Setting up your Neo4j training environment for the course, Advanced Cypher

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Overview

You should bring a laptop to the class that is properly set up for the class.

You may choose to use your personal laptop rather than your work laptop for this course if:

- Your work laptop blocks or restricts Internet access.
- You want to install Neo4j Desktop and you do not have admin privileges for your work laptop.

To prepare your laptop for this course, you must perform these four Steps:

Step 1: Select an Option (1,2,3) for your development environment and prepare your laptop for the selected option.

Step 2: Use Neo4j Browser to confirm that you can access the database.

Step 3: Prepare the database for use with this course.

Step 4: Download course files.

When performing the hands-on exercises for this course, you have three options:

Option 1: Install and use Neo4j Desktop on your laptop (preferred approach)

- You must download and install Neo4j Desktop before coming to the class.
- You must prepare your Neo4j Desktop environment for this course.
- Neo4j Desktop is available on Windows, OS X, and Linux (must be a 64-bit system).
- Neo4j Desktop is free to use for development.
- All databases are created and used on your local system.
- You access the database with the Neo4j Browser application running locally on your system.
- WiFi capability during the class is optional, but recommended. It is possible to use Neo4j Desktop offline since the Neo4j Database is running locally.

Option 2: Use Neo4j Aura (Neo4j in the Cloud)

- You must set up a Neo4j Aura subscription before coming to the class.
- There is a monthly subscription cost for using Neo4j Aura.
- All operations such as backing up your database, are handled by Neo4j.
- Your databases are available 24x7 as long as your subscription is active.
- You access your database for this course using a Web browser.
- Your laptop must have WiFi capability that does not block Internet sites.

Option 3: Use a Neo4j Sandbox (a temporary Neo4j instance)
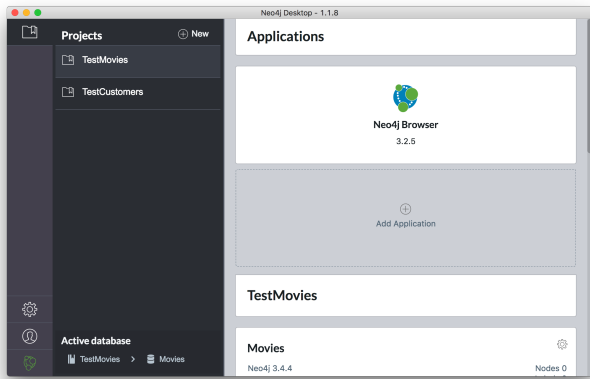
- You must set up a Neo4j Sandbox account before coming to the class.

- A Neo4j Sandbox instance is free to use.

- Sandbox instance is available for 3 days, but can be extended to 10 days.

- You access your database for this course using a Web browser.

- Your laptop must have WiFi capability that does not block Internet sites.

Which option you use for this course will depend on your needs, but you must prepare one of them before coming to the class.

Step 1: Option 1: Using Neo4j Desktop

Neo4j Desktop

The Neo4j Desktop includes the Neo4j Database server which includes the graph engine and kernel so that Cypher statements can be executed to access a database on your system. It includes an application called Neo4j Browser. Neo4j Browser enables you to access a Neo4j database using Cypher. You can also call built-in procedures that communicate with the database server. There are a number of additional libraries and drivers for accessing the Neo4j database from Cypher or from another programming language that you can install in your development environment.

Neo4j Desktop runs on OS X, Linux, and Windows.

Steps for setting up your development environment for this course using Neo4j Desktop

Here is an overview of the steps you will perform to set up your development environment using Neo4j Desktop:

1. **Getting Started with Neo4j Desktop (follow along in video)**:

   a. Download Neo4j Desktop.

      i. View/save the installation instructions.

   b. Install Neo4j Desktop.

   c. In a project, create a local graph (database) you will use for this course.

   d. Start the graph.

Getting Started with Neo4j Desktop

Follow along with one of these videos and perform the same tasks to download, install and get started using Neo4j Desktop.

If using OS X:

https://youtu.be/pPhJi9twN9Q

If using Linux:

https://youtu.be/qyu1IHiJh-c

If using Windows:

https://youtu.be/V8rxwhoxfDw

Note: Before you install on Windows, make sure you have the latest version of PowerShell installed.

Step 1: Option 2: Using Neo4j Aura

You must create a Neo4j Aura account at https://console.neo4j.io before coming to class.

Follow along with this video that shows how to create a database for use with this course in Neo4j Aura:

https://youtu.be/lnoxoAsWguM

Step 1: Option 3: Using a Neo4j Sandbox

You must create a Neo4j Sandbox account at https://neo4j.com/sandbox-v2 before coming to class. In addition, you must create a Blank Neo4j Sandbox instance before coming to class. Keep in mind that a sandbox exists for at most 10 days.

Follow along with this video that shows how to create a Neo4j Sandbox account and a Neo4j Sandbox instance for this course:
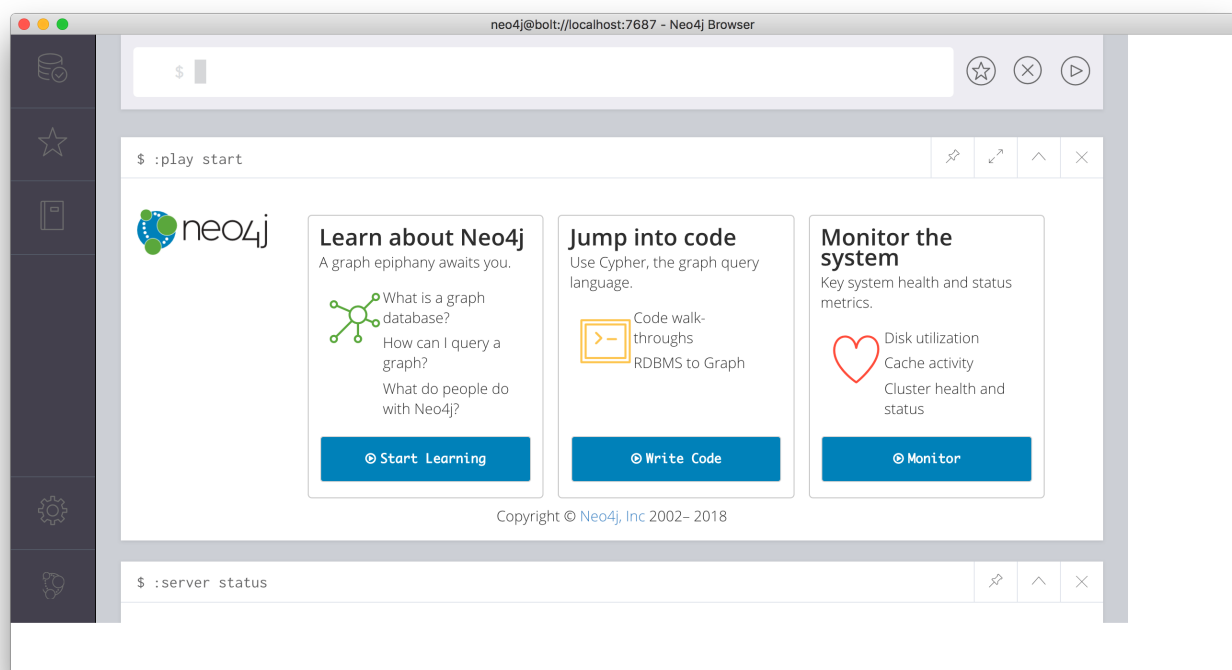
https://youtu.be/rmfgRKPjhl8

Step 2: Use Neo4j Browser to confirm that you can access the database

Neo4j Browser is a tool that enables you to access a Neo4j Database by executing Cypher statements to create or update data in the graph and to query the graph to return data. The data returned is typically visualized as nodes and relationships in a graph, but can also be displayed as tables. In addition to executing Cypher statements, you can execute a number of system calls that are related to the database being accessed by the Browser. For example, you can retrieve the list of queries that are currently running in the server.

There are two ways that you can use Neo4j Browser functionality:

- Use the Neo4j Browser Web interface from Neo4j Aura or Neo4j Sandbox.
- Open the Neo4j Browser application from Neo4j Desktop (database is local).

Getting Started with Neo4j Browser

Follow along with this video and perform the same tasks to become familiar with common tasks in Neo4j Browser and populate the graph that is used for training with the movie data.

Note: Before you perform the tasks shown in this video, you must have done **one** of the following:

- Created and started a database in Neo4j Desktop (Option 1).
- Created a database in Neo4j Aura (Option 2).
- Created a Blank Neo4j Sandbox (Option 3).

https://www.youtube.com/embed/rQTximyaETA?rel=0

Step 3: Prepare the database for use with this course.

In Neo4j Browser where you are connected to the database and have loaded the movie data.

Execute this Cypher statement:

```
MATCH (n) RETURN count(n)
```

If this query returns **171**, then you have successfully accessed the database and created sample data.

Next, enter this statement in Neo4j Browser to empty the database as you will start with an empty database for this course.

Execute this Cypher statement:

```
MATCH (n) DETACH DELETE n
```

Step 4: Download the course files.

You may not need all of these files for your course work, but it is a good idea to have them on your system. Download these files:

advanced-cypher.zip

advanced-cypher-exercises.pdf

Getting help

If you have problems with setting up your Neo4j development environment, you can join Neo4j Community and ask a question here.