

# Introducing Neo4j

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**pluralsight**   
hardcore dev and IT training

# Agenda

What is Neo4j?

Installing Neo4j

Neo4j's Graph

Getting Started

Neo4j's Editions

Settings

# What Is Neo4j?



ACID  
Graph db

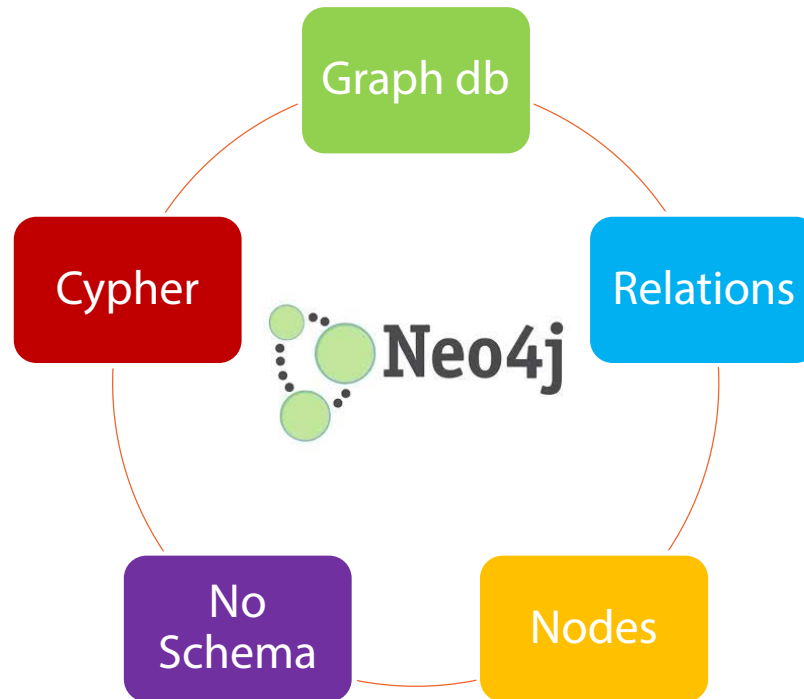
Java

Enterprise  
features

Billions of  
Entities

Rest API

# What Is Neo4j?

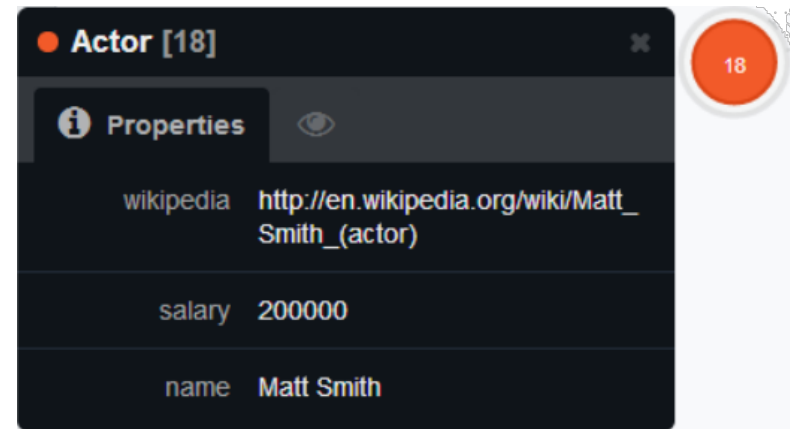


# Neo4j Editions

	Community	Enterprise	Startup	Personal
Database Platform				
Core Graph Database Features	X	X	X	X
Maintenance Releases & Schedule Fixes	-	X	X	X
Emergency Patches	-	Available	-	-
Support				
Commercial Email Support	-	X	X	-
Commercial Phone Support	-	X	X	-
Support Hours	-	Up to 24 x 7	10 x 5	-
Performance & Scalability Features				
Enterprise and Lock Manager	-	X	X	X
High-Performance Cache	-	X	X	X
Clustering	-	X	X	X
Hot Backups	-	X	X	X
Advanced Monitoring	-	X	X	X

# Building Block 1: Node

- Schemaless **entities**/objects
- Contain **properties**
  - Key = string
  - Value = primitive data type
  - Indexing
  - Unique Constraint
- Can have **labels**

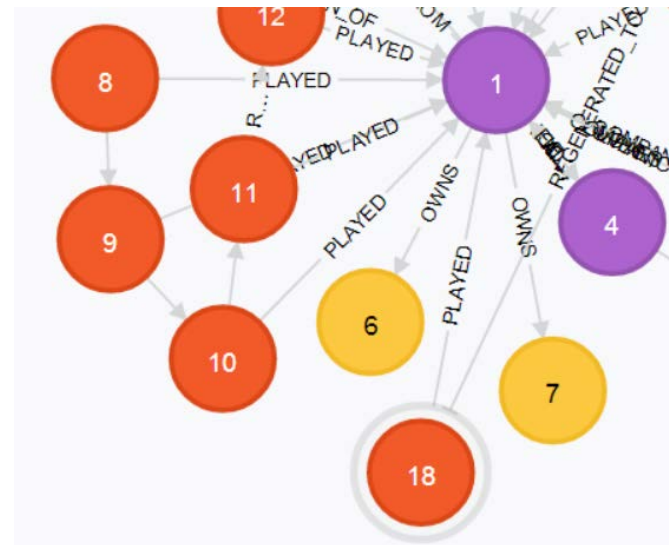


# Data Types

- boolean (true/false)
- byte (8 bits)
- short (16 bits)
- int (32 bits)
- long (64 bits)
  - Set implicitly
  - Automatic conversion when updating
  - No nulls
- float (32 bits)
- double (64 bits)
- char (Unicode)
- string (Unicode)
- arrays

# Building Block 2: Relationships

- **Connect** nodes
- **Are directed**
- **Are named**
- **Can contain properties**
  - Same as in node





# Installing Neo4j

- Community Edition great way to start
- Need **JDK**

## Windows

- Desktop app (installer)
- Console app
- Windows service

## Linux

- Unix console app
- Linux service

## Mac OSX

- Homebrew
- Terminal
- OSX service

## **Demo: Installing Neo4j on Windows**

# **Demo: Getting Started**

## **Demo: Settings**

# Summary

- Neo4j is a reliable graph database implemented in Java with enterprise features and a REST API.
- It uses the property graph model and is by default schemaless.
- Cypher is what Neo4j uses as it's primary query language.
- The community edition is free and open source.
- Enterprise features are available in the other editions.
- The properties of a node have an implicit data type when set with a query and support indexing and a unique constraint.
- Relationships implement the same properties.
- Neo4j can be installed as a desktop app (Windows only), command line app and as a service.
- Neo4j is configurable using text files.

# What's Next?

- Cypher