RQL for Promtheus Cheat Sheet

by Mehmood via cheatography.com/135341/cs/28064/

Selecting series

Select latest sample for series with a given metric name:

```
Select * from Kubernetes WHERE series
```

Select 5-minute range of samples for series with a given metric name:

```
Select * from Kubernetes WHERE series
```

Only series with given label values:

```
Select * from Kubernetes WHERE cpu="0" AND mode="idle" AND series =n ode _c p u _s eco nd s _ total
```

Complex label matchers:

```
Select * from Kubernetes WHERE cpu!="0" AND mode=~"idle|system" AND series =n ode _c p u _s eco nd s _ total
```

=: Equality

!=: Non-equality

=: Regex match

!~: Negative regex match

Math between series

Add all equally-labelled series from both sides:

```
Select * from Kubernetes where series =n ode _m e m or y_M em F r ee _bytes + n ode _m e m or y_C ac h e d_ bytes
```

Add series, matching only on the instance and job labels:

```
Select job, instance from Kubernetes where metric na m e =n ode _m e m or y_M em F r ee _bytes AND Sel =n ode _m e m or y_C ac h e d_ bytes
```

Filtering series by value

Only keep series with a sample value greater than a given number:

```
Select * from kubernetes where metric_total > 10102_4*1024
```

Only keep series from the left-hand side whose sample values are larger than their right-hand-si

```
Select * from kubernetes where go_gor ) ou tines > go_thr eads
```

Instead of filtering, return 0 or 1 for each compared series:

```
Select * from kubernetes where go_gor tines > bool go_thr eads
```

Match only on specific labels:

```
Select * from kubernetes where go_gor tines > bool go_thr eads AND series =n ode _c p u _s eco nd s e)
```

Available comparison operators: ==, !=, >, <, >=,<=

Set operations

Include any label sets that are either on the left or right side:

```
Select series, job from kubernetes where =up AND (job="p ro m e th eu "no de ")
```

Match only on specific labels:

```
Select * from kubernetes where go_gor_ o u tines > bool go_threads gro
```

Aggregating over multiple series

Sum over all series:

```
Select * from Kubernetes where sum
```

Preserve the instance and job label dimension

```
Select * from kubernetes where go_gor tines > bool go_thr eads AND series =n ode _c p u _s eco nd
```

Aggregate away the instance and job label dim

```
Select * from kubernetes where go_gor tines > bool go_thr eads group nstance)
```

Available aggregation operators: sum(), min(),

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