# 1.1. 3.3.x Branch

- Version 3.3.3
- Version 3.3.2
- Version 3.3.1
- Version 3.3.0

# 1.1.1. Version 3.3.3

### 1.1.1.1. Features and Enhancements

- #4623: Handle replicator instance start time during upgrades better.
- #4653: Fix the ability to use ; in config values.
- #4626: Fix purge infos replicating to the wrong shards during shard splitting.
- #4669: Make it possible to override [replicator] valid\_socket\_options with more than two items.
- #4670: Allow setting of some ibrowse replication options such as {prefer\_ipv6, true}.
- #4679: Fix multipart parser "attachment longer than expected" error. Previously there was a small chance attachments were not replicated.
- #4680: Allow restarting failed shard splitting jobs.
- #4722: Fix badmatch error when purge requests time out.
- #4736: Stop client process and clean up if client disconnects when processing streaming requests.
- #4758: Remove sensitive headers from the mochiweb request in process dictionary. This should prevent sensitive headers leaking into logs when a request process crashes.
- #4784: Extract the correct node name from <code>ERL\_FLAGS</code> in <code>remsh</code>.
- #4794: Fix incorrect raising of database\_does\_not\_exist error.
- #4821: Wait for compacted indexes to flip. Previously, a timeout during compact file flips could lead to crashes and a subsequent recompaction.
- #4837: Fix update bug in ets\_Iru.
- #4847: Require auth for \_replicate endpoint.
- #4878: Add an option to scrub some sensitive headers from external json requests.

### 1.1.2. Version 3.3.2

### 1.1.2.1. Features and Enhancements

- #4529: In Javascript process manager, use a database tag in addition to a ddoc ID to quickly find processes. This should improve performance.
- #4509, #4405: Make remsh work with guoted cookie values.
- #4473: Avoid re-compiling filter view functions. This could speed up Javascript filter functions.
- #4412: Remove Javascript json2 script and the try/except clause around seal.
- #4513: Allow configurable timeouts for \_view and \_search . Search timeouts can be specified as [fabric] search\_timeout and [fabric] search\_permsg . View per-message timeout can be configured as [fabric] view\_permsg\_timeout .
- #4438: Proxy auth can now use one of the configured hash algorithms from chttpd\_auth/ hash\_algorithms to decode authentication tokens.
- #4370: Ensure design docs are uploaded individually when replicating with \_bulk\_get . This restores previous behavior before version 3.3.0.
- #4416: Allow \_local doc writes to the replicator dbs. Previously this issue prevented replicating the replicator db itself, since checkpointing was not working properly.

- #4363: Fix replication \_scheduler/docs "total\_rows" value.
- #4380: Be more defensive about SpiderMonkey location. An error should be emitted early if the Spidermonkey library cannot be found.
- #4388: Bump recon to 2.5.3. See the changelog for more details.
- #4476, #4515, #4490, #4350, #4379: Various documentation cleanups and fixes.
- Fix for CVE-2023-26268.

# 1.1.3. Version 3.3.1

### 1.1.3.1. Features and Enhancements

- #4343, #4344, #4345: Fix undef when parsing replication doc body with a user\_ctx.
- #4346: Add make target to find undef errors.
- #4347: Remove failed couch\_plugins experiment, fixes more undef errors.
- #4348: Fix undef error in weatherreport.
- #4353: Allow starting of more than one replication job. (D'OH!)

## 1.1.4. Version 3.3.0

# 1.1.4.1. Highlights

• #4308: Replicator was optimized and should be faster. It now uses the \_bulk\_get endpoint on the source, and can statistically skip calling \_revs\_diff on the target. Benchmark tests replicating 1M documents, 10KB each, from UK to US East show a 3x speed improvement.

### 1.1.4.2. Features and Enhancements

- #3766, #3970, #3972, #4093, #4102, #4104, #4110, #4111, #4114, #4245, #4246:, #4266:

  Add smoosh queue persistence. This allows resuming smoosh operations after a node restart.

  This is disabled by default and can be enabled with [smoosh] persist = true. Optimise smoosh operations and increase test coverage to 90%.
- #3798: Add libicu version and collation algorithm version to /\_node/{node-name}/\_versions.
- #3837: The Erlang source tree is now auto-formatted with erlfmt.
- #3845: Clean up the couch\_ejson\_compare C-module and squash Microsoft compiler warnings.
- #3832: Add GET variant to \_dbs\_info endpoint, used to be POST only.
- #3864: Improve erlang\_ls configuration.
- #3853: Remove legacy ddoc\_cache\_opener gen\_server and speed up event routing.
- #3879: Remove use of ERL\_OPTS environment variable. All supported Erlang versions now use ERL\_COMPILER\_OPTIONS for the same purpose.
- #3883: Add support for SpiderMonkey 91.
- #3889: Track libicu collator versions in the view header.
- #3952: Make the timeout for receiving requests from attachment writers configurable.
- #3927: Include index signature in \_search\_info .
- #3963: Optimtize key tree stemming by using maps instead of sets. This greatly reduced memory usage for heavily conflicted docs in some situations.
- #3974: Create new config options in [couchdb] and [smoosh] sections to enable finer control of compaction logging levels.
- #3983, #3984, #3985, #3987, #4033: Add various functions to couch\_debug module.
- #4000: Ensure Object.prototype.toSource() is always available.
- #4018: Update jiffy to 1.1.1 and b64url to 1.0.3.
- #4021: Reduce smoosh compaction log level to debug.
- #4041: Allow and evaluate nested json claim roles in JWT token.
- #4060, #4290: Add support for Erlang 25.

- #4064: Enable replicating purge requests between nodes. Also avoid applying interactive purges more than once.
- #4069, #4084: Drop support for Erlang < 23, update vm.args settings to match. Review this if you have customized your vm.args.
- #4083: Support Elixir 13.
- #4085: Add an option to let custodian always use [cluster] n value.
- #4095: Implement winning\_revs\_only option for the replicator. It replicates only the winning revisions from the source to the target, effectively discarding conflicts.
- #4135: Separate search IO from file IO.
- #4140, #4162: Upgrade hash algorithm for cookie auth (sha1 -> sha256). This introduces a new config setting hash\_algorithms. New cookie values are hashed with sha256, sha1 hashes are still accepted. Admins can set this to sha256 only. Sha1 will be disallowed in the next major release. Show supported hash algorithms in /\_node/{node-name}/\_versions endpoint.
- #4179: Don't double-encode changes sequence strings in the replicator.
- #4182: Explicitly maintain a fully connected cluster. Previously, it was possible for the nodes to disconnect, and for that state to persist until the nodes restarted.
- #4198: Redact passwords in log file.
- #4243: Update mochiweb to 3.1.1.
- #4254: The \_dbs\_info access control is now configured with the \_[couchdb] admin\_only\_all\_dbs setting. Defaults to true. This was a leftover from the 3.0.0 release.
- #4264: active database sizes is now limited to leaf nodes. Previously, it included intermediate tree nodes, which had the effect that deleting (large) documents did not decrease active database size. In addition, smooth now picks up databases where large documents are deleted for compaction more eagerly, reclaiming the deleted space quicker.
- #4270: Shard splitting now uses its own reshard IO priority. It can be configured to be safely run in the background with production loads, or with maximum IO available, if admins prefer quicker progress.
- #4274: Improve validation of replicator job parameters & move \_replicator VDU design doc to internal BDU.
- #4280: Add CFLAGS and LDFLAGS to ICU build parameters.
- #4284: Remove all usage of global to avoid potential deadlocks in replication jobs.
- #4287: Allow = in config key names.
- #4306: Fauxton was updated to version v1.2.9. Changes since v1.2.8 can be found here
- #4317: Write "Relax" welcome message to standard out on Windows.

#### 1.1.4.3. Performance

- #3860: Add sharding to <a href="mailto:couch\_index\_server">couch\_index\_server</a>, similar to #3366, avoids processing bottlenecks on servers with a lot of concurrent view indexing going on.
- #3891: Avoid decoding JWT payloads when not necessary.
- #4031: Default [rexi] use\_kill\_all to true . This improves intra-cluster-node messaging. Set to false if you run a cluster with nodes that have a version <3.0.0.
- #4052: Optimise couch\_util:reorder\_results/2,3, which speeds up \_bulk\_docs and \_revs\_diff.
- #4055: Avoid using length/1 guard for >0 or ==0 tests in couch\_key\_tree.
- #4056: Optimise couch\_key\_tree:find\_missing/2 . This speeds up \_revs\_diff .
- #4059: Reduce complexity of possible\_ancestors from quadratic to linear. This speeds up working with heavily conflicted documents significantly.
- #4091: Optimise <a href="couch\_util:to\_hex/1">couch\_util:to\_hex/1</a>, this speeds up all operations that need to encode a revision id into JSON (this is most operations).
- #4106: Set io\_priority in all IO paths. Introduces system io\_priority.
- #4144, #4172: Implement \_bulk\_get support for the replicator. Backward compatibility is ensured. This speeds up all replications. Add option to disable new behaviour for legacy setups.

- #4163: Statistically skip <u>revs\_diff</u> in the replicator. This improves performance for replications into empty targets.
- #4177: Remove the long deprecated bigcouch 0.4 change sequence support.
- #4238: Optimise \_bulk\_get endpoint. This speeds up replication of 1M docs by ~2x. Individual \_bulk\_get requests are up to 8x faster.
- #3517: Add experimental fix for reduce performance regression due to expensive repeated AST-transformations on newer SpiderMonkey versions. Set COUCHDB\_QUERY\_SERVER\_JAVASCRIPT env var to COUCHDB\_QUERY\_SERVER\_JAVASCRIPT="/opt/couchdb/bin/couchjs /opt/couchdb/share/server/main-ast-bypass.js".
- #4262: couchjs executable built against Spidermonkey >= 78 will return the detailed major.minor.patch as opposed to just the major version as previously.

### **1.1.4.4. Bugfixes**

- #3817: Fix undefined function call in weatherreport .
- #3819: Return 400 instead of 500 response code for known invalid \_bulk\_docs with new\_edits=false request.
- #3861: Add SameSite setting when clearing session cookies.
- #3863: Fix custom TLS distribution for Erlang 20.
- #3870: Always send all cookie attributes.
- #3886: Avoid changes feed rewind after shard move with no subsequent db updates.
- #3888: Make \_stats endpoint resilient against nodes that go offline.
- #3901: Use db-creation time instead of 0 for instance\_start\_time to help replicator recognise whether a peer database was deleted and recreated.
- #3909: Fix new\_edits:false and VDU function\_clause.
- #3934: Fix replicated\_changes typo for purge doc updates.
- #3940: Ensure the multipart parser always monitors the worker and make sure to wait for attachment uploads before responding.
- #3950: Ignore responses from timed-out or retried ibrowse calls.
- #3969: Fix skip and limit for \_all\_dbs and \_dbs\_info.
- #3979: Correctly respond with a 500 code when document updates time out under heavy load.
- #3992: Show that Search is available if it was available before. Avoid Search availability disappearing just because a Search node was temporarily not available.
- #3993: Return a 400 error when decoding a JWT token fails, rather than crashing and not responding at all.
- #3990: Prevent creation of ddocs with no name through Mango index creation.
- #4003: Improve index building during shard splitting.
- #4016: Fix function\_clause error for replicated changes with a target VDU.
- #4020: Fix maybe\_handle\_error clauses.
- #4037: Fix ES{256,384,512} support for JWTs.
- #4040: Handle exit(shutdown) error in chttpd.
- #4043: Fix purge request timeouts (5s -> infinity).
- #4146: The devcontainer has been updated.
- #4050: Handle all\_dbs\_active in fabric\_doc\_update.
- #4160: Return a proper 400 error when an invalid object is sent to \_bulk\_get .
- #4070: Prevent error: function\_clause in check\_security/3 if roles claim is malformed.
- #4075: Fix couch\_debug:opened\_files\* functions.
- #4108: Trim X-Auth-CouchDB-Roles header after reading.
- #4153: The require\_valid\_user setting is now under chttpd.
- #4161: Fix content-type handling in \_session .
- #4176: Fix eventsource \_changes feed.
- #4197: Support large (and impractical as-of-yet) q values. Fix shard open timeouts for q > 64.

- #4199: Fix spurious unlock in close\_db\_if\_idle.
- #4230: Avoid refresh messages piling up in prometheus server.
- #4240: Implement global password hasher process. This fixes a race-condition when setting new admin passwords in quick succession on a multicore server.
- #4261, #4271: Clean up stale view checkpoints, improve purge client cleanup logging
- #4272: Kill all couch\_server\_N if database\_dir changes.
- #4313: Use <a href="httpd">chttpd</a> config section when patching local <a href="httpd">\_replicate</a> endpoints.
- #4321: Downgrade jiffy to allow building on Windows again.
- #4329, #4323: Ignore build windows binaries in git.

#### 1.1.4.5. Tests

- #3825: Eliminate Elixir compiler warnings.
- #3830: Reduce skipped Elixir integration tests.
- #3890: Handle not\_found lookups removing ddoc cache key.
- #3892: Use Debian Stable for CI, add Erlang 24 to CI.
- #3898: Remove CI support for Ubuntu 16.04.
- #3903, #3914: Refactor Jenkins to dynamically generate stages. Drop MINIMUM\_ERLANG\_VERSION to 20, drop the packaging ERLANG\_VERSION to 23, add the weatherreport—test as a build step, and add ARM and POWER back into the matrix.
- #3921:, #3923: Execute various tests in clean database\_dir to avoid subsequent test flakiness.
- #3968: Ensure key tree rev stemming does't take too much memory.
- #3980: Upgrade Mango test dependency nose to nose and fix flaky-on-Windows tests.
- #4006: Remove CI support for Debian 9.
- #4061, #4082: Update PPC CI builder.
- #4096: Fix flaky validate\_doc\_update Elixir test.
- #4123: Fix haproxy.cfg.
- #4126: Return a 400 response for a single new\_edits=false doc update without revision.
- #4129: Fix proxyauth\_test and removed it from skip list.
- #4132: Address race condition in cpse\_incref\_decref test.
- #4151: Refactor replication tests to use clustered endpoints.
- #4178: Add test coverage to prevent junk in eventsource.
- #4188: Enable eunit coverage for all applications instead of enabling it per-application.
- #4202: Fix race condition in ddoc cache LRU test.
- #4203, #4205: Reduce test log noise.
- #4268: Improve flaky \_dbs\_info test.
- #4319: Fix offline configure and make release.
- #4328: Fix eaddrnotavail in Elixir tests under Windows.
- #4330: Do not run source checks in main CI build.

### 1.1.4.6. Docs

- #4164: The CouchDB documentation has been moved into the main CouchDB repository.
- #4307, #4174: Update Sphinx to version 5.3.0
- #4170: Document the /\_node/{node-name}/\_versions endpoint.

#### 1.1.4.7. Builds

- #4097: Stop publication of nightly packages. They were not used anywhere.
- #4322: Reuse installed rebar and rebar3 for mix. Compatible with Elixir =< 13 only. Elixir 14 is not supported yet.
- #4326: Move Elixir source checks to a separate build step.

# 1.1.4.8. Other

• Added pumpkin spice to selected endpoints....