

Solution for exercise on Agile metamodelling

In the query we have that the ?downtime we entered is \geq than the downtime of the variable ?CSdowntime, which is the cloud services to be retrieved.

```
PREFIX rdf: <http://www.w3.org/1999/02/22-rdf-syntax-ns#>
PREFIX rdfs: <http://www.w3.org/2000/01/rdf-schema#>
PREFIX bpaas: <http://ikm-group.ch/archimeo/bpaas#>
prefix mod: <http://fhnw.ch/modelingEnvironment/ModelOntology#>
prefix lo: <http://fhnw.ch/modelingEnvironment/LanguageOntology#>
```

```
SELECT ?CS ?label
WHERE {
  ?CS rdf:type bpaas:CloudService .
  ?CS bpaas:cloudServiceHasAPQC ?csAPQC .
  ?CS bpaas:cloudServiceHasMonthlyDowntimeInMinute ?CSdowntime .
  ?CS rdfs:label ?label .
```

```
mod:SendInvoice_72f5a941-8e9a-40dc-b8ea-9df13599bb17 rdf:type ?modellingElement .
?predicate rdfs:domain ?modellingElement .
?predicate rdfs:range ?APQC .
```

```
mod:SendInvoice_72f5a941-8e9a-40dc-b8ea-9df13599bb17 lo:Downtime_in_min ?downtime .
```

```
FILTER (?csAPQC = ?APQC && ?downtime  $\geq$  ?CSdowntime).
```

```
}
```

- Looking at the results now, we have that the number of cloud services has reduced.
- Therefore, our Cloud Broker has now 5 Cloud Services to inspect, out of the initial 335.

	CS	label
1	<http://ikm-group.ch/archiMEO/bdata#Ninja_email>	"Ninja_email"
2	<http://ikm-group.ch/archiMEO/bdata#InvoiceNinja>	"InvoiceNinja"
3	<http://ikm-group.ch/archiMEO/bdata#NextCloud>	"NextCloud"
4	<http://ikm-group.ch/archiMEO/bdata#Drive>	"Drive"
5	<http://ikm-group.ch/archiMEO/bdata#MailJet>	"MailJet"

lo:hasMonthlyDowntimeInMinutes