

T-SQL static code analysis: Queries should not join too many tables

1-2 minutes

When you need access to data from multiple tables, it is more efficient, effective, and understandable to use pre-built views than to select the data from a large number of tables - effectively creating in-memory views - at runtime.

Noncompliant Code Example

With a maximum number of 3 joined tables:

```
SELECT PERSONS.NAME, COUNTRIES.NAME,  
GENRES.NAME, PROFESSIONS.NAME  
FROM PERSONS  
    INNER JOIN COUNTRIES ON COUNTRIES.ID =  
PERSON.COUNTRY_ID  
    INNER JOIN GENRES ON GENRES.ID =  
PERSONS.GENRE_ID  
    INNER JOIN PROFESSIONS ON PROFESSIONS.ID =  
PERSONS.PROFESSIONS_ID -- Noncompliant; this is table #4  
WHERE COUNTRIES.CODE = 'US'
```

```
SELECT PERSONS.NAME, COUNTRIES.NAME,  
GENRES.NAME, PROFESSIONS.NAME  
FROM PERSONS, COUNTRIES, GENRES, PROFESSIONS --  
Noncompliant
```

```
WHERE COUNTRIES.CODE = 'US' AND COUNTRIES.ID =  
PERSON.COUNTRY_ID AND GENRES.ID =  
PERSONS.GENRE_ID AND PROFESSIONS.ID =  
PERSONS.PROFESSIONS_ID
```