**DB changes:**

Here are db changes list:

List of stored procedures need to be changed:

[Stp\_MailsToIndex\_GetToMerge]

[GetLevel3IndexBestCandidateAndLock] new Replacing [GetSearchIndex]

[TurnonSearchIndexes] new Replacing [ResetIndexDocCount] , [CreateIndex] , no unlock for merged indecies

[GetNewIndexPath] new one (aka GetLevelNum in design document)

[UnlockSearchIndexes] new one

[Stp\_MailsToIndex\_SetDoneMerging]

[BatchGUID],[DateLeased],[AppType] if vlue is 0 used by search , 1 merge, 2 re-merge,

Create table [ApplicationType] .

[LeaseTime] we can put total minutes on it

column will be added to Search.searchIndex table for more analytical purpose , to obtain time taken and information

Partition MailsToIndex table by group level ,revisit searchindex optimization with SP / schema changes above.

**What to Clean:**

1. **MergeLockFactory.cs**
2. **DirectoryUtil.cs**
3. **All DB calls in MergeStrategy.cs will be moved to DBProcessor per design**
4. **All Directory/Files calls calls will be re-written in FIleProcessor per design**
5. **All Index operation will be moved to IndexProcessor per design**

**Optimization :**

1. MailsToIndex partitioning by Group
2. GetToMerge , lock will be on the group level (App lock name should have GroupID in it). We can’t
3. SetDoneMerge : update new L1 index merged , batch update , speed up ?
4. SetSearchIndex : update old L1 index history , batch update ,speed up ?
5. Search.SearchIndex table , any optimization , cleaning up
6. Change to transactional scope
7. Remove trigger on search index
8. Searchindex DB will be partitioned
9. MailsToIndex history will be partitioned.
10. GetToMerge logic optimization
11. DB tools not working with merge