://<web.server>/hdp/HDP/<OS>/2.x/updates/<latest.version>
HDP-UTILS Base URL	http://<web.server>/hdp/HDP-UTILS-<version>/repos/<OS>

    where <web.server> = FQDN of the web server host, and <OS> is centos6, centos7, sles11, sles12, ubuntu14, ubuntu16, or debian7.

    > ⚠️ **Important**
    >
    > Be sure to record these Base URLs. You will need them when installing Ambari and the cluster.

4. Optional: If you have multiple repositories configured in your environment, deploy the following plug-in on all the nodes in your cluster.

    a. Install the plug-in.

For RHEL and CentOS 7:   `yum install yum-plugin-priorities`

For RHEL and CentOS 6:   `yum install yum-plugin-priorities`

b. Edit the `/etc/yum/pluginconf.d/priorities.conf` file to add the following:

`[main]`

`enabled=1`

`gpgcheck=0`

More Information

Accessing Cloudera Repositories [9]

1.5.3.2. Setting up a Local Repository With Temporary Internet Access

Prerequisites

Complete the Getting Started Setting up a Local Repository procedure.

`--`

To finish setting up your local repository, complete the following:

Steps

1. Put the repository configuration files for Ambari and the Stack in place on the host.

2. Confirm availability of the repositories.

For RHEL/CentOS/Oracle Linux: `yum repolist`

For SLES: `zypper repos`

For Debian/Ubuntu: `dpkg-list`

3. Synchronize the repository contents to your mirror server.

   • Browse to the web server directory:

   For RHEL/CentOS/Oracle Linux: `cd /var/www/html`

   For SLES: `cd /srv/www/htdocs/rpms`

   For Debain/Ubuntu: `cd /var/www/html`

   • For Ambari, create `ambari` directory and reposync.

   `mkdir -p ambari/<OS>`

   `cd ambari/<OS>`

   `reposync -r Updates-Ambari-2.5.0.3`

   where <OS> is centos6, centos7, sles11, sles12, ubuntu14, ubuntu16, or debian7.

- For HDP Stack Repositories, create `hdp` directory and reposync.

```
mkdir -p hdp/<OS>
```

```
cd hdp/<OS>
```

```
reposync -r HDP-<latest.version>
```

```
reposync -r HDP-UTILS-<version>
```

4. Generate the repository metadata.

For Ambari:	`createrepo <web.server.directory>/ambari/` `<OS>/Updates-Ambari-2.5.0.3`
For HDP Stack Repositories:	`createrepo <web.server.directory>/hdp/<OS>/` `HDP-<latest.version>`
	`createrepo <web.server.directory>/hdp/<OS>/` `HDP-UTILS-<version>`

5. Confirm that you can browse to the newly created repository.

   URLs for the New Repository

   Ambari Base URL   http://<web.server>/ambari/<OS>/Updates-Ambari-2.5.0.3

   HDP Base URL   http://<web.server>/hdp/<OS>/HDP-<latest.version>

   HDP-UTILS Base URL   http://<web.server>/hdp/<OS>/HDP-UTILS-<version>

   where <web.server> = FQDN of the web server host, and <OS> is centos6, centos7, sles11, sles12, ubuntu14, ubuntu16, or debian7.

   ⚠️ **Important**

   > Be sure to record these Base URLs. You will need them when installing Ambari and the Cluster.

6. Optional. If you have multiple repositories configured in your environment, deploy the following plug-in on all the nodes in your cluster.

   a. Install the plug-in.

For RHEL and CentOS 7:	`yum install yum-plugin-priorities`
For RHEL and CentOS 6:	`yum install yum-plugin-priorities`

   b. Edit the `/etc/yum/pluginconf.d/priorities.conf` file to add the following:

```
[main]
```

```
enabled=1
```

```
gpgcheck=0
```

More Information

1.5.4. Preparing The Ambari Repository Configuration File

1. Download the `ambari.repo` file from the private repository.

   ```
   https://archive.cloudera.com/p/ambari/2.x/2.6.0.0/<os>/ambari.repo
   ```

   where <OS> is centos6, centos7, sles11, sles12, ubuntu14, ubuntu16, or debian7.

2. Edit the `ambari.repo` file and replace the Ambari Base URL `baseurl` obtained when setting up your local repository.

   > **Note**
   >
   > You can disable the GPG check by setting gpgcheck =0. Alternatively, you can keep the check enabled but replace the gpgkey with the URL to the GPG-KEY in your local repository.

   ```
   [Updates-Ambari-2.5.0.3]
   ```

   ```
   name=Ambari-2.5.0.3-Updates
   ```

   ```
   baseurl=INSERT-BASE-URL
   ```

   ```
   gpgcheck=1
   ```

   ```
   gpgkey=https://archive.cloudera.com/p/ambari/2.x/2.6.0.0/centos6/RPM-GPG-
   KEY/RPM-GPG-KEY-Jenkins
   ```

   ```
   enabled=1
   ```

   ```
   priority=1
   ```

   Base URL for a Local Repository

Built with Repository Tarball (No Internet Access)	http://<web.server>/Ambari-2.5.0.3/<OS>
Built with Repository File (Temporary Internet Access)	http://<web.server>/ambari/<OS>/Updates-Ambari-2.5.0.3

   where <web.server> = FQDN of the web server host, and <OS> is centos6, centos7, sles11, sles12, , ubuntu14, or debian7.

3. Place the ambari.repo file on the machine you plan to use for the Ambari Server.

For RHEL/CentOS/Oracle Linux:	`/etc/yum.repos.d/ambari.repo`
For SLES:	`/etc/zypp/repos.d/ambari.repo`
For Debain/Ubuntu:	`/etc/apt/sources.list.d/ambari.list`

4. Edit the `/etc/yum/pluginconf.d/priorities.conf` file to add the following:

   ```
   [main]
   ```

   ```
   enabled=1
   ```

```
gpgcheck=0
```

Next Steps

Proceed to Installing Ambari Server to install and setup Ambari Server.

More Information

Setting Up a Local Repository with No Internet Access [14]

Setting up a Local Repository With Temporary Internet Access [16]

2. Installing Ambari

To install Ambari server on a single host in your cluster, complete the following steps:

1. Download the Ambari Repository [20]

2. Set Up the Ambari Server [29]

3. Start the Ambari Server [33]

2.1. Download the Ambari Repository

Follow the instructions in the section for the operating system that runs your installation host.

- **RHEL/CentOS/Oracle Linux 6** [20]

- **RHEL/CentOS/Oracle Linux 7** [22]

- **SLES 12** [23]

- **SLES 11** [25]

- **Ubuntu 14** [26]

- **Ubuntu 16** [27]

- **Debian 7** [28]

Use a command line editor to perform each instruction.

2.1.1. RHEL/CentOS/Oracle Linux 6

On a server host that has Internet access, use a command line editor to perform the following:

Steps

1. Log in to your host as `root`.

2. Download the Ambari repository file to a directory on your installation host.

   ```
   wget -nv https://archive.cloudera.com/p/ambari/2.x/2.5.0.3/centos6/ambari.
   repo -O /etc/yum.repos.d/ambari.repo
   ```

   ⚠️ **Important**

   Do not modify the `ambari.repo` file name. This file is expected to be available on the Ambari Server host during Agent registration.

3. Confirm that the repository is configured by checking the repo list.

   ```
   yum repolist
   ```

   You should see values similar to the following for Ambari repositories in the list.

```
repo id                repo name                            status
ambari-2.5.0.0-1094    ambari Version - ambari-2.5.0.0-1094  12
base                   CentOS-6 - Base                      6,696
extras                 CentOS-6 - Extras                    64
updates                CentOS-6 - Updates                   974
 repolist: 7,746
```

Version values vary, depending on the installation.

4. Install the Ambari bits. This also installs the default PostgreSQL Ambari database.

```
yum install ambari-server
```

5. Enter **y** when prompted to confirm transaction and dependency checks.

A successful installation displays output similar to the following:

```
Installing : postgresql-libs-8.4.20-6.el6.x86_64         1/4
Installing : postgresql-8.4.20-6.el6.x86_64              2/4
Installing : postgresql-server-8.4.20-6.el6.x86_64       3/4
Installing : ambari-server-2.5.0.3-1050.x86_64           4/4
Verifying  : ambari-server-2.5.0.3-1050.x86_64           1/4
Verifying  : postgresql-8.4.20-6.el6.x86_64              2/4
Verifying  : postgresql-server-8.4.20-6.el6.x86_64       3/4
Verifying  : postgresql-libs-8.4.20-6.el6.x86_64         4/4

Installed:
  ambari-server.x86_64 0:2.5.0.3-1050

Dependency Installed:
 postgresql.x86_64 0:8.4.20-6.el6
 postgresql-libs.x86_64 0:8.4.20-6.el6
 postgresql-server.x86_64 0:8.4.20-6.el6
 Complete!
```

Note

Accept the warning about trusting the Cloudera GPG Key. That key will be automatically downloaded and used to validate packages from Cloudera. You will see the following message:

```
Importing GPG key 0x07513CAD: Userid: "Jenkins (HDP
Builds) <jenkin@hortonworks.com>" From : https://
archive.cloudera.com/p/ambari/2.x/2.5.0.3/centos7/RPM-
GPG-KEY/RPM-GPG-KEY-Jenkins
```

Note

When deploying a cluster having limited or no Internet access, you should provide access to the bits using an alternative method.

Ambari Server by default uses an embedded PostgreSQL database. When you install the Ambari Server, the PostgreSQL packages and dependencies must be available for install. These packages are typically available as part of your Operating System repositories. Please confirm you have the appropriate repositories available for the postgresql-server packages.

Next Step

Set Up the Ambari Server [29]

More Information

Using a Local Repository [9]

2.1.2. RHEL/CentOS/Oracle Linux 7

On a server host that has Internet access, use a command line editor to perform the following

Steps

1. Log in to your host as `root`.

2. Download the Ambari repository file to a directory on your installation host.

   ```
   wget -nv https://archive.cloudera.com/p/ambari/2.x/2.5.0.3/centos7/ambari.
   repo -O /etc/yum.repos.d/ambari.repo
   ```

   ⚠️ **Important**

   Do not modify the `ambari.repo` file name. This file is expected to be available on the Ambari Server host during Agent registration.

3. Confirm that the repository is configured by checking the repo list.

   ```
   yum repolist
   ```

   You should see values similar to the following for Ambari repositories in the list.

   ```
   repo id                    repo name
    status
   ambari-2.5.0.0-1094        ambari Version - ambari-2.5.0.0-1094
    12
   epel/x86_64                Extra Packages for Enterprise Linux 7 - x86_64
    11,387
   ol7_UEKR4/x86_64           Latest Unbreakable Enterprise Kernel Release 4
                               for Oracle Linux 7Server (x86_64)    295
   ol7_latest/x86_64          Oracle Linux 7Server Latest (x86_64)
    18,642
   puppetlabs-deps/x86_64     Puppet Labs Dependencies El 7 - x86_64
    17
   puppetlabs-products/x86_64 Puppet Labs Products El 7 - x86_64
    225
    repolist: 30,578
   ```

   Version values vary, depending on the installation.

4. Install the Ambari bits. This also installs the default PostgreSQL Ambari database.

   ```
   yum install ambari-server
   ```

5. Enter **y** when prompted to confirm transaction and dependency checks.

A successful installation displays output similar to the following:

```
Installing : postgresql-libs-9.2.18-1.el7.x86_64          1/4
Installing : postgresql-9.2.18-1.el7.x86_64               2/4
Installing : postgresql-server-9.2.18-1.el7.x86_64        3/4
Installing : ambari-server-2.5.0.3-1050.x86_64            4/4
Verifying  : ambari-server-2.5.0.3-1050.x86_64            1/4
Verifying  : postgresql-9.2.18-1.el7.x86_64               2/4
Verifying  : postgresql-server-9.2.18-1.el7.x86_64        3/4
Verifying  : postgresql-libs-9.2.18-1.el7.x86_64          4/4

Installed:
  ambari-server.x86_64 0:2.5.0.3-1050

Dependency Installed:
 postgresql.x86_64 0:9.2.18-1.el7
 postgresql-libs.x86_64 0:9.2.18-1.el7
 postgresql-server.x86_64 0:9.2.18-1.el7
Complete!
```

Note

Accept the warning about trusting the Cloudera GPG Key. That key will be automatically downloaded and used to validate packages from Cloudera. You will see the following message:

```
Importing GPG key 0x07513CAD: Userid: "Jenkins (HDP
Builds) <jenkin@hortonworks.com>" From : https://
archive.cloudera.com/p/ambari/2.x/2.5.0.3/centos7/RPM-
GPG-KEY/RPM-GPG-KEY-Jenkins
```

Note

When deploying a cluster having limited or no Internet access, you should provide access to the bits using an alternative method.

Ambari Server by default uses an embedded PostgreSQL database. When you install the Ambari Server, the PostgreSQL packages and dependencies must be available for install. These packages are typically available as part of your Operating System repositories. Please confirm you have the appropriate repositories available for the postgresql-server packages.

Next Step

Set Up the Ambari Server [29]

More Information

Using a Local Repository [9]

2.1.3. SLES 12

On a server host that has Internet access, use a command line editor to perform the following:

Steps

1. Log in to your host as `root`.

2. Download the Ambari repository file to a directory on your installation host.

```
wget -nv https://archive.cloudera.com/p/ambari/2.x/2.5.0.3/sles12/ambari.
repo -O /etc/zypp/repos.d/ambari.repo
```

> ⚠️ **Important**
>
> Do not modify the `ambari.repo` file name. This file is expected to be available on the Ambari Server host during Agent registration.

3. Confirm the downloaded repository is configured by checking the repo list.

```
zypper repos
```

You should see the Ambari repositories in the list.

```
# | Alias                  | Name                                |
 Enabled | Refresh
--+----------------------- +------------------------------------
+---------+--------
1 | ambari-2.5.0.0-1094    | ambari Version - ambari-2.5.0.0-1094 | Yes
  | No
2 | http-demeter.uni       | SUSE-Linux-Enterprise-Software
    -regensburg.de-c997c8f9 |  -Development-Kit-12-SP1 12.1.1-1.57 | Yes
  | Yes
3 | opensuse               | OpenSuse                            | Yes
  | Yes
```

Version values vary, depending on the installation.

4. Install the Ambari bits. This also installs the default PostgreSQL Ambari database.

```
zypper install ambari-server
```

5. Enter **y** when prompted to confirm transaction and dependency checks.

A successful installation displays output similar to the following:

```
 Retrieving package postgresql-libs-8.3.5-1.12.x86_64 (1/4), 172.0 KiB (571.
0 KiB unpacked)
Retrieving: postgresql-libs-8.3.5-1.12.x86_64.rpm [done (47.3 KiB/s)]
Installing: postgresql-libs-8.3.5-1.12 [done]
Retrieving package postgresql-8.3.5-1.12.x86_64 (2/4), 1.0 MiB (4.2 MiB
 unpacked)
Retrieving: postgresql-8.3.5-1.12.x86_64.rpm [done (148.8 KiB/s)]
Installing: postgresql-8.3.5-1.12 [done]
Retrieving package postgresql-server-8.3.5-1.12.x86_64 (3/4), 3.0 MiB (12.6
 MiB unpacked)
Retrieving: postgresql-server-8.3.5-1.12.x86_64.rpm [done (452.5 KiB/s)]
Installing: postgresql-server-8.3.5-1.12 [done]
Updating etc/sysconfig/postgresql...
Retrieving package ambari-server-2.5.0.3-135.noarch (4/4), 99.0 MiB (126.3
 MiB unpacked)
Retrieving: ambari-server-2.5.0.3-135.noarch.rpm [done (3.0 MiB/s)]
Installing: ambari-server-2.5.0.3-135 [done]
 ambari-server 0:off 1:off 2:off 3:on 4:off 5:on 6:off
```

Note

When deploying a cluster having limited or no Internet access, you should provide access to the bits using an alternative method.

Ambari Server by default uses an embedded PostgreSQL database. When you install the Ambari Server, the PostgreSQL packages and dependencies must be available for install. These packages are typically available as part of your Operating System repositories. Please confirm you have the appropriate repositories available for the postgresql-server packages.

Next Step

Set Up the Ambari Server [29]

More Information

Using a Local Repository [9]

2.1.4. SLES 11

On a server host that has Internet access, use a command line editor to perform the following

Steps

1. Log in to your host as `root`.

2. Download the Ambari repository file to a directory on your installation host.

```
wget -nv https://archive.cloudera.com/p/ambari/2.x/2.5.0.3/suse11/ambari.
repo -O /etc/zypp/repos.d/ambari.repo
```

Important

Do not modify the `ambari.repo` file name. This file is expected to be available on the Ambari Server host during Agent registration.

3. Confirm the downloaded repository is configured by checking the repo list.

```
zypper repos
```

You should see the Ambari repositories in the list.

```
# | Alias                   | Name                                    |
 Enabled | Refresh
--+------------------------+-----------------------------------------
+---------+--------
1 | ambari-2.5.0.0-1094     | ambari Version - ambari-2.5.0.0-1094 | Yes
    | No
2 | http-demeter.uni        |SUSE-Linux-Enterprise-Software
     -regensburg.de-c997c8f9 | -Development-Kit-11-SP3 12.1.1-1.57  | Yes
    | Yes
3 | opensuse                | OpenSuse                                | Yes
    | Yes
```

Version values vary, depending on the installation.

4. Install the Ambari bits. This also installs the default PostgreSQL Ambari database.

```
zypper install ambari-server
```

5. Enter **y** when prompted to to confirm transaction and dependency checks.

A successful installation displays output similar to the following:

```
 Retrieving package postgresql-libs-8.3.5-1.12.x86_64 (1/4), 172.0 KiB (571.
0 KiB unpacked)
Retrieving: postgresql-libs-8.3.5-1.12.x86_64.rpm [done (47.3 KiB/s)]
Installing: postgresql-libs-8.3.5-1.12 [done]
Retrieving package postgresql-8.3.5-1.12.x86_64 (2/4), 1.0 MiB (4.2 MiB
 unpacked)
Retrieving: postgresql-8.3.5-1.12.x86_64.rpm [done (148.8 KiB/s)]
Installing: postgresql-8.3.5-1.12 [done]
Retrieving package postgresql-server-8.3.5-1.12.x86_64 (3/4), 3.0 MiB (12.6
 MiB unpacked)
Retrieving: postgresql-server-8.3.5-1.12.x86_64.rpm [done (452.5 KiB/s)]
Installing: postgresql-server-8.3.5-1.12 [done]
Updating etc/sysconfig/postgresql...
Retrieving package ambari-server-2.5.0.3-135.noarch (4/4), 99.0 MiB (126.3
 MiB unpacked)
Retrieving: ambari-server-2.5.0.3-135.noarch.rpm [done (3.0 MiB/s)]
Installing: ambari-server-2.5.0.3-135 [done]
ambari-server 0:off 1:off 2:off 3:on 4:off 5:on 6:off
```

Note

When deploying a cluster having limited or no Internet access, you should provide access to the bits using an alternative method.

Ambari Server by default uses an embedded PostgreSQL database. When you install the Ambari Server, the PostgreSQL packages and dependencies must be available for install. These packages are typically available as part of your Operating System repositories. Please confirm you have the appropriate repositories available for the postgresql-server packages.

Next Step

Set Up the Ambari Server [29]

More Information

Using a Local Repository [9]

2.1.5. Ubuntu 14

On a server host that has Internet access, use a command line editor to perform the following:

Steps

1. Log in to your host as `root`.

2. Download the Ambari repository file to a directory on your installation host.

```
wget -O /etc/apt/sources.list.d/ambari.list https://archive.cloudera.com/p/
ambari/2.x/2.5.0.3/ubuntu14/ambari.list
```

```
apt-key adv --recv-keys --keyserver keyserver.ubuntu.com B9733A7A07513CAD
```

```
apt-get update
```

> ⚠️ **Important**
>
> Do not modify the `ambari.list` file name. This file is expected to be available on the Ambari Server host during Agent registration.

3. Confirm that Ambari packages downloaded successfully by checking the package name list.

```
apt-cache showpkg ambari-server
```

```
apt-cache showpkg ambari-agent
```

```
apt-cache showpkg ambari-metrics-assembly
```

You should see the Ambari packages in the list.

4. Install the Ambari bits. This also installs the default PostgreSQL Ambari database.

```
apt-get install ambari-server
```

> **Note**
>
> When deploying a cluster having limited or no Internet access, you should provide access to the bits using an alternative method.
>
> Ambari Server by default uses an embedded PostgreSQL database. When you install the Ambari Server, the PostgreSQL packages and dependencies must be available for install. These packages are typically available as part of your Operating System repositories. Please confirm you have the appropriate repositories available for the postgresql-server packages.

Next Step

More Information

2.1.6. Ubuntu 16

On a server host that has Internet access, use a command line editor to perform the following:

Steps

1. Log in to your host as `root`.

2. Download the Ambari repository file to a directory on your installation host.

```
wget -O /etc/apt/sources.list.d/ambari.list https://archive.cloudera.com/p/
ambari/2.x/2.5.0.3/ubuntu16/ambari.list
```

```
apt-key adv --recv-keys --keyserver keyserver.ubuntu.com B9733A7A07513CAD
```

```
apt-get update
```

> ⚠️ **Important**
>
> Do not modify the `ambari.list` file name. This file is expected to be available on the Ambari Server host during Agent registration.

3. Confirm that Ambari packages downloaded successfully by checking the package name list.

```
apt-cache showpkg ambari-server
```

```
apt-cache showpkg ambari-agent
```

```
apt-cache showpkg ambari-metrics-assembly
```

You should see the Ambari packages in the list.

4. Install the Ambari bits. This also installs the default PostgreSQL Ambari database.

```
apt-get install ambari-server
```

> **Note**
>
> When deploying a cluster having limited or no Internet access, you should provide access to the bits using an alternative method.
>
> Ambari Server by default uses an embedded PostgreSQL database. When you install the Ambari Server, the PostgreSQL packages and dependencies must be available for install. These packages are typically available as part of your Operating System repositories. Please confirm you have the appropriate repositories available for the postgresql-server packages.

Next Step

Set Up the Ambari Server [29]

More Information

Using a Local Repository [9]

2.1.7. Debian 7

On a server host that has Internet access, use a command line editor to perform the following:

Steps

1. Log in to your host as `root`.

2. Download the Ambari repository file to a directory on your installation host.

   ```
   wget -O /etc/apt/sources.list.d/ambari.list https://archive.cloudera.com/p/
   ambari/2.x/2.5.0.3/debian7/ambari.list
   ```

   ```
   apt-key adv --recv-keys --keyserver keyserver.debian.com B9733A7A07513CAD
   ```

   ```
   apt-get update
   ```

   ### Important

   Do not modify the `ambari.list` file name. This file is expected to be
   available on the Ambari Server host during Agent registration.

3. Confirm that Ambari packages downloaded successfully by checking the package name
   list.

   ```
   apt-cache showpkg ambari-server
   ```

   ```
   apt-cache showpkg ambari-agent
   ```

   ```
   apt-cache showpkg ambari-metrics-assembly
   ```

   You should see the Ambari packages in the list.

4. Install the Ambari bits. This also installs the default PostgreSQL Ambari database.

   ```
   apt-get install ambari-server
   ```

   ### Note

   When deploying a cluster having limited or no Internet access, you should
   provide access to the bits using an alternative method.

   Ambari Server by default uses an embedded PostgreSQL database. When
   you install the Ambari Server, the PostgreSQL packages and dependencies
   must be available for install. These packages are typically available as part of
   your Operating System repositories. Please confirm you have the appropriate
   repositories available for the postgresql-server packages.

Next Step

Set Up the Ambari Server [29]

More Information

Using a Local Repository [9]

2.2. Set Up the Ambari Server

Before starting the Ambari Server, you **must** set up the Ambari Server. Setup configures
Ambari to talk to the Ambari database, installs the JDK and allows you to customize the
user account the Ambari Server daemon will run as. The

```
ambari-server setup
```

command manages the setup process. Run the following command on the Ambari server host to start the setup process. You may also append Setup Options to the command.

```
ambari-server setup
```

Respond to the setup prompt:

1. If you have *not* temporarily disabled SELinux, you may get a warning. Accept the default (`y`), and continue.

2. By default, Ambari Server runs under `root`. Accept the default **(n)** at the `Customize user account for ambari-server daemon` prompt, to proceed as `root`. If you want to create a different user to run the Ambari Server, or to assign a previously created user, select **y** at the `Customize user account for ambari-server daemon` prompt, then provide a user name.

3. If you have not temporarily disabled `iptables` you may get a warning. Enter **y** to continue.

4. Select a JDK version to download. Enter 1 to download Oracle JDK 1.8. Alternatively, you can choose to enter a Custom JDK. If you choose Custom JDK, you must manually install the JDK on all hosts and specify the Java Home path.

   > **Note**
   >
   > JDK support depends entirely on your choice of Stack versions. By default, Ambari Server setup downloads and installs Oracle JDK 1.8 and the accompanying Java Cryptography Extension (JCE) Policy Files.

5. Accept the Oracle JDK license when prompted. You must accept this license to download the necessary JDK from Oracle. The JDK is installed during the deploy phase.

6. Select **n** at `Enter advanced database configuration` to use the default, embedded PostgreSQL database for Ambari. The default PostgreSQL database name is `ambari`. The default user name and password are `ambari/bigdata`. Otherwise, to use an existing PostgreSQL, MySQL/MariaDB or Oracle database with Ambari, select **y**.

   • If you are using an existing PostgreSQL, MySQL/MariaDB, or Oracle database instance, use one of the following prompts:

     > **Important**
     >
     > You must prepare a non-default database instance, before running setup and entering advanced database configuration.

     > **Important**
     >
     > Using the **Microsoft SQL Server** or **SQL Anywhere** database options are not supported.

   • To use an existing Oracle instance, and select your own database name, user name, and password for that database, enter **2**.

Select the database you want to use and provide any information requested at the prompts, including host name, port, Service Name or SID, user name, and password.

- To use an existing MySQL/MariaDB database, and select your own database name, user name, and password for that database, enter **3**.

  Select the database you want to use and provide any information requested at the prompts, including host name, port, database name, user name, and password.

- To use an existing PostgreSQL database, and select your own database name, user name, and password for that database, enter **4**.

  Select the database you want to use and provide any information requested at the prompts, including host name, port, database name, user name, and password.

7. At `Proceed with configuring remote database connection properties [y/n]` choose **y**.

8. Setup completes.

> **Note**
>
> If your host accesses the Internet through a proxy server, you must configure Ambari Server to use this proxy server.

More Information

Setup Options [31]

Configuring Ambari for Non-Root

Changing the JDK Version on an Existing Cluster

Using Non-Default Databases-Ambari

How to Set Up an Internet Proxy Server for Ambari

2.2.1. Setup Options

The following options are frequently used for Ambari Server setup.

-j (or –java-home)   Specifies the JAVA_HOME path to use on the Ambari Server and all hosts in the cluster. By default when you do not specify this option, Ambari Server setup downloads the Oracle JDK 1.8 binary and accompanying Java Cryptography Extension (JCE) Policy Files to /var/lib/ambari-server/resources. Ambari Server then installs the JDK to /usr/jdk64.

Use this option when you plan to use a JDK other than the default Oracle JDK 1.8. If you are using an alternate JDK, you must manually install the JDK on all hosts and specify the Java Home path during Ambari Server setup. If you plan to use Kerberos, you must also install the JCE on all hosts.

This path must be valid on all hosts. For example:

```
ambari-server setup –j /usr/java/default
```

–jdbc-driver   Should be the path to the JDBC driver JAR file. Use this option to specify the location of the JDBC driver JAR and to make that JAR available to Ambari Server for distribution to cluster hosts during configuration. Use this option with the –jdbc-db option to specify the database type.

–jdbc-db   Specifies the database type. Valid values are: [postgres | mysql | oracle] Use this option with the –jdbc-driver option to specify the location of the JDBC driver JAR file.

-s (or –silent)   Setup runs silently. Accepts all the default prompt values, such as:

- User account "root" for the ambari-server

- Oracle 1.8 JDK (which is installed at /usr/jdk64). This can be overridden by adding the -j option and specifying an existing JDK path.

- Embedded PostgreSQL for Ambari DB (with database name "ambari")

> ## Important
>
> By choosing the silent setup option and by not overriding the JDK selection, Oracle JDK will be installed and you will be agreeing to the Oracle Binary Code License agreement.
>
> Do not use this option if you do not agree to the license terms.

If you want to run the Ambari Server as non-root, you must run setup in interactive mode. When prompted to customize the ambari-server user account, provide the account information.

-v (or –verbose)   Prints verbose info and warning messages to the console during Setup.

-g (or –debug)   Prints debug info to the console during Setup.

Next Steps

Start the Ambari Server [33]

More Information

JDK Requirements

Configuring Ambari for Non-Root

Oracle Java License Terms

2.3. Start the Ambari Server

- Run the following command on the Ambari Server host:

```
ambari-server start
```

- To check the Ambari Server processes:

```
ambari-server status
```

- To stop the Ambari Server:

```
ambari-server stop
```

Note

If you plan to use an existing database instance for Hive or for Oozie, you must prepare to use a non-default database **before** installing your Hadoop cluster.

On Ambari Server start, Ambari runs a database consistency check looking for issues. If any issues are found, Ambari Server **start will abort** and display the following message: DB configs consistency check failed. Ambari writes more details about database consistency check results to the/var/log/ambari-server/ambari-server-check-database.log file.

You can force Ambari Server to start by skipping this check with the following option:

```
ambari-server start --skip-database-check
```

If you have database issues, by choosing to skip this check, **do not make any changes to your cluster topology or perform a cluster upgrade until you correct the database consistency issues**. Please contact Hortonworks Support and provide the ambari-server-check-database.log output for assistance.

Next Steps

Install, Configure and Deploy a Hadoop cluster

More Information

Using Non-Default Databases-Hive

Using Non-Default Databases-Oozie

3. Installing, Configuring, and Deploying a Cluster

Use the Ambari Cluster Install Wizard running in your browser to install, configure, and deploy your cluster, as follows:

3.1. Log In to Apache Ambari

Prerequisites

Ambari Server must be running.

To log in to Ambari Web using a web browser:

Steps

1. Point your web browser to

   ```
   http://<your.ambari.server>:8080
   ```

   ,where `<your.ambari.server>` is the name of your ambari server host.

   For example, a default Ambari server host is located at `http://c6401.ambari.apache.org:8080`.

2. Log in to the Ambari Server using the default user name/password: `admin/admin`. You can change these credentials later.

For a new cluster, the Cluster Install wizard displays a Welcome page.

Next Step

Launch the Ambari Cluster Install Wizard [35]
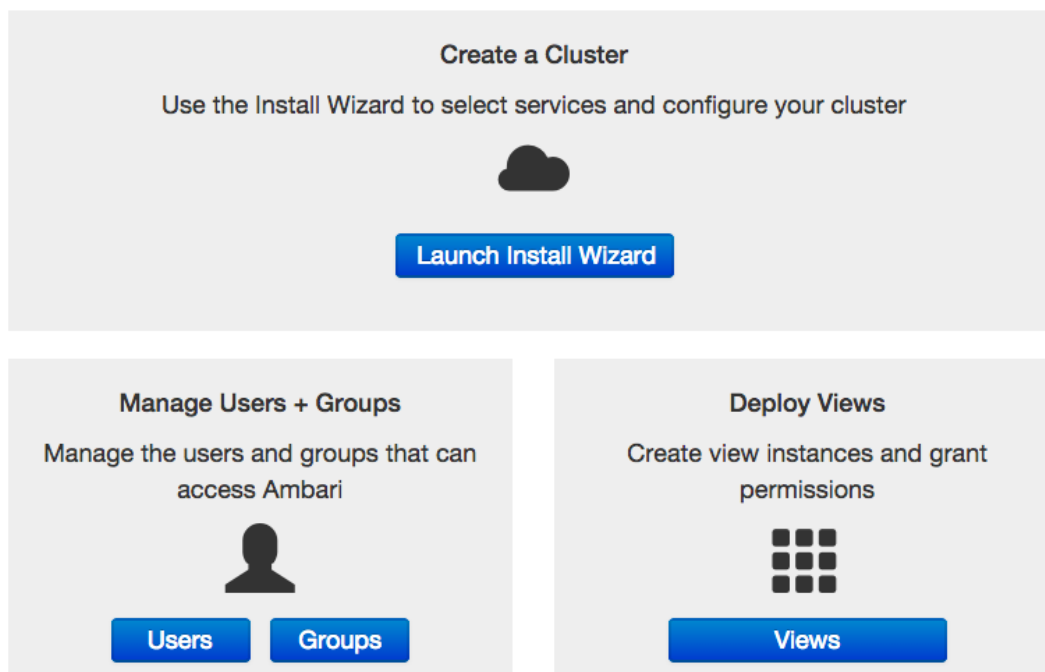
More Information

Start the Ambari Server [33]

3.2. Launch the Ambari Cluster Install Wizard

From the Ambari Welcome page, choose **Launch Install Wizard**.

Next Step

Name Your Cluster [35]

3.3. Name Your Cluster

Steps

1. In **Name your cluster**, type a name for the cluster you want to create.

   Use no white spaces or special characters in the name.

2. Choose **Next**.

Next Step

3.4. Select Version

In this Step, you will select the software version and method of delivery for your cluster. Using a Private Repository requires Internet connectivity. Using a Local Repository requires you have configured the software in a repository available in your network.

Choosing Stack

The available versions are shown in TABs. When you select a TAB, Ambari attempts to discover what specific version of that Stack is available. That list is shown in a DROPDOWN. For that specific version, the available Services are displayed, with their Versions shown in the TABLE.

Choosing Version

If Ambari has access to the Internet, the specific Versions will be listed as options in the DROPDOWN. If you have a Version Definition File for a version that is not listed, you can click **Add Version...** and upload the VDF file. In addition, a **Default Version Definition** is also included in the list if you do not have Internet access or are not sure which specific version to install.

Note

In case your Ambari Server has access to the Internet but has to go through an Internet Proxy Server, be sure to setup the Ambari Server for an Internet Proxy.

Choosing Repositories

Ambari gives you a choice to install the software from the Private Repositories (if you have Internet access) or Local Repositories. Regardless of your choice, you can edit the Base URL of the repositories. The available operating systems are displayed and you can add/remove operating systems from the list to fit your environment.

The UI displays repository Base URLs based on Operating System Family (OS Family). Be sure to set the correct OS Family based on the Operating System you are running.

redhat7   Red Hat 7, CentOS 7, Oracle Linux 7

redhat6   Red Hat 6, CentOS 6, Oracle Linux 6

sles11   SUSE Linux Enterprise Server 11

sles12   SUSE Linux Enterprise Server 12

ubuntu14   Ubuntu 14

ubuntu16   Ubuntu 16

debian7   Debian 7

Advanced Options

There are advanced repository options available.

• **Skip Repository Base URL validation (Advanced):** When you click **Next**, Ambari will attempt to connect to the repository Base URLs and validate that you have entered a validate repository. If not, an error will be shown that you must correct before proceeding.

• **Use RedHat Satellite/Spacewalk:** This option will only be enabled when you plan to use a Local Repository. When you choose this option for the software repositories, you are

responsible for configuring the repository channel in Satellite/Spacewalk and confirming the repositories for the selected **stack version** are available on the hosts in the cluster.

Next Step

Install Options [38]

More Information

Setting up an Internet Proxy Server for Ambari

Using a Local Repository

3.5. Install Options

In order to build up the cluster, the Cluster Install wizard prompts you for general information about how you want to set it up. You need to supply the FQDN of each of your hosts. The wizard also needs to access the private key file you created when you set up password-less SSH. Using the host names and key file information, the wizard can locate, access, and interact securely with all hosts in the cluster.

Steps

1. In **Target Hosts**, enter your list of host names, one per line.

   You can use ranges inside brackets to indicate larger sets of hosts. For example, for host01.domain through host10.domain use `host[01-10].domain`

   > **Note**
   >
   > If you are deploying on EC2, use the `internal Private DNS` host names.

2. If you want to let Ambari automatically install the Ambari Agent on all your hosts using SSH, select **Provide your SSH Private Key** and either use the **Choose File** button in the **Host Registration Information** section to find the private key file that matches the public key you installed earlier on all your hosts or cut and paste the key into the text box manually.

3. Enter the user name for the SSH key you have selected. If you do not want to use `root`, you must provide the user name for an account that can execute `sudo` without entering a password. If SSH on the hosts in your environment is configured for a port other than 22, you can change that also.

4. If you do not want Ambari to automatically install the Ambari Agents, select **Perform manual registration**.

5. Choose **Register and Confirm** to continue.

Next Step

Confirm Hosts [39]

More Information

3.6. Confirm Hosts

Confirm Hosts prompts you to confirm that Ambari has located the correct hosts for your cluster and to check those hosts to make sure they have the correct directories, packages, and processes required to continue the install.

If any hosts were selected in error, you can remove them by selecting the appropriate checkboxes and clicking the grey **Remove Selected** button. To remove a single host, click the small white **Remove** button in the Action column.

At the bottom of the screen, you may notice a yellow box that indicates some warnings were encountered during the check process. For example, your host may have already had a copy of `wget` or `curl`. Choose **Click here to see the warnings** to see a list of what was checked and what caused the warning. The warnings page also provides access to a python script that can help you clear any issues you may encounter and let you run

```
Rerun Checks
```

.

> ### Note
>
> If you are deploying HDP using Ambari 1.4 or later on RHEL 6.5 you will likely see Ambari Agents fail to register with Ambari Server during the **Confirm Hosts** step in the Cluster Install wizard. Click the **Failed** link on the Wizard page to display the Agent logs. The following log entry indicates the SSL connection between the Agent and Server failed during registration:
>
> ```
> INFO 2014-04-02 04:25:22,669 NetUtil.py:55 - Failed
> to connect to https://<ambari-server>:8440/cert/ca due
> to [Errno 1] _ssl.c:492: error:100AE081:elliptic curve
> routines:EC_GROUP_new_by_curve_name:unknown group
> ```

When you are satisfied with the list of hosts, choose **Next**.

Next Step

Choose Services [39]

More Information

Hortonworks Data Platform Apache Ambari Troubleshooting

3.7. Choose Services

Based on the Stack chosen during the **Select Stack** step, you are presented with the choice of Services to install into the cluster. A Stack comprises many services. You may choose to install any other available services now, or to add services later. The Cluster Install wizard selects all available services for installation by default.

Starting in Ambari 2.5, SmartSense deployment is mandatory. You cannot clear the option to install SmartSense using the Cluster Install wizard.

☑ SmartSense   1.4.0.0-   SmartSense - Hortonworks SmartSense Tool (HST) helps quickly gather configuration,
                    1033   metrics, logs from common HDP services that aids to quickly troubleshoot support
                                 cases and receive cluster-specific recommendations.

To choose the services that you want to deploy:

Steps

1. Choose **none** to clear all selections, or choose **all** to select all listed services.

2. Choose or clear individual check boxes to define a set of services to install now.

3. After selecting the services to install now, choose **Next**.

Note

Ambari does not install Hue, or HDP Search (Solr). After adding some services, you may need to perform additional tasks. For more information about installing and configuring specific services, see the following topics:

- Apache Spark Component Guide

- Apache Storm Component Guide

- Apache Ambari Apache Storm Kerberos Configuration

- Apache Kafka Component Guide

- Apache Ambari Apache Kafka Kerberos Configuration

- Installing and Configuring Apache Atlas

- Installing Ranger Using Ambari

- Installing Hue

- Apache Solr Search Installation

- Installing Ambari Log Search (Technical Preview)

- Installing Druid (Technical Preview)

Next Step

Assign Masters [41]

More Information

Add Services

SmartSense User Guide

3.8. Assign Masters

The Cluster Install wizard assigns the master components for selected services to appropriate hosts in your cluster and displays the assignments in Assign Masters. The left column shows services and current hosts. The right column shows current master component assignments by host, indicating the number of CPU cores and amount of RAM installed on each host.

1. To change the host assignment for a service, select a host name from the drop-down menu for that service.

2. To remove a ZooKeeper instance, click the green **-** icon next to the host address you want to remove.

3. When you are satisfied with the assignments, choose **Next**.

Next Step

Assign Slaves and Clients [41]

3.9. Assign Slaves and Clients

The Cluster Install wizard assigns the slave components, such as DataNodes, NodeManagers, and RegionServers, to appropriate hosts in your cluster. It also attempts to select hosts for installing the appropriate set of clients.

Steps

1. Use **all** or **none** to select all of the hosts in the column or none of the hosts, respectively.

   If a host has an asterisk next to it, that host is also running one or more master components. Hover your mouse over the asterisk to see which master components are on that host.

2. Fine-tune your selections by using the check boxes next to specific hosts.

3. When you are satisfied with your assignments, choose **Next**.

Next Step

Customize Services [41]

3.10. Customize Services

The Customize Services step presents you with a set of tabs that let you review and modify your cluster setup. The Cluster Install wizard attempts to set reasonable defaults for each of the options. You are **strongly encouraged** to review these settings as your requirements might be slightly different.

Browse through each service tab. Hovering your cursor over each of the properties, displays a brief description of what the property does. The number of service tabs shown depends

on the services you decided to install in your cluster. **Any tab that requires input shows a red badge with the number of properties that need attention.** Select each service tab that displays a red badge number and enter the appropriate information.

Directories

The choice of directories where you will store information is critical. Ambari chooses reasonable defaults based on the mount points available in your environment but you are **strongly encouraged** to review the default directory settings recommended by Ambari. In particular, confirm directories such as `/tmp` and `/var` are **not** being used for HDFS NameNode directories and DataNode directories under the **HDFS** tab.

Passwords

You must provide database passwords for the Hive and Oozie services, the Master Secret for Knox, the Grafana database password. Using Hive as an example, choose the **Hive** tab and expand the **Advanced** section. In Database Password field marked in red, provide a password, then retype to confirm it.

> **Note**
>
> By default, Ambari installs a new MySQL instance for the Hive Metastore and install a Derby instance for Oozie. If you plan to use existing databases for MySQL/MariaDB, Oracle or PostgreSQL, modify these options before proceeding.

> **Important**
>
> Using the **Microsoft SQL Server** or **SQL Anywhere** database options are not supported.

Service Account Users and Groups

The service account users and groups are available on the **Misc** tab. These are the **operating system accounts the service components will run as**. If these users do not exist on your hosts, Ambari will automatically create the users and groups locally on the hosts. If these users already exist, Ambari will use those accounts.

Depending on how your environment is configured, you might not allow `groupmod` or `usermod` operations. If this is the case, you **must** be sure all users and groups are already created and **be sure to** select the **Skip group modifications** option on the **Misc** tab. This tells Ambari to not modify group membership for the service users.

After you complete Customizing Services, choose **Next**.

Next Step

Review [43]

More Information

Using Non-Default Databases

Customizing HDP Services

3.11. Review

Review displays the assignments you have made. Check to make sure everything is correct. If you need to make changes, use the left navigation bar to return to the appropriate screen.

To print your information for later reference, choose **Print**.

When you are satisfied with your choices, choose **Deploy**.

Next Step

Install, Start and Test [43]

3.12. Install, Start and Test

The progress of the install displays on the screen. Ambari installs, starts, and runs a simple test on each component. Overall status of the process displays in progress bar at the top of the screen and host-by-host status displays in the main section. Do not refresh your browser during this process. Refreshing the browser may interrupt the progress indicators.

To see specific information on what tasks have been completed per host, click the link in the **Message** column for the appropriate host. In the **Tasks** pop-up, click the individual task to see the related log files. You can select filter conditions by using the **Show** drop-down list. To see a larger version of the log contents, click **Open** or to copy the contents to the clipboard, use **Copy**.

When `Successfully installed and started the services` appears, choose **Next**.

Next Step

Complete [43]

3.13. Complete

The **Summary** page provides you a summary list of the accomplished tasks. Choose **Complete**. Ambari Web opens in your web browser.