RedisBloom 2.2 release notes

Requirements
RedisBloom v2.2.15 requires:

- Minimum Redis compatibility version (database): 4.0.0
- Minimum Redis Enterprise Software version (cluster): 5.0.0

v2.2.15 (May 2022)
This is a maintenance release for RedisBloom 2.2.
Update urgency: None.
Details:

- Enhancements:
  
  - Added support for RedisBloom for AArch64 Linux

v2.2.14 (March 2022)
This is a maintenance release for RedisBloom 2.2.
Update urgency: MODERATE: Program an upgrade of the server, but it’s not urgent.
Details:

- Bug fixes:

  - #419 CMS . INCRBY now returns an error on overflow
  - #412 Fixed macOS build

v2.2.12 (February 2022)
This is a maintenance release for RedisBloom 2.2.
Update urgency: MODERATE: Program an upgrade of the server, but it’s not urgent.
Details:

- Bug fixes:

  - #392 Fixed a potential crash on Bloom filter expansion when loading from AOF
  - #404 Fixed a potential crash on Cuckoo filter when calling CF . LOADCHUNK on a filter with EXPANSION greater than 1

v2.2.9 (November 2021)
This is a maintenance release for RedisBloom 2.2.
Update urgency: MODERATE: Program an upgrade of the server, but it's not urgent.

Details:

- Bug fixes:
  - #281 Memory leak when loading TOPK keys from RDB.
  - #303 CMS.INCRBY for negative or non-number
  - #354 TOPK List Duplicate entries
  - #369 Free only latest filter on CF.COMPACT
  - #371 CF.SCANDUMP for cuckoo filter
  - #374 ReplicateVerbatim for CF.LOADCHUNK (similar to #309)
- Improvements:
  - #331 Add WITHCOUNT flag to TOPK.LIST

v2.2.6 (August 2021)

This is a maintenance release for version 1.0.

Update urgency: LOW - No need to upgrade unless there are new features you want to use.

Details:

- Enhancements:
  - #333 Support inter shards TLS capability

v2.2.4 (July 2020)

Headlines:

- This release improves overall stability and provides fixes for found issues.

Details:

- Bug fixes:
  - #215 Count-Min-Sketch CMS.INCRBY command to reply with correct min result.
  - #219 Cuckoo Filter CF.DEBUG correct response formatting.

v2.2.3 (July 2020)

Headlines:

- This release improves overall stability and provides fixes for found issues.

Details:

- Bug fixes:
  - #217 Client hung on BF.INSERT with multiple new items when a non-scaling filter is full.

v2.2.2 (March 2020)
Headlines:

- This release improves overall stability and provides fixes for issues found after the previous release.

Details:

- Minor enhancements:
  - Bloom
    - #180 Removed the upper limit on Bloom Filter capacity.

v2.2.1 (January 2020)

Headlines:

- This release improves overall stability and provides fixes for issues found after the previous release.

Details:

- Minor Enhancements:
  - Bloom
    - #179 Allow storing filters with size over 4294967295 (UINT32_MAX). Now 64 bits.
    - #177 Prevent passing both EXPANSION and NONSCALING parameters to BF . RESERVE.

v2.2.0 (December 2019)

- Added functionality
  - Bloom
    - #149 BF . INFO returns details about a specific bloom filter
  - Scalable
    - #153 Ability to change the EXPANSION rate. This means each subsequent sub-filter will be expansion times larger as the previous one.
    - #160 Optimise the scaling up of filter according to the Scalable Bloom Filter paper
    - #161 Optional NONSCALING argument to disable scaling. (This saves space since less hash functions are used)
    - #155 Disabling rounding up functionality
  - Cuckoo
    - #149 CF . INFO returns details about a specific cuckoo filter
  - Scalable
    - #138 Configurable EXPANSION. When an additional filter is created, its size will be the size of the current filter multiplied by the expansion. Higher expansion rates will result in lower error rates.
    - #142 The maximum number of expansions limited to 32.
    - #131 Configurable MAXITERATIONS. Number of attempts to swap buckets before declaring filter as full and creating an additional filter.
    - #135 Configurable BUCKETSIZ E. Number of items in each bucket. Higher bucket size value improves the fill rate but result in a higher error rate and slightly slower operation speed.
  - #142 use of 64bit hash function
  - #136 expose compaction of filters in the API
  - CMS
    - #97 CMS . INCRBY returns count instead of ‘OK’

- Minor bug fixes
  - Bloom
    - #154 Check error rate is 1< (cannot be equal)
  - Cuckoo
- #134 Added CuckooInsert_MemAllocFailed exception
- #130 Number of deletes wasn't saved to RDB
- General
  - #117 Using RMUtil_RegisterWriteDenyOOMCmd
  - #121 Moved ReplicaVerbatim to end of functions

Updated: May 16, 2022