CQL



- Cassandra Query Language
- Semelhante ao SQL
- Não existe JOIN
- Se pode criar estruturas
- Realizar Consultas

Para saber mais:

http://cassandra.apache.org/doc/cql3/CQL.html



KeySpace

```
CREATE KEYSPACE Excelsior
   WITH replication = {'class': 'SimpleStrategy', 'replication_factor': 3};

CREATE KEYSPACE Excalibur
   WITH replication = {'class': 'NetworkTopologyStrategy', 'DC1': 1, 'DC2': 3};

ALTER KEYSPACE Excelsior
   WITH replication = {'class': 'SimpleStrategy', 'replication_factor': 4};

USE Excalibur;

DROP KEYSPACE Excalibur;
```



Column Family

```
CREATE TABLE monkeySpecies (
  species text PRIMARY KEY,
  common_name text,
  population varint,
  average_size int
) WITH comment='Important biological records'
ALTER TABLE monkeySpecies ALTER average_size TYPE varint;
ALTER TABLE monkeySpecies ADD gravesite varchar;
DROP TABLE monkeySpecies;
TRUNCATE monkeySpecies;
```



Index

CREATE INDEX userIndex ON NerdMovies (user);

CREATE INDEX ON Mutants (abilityId);

DROP INDEX userIndex;



Manipulação de dados

```
INSERT INTO NerdMovies (movie, director, main_actor, year) VALUES ('Serenity', 'Joss Whedon', 'Nathan Fillion', 2005);
```

```
UPDATE NerdMovies SET director = 'Joss Whedon', main_actor = 'Nathan Fillion', year = 2005 WHERE movie = 'Serenity';
```

DELETE FROM NerdMovies USING TIMESTAMP 1240003134 WHERE movie = 'Serenity';



Manipulação de dados

```
BEGIN BATCH
```

```
INSERT INTO users (userid, password, name) VALUES ('user2', 'ch@ngem3b', 'second user');

UPDATE users SET password = 'ps22dhds' WHERE userid = 'user3';

INSERT INTO users (userid, password) VALUES ('user4', 'ch@ngem3c');

DELETE name FROM users WHERE userid = 'user1';

APPLY BATCH;
```



Select

SELECT name, occupation FROM users WHERE userid IN (199, 200, 207);

SELECT name AS user_name, occupation AS user_occupation FROM users;

SELECT time, value FROM events WHERE event_type = 'myEvent' AND time > '2011-02-03' AND time <= '2012-01-01'

SELECT COUNT(*) FROM users;

SELECT COUNT(*) AS user_count FROM users;



ascii	strings
bigint	integers
blob	blobs
boolean	booleans
counter	integers
decimal	integers, floats
double	integers
float	integers, floats



inet	strings
int	integers
text	strings
timestamp	integers, strings
timeuuid	uuids
uuid	uuids
varchar	strings
varint	integers



Coleções

map	Dicionário de dados (chave valor)
set	Coleção de unico valor
list	coleção



Map

```
CREATE TABLE users (
   id text PRIMARY KEY,
   given text,
   surname text,
   favs map<text, text>
);

INSERT INTO users (id, given, surname, favs)
        VALUES ('jsmith', 'John', 'Smith', { 'fruit' : 'apple', 'band' : 'Beatles' });

UPDATE users SET favs['author'] = 'Ed Poe' WHERE id = 'jsmith'

UPDATE users SET favs = favs + { 'movie' : 'Cassablanca' } WHERE id = 'jsmith'
```



Set

```
CREATE TABLE images (
    name text PRIMARY KEY,
    owner text,
    date timestamp,
    tags set<text>
);

INSERT INTO images (name, owner, date, tags)
        VALUES ('cat.jpg', 'jsmith', 'now', { 'kitten', 'cat', 'pet' });

UPDATE images SET tags = tags + { 'cute', 'cuddly' } WHERE name = 'cat.jpg';

UPDATE images SET tags = tags - { 'lame' } WHERE name = 'cat.jpg';
```



List

```
CREATE TABLE plays (
  id text PRIMARY KEY,
  game text,
  players int,
  scores list<int>
INSERT INTO plays (id, game, players, scores)
      VALUES ('123-afde', 'quake', 3, [17, 4, 2]);
UPDATE plays SET players = 5, scores = scores + [ 14, 21 ] WHERE id =
'123-afde':
UPDATE plays SET players = 5, scores = [ 12 ] + scores WHERE id = '123-afde';
UPDATE plays SET scores[1] = 7 WHERE id = '123-afde';
DELETE scores[1] FROM plays WHERE id = '123-afde';
UPDATE plays SET scores = scores - [ 12, 21 ] WHERE id = '123-afde';
```