Volta Cassandra installation manual

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1 Volta Cassandra

Volta Cassandra is an installation package that provides an easy way to install and configure for Apache Cassandra on Linux.

Volta Cassandra is available for the following Linux distribution:

- Debian, as .deb
- Ubuntu, as .deb
- CentOS, as .rpm

More information about Volta Cassandra and Satellite Volta Project on website http://www.satellitevolta.com/. Please contact mailto:support@satellitevolta.com, for technical support.

2 How to install Volta Cassandra package

Volta Cassandra is available as .deb and .rpm packages on www.satellitevolta.com website and by using apt-get or yum, on the repository http://repo.satellitevolta.com .

You should prefer the latter way because it will provide easy updates to newer versions.

2.1 Package installation

Volta Cassandra packages for Debian, Ubuntu and CentOS are available on www.satellitevolta.com .

Once you downloaded the chosen package, to install it, you need to open your terminal, move in the directory of the package and run one of the following commands, depending on your distribution:

- On Debian/Ubuntu:

```
sudo dpkg –i volta-cassandra_x.y.z-k_all.deb
```

- On CentOS:

```
sudo rpm –i volta-cassandra_x.y.z-k_noarch.rpm
```

where x.y.z-k is the version of the downloaded volta-cassandra package.

2.2 Installation from repository

To download and install Volta Cassandra package using the repository, you have to perform the following instructions.

2.2.2 How to import the repository signing key

The repository signing key can be found at [RIF-03].

To import the signing key, run the following command, using the root user:

```
wget -qO - http://repo.satellitevolta.com/signing-key.asc |
apt-key add -
```

2.2.3 How to install packages on Debian distributions

To download the package, a change in your APT configuration is required. Add one of the following two lines, (the choice depends on your distribution), to the file/etc/apt/sources.list:

- On Debian Wheezy (stable):

```
deb http://repo.satellitevolta.com/debian wheezy main
```

- On Debian Jessy (testing):

```
deb http://repo.satellitevolta.com/ubuntu jessie main contrib
```

After this, update the repository indexes, using the command:

```
sudo apt-get update
```

Now it is possible to download and install the package from Satellite Volta repository, using the command:

```
sudo apt-get install satellite volta-cassandra
```

2.2.4 How to install packages on Ubuntu LTS 14.04 (Trusty)

To download the package, a change in your APT configuration is required. Add the following line to the file/etc/apt/sources.list:

```
deb http://repo.satellitevolta.com/ubuntu trusty main contrib
```

After this, update the repository indexes, using the command:

```
sudo apt-get update
```

Now it is possible to download and install the package from Satellite Volta repository, using the command:

```
sudo apt-get install volta-cassandra
```

2.2.5 How to install packages on CentOS/RHEL

To download the package, a change in your YUM configuration is required. Add a file named *satellitevolta.repo* in */etc/yum.repos*, with these lines:

```
[satellitevolta]
name=Satellite Volta Packages for RHEL/CENTOS
baseurl=http://repo.satellitevolta.com/centos/
enabled=1
gpgcheck=1
gpgkey=http://repo.satellitevolta.com/signing-key.asc
```

Now it is possible to download and install the package from Satellite Volta repository, using the command:

```
yum install volta-cassandra
```

3 How to configure Volta Cassandra

The volta-cassandra package install an instance of Apache Cassandra and its service on your system. The service will start automatically each time you reboot.

However, Apache Cassandra must be confiured before you can start the service for the first time.

N.B.: if you try to start the service before you complete the configuration step, it will not start and an error will be returned. In this way, a non-expert user cannot start Apache Cassandra without a real configuration or with a partial one.

To start the configuration procedure, run one of this commands:

```
cassandra-volta-conf configure (for non-expert users)
```

```
cassandra-volta-conf -x configure (for expert users)
```

This launches a wizard in which you need to provide values for several configuration parameters, first of all for the required ones. The wizard provides default and example values to help the user. An example of a basic wizard is the following:

```
cluster_name
 [] >Test Cluster
listen_address
127.0.0.1/8, 192.168.1.36/24 [None] >127.0.0.1
commitlog_directory
None [None] >
data_file_directories
None [None] >
seed_provider
comma separated list of addresses [127.0.0.1] >
saved_caches_directory
None [None] >
rpc_address
localhost [localhost] >
```

For each parameters, in the following line, the user finds some example values (if available) in a comma separated list, and a default value (if available) between square brackets ([...]).

If the parameters is a strictly required one and no default values are available (i.e.: cluster_name), question is repeated until the user will give a value.

When the procedure ends, configuration values are saved automatically in the *cassandra.yaml* file, located in */opt/volta-cassandra/conf* .

If you want to save the values elsewhere (i.e.: to check their correctness before they are written in *cassandra.yaml*), you can indicate a different output by adding the following option to the configuration command:

```
cassandra-volta-conf        -f    /pathtothefile/nameofthefile
configure
```

By default, configuration procedure is based on the template *cassandra.yaml.template*, located in */opt/volta-cassandra/conf* .

If you want to use a different template (i.e.: to use the values of a configuration you already used), you can indicate a different input by adding the following option to the configuration command:

```
cassandra-volta-conf  -t /pathtothetemplate/nameofthetemplate
configure
```

To visualize other options for the configuration command, run:

```
cassandra-volta-conf –help
```

4 Start and management Volta Cassandra service

Once the configuration procedure is complete, you can start the volta-cassandra service with one of the following commands, depending on your distribution:

- On Debian Wheezy and Ubuntu LTS:

```
service volta-cassandra start
```

- On Debian Jessy and CentOS:

```
systemctl enable volta-cassandra.service
```
 (to enable the service)

```
systemctl start volta-cassandra.service
```

If you need to stop the service, you can use one of the following commands, depending on your distribution:

- On Debian Wheezy and Ubuntu LTS:

```
service volta-cassandra stop
```

- On Debian Jessy and CentOS:

```
systemctl stop volta-cassandra.service
```

Alternatively, if you do not want to use the service, you can start satellitevolta-cassandra, by running the command:

```
/opt/volta-cassandra/bin/cassandra-wrapper
```