Redis Enterprise Pack 4.5 Release Notes (May 2017)

If you are upgrading from a previous version, make sure to review the upgrade instructions before beginning the upgrade process.

You can upgrade to this version from any 4.4 version. If you have a version older than 4.4 you must first upgrade to 4.4 or higher, and only then upgrade to this version.

New features

The new discovery service with support for Redis Sentinel API

The Discovery Service provides an IP-based connection management service used when connecting to Redis Enterprise Pack databases. When used in conjunction with Redis Enterprise Pack's other high availability features, the Discovery Service assists an application cope with topology changes such as adding, removing of nodes, node failovers and so on. It does this by providing your application with the ability to easily discover which node hosts the database endpoint. The API used for discovery service is compliant with the Redis Sentinel API.

Discovery Service is an alternative for applications that do not want to depend on DNS name resolution for their connectivity. Discovery Service and DNS based connectivity are not mutually exclusive. They can be used side by side in a given cluster where some clients can use Discovery Service based connection while others can use DNS name resolution when connecting to databases.

Building large databases with RAM and Flash memory in Redis on Flash v2.0

With Redis Enterprise Pack 4.5, Redis on Flash v2 is production ready. RFv2 brings performance, reliability, and stability enhancements as well as many features customers have been waiting for.

Redis on Flash (RoF) offers users of Redis Enterprise Pack and Redis Enterprise Cloud Private the unique ability to operate a Redis database that spans both RAM and flash memory (SSD), but remains separate from Redis Enterprise Pack’s persistence mechanisms. Whilst keys are always stored in RAM, RoF intelligently manages the location of their values (RAM vs Flash) in the database via a LRU-based (least-recently-used) mechanism. Hot values will be in RAM and infrequently used, while warm values will be ejected to flash memory. This enables you to have much larger datasets with RAM-like latency and performance, but at dramatically lower cost than an all-RAM database.

Additional capabilities

Support for additional Redis commands and features:

- The Redis TOUCH command is now supported
- Redis version upgraded to 3.2.8
- Support for OBJECT in Lua scripts

Support has been added RHEL 7.3 with this version.

Important fixes

- RP10106 - SSL Certificate should not need to be signed with a stronger hashing algorithm to be accepted
- RP10465 - failover times can be higher under certain scenarios in local watchdog profile
- RP10633 - Improve install.sh and answers file
- RP11880 - Improved slave sync and add node robustness
- RP8689 - Minimized impact when changing RAM-Flash limit on Redis Enterprise Flash
- RP12063 - Improved Redis Flash data import/population performance
- RP11608 - Improvements to databases.txt creation in support package
- RP11941 - Eliminated warning and errors during upgrade on RHEL6 with leash and python2.6 is installed
- RP11994 - Databases under certain cases may not display in UI even though they are in the cluster metadata and safely operating.
- RP12438 - Email alerts with Amazon SES may fail under certain conditions.
- RP12538 - Redis failover was initiated by node_wd during sync to new slave
- RP10264 - Improved debuginfo package for better supportability

Important fixes in RP 4.5.0-22
- RP12667 - NGINX security improvements, improved TLS and SSL related warnings on security scans.
- RP12690 - Added simpler ability to recover cluster from AWS S3
- RP13359 - Advanced memory allocation and booking enhancements

Important fixes in RP 4.5.0-31
- RP13060 - Client may experience reconnect issues after failover of the endpoint.
- RP13711 - Disabling IPv6 may cause startup of node services to fail (NGINX) on RHEL 7
- RP12747 - Calculation can be incorrect for memory quota for databases

Important fixes in RP 4.5.0-35
- RP12844 - cnm_exec crashes on “not enough arguments for format string”

Important fixes in RP 4.5.0-43
- RP9846 - In UI, Used Memory may show incorrect values
- RP12211 - UI fails import from a Redis OSS DB with password
- RP13356 - Enable failover when license expires
- RP14692 - rladmin status command may crash during backup
- RP14541 - In rare cases, DMC log grew quickly and caused stability issues
- RP15107 - When using Redis on Flash, it may cause DMC proxy crashes

Important fixes in RP 4.5.0-47
- Multiple important Redis on Flash updates.

Important fixes in RP 4.5.0-51
- 15161 - Make Unix socket folder configurable at install time
- 15164 - Make Unix socket folder configurable at build time
- 16082 - Make Unix socket folder configurable at runtime
- Fixed an issue where on import of data, TTL information was set incorrectly

Updated: June 16, 2021