Volta Control user manual

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1 Volta Control

Volta Control is a visual tool for designing, implementing and managing databases on Apache Cassandra. With Volta Control, you can control keyspaces and tables in each cluster node and read/write/delete data using CQL code.

For further information about Volta Control (manual, latest release, etc) and Satellite Volta project, please visit www.satellitevolta.com or send an email to support@satellitevolta.com for technical support.

2 System Requirements

To use Volta Control, a JRE (Java Runtime Environment) version 6 or greater (www.java.com) is required.

3 How to use Volta Control

Volta Control is available on www.satellitevolta.com both as a distribution package for Windows system (in .zip format) and Linux system (in .tar.gz format), and as an installer for Debian and Ubuntu distributions (in .deb format) and CentOS distributions (in .rpm format).

If you chose the distribution package, to start using Volta Control, follow these steps:

- Decompress the Volta Control distribution package.
- Launch Volta Control by double clicking on *volta-control-x.y.z.jar* or, from a shell/command prompt, execute:

  java -jar volta-control-x.y.z.jar

  where *x.y.z* is the Volta Control version you have just downloaded.

If you chose the installer package, to install it, run one of the following commands, depending on your distribution:

- On Debian/Ubuntu:

sudo dpkg –i volta-control_x.y.z-k_all.deb

- On CentOS:

  sudo rpm –i volta-control_x.y.z-k_noarch.rpm

  where *x.y.z-k* is the Volta Control version you have just downloaded..

Once the installation ended, you can start Volta Control by running the following command:

volta-control

At first launch, Volta Monitor creates the folder *.volta-control* in the user account folder; in that folder the application will save connections data, logs, preferences, etc.

4 User manual

The next pages introduce the Volta Control tool, giving details about the main features available.

4.1 Connections to Apache Cassandra

Launch Volta Control and, after the splash screen, you will see the list of connections to Apache Cassandra nodes.

Each connection shows some details as: name of connection, user name, default keyspace (if defined), IP address and port.

With a right click on a connection you can use the context menu for executing the following actions:

- Open connection

  Starts a connection to an Apache Cassandra node and opens the query manager

- Edit connection

  Opens the connection manager panel to change the connection parameters

- Delete connection

  Removes a connection permanently

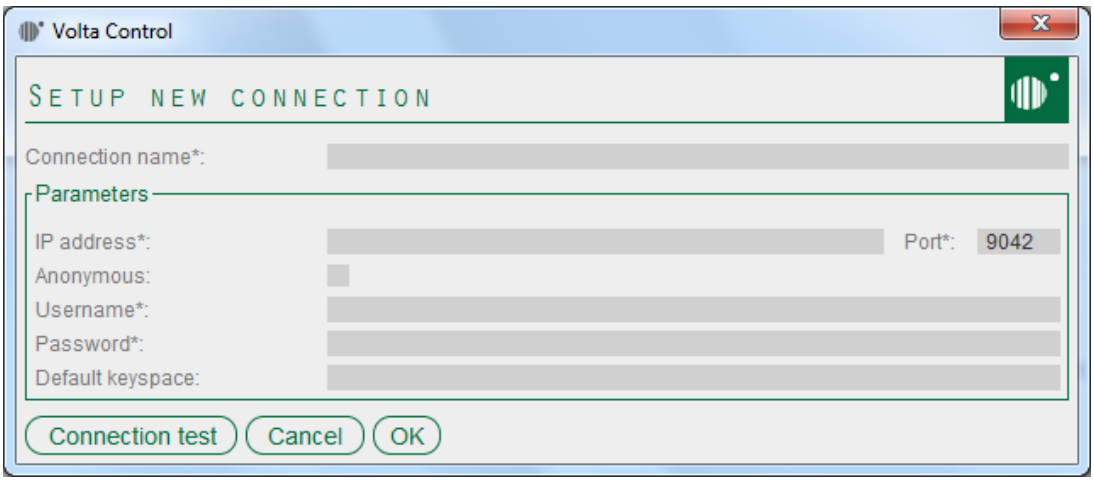
- Delete all connections

  Removes all connections in one time

If you click on a connection, an Apache Cassandra node will be selected to be queried and the query manager will be opened.

4.2 Setup a new connection

Clicking the button “Setup a new connection” in the connections panel you can create a new connection to an Apache Cassandra node.



Fill in the form and then click on:

- Connection test

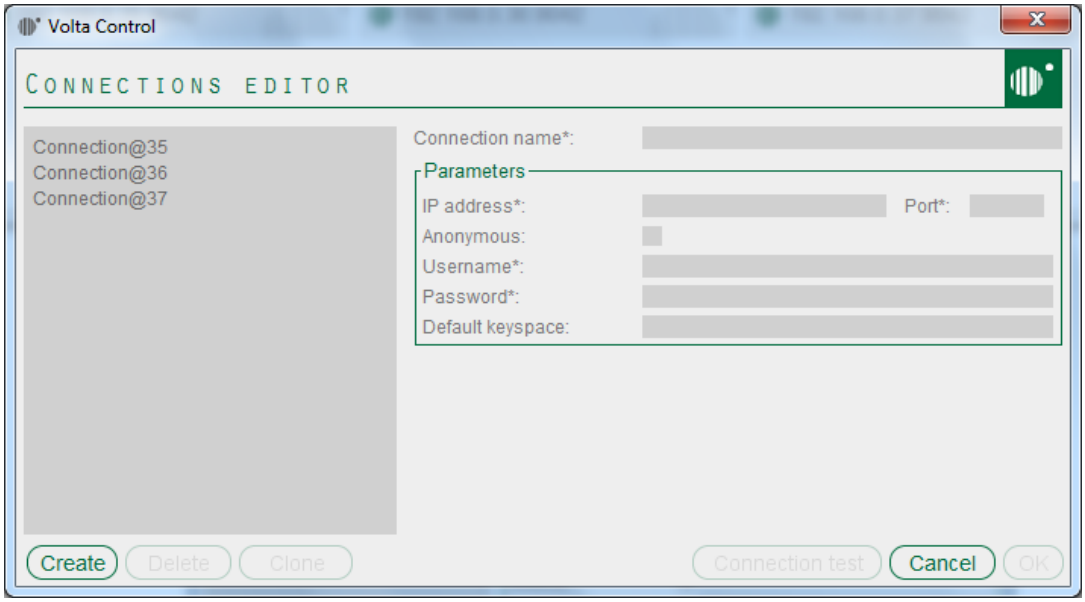
  Connects to the node to check the configuration
- Cancel

  Cancels the action
- OK

  Saves connection for later use

4.3 Connections Editor

Clicking the button “Edit Connections” you can configure connections to Apache Cassandra nodes.



The leftmost list shows the available connections.

Clicking on one of them you can change the parameters (node IP, type of access, username, password, default keyspace) and execute the following actions:

- Test connection

  Connects to the node to check the configuration

- Cancel

  Cancels the action

- OK

  Saves connection for later use

Moreover, you can also execute the following actions:

- Create

Creates a new connection, filling the form on the right

- Delete

  Deletes the connection to the Apache Cassandra node selected

- Clone

  Duplicates the selected connection, cloning parameters

4.4 Help

The “Help” button shows a menu with 2 items: “Volta Control License” with information about the terms of use and “About Volta Control” with details on current version.

The Help button is also available in the query manager.

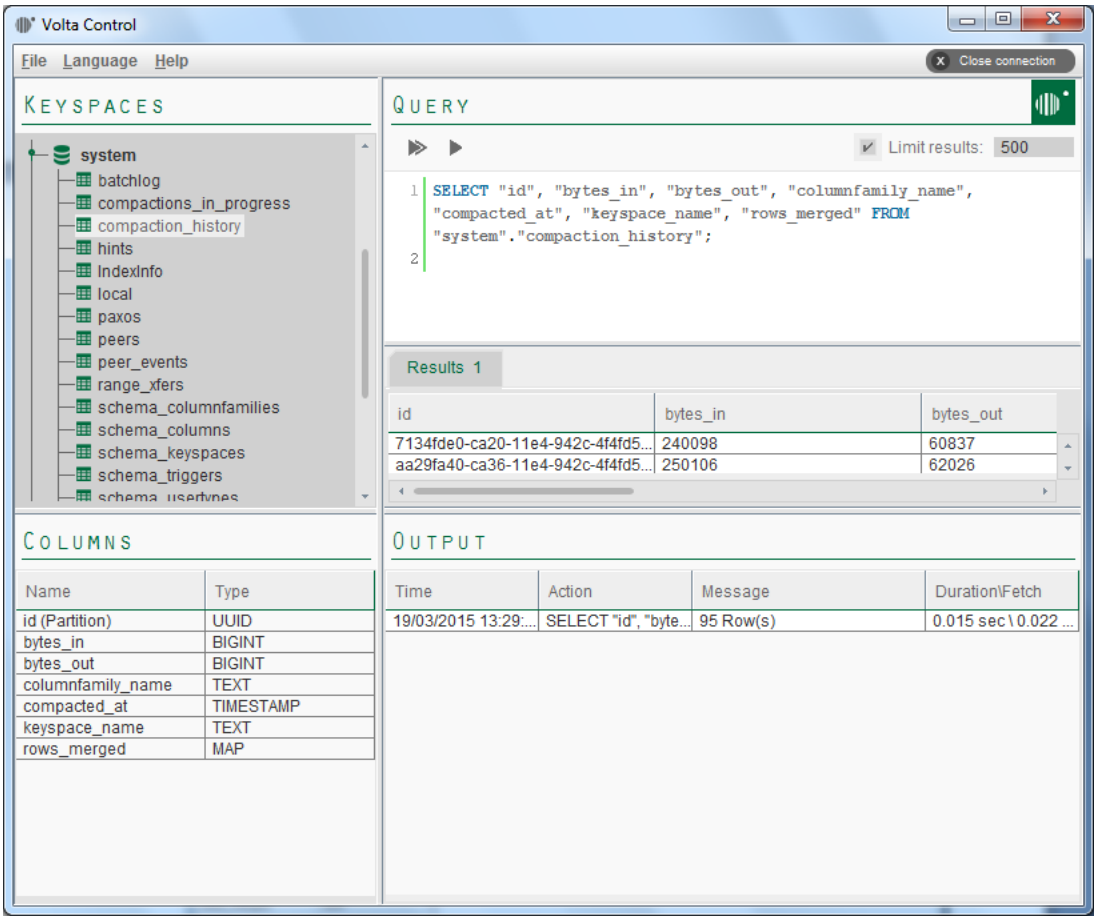
4.5 Language

Using the “Language” button, you can select the favorite language.

The Language button is also available in the query manager.

4.6 Query manager

In the main panel “Connections to Apache Cassandra”, you can click on a connection to start the query manager and connect to an Apache Cassandra node.



The query manager has four areas:

- Keyspaces
- Query editor
- Columns description

- Query log

4.6.1 KEYSPACES

The keyspaces area shows a tree of objects: connection to the Apache Cassandra node, the keyspaces of the node (the default keyspace, if any, is bold), the tables of each keyspace.

The context menu of the tree root (activated by a right click on Apache Cassandra node) has the item “Refresh all” that reloads the tree objects. You can also refresh the tree pressing F5.

The context menu of a keyspace element (activated by a right click) has the following items:

- Set as default keyspace

  Sets the current keyspace as the default keyspace for CQL query execution

- Refresh all (F5)

  Refreshes the tree

- CREATE statement

  Writes a CQL query for current keyspace creation in the query editor

- DROP statement

  Writes a CQL query for current keyspace deletion in the query editor

The context menu of a table element (activated by a right click) has the following items:

- Refresh all (F5)

  Refreshes the tree

- SELECT statement

  Writes a CQL query in the query editor to execute a SELECT in the current table

- INSERT statement

Writes a CQL query in the query editor to execute an INSERT in the current table

- CREATE statement

  Writes a CQL query in the query editor to execute a CREATE of the current table

- UPDATE statement

  Writes a CQL query in the query editor to execute an UPDATE of the current table

- DELETE statement

  Writes a CQL query in the query editor to execute a DELETE in the current table

- DELETE ALL statement

  Writes a CQL query in the query editor to execute a DELETE ALL in the current table

- DROP statement

  Writes a CQL query in the query editor to execute a DROP of the current table

4.6.2 Query editor

In the query editor you can write and execute CQL queries for databases in Apache Cassandra, separated by ";", taking advantage of suggestions and autocomplete features, invoked by pressing CTRL+TAB.

Several queries can be executed all at once pressing "Execute" button or you can execute only the selected query pressing "Execute selection" button.

You can also limit the number of rows returned, inserting a number in "Limit results" box.

Query results are shown below the query editor, in a tab.

You can export results in CVS (comma separated values) using the context menu (activated by right click).

4.6.3 Columns description

The columns description area shows information about columns of the table selected in the keyspace tree.

Clicking on each table you can see names and types of columns available.

4.6.4 Query log

The query log traces details of all queries executed.

The Query Log can be cleared by context menu, activated by right click.

5 Volta Control License

Volta Control

Volta Control is available for free under the terms of the license "Satellite Volta Software License, Version 1.0, September 2014". For more details visit the website www.satellitevolta.com.

Volta Control includes software distributed under the following licenses.

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