Redis Enterprise Pack 5.0 Release Notes (November 2017)

Redis Enterprise Software 5.0 is now available. Key features include Geo-Distributed Active-Active Conflict-free Replicated Databases (CRDB), LDAP integration, Redis Module integration, and support for the Redis Cluster API.

Overview

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

You can upgrade to RS 5.0 from RS 4.4.2 and above. If you have a version older than this, you must first upgrade to at least 4.4.2.

New features

Support for Redis Cluster API

The Redis Cluster API support in Redis Enterprise Software (RS) provides a simple mechanism for Cluster enabled Redis clients to learn and know the cluster topology. This enables clients to connect directly to an RS proxy on the node hosting the master shard for the data being operated on. The result is that for all but the initial call to get the cluster topology or reacquire the location of the master shard, the client will connect to the RS endpoint proxy where the master shard is located. Learn more about the Cluster API implementation.

Geo-distributed Active-Active conflict-free replicated databases (CRDB)

Developing globally distributed applications can be challenging, as developers have to think about race conditions and complex combinations of events under geo-failovers and cross-region write conflicts. CRDBs simplify developing such applications by directly using built-in smarts for handling conflicting writes based on the data type in use. Instead of depending on just simplistic “last-writer-wins” type conflict resolution, geo-distributed CRDBs combines techniques defined in CRDT (conflict-free replicated data types) research with Redis types to provide smart and automatic conflict resolution based on the data type’s intent.

For more information, go here. For information, go to Developing with CRDBs.

Redis modules

Redis Modules enable you to extend the functionality of Redis Enterprise Pack. One can add new data types, capabilities, etc. to tailor the cluster to a specific use case or need. Once installed, modules benefit from the high performance, scalability, and high availability that Redis Enterprise is known for.

Redis has developed and certified the following modules for use with Redis Enterprise Pack:

- **RedisSearch**
  - This module turns RS into a supercharged distributed in-memory full-text indexing and search beast.

- **ReJSON**
  - Now you have the convenience JSON as a built-in data type and easily able to address nested data via a path.

- **RedisBloom**
  - Enables RS to have a scalable bloom filter as a data type. Bloom filters are probabilistic data structures that quickly determine if values are in a set.
Custom modules

In addition, Redis Enterprise Pack provides the ability to load and use custom Redis modules or of your own creation.

Support for Docker

Deploying and running your Redis Enterprise Software cluster on Docker containers is supported in development systems and available to pull from Docker hub. With the official image, you can easily and quickly test several containers to build the scalable and highly available cluster Redis Enterprise Software is famous for.

For more information, go to quick start with Redis Enterprise on Docker.

LDAP Integration

As part of our continued emphasis on security, administrative user accounts in Redis Enterprise Pack can now use either built-in authentication or authenticate externally via LDAP with saslauthd. The accounts can be used for administering resources on the cluster via command line, Rest API, or admin console.

For more information see LDAP Integration.

Additional capabilities

Support for additional Redis commands and features:

- Support for Redis version 4.0.2
- Support added for RHEL/CentOS 6.9 and 7.4

Information

- In the node bootstrap API, the structure of the JSON has changed for adding an external IP during the bootstrap process.
- End-of-Life for RHEL/CentOS 6.5 and 6.6 have been reached, so those versions are no longer supported.
- Modules are not supported in Redis Enterprise Pack 5.0 for RHEL/CentOS 6.x

Important fixes

5.0.0-31

- RP9299 - Issue with reliability of metric ingress
- RP9680 - Redis Enterprise Pack starting before /etc/rc.local script executed
- RP12363 - In some cases, flash drives do not mount following a stop/start of the node
- RP12493 - Allow change to debug package creation location
- RP13079 - DNS doesn’t change after having removed the external IP address in some cases
- RP13933 - rladmin balance sometimes shows incorrect information
- RP14060 - pubsub stats aren’t reflected correctly by the stats archiver
- RP14939 - Add license checks to all needed entry points in the cluster
- RP15090 - Problem in log rotate script causes other logs to not rotate
- RP15104 - rlutil check fix doesn’t work sometimes
- RP15130 - Fixed permission on two logs with incorrect ownership
- RP15160 - Allow option to change ports for API and CM in NGINX
- RP15164 - Allow unix socket folder to be configurable at build time
- RP15499 - rladmin command not responding on a cluster with large number of shards
- RP15853 - When trying to add a new db the ‘activate’ button was changed to ‘update’ and was grayed out.
- RP15861 - Allow unix socket folder to be configurable at install time
- RP16115 - TTL bug with Replica Of and import
- RP16447 - DMC client connection reports incorrect number of connections to monitoring applications.
- RP16481 - In some cases, resource_mgr uses incorrect directories to compute persistent and ephemeral storage

**Updated:** April 14, 2022