RedisGraph 2.8 release notes

Requirements
RedisGraph v2.8.11 requires:

- Minimum Redis compatibility version (database): 6.2.0
- Minimum Redis Enterprise Software version (cluster): 6.2.8

v2.8.11 (March 2022)
This is a maintenance release for RedisGraph 2.8.
Update urgency: HIGH: There is a critical bug that may affect a subset of users. Upgrade!
Details:
  - Bug fixes:
    - #2259, #2258 Fix memory leak and potential crash on RDB saving

v2.8.10 (March 2022)
This is a maintenance release for RedisGraph 2.8.
Update urgency: HIGH: There is a critical bug that may affect a subset of users. Upgrade!
Details:
  - Features:
    - #2245 Support graphs eviction
  - Bug fixes:
    - #1493, #2240 Fixed crash on certain queries
    - #2229, #2222 Fixed crash on certain queries
    - #2209, #2228 Fixed crash on certain invalid DELETE queries
    - #2237, #2242 Fixed crash on certain PROFILE queries
    - #2230, #2232 Fixed wrong number of reported deleted relationships on certain queries
    - #2233 Certain valid queries were reported invalid
    - #2246 Fixed memory leaks
  - Improvements:
    - #2235 Improved RDB loading performance

v2.8.9 (March 2022)
This is a maintenance release for RedisGraph 2.8.
Update urgency: MODERATE: Program an upgrade of the server, but it's not urgent.
Details:
Features:

- #2181, #2182 Full support for ARM builds

Bug fixes:

- #2167 Fixed a potential crash: filter placement in OPTIONAL subtrees
- #2176 Fixed a potential crash: invalid memory access in nested DISTINCT functions
- #2217 Fixed a potential crash: memory access after free on FLUSHALL
- #2207 Fixed memory leak when MAX_QUEUED_QUERIES is used
- #2220 WITH * WHERE - the WHERE filters were ignored
- #2151 Return correct results for aggregations with no inputs
- #2163 Emit error correctly on multi-query inputs

Improvements:

- #2173 Improve performance of breadth-first search

v2.8.8 (February 2022)

This is the General Availability release of RedisGraph 2.8.

Highlights

RedisGraph 2.8 introduces multi-labeled nodes, indexes over relationship properties, additional expressivity (construct, functions, and operators), major performance enhancements, and many bug fixes.

What's new in 2.8

- Multi-labeled nodes
- Indexes over relationship properties
- Enhanced full-text search
- Delta matrices: node and relationships additions and deletions are much faster, as they are first updated in small delta matrices. The main matrices are then bulk-updated.
- Additional Cypher construct, functions, and operators
- RediSearch 2.2.7
- SuiteSparse (GraphBLAS) 6.0.0

Details

- Features (since 2.8-M02):
  - #2109 Introduce allShortestPaths BFS function
  - #2099 Introduce keys function
  - #2047 Introduce reduce function
  - #2076 Introduce XOR operation in filter trees
  - #2088 Introduce pattern comprehensions
  - #2051 Allow copying of entity attribute sets in SET clauses
  - #2067 Allow modification of virtual key entity count (VKEY_MAX_ENTITY_COUNT) at runtime
  - #2102 New load time configuration option NODE_CREATION_BUFFER - see documentation (MOD-2348)
  - #2049 RediSearch supports field definitions

- Performance improvements (since 2.8-M02):
  - #2097 Locks favor writers to prevent write exhaustion
  - #1945 Track node count per label in graph statistics
Delta matrices are always hypersparse
Matrix sync policies reduce the number of syncs required
Transposed matrices are always boolean
Entity annotation has been replaced with an AST toString function
Slowlog queries no longer create graphs
Index graph entities incrementally on restore
Faster AOF recovery (PM-1252)

Bug fixes (since 2.8-M02):

Implement new BFS algorithm
Creating a node with multiple properties using the same key only accepts the last value
Avoid arithmetic overflow in avg function
Modulo by zero emits division by zero error
Fix evaluation of variable-length edges in expression ordering
Fix utilization of record offset in procedure calls, refactor outputs
Update label for every node in the AST
Use operand matrix when available
Emit error on a query that only contains parameters
Print ExecutionPlan in GRAPH. EXPLAIN only if no errors are encountered in the construction
Free thread-local data on graph deletion
Fix crash in index utilization using wrong query_graph
Fix crash in index utilization
Avoid serialization of duplicate graph keys
Numeric indices no longer lose precision on very large values
CRLF sequences embedded in strings no longer trigger a protocol error when being emitted
Fix crash when trying to retrieve an out-of-bounds item
Fix crash when matching a node engages an index to search for a value that is a RediSearch stop word

This is the first GA version of 2.8. The version inside Redis will be 2.8.8 in semantic versioning. Since the version of a module in Redis is numeric, we could not add a GA flag.

Minimum Redis version: 6.2

Updated: March 31, 2022