

## SQL SERVER – DIFFERENCE BETWEEN INDEX REBUILD AND INDEX REORGANIZE EXPLAINED WITH T-SQL SCRIPT

**Index Rebuild** : This process drops the existing Index and recreates the index.

```
USE AdventureWorks;  
GO  
ALTER INDEX ALL ON Production.Product REBUILD  
GO
```

**Index Reorganize** : This process physically reorganizes the leaf nodes of the index.

```
USE AdventureWorks;  
GO  
ALTER INDEX ALL ON Production.Product REORGANIZE  
GO
```

**Recommendation**: Index should be **rebuild** when index fragmentation is greater than 40%. Index should be reorganized when index fragmentation is between 10% to 40%. **Index rebuilding** process uses more CPU and it locks the database resources.

SQL Server **Developer** version and **Enterprise** version has option **ONLINE**, which can be turned on when Index is *rebuilt*. **ONLINE** option will keep index available during the rebuilding.