

Exercise 06.01 – Introduction to DSE Search

In this exercise, you will accomplish the following:

- Create a DSE Search Index using CQL
- Use DSE Search to satisfy a query using CQL

Step 1: Set-Up the Cluster

To do this exercise, we configured your cluster with all of your nodes running DSE with Search enabled (we will also enable Analytics and Graph, although these are not strictly necessary for this exercise).

Step 2: Create an Index

When setting up the cluster, Search was one of the options enabled. However, Search needs to be informed which columns to index. Use CQL to add an index to the name columns of the *killrvideo.users* table.

1. Confirm you are still logged into the DSE-node1 instance. If not, refer to the steps listed above.
2. Use CQL statements to create the index. Launch *cqlsh* (username and password are both *cassandra*):

```
cqlsh node1 -u cassandra -p cassandra
```

3. Currently, within the *killrvideo.users* table there is no way to query based on the users' names. Create an index to permit a search based on names. Execute the following CQL command:

```
CREATE SEARCH INDEX ON killrvideo.users  
  
WITH COLUMNS firstname, lastname;
```

Ignore any warnings for the present time. Wait approximately 30 seconds after creating the index to run the next command.

4. Perform a search on the name fields. Look for users with a first name of *Randi*:

```
SELECT * FROM killrvideo.users WHERE solr_query='firstname: Randi';
```

The results should return multiple hits. How many users have the first name *Randi*?

5. Exit `cqlsh`.
6. You can also access the HTTP Search API at port 8983 on any of your Search-enabled nodes (which in our case is all of them). In your browser, go to (replace `node_ip_address` with one of your cluster node's external IP address):

```
http://node1_ip_address:8983/solr
```

Take a few moments to familiarize yourself with this HTTP interface. Review the *Dashboard* page. Why would this page be of interest to someone concerned about the hardware? What items are being captured on the *Logging* page? What is the purpose of the *Core Admin* page?

Return to the OpsCenter page? Remember this is on the DSE-node1 instance and is using port number 8888. How many nodes are currently running?

That's it. Congratulations on creating a simple Search Index and running a Search query.

END OF EXERCISE