Compress All Tables & Indexes in a DB – SQL Server.

Scenario-1: This EXECUTES & ENABLES all Tables & Indexes Compression at PAGE Level

```sql
/*
Run in the database that will be compressed with CONDITION DATA_COMPRESSION=PAGE
*/

use AdventureWorks2012 --CHANGE YOUR DBNAME HERE TO COMPRESS Table & Indexes with CONDITION DATA_COMPRESSION=PAGE
go
DECLARE @sqlcmd nvarchar(1000)
DECLARE compress_cursor CURSOR FOR
SELECT DISTINCT 'ALTER TABLE ' + '[' + s.[name] + ']'+'.' + '[' + o.[name] + ']' + ' REBUILD WITH (DATA_COMPRESSION=PAGE);'
FROM sys.objects AS o WITH (NOLOCK)
INNER JOIN sys.indexes AS i WITH (NOLOCK)
ON o.[object_id] = i.[object_id]
INNER JOIN sys.schemas AS s WITH (NOLOCK)
ON o.[schema_id] = s.[schema_id]
INNER JOIN sys.dm_db_partition_stats AS ps WITH (NOLOCK)
ON i.[object_id] = ps.[object_id]
AND ps.[index_id] = i.[index_id]
WHERE o.[type] = 'U'

UNION ALL

SELECT 'ALTER INDEX '+ '[' + i.[name] + ']' + ' ON ' + '[' + s.[name] + ']' + '.' + '[' + o.[name] + ']' + ' REBUILD WITH (DATA_COMPRESSION=PAGE);'
FROM sys.objects AS o WITH (NOLOCK)
INNER JOIN sys.indexes AS i WITH (NOLOCK)
ON o.[object_id] = i.[object_id]
INNER JOIN sys.schemas s WITH (NOLOCK)
ON o.[schema_id] = s.[schema_id]
INNER JOIN sys.dm_db_partition_stats AS ps WITH (NOLOCK)
ON i.[object_id] = ps.[object_id]
AND ps.[index_id] = i.[index_id]
WHERE o.type = 'U' AND i.[index_id] >0


OPEN compress_cursor;

FETCH NEXT FROM compress_cursor INTO @sqlcmd

WHILE @@FETCH_STATUS = 0
BEGIN
    PRINT @sqlcmd
    EXEC sp_executesql @sqlcmd
    FETCH NEXT FROM compress_cursor INTO @sqlcmd
END
CLOSE compress_cursor
DEALLOCATE compress_cursor
```

SAMPLE OUTPUT:

```
Messages
  ALTER TABLE [dbo].[AWBuildVersion] REBUILD WITH (DATA_COMPRESSION=PAGE);
  ALTER TABLE [dbo].[DatabaseLog] REBUILD WITH (DATA_COMPRESSION=PAGE);
  ALTER TABLE [dbo].[ErrorLog] REBUILD WITH (DATA_COMPRESSION=PAGE);
  ALTER TABLE [HumanResources].[Department] REBUILD WITH (DATA_COMPRESSION=PAGE);
  ALTER TABLE [HumanResources].[Employee] REBUILD WITH (DATA_COMPRESSION=PAGE);
  ALTER TABLE [HumanResources].[EmployeeDepartmentHistory] REBUILD WITH (DATA_COMPRESSION=PAGE);
  ALTER TABLE [HumanResources].[EmployeePayHistory] REBUILD WITH (DATA_COMPRESSION=PAGE);
  ALTER TABLE [HumanResources].[JobCandidate] REBUILD WITH (DATA_COMPRESSION=PAGE);
```

Scenario-2: This EXECUTES & ENABLES all Tables & Indexes Compression at ROW Level

```sql
/*
Run in the database that will be compressed with CONDITION DATA_COMPRESSION=ROW
*/

use AdventureWorks2012 --CHANGE YOUR DBNAME HERE TO COMPRESS Table & Indexes with CONDITION DATA_COMPRESSION=ROW
go
DECLARE @sqlcmd nvarchar(1000)
DECLARE compress_cursor CURSOR FOR
SELECT DISTINCT 'ALTER TABLE ' + '[' + s.[name] + ']'+'.' + '[' + o.[name] + ']' + ' REBUILD WITH
(DATA_COMPRESSION=ROW);'
FROM sys.objects AS o WITH (NOLOCK)
INNER JOIN sys.indexes AS i WITH (NOLOCK)
ON o.[object_id] = i.[object_id]
INNER JOIN sys.schemas AS s WITH (NOLOCK)
ON o.[schema_id] = s.[schema_id]
INNER JOIN sys.dm_db_partition_stats AS ps WITH (NOLOCK)
ON i.[object_id] = ps.[object_id]
AND ps.[index_id] = i.[index_id]
WHERE o.[type] = 'U'

UNION ALL

SELECT 'ALTER INDEX '+ '[' + i.[name] + ']' + ' ON ' + '[' + s.[name] + ']' + '.' + '[' + o.[name] + ']' + ' REBUILD
WITH (DATA_COMPRESSION=ROW);'
FROM sys.objects AS o WITH (NOLOCK)
INNER JOIN sys.indexes AS i WITH (NOLOCK)
ON o.[object_id] = i.[object_id]
INNER JOIN sys.schemas s WITH (NOLOCK)
ON o.[schema_id] = s.[schema_id]
INNER JOIN sys.dm_db_partition_stats AS ps WITH (NOLOCK)
ON i.[object_id] = ps.[object_id]
AND ps.[index_id] = i.[index_id]
WHERE o.type = 'U' AND i.[index_id] >0


OPEN compress_cursor;

FETCH NEXT FROM compress_cursor INTO @sqlcmd

WHILE @@FETCH_STATUS = 0
BEGIN
    PRINT @sqlcmd
    EXEC sp_executesql @sqlcmd
    FETCH NEXT FROM compress_cursor INTO @sqlcmd
END
CLOSE compress_cursor
DEALLOCATE compress_cursor
```

SAMPLE OUTPUT:

```
100 %    ▾ ◀
🔲 Messages
   ALTER TABLE [dbo].[AWBuildVersion] REBUILD WITH (DATA_COMPRESSION=ROW);
   ALTER TABLE [dbo].[DatabaseLog] REBUILD WITH (DATA_COMPRESSION=ROW);
   ALTER TABLE [dbo].[ErrorLog] REBUILD WITH (DATA_COMPRESSION=ROW);
   ALTER TABLE [HumanResources].[Department] REBUILD WITH (DATA_COMPRESSION=ROW);
   ALTER TABLE [HumanResources].[Employee] REBUILD WITH (DATA_COMPRESSION=ROW);
   ALTER TABLE [HumanResources].[EmployeeDepartmentHistory] REBUILD WITH (DATA_COMPRESSION=ROW);
   ALTER TABLE [HumanResources].[EmployeePayHistory] REBUILD WITH (DATA_COMPRESSION=ROW);
```

Scenario-3: This EXECUTES & DISABLES all Tables & Indexes Compression. (Removes Compression)

```sql
/*
Run in the database that will be compressed with CONDITION DATA_COMPRESSION=NONE
*/

use AdventureWorks2012 --CHANGE YOUR DBNAME HERE To Remove Compression of all Tables & Indexes.
go
DECLARE @sqlcmd nvarchar(1000)
DECLARE compress_cursor CURSOR FOR
SELECT DISTINCT 'ALTER TABLE ' + '[' + s.[name] + ']'+'.' + '[' + o.[name] + ']' + ' REBUILD WITH
(DATA_COMPRESSION=NONE);'
FROM sys.objects AS o WITH (NOLOCK)
INNER JOIN sys.indexes AS i WITH (NOLOCK)
ON o.[object_id] = i.[object_id]
INNER JOIN sys.schemas AS s WITH (NOLOCK)
ON o.[schema_id] = s.[schema_id]
INNER JOIN sys.dm_db_partition_stats AS ps WITH (NOLOCK)
ON i.[object_id] = ps.[object_id]
AND ps.[index_id] = i.[index_id]
WHERE o.[type] = 'U'

UNION ALL

SELECT 'ALTER INDEX '+ '[' + i.[name] + ']' + ' ON ' + '[' + s.[name] + ']' + '.' + '[' + o.[name] + ']' + ' REBUILD
WITH (DATA_COMPRESSION=NONE);'
FROM sys.objects AS o WITH (NOLOCK)
INNER JOIN sys.indexes AS i WITH (NOLOCK)
ON o.[object_id] = i.[object_id]
INNER JOIN sys.schemas s WITH (NOLOCK)
ON o.[schema_id] = s.[schema_id]
INNER JOIN sys.dm_db_partition_stats AS ps WITH (NOLOCK)
ON i.[object_id] = ps.[object_id]
AND ps.[index_id] = i.[index_id]
WHERE o.type = 'U' AND i.[index_id] >0


OPEN compress_cursor;

FETCH NEXT FROM compress_cursor INTO @sqlcmd

WHILE @@FETCH_STATUS = 0
BEGIN
    PRINT @sqlcmd
    EXEC sp_executesql @sqlcmd
    FETCH NEXT FROM compress_cursor INTO @sqlcmd
END
CLOSE compress_cursor
DEALLOCATE compress_cursor
```

SAMPLE OUTPUT:

```
Messages
   ALTER TABLE [dbo].[AWBuildVersion] REBUILD WITH (DATA_COMPRESSION=NONE);
   ALTER TABLE [dbo].[DatabaseLog] REBUILD WITH (DATA_COMPRESSION=NONE);
   ALTER TABLE [dbo].[ErrorLog] REBUILD WITH (DATA_COMPRESSION=NONE);
   ALTER TABLE [HumanResources].[Department] REBUILD WITH (DATA_COMPRESSION=NONE);
   ALTER TABLE [HumanResources].[Employee] REBUILD WITH (DATA_COMPRESSION=NONE);
   ALTER TABLE [HumanResources].[EmployeeDepartmentHistory] REBUILD WITH (DATA_COMPRESSION=NONE);
   ALTER TABLE [HumanResources].[EmployeePayHistory] REBUILD WITH (DATA_COMPRESSION=NONE);
   ALTER TABLE [HumanResources].[JobCandidate] REBUILD WITH (DATA_COMPRESSION=NONE);
```