

Ten. Million. Questions. Let's celebrate [all we've done together](#).

Stack Overflow is a question and answer site for professional and enthusiast programmers. It's 100% free.

Take the 2-minute tour ×

Slow cypher queries in Neo4j server mode - jersey-REST

Work on work you love. From home.



 **stackoverflow**careers



0



I am accessing and querying a graph db via REST, with Jersey and I am obtaining Json files with the results, but it is slower than querying it via embedded. My graph has 350.000 nodes and 1.500.000 relationships. I don't know if there is a way for not blocking the db when it is accessed by a user via embedded... thanks

- DOMAIN MODEL: 300.000 nodes, 1.500.000 relationships (of 40 types, including IS_A type). There is about 15 big hierarchies (each of one has between 1.000 and 100.000 nodes), and these hierarchies (its nodes) are related with the nodes of other hierarchies.
- QUERY:

```
MATCH (a: Concept{conceptid : '123456'}) <-[:RELCL] - (b: Concept) -[:REL
{reltype: '112233'}] -> (c: Concept) -[:RELCL] -> (av: Concept {conceptid:
'654321'})
RETURN DISTINCT b.conceptid AS CONCEPTID
```

Note that RELCL is the IS_A relationship.

Note that

```
MATCH (a: Concept{conceptid : '123456'}) <-[:RELCL] - (b: Concept)
```

b returns 300.000 nodes.

Note that

```
(c: Concept) -[:RELCL] -> (av: Concept {conceptid: '654321'})
```

c returns 300.000 nodes.

Time executed via (Neo4j embedded):

```
GraphDatabaseService graphDb = new GraphDatabaseFactory().newEmbeddedDatabase(DB_PAT
ExecutionEngine engine = new ExecutionEngine(graphDb);
ExecutionResult result = engine.execute(query));
```

= 12 s.

Time executed via (Neo4j server mode (Neo4j Community 2.1.5) - jersey-REST):

```
final String txUri = SERVER_ROOT_URI + "transaction/commit";
WebResource resourceQuery = Client.create().resource( txUri );
String payload = "{\"statements\" : [ {\"statement\" : \"\" + query + \"\" } ]}";
ClientResponse responseQuery= resourceQuery
.accept( MediaType.APPLICATION_JSON )
.type( MediaType.APPLICATION_JSON )
.entity( payload )
.post( ClientResponse.class );

String res = String.format("POST [%s] to\n [%s], \nstatus code [%d %s], returned dat
payload, txUri, responseQuery.getStatus(),
responseQuery.getClientResponseStatus(), responseQuery.getEntity( String.class ) );
```

= 240 s.

When executing both codes in Eclipse, I put in *Run Configuration -Xms12G -Xmx16G* as *VM Arguments*. I see, when executing embedded version, that RAM increase over 8GB in javaw process. But when executing Server-REST version, it only reach 130MB. (The PC where I am

asked 4 months ago

viewed 78 times










Blog

 [Why Stack Overflow is a Good Workplace for Women](#)

Related

- 0 [Neo4j Executing cypher query via rest](#)
- 3 [Neo4j increasing latency as SKIP increases on Cypher query + REST API](#)
- 1 [Connection Neo4j with Glassfish via Rest](#)
- 3 [Optimizing high volume batch inserts into Neo4j using REST](#)
- 0 [Neo4j Cypher query results serialisation in Java](#)
- 4 [Neo4j Cypher Query Extremely Slow \(about 20 minutes\)](#)
- 0 [Neo4j - slow cypher query - big graph with hierarchies](#)
- 1 [Neo4j: Create nodes via CYPHER/REST slow](#)
- 1 [Neo4j/CYPHER: How can I query some properties from a node, its relationships and target node efficiently?](#)
- 0 [Is it possible to query a Neo4J db using Cypher, via the REST API, and return the URI of a node?](#)

Hot Network Questions

-  Does touching the tent outer wall from the inside make it leak?
-  Should you always minimize cognitive load
-  Why are carpenter's pencils flat?
-  A short, brutal riddle
-  Seven overlapping circles
-  Remove a language from the "Preferred language order"
-  How does java.util.EnumSet<E> work?
-  Shut down list of servers given in a file
-  Does adult neurogenesis occur only in the olfactory bulb and the hippocampus?

executing the codes has 16GiB of RAM).

In *Neo4j GUI settings*, *Database Configuration*, *Server Configuration* and *Java VM Options* files, has the default values.

Thank you again.

java rest neo4j jersey cypher

share improve this question

edited Apr 8 at 10:41

asked Apr 8 at 9:15

 Vicente
8 ● 3

Can you provide way more details: your domain model, your queries, your code, your server and client config, network setup? etc? Without more information no one will be able to answer your question. – [Michael Hunger](#) Apr 8 at 9:53

Are you including the time taken to marshal to json in the non-embedded example? – [monkjack](#) Apr 8 at 10:45

The time counter starts exactly at the beginning of the code block, and stops exactly at the end of the code block, just after the execution of the "String res = ..." statement. – [Vicente](#) Apr 8 at 10:56

add a comment

Know someone who can answer? Share a link to this [question](#) via [email](#), [Google+](#), [Twitter](#), or [Facebook](#).

Your Answer

B

I

Sign up or [log in](#)

Sign up using Google

Sign up using Facebook

Sign up using Stack Exchange

Post as a guest

Name

Email

required, but never shown

Post Your Answer

By posting your answer, you agree to the [privacy policy](#) and [terms of service](#).

Browse other questions tagged [java](#) [rest](#) [neo4j](#) [jersey](#) [cypher](#) or [ask your own question](#).

Is "user-select: none" bad UX?

Can a plane fly backward if its prop's in reverse?

Make subscript size smaller (always)

Name for a device purposefully put together from faulty parts

The Programming Language Quiz

Noun form of "extant"?

How to ask dumb questions

Can a Glaive be stowed in a Ruby Scabbard?

As a professional photographer, how can one handle a wedding photographer being rude or demanding in a way that will compromise overall image quality?

Why do we still use keys to start cars? why not passwords?

Preventing a Print expression from generating a new cell each time it executed

How to show pagination "go to page" text box?

Approximation of Borel sets by a countable collection of majorants

How do I remove Candy Crush Saga from Windows 10?

Does Lebanon ban the diary of Anne Frank?

question feed

[tour](#) [help](#) [blog](#) [chat](#) [data](#) [legal](#) [privacy policy](#) [work here](#) [advertising info](#) [mobile](#) [contact us](#) [feedback](#)

TECHNOLOGY

LIFE / ARTS

CULTURE /
RECREATION

SCIENCE

OTHER

