

Server & XCDR Data Compression: Documentation Plan (Draft)

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Draft Status

The current draft is draft 1.0 of the plan, prepared 01/29/2018.

Overview

End-to-End Document Compression, is a P0 feature for Vulcan, requiring additions and modifications to the Couchbase Documentation set. The feature is listed in the official Vulcan spreadsheet, [here](#).

PRD

The PRD is located [here](#). The XDCR PRD is [here](#). These documents imply that at a minimum, the following issues must be documented:

- Overview: what does this feature do, who uses it, and why. What CB server versions offer the feature. What types of bucket are covered. What clients, internal and external, use the feature. (This is substantially covered in the sections *Why Compress?*, *Where to Compress?*, and *Approach?*)
- Enabling compression on the server. No information is yet provided in the PRD. Likely, this affects:
 - UI
 - REST
 - CLI
- How to set Bucket Expiration, through the following modes:
 - Off
 - Passive
 - Active

The table *Mode Comparison* (from the PRD) can be reproduced.

- Switching Between Modes (the table *Switching Between Modes* be largely be reproduced)
- How clients can opt in. (The section *Opting In To Compression* can be reused.)

- How to write compressed documents from the SDK. (The section *Writing Compressed Documents from the SDK* can be used, but this should be in the SDK documentation, rather than the server documentation - a pointer can be provided.)
- Using compression with XDCR.

Proposed Changes and Additions to Documentation

The feature will be documented by means of the following additions and changes:

1. Introduction -> [What's New](#) will be updated, with an appropriate summary of and pointer to the new feature.
2. Managing Clusters -> [Setting Up Buckets](#) -> [Create a Bucket](#) and [Change Bucket Settings](#) will be updated, to indicate how to enable compression on the server, and at the right mode. This assumes that bucket-interfaces will indeed feature options for compression. Otherwise, if the option is only general across the server, Managing Clusters -> Settings -> [Configure Cluster Settings](#) will be updated.
3. Managing Clusters -> Cross Datacenter Replication (XDCR) -> [Managing XDCR](#) will be updated, to reflect how XDCR can opt to receive and send compressed documents. UI features will be addressed as available: as indicated in the [XDCR PRD](#). The cli command Tools & API References -> CLI Reference -> couchbase-cli -> [xdcr-replicate](#) will be updated to include the new -enable and disable flags (see [here](#)).
4. Tools & API References -> CLI Reference -> couchbase-cli -> [bucket-create](#) and [bucket-edit](#) will be updated, to reflect new flags. Alternatively, if the compression option is only to be applied generally, across the server, [setting-cluster](#) will be modified (or other command/s, as appropriate).
5. Understanding Couchbase -> Data Service and Core Data Access -> [Buckets](#) will be updated, to provide a reference to the feature, plus updates to the capabilities tables. Additionally, a reference will be provided on [Bucket Disk Storage](#). (However, since compression does not only relate to diskful data, the full explanation will only be pointed to, from this page.)
6. A new page, Understanding Couchbase -> Data Service and Core Data Access -> **Data Compression**, will be created. This will contain the overview information, plus information on enablement options and modes. Pointers to all other relevant areas will be included.
7. A new page in the SDK Documentation, Developers -> Working with Data -> Compressing Data will be created, to include information in the PRD under *Writing Compressed Documents from the SDK*.

Tracking

The Jira ticket DOC-3062 will be used to track the above work. Each of the tasks listed will be handled as a subtask of that ticket.

Schedule

The schedule and assignment for delivery, based on the proposal above, is in development. The goal for Vulcan DP is the delivery of task 5. UI modifications will also be documented, as available.