openCypher versioning

Mats Rydberg
mats@neo4j.org
Background

• Cypher versions follow Neo4j versions
  • Latest is 3.2, soon 3.3
• When openCypher project was started, some features were excluded
  • Standardisation Scope

Since some version numbers are already occupied, we suggest a jump by a factor 10...
Proposal

- Version Cypher as implemented in Neo4j filtered by Standardisation Scope as Cypher 9
  - The Neo4j Cypher manual
  - CIPs
- Current work in the oCIG will lead to a release of Cypher 10
  - First release to include a natural language specification
  - Before Midsummer 2018 (2018-06-22)
  - Multiple Graphs, Compositionality, Subqueries, etc
Release frequency

- 1-2 years between releases
  - *Cypher 11* sometime 2019-20
    - Path patterns
- Corrections to versions are labeled with trailing letters
  - 10a, 10b, etc
Conformance

Conformance to the standard would always be based on a baseline version, amended by selected CIPs or based on a *profile*.

A profile describes a useful subset of the baseline.

- Example: Cypher 9 read-only
- Example: Cypher 9 with multiple graphs
- Example: Cypher 9 with CIP 2017-06-03
- Example: Cypher 10 without subqueries
Summary of release process

• Each major release contains a baseline specification
• The next major release is developed through CIPs which describe changes with respect to the previous baseline
• When the next major release is cut, the CIPs are condensed into an updated version of the specification
• When a CIP is accepted, a snapshot version of Cypher is implicitly created (deviation from last baseline)