**How to Get Next Storage Location**

For our LAB setup, we have 5 servers with 5 storage location.The problem for Indexing/merge service is it needs to distribute indices as evenly as possible so we shall guarantee that no server shall runs out of space in their storage. Here’s the current approach to resolve this. Since tomorrow is due for this task, we will use it for now and discuss its optimization later.

**Indexing**Indexing will use a uniform distribution concept. Let us say you have 5 servers and each requestId you will work on will go to the next server by using requestId%5. This will not guarantee to distribute all the index creation 100% evenly but will be close enough to manage level 1 index creation storage efficiently.

**Merge Solution:** Merge will use the SizeInMB and DocCount columns to find which server has the lowest disk usage size or doc count at the query time. Here’s high level implantation concept.  
  
- Get the lowest server name using this query or etc.     
SELECT top 1 IndexServerName ,sum(SizeInMB) as totalSize, sum(DocCount) as totalDocCount from searchIndex (nolock)  
WHERE active=1 and IsLocked=0 and DocCount>0  
GROUP BY IndexServerName  
ORDER BY sum(SizeInMB),sum(DocCount)

- Use the server name as new index destination storage. This will also cover the initial level 3 index creation for each group.

**Server Lookup Table Sample**

|  |  |  |
| --- | --- | --- |
| IndexServerNameId | IndexServerName | Active |
| 1 | ELS04POC01 | 1 |