

# CAST Engineering Dashboard - Information - Scope - Total checks for quality rule - Avoid Artifacts with a Complex SELECT Clause

## Purpose

This page provides information on the scope of the rule Avoid Artifacts with a Complex SELECT Clause.

## Applicable in CAST Version

Release	Yes/No
8.3.x	✓
8.2.x	✓
8.1.x	✓
8.0.x	✓
7.3.x	✓
7.2.x	✓
7.0.x	✗

## Applicable RDBMS

RDBMS	Yes/No
Oracle Server	✓
Microsoft SQL Server	✓
CSS2	✓
CSS1	✗

## Details

The scope of the rule "Avoid Artifacts with a Complex SELECT Clause" is the artifacts that use SQL artifacts. You can run the below query on Knowledge base by replacing <object\_id> with desired objectID to get the database objects linked to it -

```
select k.IdKey, k.KeyNam, t.*, clt.link_type_name
  from (   select distinct T.OBJECT_ID
          from TypCat TC
          join CTT_OBJECT_APPLICATIONS T
            on T.OBJECT_TYPE = TC.IdTyp
            and TC.IdCatParent in ( 6100, 6101, 139148, 136996 ) -- database table, view,
          CAST_PersistenceFrameworkQuery, CAST_PersistentEntity
          )Tmp
  join Acc A
    on A.IdClr = <object_id>
   and A.IdCle = Tmp.OBJECT_ID
   and A.AccKnd in ( 0, 4096, 262144, 1048576 )
   and ( A.Prop & 65536 ) = 0
  join Keys k
    on k.IdKey = A.IdCle
  join typ t
    on t.IdTyp = k.ObjTyp
  join ctv_link_types clt
    on clt.link_type_lo = A.acctyplo
   and clt.link_type_hi = A.acctyphi
```

If the above query returns rows that means the object is linked with database objects

For example :

1. if a java method *methodA* uses an SQL artifact say a select statement with *tableA* then *methodA* will have a link to *tableA*. This is one of the scenarios where an artifact is making a link with an SQL artifact so *methodA* will come under the scope of this rule.
2. There might be a method which does not contain any SQL artifacts yet it is being counted in the total checks. This is because of the fact that there might be a link to any Spring bean entity from that method. Spring bean entity is an object belonging to a Persistence framework(it is used in executing query). Hence, the methods calling this spring bean are always in the total checks.

## Notes/comments

## Related Pages

[SQL Queries - CAST Knowledge Base - Queries on metrics and diagnostics - How to run DETAIL and TOTAL procedures manually](#)

[CAST Engineering Dashboard - Quality rule - Missing Quality Rule](#)