--To collect Server metadata using scripts, you can utilize system catalog views, dynamic management views (DMVs), and functions. Below are ---some example scripts that gather various types of metadata:

**--1. Database and Table Information**

-- Collect information about all databases

SELECT name AS DatabaseName,

create\_date AS CreationDate,

state\_desc AS State

FROM sys.databases;

-- Collect information about all tables in a specific database

SELECT s.name AS SchemaName,

t.name AS TableName,

t.create\_date AS CreationDate,

t.modify\_date AS LastModifiedDate

FROM sys.tables t

INNER JOIN sys.schemas s ON t.schema\_id = s.schema\_id;

**--2. Column Information**

-- Collect information about all columns in a specific table

SELECT t.name AS TableName,

c.name AS ColumnName,

ty.name AS DataType,

c.max\_length AS MaxLength,

c.is\_nullable AS IsNullable

FROM sys.columns c

INNER JOIN sys.tables t ON c.object\_id = t.object\_id

INNER JOIN sys.types ty ON c.user\_type\_id = ty.user\_type\_id

--WHERE t.name = 'YourTableName'; -- Replace with your table name

**--3. Index Information**

-- Collect information about all indexes

SELECT t.name AS TableName,

ind.name AS IndexName,

ind.type\_desc AS IndexType,

col.name AS ColumnName

FROM sys.indexes ind

INNER JOIN sys.index\_columns ic ON ind.object\_id = ic.object\_id AND ind.index\_id = ic.index\_id

INNER JOIN sys.columns col ON ic.object\_id = col.object\_id AND ic.column\_id = col.column\_id

INNER JOIN sys.tables t ON ind.object\_id = t.object\_id

WHERE ind.is\_primary\_key = 0 -- Exclude primary keys

ORDER BY t.name, ind.name, ic.key\_ordinal;

**--4. Stored Procedure Information**

-- Collect information about all stored procedures

SELECT s.name AS SchemaName,

p.name AS ProcedureName,

p.create\_date AS CreationDate,

p.modify\_date AS LastModifiedDate

FROM sys.procedures p

INNER JOIN sys.schemas s ON p.schema\_id = s.schema\_id;

**--5. Foreign Key Information**

-- Collect information about all foreign keys

SELECT fk.name AS ForeignKeyName,

tp.name AS ParentTable,

cp.name AS ParentColumn,

tr.name AS ReferencedTable,

cr.name AS ReferencedColumn

FROM sys.foreign\_keys fk

INNER JOIN sys.foreign\_key\_columns fkc ON fk.object\_id = fkc.constraint\_object\_id

INNER JOIN sys.tables tp ON fkc.parent\_object\_id = tp.object\_id

INNER JOIN sys.columns cp ON fkc.parent\_object\_id = cp.object\_id AND fkc.parent\_column\_id = cp.column\_id

INNER JOIN sys.tables tr ON fkc.referenced\_object\_id = tr.object\_id

INNER JOIN sys.columns cr ON fkc.referenced\_object\_id = cr.object\_id AND fkc.referenced\_column\_id = cr.column\_id;

**--6. View Information**

-- Collect information about all views

SELECT s.name AS SchemaName,

v.name AS ViewName,

v.create\_date AS CreationDate,

v.modify\_date AS LastModifiedDate

FROM sys.views v

INNER JOIN sys.schemas s ON v.schema\_id = s.schema\_id;

**--7. Trigger Information**

-- Collect information about all triggers

SELECT t.name AS TableName,

tr.name AS TriggerName,

tr.create\_date AS CreationDate,

tr.modify\_date AS LastModifiedDate,

tr.is\_disabled AS IsDisabled

FROM sys.triggers tr

INNER JOIN sys.tables t ON tr.parent\_id = t.object\_id;

**--8. Function Information**

-- Collect information about all functions

SELECT s.name AS SchemaName,

f.name AS FunctionName,

f.create\_date AS CreationDate,

f.modify\_date AS LastModifiedDate

FROM sys.objects f

INNER JOIN sys.schemas s ON f.schema\_id = s.schema\_id

WHERE f.type IN ('FN', 'IF', 'TF'); -- Scalar, inline table-valued, and multi-statement table-valued functions

--You can schedule these scripts to run periodically using Server Agent jobs and store the results in a metadata repository for easy access and analysis.