How to keep an history of table size

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Issue

Sometimes customers might come to you asking how can keep a record of table size evolution.

Investigation/Analysis

This is something that needs to be developed and tested by the customer, anyway we can give an example so that the customer can adapt to his needs.

Mitigation

Note: this is is just an example.

```sql
-- table for keeping records
create table table_size_history(
        DateCheck datetime DEFAULT getdate(),
        TableName sysname,
        SchemaName sysname,
        [rows] bigint,
        TotalSpaceMB numeric(36,2),
        UsedSpaceMB numeric(36,2),
        UnusedSpaceMB numeric(36,2)
)
----
-- inside a SQL Agent Job run the below

insert into table_size_history (TableName, SchemaName, [rows],TotalSpaceMB,UsedSpaceMB,UnusedSpaceMB)
SELECT
    t.NAME AS TableName,
    s.Name AS SchemaName,
    p.rows,
    CAST(ROUND(((SUM(a.total_pages) * 8) / 1024.00), 2) AS NUMERIC(36, 2)) AS TotalSpaceMB,
    CAST(ROUND(((SUM(a.used_pages) * 8) / 1024.00), 2) AS NUMERIC(36, 2)) AS UsedSpaceMB,
    CAST(ROUND(((SUM(a.total_pages) - SUM(a.used_pages)) * 8) / 1024.00, 2) AS NUMERIC(36, 2)) AS UnusedSpaceM
FROM
    sys.tables t
INNER JOIN
    sys.indexes i ON t.OBJECT_ID = i.object_id
INNER JOIN
    sys.partitions p ON i.object_id = p.OBJECT_ID AND i.index_id = p.index_id
INNER JOIN
    sys.allocation_units a ON p.partition_id = a.container_id
LEFT OUTER JOIN
    sys.schemas s ON t.schema_id = s.schema_id
WHERE
    t.NAME NOT LIKE 'dt%'
    AND t.is_ms_shipped = 0
    AND i.OBJECT_ID > 255
GROUP BY
    t.Name, s.Name, p.Rows
```

How good have you found this content?