START

Calculate End Time (MWEND) for Maintenance Window (MW)

Get List Of Indexes to Maintain for Current MW Ordered by Last Managed, Skip Count and Range Scan Count (IL)

(Only Get Indexes that have Range Scans)

Grab Index from IL

Is Index DB Tlog Full

Is There Time Left in Maintenance Window?

Has Index Skip Count Been Reached

Increment Skip Count

Index Operation (IdxOp) = NOOP

Get Index Meta Data (Is Disabled & Page Locks Allowed (PLA))

Reset Skip Count to Zero

Is Index Disabled?

Get Index Stats Data (Fragmentation (Frag) & Page Count (PC))

Frag >= 10% AND PC > 64

Calculate if Online Operations Supported for Index (OO)

Index Part in HOT MW OR PC > 1000

Frag < 30% AND PLA = True

IdxOp = REORG

Frag < 30 AND PLA = False

OO = False AND Offline Op Allowed = False

ERROR FAILED ANALYSIS

OO = False AND Offline Op Allowed = True

IdxOp = REBUILD_OFFLINE

IdxOp = NOOP

OO = True

IdxOp = REBUILD_ONLINE

Offline Allowed

IdxOp = REBUILD_OFFLINE

PLA = True

ERROR FAILED ANALYSIS

IdxOp = REORG

Is Index Disabled?

Calculate Fill Factor Adjustment (+)

Adjust (+) Max Skip Count Based on When Index was Last Managed

Calculate IdxOp Time from History

IdxOp = NOOP

Current Time + 5 Minutes > MWEND

Reset Skip Count to Max Skip Count

IdxOp Time + Current Time > MWEND

Adjust (-) Max Skip Count Based on When Index was Last Managed

IdxOp = REBUILD

Calculate Fill Factor Adjustment (-)

Build IdxOp Statement with REORG

PLA = True

Build IdxOp Statement with MAXDOP = 1

Build IdxOp Statement with MAXDOP = 8

Execute Operation

Calculate Tlog Space in DB After IdxOp

End

ERROR FAILED ANALYSIS

Current index cannot be maintained. Due to no operation is supported on this index. Operations considered are Rebuild Online, Rebuild Offline, and Reorganize.

Online might not be supported due to LOB column types or SQL Server Edition.

Offline might not be supported because index cannot be taken offline.

Reorganize might not be supported because Allow Page Locks is set to False.

(Flow labels: Yes / No at decision points)