

Querying CASTEMO knowledge graphs

Now, time to get knowledge out of the knowledge graphs. This chapter categorizes some useful queries to validate your data, and start digging information from the CASTEMO knowledge graphs stored in RethinkDB.

- [Finding inconsistent and invalid data](#)
- [Querying CASTEMO knowledge graphs in Neo4j](#)
- [Querying with relations](#)

Finding inconsistent and invalid data

This is the collapsible text.

For various reasons, such as data import or bugs of some version of the interface, a CASTEMO knowledge graph can contain **inconsistent data**. It is thus important to identify this data and correct the inconsistencies either manually or from a script.

Get all entities involved in more than one synonym cloud

In the CASTEMO data model, one entity can be only involved in one synonym cloud.

ReQL

```
r.db("inkvisitor")
  .table("relations")
  .filter({ type: "SYN" })
  .getField("entityIds")
  .reduce(function (acc, val) {
    return acc.setUnion(val);
  })
  .default([])
  .map(function (ide) {
    return {
      id: ide,
      count: r
        .db("inkvisitor")
        .table("relations")
        .filter({ type: "SYN" })
        .getField("entityIds")
        .filter(function (syn) {
          return syn.contains(ide);
        })
        .count()
    };
  })
```

```
    })  
    .count(),  
  };  
})  
.filter(function (a) {  
  return a("count").gt(1);  
});
```

R

Empty language: get labels of all concepts with empty language

ReQL

```
r.db("inkvisitor")  
  .table("entities")  
  .filter({ language: "", class: "C" })  
  .getField("label");
```

Querying CASTEMO knowledge graphs in Neo4j

Querying with relations