

Neo4j Cheatsheet

Connection

Use Neo4j Browser

Web-based interface at `http://localhost:7474` by default

Connection string

`neo4j://localhost:7687`

Connect in Cypher Shell

`cypher-shell -a neo4j://localhost:7687 -u username -p password`

Connect via driver

Common pattern in programming languages to connect with credentials

Database Operations

Show databases

`SHOW DATABASES`

Create database

`CREATE DATABASE name`

Drop database

`DROP DATABASE name`

Use database

`:use name`

Schema Operations

Show constraints

`SHOW CONSTRAINTS`

Create constraint

`CREATE CONSTRAINT constraint_name FOR (n:Label) REQUIRE n.property IS UNIQUE`

Show indexes

`SHOW INDEXES`

Create index

`CREATE INDEX index_name FOR (n:Label) ON (n.property)`

Query Operations

Count nodes

`MATCH (n:Label) RETURN count(n)`

Limit results

`MATCH (n) RETURN n LIMIT 10`

Order results

`MATCH (n) RETURN n ORDER BY n.property`

Aggregate data

`MATCH (n:Label) RETURN n.property, count(*)`

Node Operations

Create node

`CREATE (n:Label {property: 'value'})`

Match node

`MATCH (n:Label {property: 'value'}) RETURN n`

Update node

`MATCH (n:Label {property: 'value'}) SET n.property2 = 'newValue'`

Delete node

`MATCH (n:Label {property: 'value'}) DELETE n`

Relationship Operations

Create relationship

`MATCH (a:Label1), (b:Label2) CREATE (a)-[:RELATIONSHIP]->(b)`

Match relationship

`MATCH (a)-[:RELATIONSHIP]->(b) RETURN a,r,b`

Update relationship

`MATCH (a)-[:RELATIONSHIP]->(b) SET r.property = 'value'`

Delete relationship

`MATCH (a)-[:RELATIONSHIP]->(b) DELETE r`

Performance

EXPLAIN

`EXPLAIN MATCH (n) RETURN n`

PROFILE

`PROFILE MATCH (n) RETURN n`

Graph Algorithms

Shortest path

`MATCH p=shortestPath((a:Label1)-[*]-(b:Label2)) RETURN p`

All paths

`MATCH p=(a:Label1)-[*..5]->(b:Label2) RETURN p`

System Commands

:help

Show help menu in Neo4j Browser

:play

Open interactive guides

:sysinfo

Show system information

:schema

Display database schema information

Admin Commands

List users

`SHOW USERS`

Create user

`CREATE USER username SET PASSWORD 'password'`

Grant role

`GRANT ROLE admin TO username`