

SQL SERVER – LIST COUNT OF ROWS IN ALL TABLES IN DATABASE USING A CURSOR

In this document, sql developers will find a **SQL cursor example** t-sql code to list number of rows (**record counts**) in all user tables in a MS SQL Server database.

Note that with the **T-SQL** enhancements introduced with **MS SQL Server 2005** and **MS SQL Server 2008**, developers and database administrators can find ways to avoid using SQL Server cursor in their sql codes in their jobs.

Do not use frequently **sql cursor** in production system during high load times. **SQL cursors** if not done in the correct declaration can effect the performance of database applications in negative manner. So if possible prevent developers use **transact-sql cursor** in their sql scripts.

In the following **SQL Server** cursor, you will first notice the **cursor declaration** in sql script. You can **declare sql cursor** using **DECLARE cursorname CURSOR syntax**.

This **sample sql cursor** is build over a list of user tables defined in a database, and is used for listing the count of rows in each database table. Since for each table a sql select query is build and executed seperately, the sql cursor or the loop for running select task for each table consumes considerable resource.

Do not forget, sql engine is built and optimized for batch processes not for single row processes.

So if possible avoid from using sql cursor in sql codes.

SQL Cursor Example

Here is a sql cursor example :

```
DECLARE @TableName sysname
```

```
DECLARE @SQL nvarchar(max)
```

```
DECLARE tables_cursor CURSOR FAST_FORWARD
```

```
FOR
```

```
SELECT name FROM sys.tables
```

```
OPEN tables_cursor
```

```
FETCH NEXT FROM tables_cursor INTO @TableName
```

```
WHILE @@FETCH_STATUS = 0
```

```
BEGIN
```

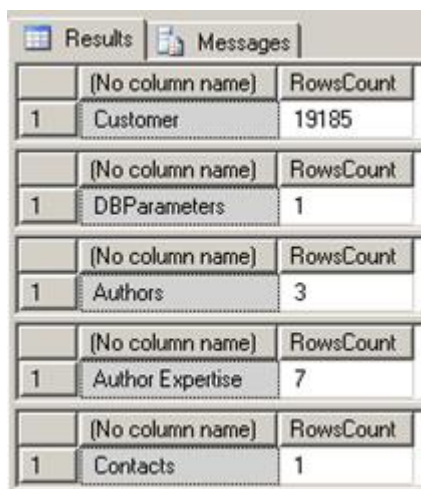
```
    SELECT @SQL =
```

```
        'SELECT ''' + @TableName + ''', COUNT(*) as RowsCount ' +
```

```
        'FROM [' + @TableName + ']'
```

```
EXEC SP_EXECUTESQL @SQL  
    FETCH NEXT FROM tables_cursor INTO @TableName  
END  
  
CLOSE tables_cursor  
DEALLOCATE tables_cursor
```

And when I execute the above sample **sql cursor** code on one of my SQL Server databases, I get the following sample **t-sql** cursor output :



The screenshot shows the 'Results' pane of SQL Server Enterprise Manager. It displays a table with two columns: '(No column name)' and 'RowCount'. The table contains five rows of data, each representing a table in the database and its row count. The first row is 'Customer' with 19185 rows. The second row is 'DBParameters' with 1 row. The third row is 'Authors' with 3 rows. The fourth row is 'Author Expertise' with 7 rows. The fifth row is 'Contacts' with 1 row.

	(No column name)	RowCount
1	Customer	19185
1	DBParameters	1
1	Authors	3
1	Author Expertise	7
1	Contacts	1

The above cursor is declared as **FAST_FORWARD** which is faster than other cursor declaration types.