

Get RDF data cube vocabulary as turtle file from qb: (<http://purl.org/linked-data/cube#>)

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Get RDF data cube vocabulary as turtle file from qb: (<http://purl.org/linked-data/cube#>).

This script retrieves the RDF data cube vocabulary and stores it as a .ttl in the packages.

Setup

```
devtools::load_all(pkg="../..")
```

```
## Loading rrdqfb
```

Get and store RDF data vocabulary

```
library(RCurl)
library(devtools)
qbURL<-"https://raw.githubusercontent.com/UKGovLD/publishing-statistical-data/master/specs/src/main/vocab/cube.ttl"
if (! url.exists(qbURL) ) {
  stop(paste0("Can not access URL ",qbURL))
}
cube.vocabulary.ttl <- getURL(qbURL)
savefile <- file.path(system.file("extdata/cube-vocabulary-rdf", package="rrdqfb"), "cube.ttl" )
writeLines( cube.vocabulary.ttl, savefile)
cat("written to ", normalizePath(savefile) )
```

```
## written to /home/ma/projects/R-projects/rrdqfbcrnd0/rrdqfb/inst/extdata/cube-vocabulary-rdf/cube.ttl
```

SPARQL for getting the cube vocabulary using FROM in the SPARQL query

The following is experimental and not needed for the present package. See below for explanation.

```
rdf.data.cube.URLstem<- qbURL
SPARQLscript<- paste(
  "CONSTRUCT { ?s ?p ?o }",
  paste0( "FROM ", "<", rdf.data.cube.URLstem, ">", collapse="\n" )
  ,
  "WHERE { ?s ?p ?o }", sep="\n", collapse="\n"
)
cat(SPARQLscript,"\n")
```

```
CONSTRUCT { ?s ?p ?o } FROM https://raw.githubusercontent.com/UKGovLD/publishing-statistical-data/master/specs/src/main/vocab/cube.ttl WHERE { ?s ?p ?o }
```

```
SPARQLscriptfn<- file.path(tempdir(),"get-cube.rq")
writeLines( SPARQLscript, con=SPARQLscriptfn )
cat("SPARQL script stored in ", normalizePath(SPARQLscriptfn), "\n")
```

SPARQL script stored in /tmp/Rtmp8kg9Xk/get-cube.rq

Using the script with R

The R-code below does not work with rdfs.

```
store <- new.rdf()
results <- construct.rdf(store, SPARQLscript )
summarize.rdf(results)
```

However, it works using a local Fuseki instance. The code below assumes a local Fuseki instance is running at <http://localhost:3030/arm/query>. Change to follow your setup.

```
endpoint<- "http://localhost:3030/arm/query"
results.fuseki <- construct.remote(endpoint, SPARQLscript )
summarize.rdf(results.fuseki)
```