# Release process for Couchbase .Net SDK

## Statement of Purpose:

The purpose of this document is to have a streamlined process formulated for the monthly release of the Couchbase .Net client library.

## Release Schedule:

The release is scheduled on the first Tuesday of every month. The history of the releases and the changes made in the library can be tracked down in JIRA (Project and Issue management tool used in Couchbase). Important URLs are covered in the Appendix section later in this document.

**Release Process:**

1. On start of every month, the developer would look into JIRA and decide the issues/bugs/enhancements that needs to be covered as a part of the next monthly release. There must be a valid NCBC filed in JIRA for every such issue.

2. A new release version is created in JIRA, dated the first Tuesday of next month. The fix versions and release versions are updated in all the JIRA issues shortlisted to be covered/resolved for the upcoming month's release.

3. Developer works upon all the issues and documents the changes. QE then reviews the changes made in the code through Gerrit, ensures it does not break the build and submits the changes in Git repository. Meanwhile, QE looks into any issues raised by the customers/support (CBSE/NCBC/SDKQE), and as per the criticality, the new issues are lined up accordingly.

4. In the last week of the month, once all the pending code changes are done, SHA1 is generated by the developer and shared with the QE. QE starts the testing of the client library. Ideally the matrix of testing should include:

(a) current stable version of server, latest version of client, Linux cluster, .Net framework 4.0

(b) current stable version of server, latest version of client, Windows cluster, .Net framework 4.0

(c) current stable version of server, latest version of client, Linux cluster, .Net framework 3.5

(d) current stable version of server, latest version of client, Windows cluster, .Net framework 3.5

The tests are of two types:

(a) NUnit tests: These are basically the unit tests for client library.

(b) Scenario tests: These tests the functionality of client in different failover/rebalance scenarios and are run using sdkd.

The test results are shared (often through Google docs) among the QE/Dev team members and for any failing test, the resolution is provided. Once the QE determines the build is okay to be released, the developer would release it.

5. The binaries of the release are published at: http://www.couchbase.com/develop/net/current

The new tag in Git is added for the code release. The release notes are prepared and published to the same website.

6. The Jenkins job that runs the client tests must execute all the tests and the results must be analysed for any failure. The build snapshots must be published on Amazon S3 public bucket so that it can be used by support/customers.

**Appendix**

1. JIRA for Couchbase .NET client library:

http://www.couchbase.com/issues/browse/NCBC

2. Version history: http://www.couchbase.com/issues/browse/NCBC#selectedTab=com.atlassian.jira.plugin.system.project%3Aversions-panel

3. Latest build:

http://www.couchbase.com/develop/net/current

4. Tutorial:

http://www.couchbase.com/docs/couchbase-sdk-net-1.2/tutorial.html

5. Jenkins job:

http://sdkbuilds.couchbase.com/job/couchbase-net-client/

6. Git repository:

https://github.com/couchbase/couchbase-net-client