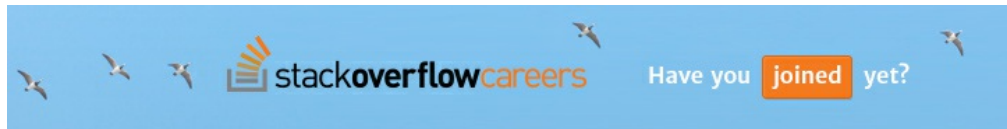


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Cypher path querying (using Neo4j)



I have a graph database so that there is in it some pattern like this one:

```
(n1)-[:a]->(n2),
(n1)-[:b]->(n2),
(n1)-[:c]->(n2),
(n1)-[:e]->(n2),
(n1)-[:d]->(n3),
(n2)-[:b]->(n4)
```

And I want to have all graph with this pattern

```
MATCH p={
  (n3)-[:d]-(n1)-[:a]->(n2)-[:b]->(n4),
  (n1)-[:b]->(n2)-[:c]-(n1),
  (n1)-[:e]->(n2)
}
RETURN p
```

Is it possible? I've search a little but I haven't found how to do it. I know we can use "|" for a type like this

```
()-[:a|b]->()
```

but there is no "&" and the path assigning only works on pattern which are written without ",", ".".

Thanks

EDIT: If it could help, here is another example of what I'm seeking: In a database with movies, person and relations like ACTED_IN, KNOWS, FRIEND and HATE I want all the graphs containing an actor "Actor1" (who ACTED_IN a movie "M") who KNOWS "Person1", FRIEND "Person2" and HATE "Person3" which ACTED_IN the same movie "M".

An UNION like the one in the answer of "Michael Hunger" does not work because we have multiple subgraphs and not graphs. Moreover, some subgraph might not be correct answers for the bigger pattern.

neo4j pattern-matching cypher

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edited Apr 14 at 14:16

asked Apr 13 at 10:37

Faquiri 10 4

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1 Answer

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Your query will be **very** inefficient, as you don't restrict your search to a set of start nodes neither with labels or label+property combinations !!!!

You can use UNION for that:

```
MATCH p=(n3)-[:d]-(n1)-[:a]->(n2)-[:b]->(n4) RETURN p
UNION
MATCH p=(n1)-[:b]->(n2)-[:c]-(n1) RETURN p
UNION
MATCH p=(n1)-[:e]->(n2) RETURN p
```

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answered Apr 13 at 10:42

asked 4 months ago

viewed 37 times

active 4 months ago

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answered Apr 13 at 10:42
 **Michael Hunger**
25.2k ● 2 ● 21 ● 41

Thanks for your reply but this query will return graphs which might not have the 3rd match because this is a UNION. no? – [Faquarl](#) Apr 13 at 11:24

I have tested this answer and it does not work :/ Actually, it allow to agregate the answers but not the paths – [Faquarl](#) Apr 14 at 13:33




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